



PROYECTO DE IMPLANTACIÓN Y ESTRUCTURAL DE NAVE PARA GARAJE  
TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE PRIVADO EN EL  
POLÍGONO DE RÍO DO POZO. NARÓN

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UNIVERSIDADE  
DA CORUÑA

ANEJO nº1

## ANEJO Nº1

CÁLCULOS ESTRUCTURALES Y DE CIMENTACIONES



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LISTADOS DE CÁLCULO



### A1.1. DOCUMENTOS BÁSICOS

Se considera de aplicación el Código Técnico de la Edificación (CTE) español, Documentos Básicos: DB SE. Seguridad Estructural. Bases de Cálculo, y DB SE-AE. Acciones en la Edificación y la Instrucción de Hormigón Estructural EHE.

### A1.2. DESCRIPCIÓN DE LA OBRA PROYECTADA

La obra que se proyecta está formada por una nave – taller de autobuses que coexiste con una pieza administrativa de oficinas. La obra se sitúa en el Polígono Industrial “Rio do Pozo” en Narón (A Coruña).

Las dimensiones de la nave son:

- Frente: 26,62 m.
- Fondo: 30,65 m.

La nave está formada por pórticos metálicos a dos aguas con una luz de 19,8 m. El primer tramo de pórticos acogerá la zona administrativa, que contará con un altillo. Serán un total de 6 vanos con una distancia entre pórticos de 6 m. Los pilares tendrán una altura de 6,46 m y el punto más alto del pórtico estará a 7,17 m.

Como cerramiento se emplean paneles de hormigón hasta una altura de 4,8 m y, a continuación, doble chapa de acero prelavado tipo minionda PL 18/76 con aislamiento intermedio.

El altillo de la zona administrativa se ejecutará con losas alveolares que poyarán sobre la estructura metálica. Se ha elegido el sistema estructural del forjado por su sencillez



constructiva para resolver un vano de 6m de luz biapoyado sin necesidad de emplear encofrado inferior y por su rapidez en la ejecución.

Las losas alveolares serán de 20cm de canto sobre la que se colocará una capa de compresión de 5cm.

Las fachadas de la zona administrativa son de fábrica de ladrillo cerámico hueco con un ladrillo exterior de 12 cm de espesor separado por 4 cm de aislamiento de un ladrillo interior de 8 cm de espesor. El aislamiento interior está formado poliuretano proyectado de densidad 30 kg/m<sup>3</sup> y como cerramiento exterior, se reviste la fachada con una chapa de acero prelacado tipo mininda PL 18/76 sobre rastrelado de acero .

### **A1.3. DESCRIPCIÓN DE LA ESTRUCTURA**

#### **3.1. CIMENTACIÓN**

La cimentación es superficial, a base de zapatas de hormigón armado atadas mediante vigas centradoras.

#### **3.2. ESTRUCTURA DE HORMIGÓN**

El techo de la planta de la zona administrativa se ejecutará con una losa alveolar de 20cm de espesor que apoyará sobre las vigas metálicas, sobre la losa alveolar se ejecutará una capa de compresión armada con parrilla de barra electrosoldada 20x30 y barras de diámetro 6..

#### **3.3. ESTRUCTURA METÁLICA**



La estructura de la nave está formada por pórticos metálicos, a dos aguas con una luz entre ejes de 20,0 m. Además contará con un alero lateral de 6m de ancho.

Los pórticos se sitúan a 6,0 m de separación. La estructura está formada por 6 pórticos a dos aguas construidos a base de perfiles metálicos de acero laminado de distintas series y secciones.

En los pórticos se atornillan las correas de cubierta con tortillería de acero inox.

#### **A1.4. CARACTERÍSTICAS DE LOS MATERIALES ESTRUCTURALES**

Los materiales a emplear serán:

- Hormigón HA-25 P de resistencia característica a compresión a 28 días de  $f_{ck} = 25 \text{ N/mm}^2$ , armado con acero B 500 de límite elástico  $f_{yk} = 500 \text{ N/mm}^2$ .
- Acero:
  1. Laminados y armados: S275 JR, de límite elástico  $f_y = 275 \text{ N/mm}^2$ .
  2. Conformados: S235 JR, de límite elástico  $f_y = 235 \text{ N/mm}^2$ .

#### **A1.5. ACCIONES CONSIDERADAS / COMBINACIONES EMPLEADAS**

Los valores de acciones adoptadas para el cálculo en el presente Proyecto son las de peso propio y las cargas y sobrecargas consideradas en el capítulo 3 de la sección SE-AE del Código Técnico de la Edificación. .

Las acciones consideradas son las siguientes:



- Permanentes: peso propio de la estructura + cubierta
- Variables: nieve + viento + forjados
- Accidentales: sin consideración

ALTILLO

Cargas gravitatorias	Forjado		4,3 KN/m <sup>2</sup>
	Cargas muertas		1 KN/m <sup>2</sup>
	Sobrecarga de uso administrativo		2 KN/m <sup>2</sup>
	Sobrecarga en escaleras		2,5 KN/m <sup>2</sup>
	Sobrecarga de tabiquería		1 KN/m <sup>2</sup>
	Viento Y	PA	18,692 KN
		PB	56,22 KN
PA		32,55 KN	
Situación normal			
Acciones sísmicas	Sin consideración (edificio de baja ocupación)		
Acciones térmicas y geológicas	Sin consideración (edificio de baja ocupación)		
Tensión admisible en el terreno	Se ha estimado una $\sigma_{adm} = 2,0 \text{ kg/cm}^2$		

CUBIERTA

Cargas gravitatorias	Peso propio		*
	Cargas muertas		0,1 KN/m <sup>2</sup>
	Sobrecarga de uso		2 KN (en 1/2 cada correa)
	Sobrecarga de Nieve		0,4 KN/m <sup>2</sup>
	Viento Y	PA	18,692 KN
		PB	56,22 KN
		PA	32,55 KN
Situación normal			
Acciones sísmicas	Sin consideración (edificio de baja ocupación)		
Acciones térmicas y geológicas	Sin consideración (edificio de baja ocupación)		
Tensión admisible en el terreno	Se ha estimado una $\sigma_{adm} = 2,0 \text{ kg/cm}^2$		

\* El peso propio de la estructura se tiene en cuenta como carga lineal, estableciendo el peso de cada uno de las piezas de acero



## ACCIONES DE VIENTO

Para la determinación de las cargas de viento se tendrá en cuenta:

### -Grado de aspereza

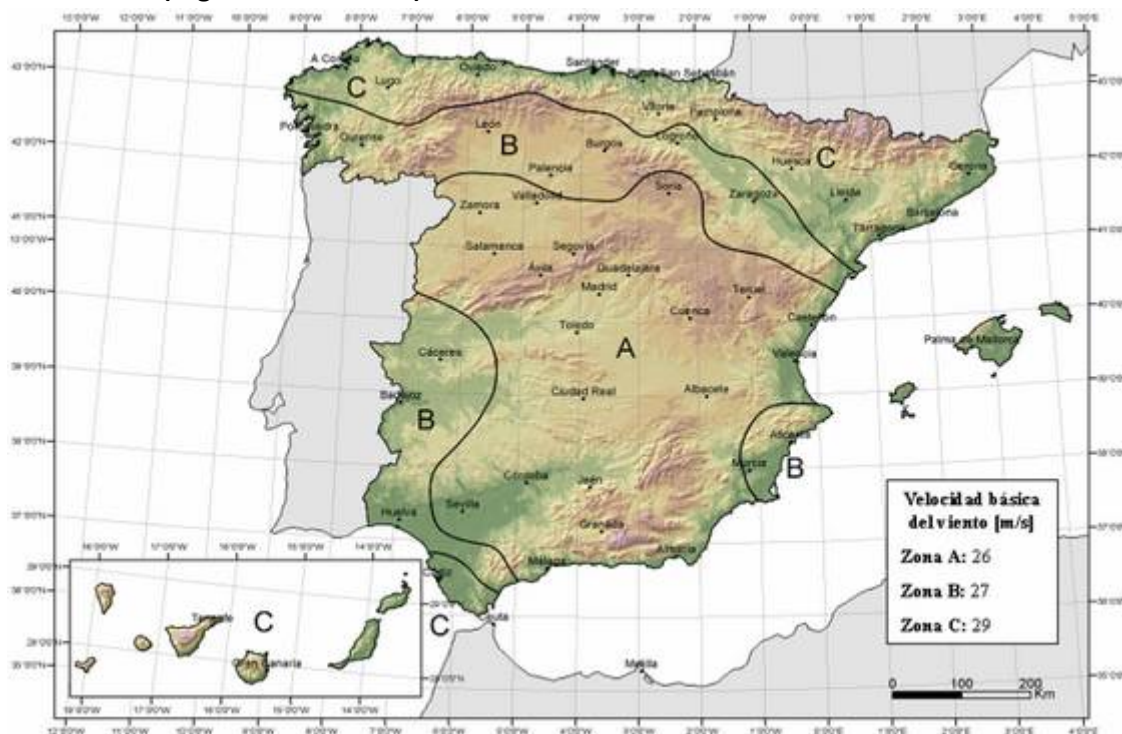
Tabla 3.3 Valores del coeficiente de exposición  $c_e$

Grado de aspereza del entorno	Altura del punto considerado (m)							
	3	6	9	12	15	18	24	30
I Borde del mar o de un lago, con una superficie de agua en la dirección del viento de al menos 5 km de longitud	2,2	2,5	2,7	2,9	3,0	3,1	3,3	3,5
II Terreno rural llano sin obstáculos ni arbolado de importancia	2,1	2,5	2,7	2,9	3,0	3,1	3,3	3,5
III Zona rural accidentada o llana con algunos obstáculos aislados, como árboles o construcciones pequeñas	1,6	2,0	2,3	2,5	2,6	2,7	2,9	3,1
IV Zona urbana en general, industrial o forestal	1,3	1,4	1,7	1,9	2,1	2,2	2,4	2,6
V Centro de negocio de grandes ciudades, con profusión de edificios en altura	1,2	1,2	1,2	1,4	1,5	1,6	1,9	2,0

Le corresponde el grado de aspereza IV



### -Zona eólica (según CTE DB-SE-AE)



El municipio se encuentra en la zona C

### A1.6. CÁLCULO

Las correas de cubierta y cierres laterales se calculan mediante el programa GENERADOR DE PÓRTICOS de CYPE, Ingenieros, versión 2011d.

Para el cálculo de las correas es necesario definir las características geométricas del pórtico, la situación geográfica de la edificación, la separación entre pórticos, las sobrecargas y la normativa de aplicación.

El programa genera las acciones sobre los pórticos y dimensiona las correas usando el modelo de viga continua, con los datos introducidos en relación al tipo de perfil, material y separación entre correas.





El cálculo de la nave se lleva a cabo con el programa METAL 3D de CYPE, Ingenieros, versión 2011d. Este programa calcula estructuras tridimensionales y puede emplearse cualquier material para las barras que se definen a partir de sus características mecánicas y geométricas.

El material empleado es acero y el dimensionamiento de perfiles se obtiene de forma automática. El programa considera un comportamiento elástico y lineal de los materiales. Las barras definidas son elementos lineales.

Las cargas aplicadas en las barras se pueden establecer en cualquier dirección y se admite cualquier tipología. En cuanto a los nudos, se pueden colocar cargas puntuales también en cualquier dirección.

Se admiten uniones empotradas, articuladas y empotradas elásticamente y se puede realizar cualquier tipo de apoyo, incluyendo la definición de apoyos elásticos en cualquier dirección y las zapatas de hormigón armado. También es posible emplear emplazamientos impuestos por cada hipótesis de carga.

El cálculo del edificio de oficinas se lleva a cabo con el programa CYPECAD de CYPE, Ingenieros, versión 2011d. Este programa ha sido concebido para realizar el diseño, cálculo y dimensionado de estructuras de hormigón.

Estas estructuras pueden estar compuestas por: pilares, pantallas y muros; vigas de hormigón, metálicas y mixtas; forjados de viguetas (genéricas, armadas, pretensadas, in situ, metálicas de alma llena y de celosía), placas aligeradas, losas mixtas, reticulares y losas macizas; y cimentaciones por losas, vigas de cimentación, zapatas y encepados.

La introducción de los datos se hace de forma gráfica, así como la consulta de los resultados y tanto los datos introducidos, como los resultados, dibujos de planos y leyes de esfuerzos se pueden exportar de diversas formas.



En cuando a las hipótesis de carga, se pueden definir las deseadas sin límite, pero las básicas son: Peso propio, Sobrecarga, Viento, Sismo o Nieve. A partir de éstas se realizan distintas combinaciones con diferentes coeficientes de combinación. Es posible establecer hasta ocho estados de combinaciones diferentes:

- Hipótesis simple
- Hormigón (Estados límites últimos)
- Cimentación. Equilibrio (Estados límites últimos)
- Cimentación. Tensiones en el terreno (Tensiones admisibles)
- Genéricas
- Desplazamientos (Estados límites últimos)
- Acero (Laminado y conformado)
- Acero (Conformado)

Para cada estado es posible definir cualquier número de combinaciones, indicando su nombre y coeficientes.

A partir de la geometría que se introduzca, se obtiene la matriz de rigidez de la estructura, así como las matrices de cargas de las hipótesis simples.

Se obtiene la matriz de desplazamientos de los nudos de la estructura, invirtiendo la matriz por métodos frontales.

Después de hallar los desplazamientos por hipótesis, se calculan todas las combinaciones para todos los estados y los esfuerzos en cualquier dirección a partir de los esfuerzos en los extremos.

**FERROL Diciembre de 2015**

**Adrián Freijomil Aradas**



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## LISTADOS DE CÁLCULO

# Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

## 1.- Barras: Descripción

Barras	Material	Perfil	Peso (kp)	Volumen (m³)	Longitud (m)	Co.pand.xy	Co.pand.xz	Dist.arr.sup. (m)	Dist.arr.inf. (m)
1/2	Acero (S275)	HE 120 B (HEB)	128.65	0.016	4.82	0.70	1.00	-	-
2/3	Acero (S275)	HE 120 B (HEB)	29.11	0.004	1.09	1.00	1.00	-	-
2/6	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	1.00	0.00	-	-
2/113	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	0.00	0.00	-	-
3/4	Acero (S235)	ZF-120x2.0 (Conformados Z)	7.64	0.001	1.90	0.00	0.00	-	-
3/5	Acero (S275)	IPE 180 (IPE)	9.90	0.001	0.53	1.00	1.00	-	-
3/110	Acero (S275)	Ø20 (Redondos)	1.84	0.000	0.75	0.00	0.00	-	-
4/8	Acero (S275)	2xUPE 240([-]) (UPE)	60.44	0.008	1.00	0.00	0.00	-	-
4/114	Acero (S275)	2xUPE 240([-]) (UPE)	60.45	0.008	1.00	0.00	0.00	-	-
5/7	Acero (S275)	IPE 180 (IPE)	8.90	0.001	0.47	1.00	1.00	-	-
5/110	Acero (S275)	IPE 300 (IPE)	22.24	0.003	0.53	0.00	0.00	-	0.53
6/7	Acero (S235)	ZF-225x4.0 (Conformados Z)	14.29	0.002	1.16	0.00	0.00	-	-
6/10	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	1.00	0.00	-	-
7/8	Acero (S235)	ZF-225x4.0 (Conformados Z)	22.53	0.003	1.83	0.00	0.00	-	-
7/9	Acero (S275)	IPE 180 (IPE)	16.41	0.002	0.87	1.00	1.00	-	-
8/12	Acero (S275)	2xUPE 240([-]) (UPE)	60.44	0.008	1.00	0.00	0.00	-	-
9/11	Acero (S275)	IPE 180 (IPE)	2.40	0.000	0.13	1.00	1.00	-	-
9/122	Acero (S235)	ZF-300x4.0 (Conformados Z)	27.45	0.003	1.87	0.00	0.00	-	1.87
10/11	Acero (S235)	ZF-225x4.0 (Conformados Z)	15.15	0.002	1.23	0.00	0.00	-	-
10/13	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	1.00	0.00	-	-
11/12	Acero (S235)	ZF-225x4.0 (Conformados Z)	21.67	0.003	1.76	0.00	0.00	-	-
11/14	Acero (S275)	IPE 180 (IPE)	18.81	0.002	1.00	1.00	1.00	-	-
12/15	Acero (S275)	2xUPE 240([-]) (UPE)	60.44	0.008	1.00	0.00	0.00	-	-
13/14	Acero (S235)	ZF-225x4.0 (Conformados Z)	16.01	0.002	1.30	0.00	0.00	-	-
13/17	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	1.00	0.00	-	-
14/15	Acero (S235)	ZF-225x4.0 (Conformados Z)	20.81	0.003	1.69	0.00	0.00	-	-
14/16	Acero (S275)	IPE 180 (IPE)	4.10	0.001	0.22	1.00	1.00	-	-
15/19	Acero (S275)	2xUPE 240([-]) (UPE)	60.44	0.008	1.00	0.00	0.00	-	-
16/18	Acero (S275)	IPE 180 (IPE)	14.70	0.002	0.78	1.00	1.00	-	-
16/131	Acero (S235)	ZF-300x4.0 (Conformados Z)	40.79	0.005	2.78	0.00	0.00	-	2.78
17/18	Acero (S235)	ZF-225x4.0 (Conformados Z)	16.87	0.002	1.37	0.00	0.00	-	-
17/21	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	1.00	0.00	-	-
18/19	Acero (S235)	ZF-225x4.0 (Conformados Z)	19.95	0.003	1.62	0.00	0.00	-	-
18/20	Acero (S275)	IPE 180 (IPE)	10.61	0.001	0.57	1.00	1.00	-	-
19/23	Acero (S275)	2xUPE 240([-]) (UPE)	60.44	0.008	1.00	0.00	0.00	-	-
20/22	Acero (S275)	IPE 180 (IPE)	8.20	0.001	0.44	1.00	1.00	-	-
20/121	Acero (S235)	ZF-300x4.0 (Conformados Z)	21.05	0.003	1.44	0.00	0.00	-	1.44
21/22	Acero (S235)	ZF-225x4.0 (Conformados Z)	17.73	0.002	1.44	0.00	0.00	-	-
21/26	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	1.00	0.00	-	-
22/23	Acero (S235)	ZF-225x4.0 (Conformados Z)	19.09	0.002	1.55	0.00	0.00	-	-
22/24	Acero (S275)	IPE 180 (IPE)	17.11	0.002	0.91	1.00	1.00	-	-
23/28	Acero (S275)	2xUPE 240([-]) (UPE)	60.45	0.008	1.00	0.00	0.00	-	-
24/27	Acero (S275)	IPE 180 (IPE)	1.69	0.000	0.09	1.00	1.00	-	-
24/108	Acero (S235)	ZF-300x4.0 (Conformados Z)	1.32	0.000	0.09	1.00	1.00	-	-
25/26	Acero (S275)	HE 240 B (HEB)	401.07	0.051	4.82	0.70	1.00	-	-
25/137	Acero (S275)	Ø20 (Redondos)	10.75	0.001	4.36	0.00	0.00	-	-
26/27	Acero (S275)	HE 240 B (HEB)	125.67	0.016	1.51	1.00	1.00	-	-
26/29	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.52	0.001	1.01	1.00	0.00	-	-
27/28	Acero (S235)	ZF-225x4.0 (Conformados Z)	18.23	0.002	1.48	0.00	0.00	-	-
27/30	Acero (S275)	IPE 100 (IPE)	8.16	0.001	1.01	1.00	1.00	-	-
108/27	Acero (S275)	Ø20 (Redondos)	0.31	0.000	0.13	1.00	1.00	-	-
27/111	Acero (S275)	Ø20 (Redondos)	4.56	0.001	1.85	0.00	0.00	-	-
137/27	Acero (S275)	Ø20 (Redondos)	10.75	0.001	4.36	0.00	0.00	-	-
28/31	Acero (S275)	2xUPE 240([-]) (UPE)	60.87	0.008	1.01	0.00	0.00	-	-
29/30	Acero (S235)	ZF-225x4.0 (Conformados Z)	19.46	0.002	1.58	0.00	0.00	-	-
29/33	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	1.00	0.00	-	-
30/31	Acero (S235)	ZF-225x4.0 (Conformados Z)	17.36	0.002	1.41	0.00	0.00	-	-
30/32	Acero (S275)	IPE 100 (IPE)	4.66	0.001	0.58	1.00	1.00	-	-
31/35	Acero (S275)	2xUPE 240([-]) (UPE)	60.45	0.008	1.00	0.00	0.00	-	-
32/34	Acero (S275)	IPE 100 (IPE)	3.45	0.000	0.43	1.00	1.00	-	-
32/111	Acero (S235)	ZF-300x4.0 (Conformados Z)	13.91	0.002	0.95	0.00	0.00	-	0.95
33/34	Acero (S235)	ZF-225x4.0 (Conformados Z)	20.32	0.003	1.65	0.00	0.00	-	-
33/36	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	1.00	0.00	-	-
34/35	Acero (S235)	ZF-225x4.0 (Conformados Z)	16.50	0.002	1.34	0.00	0.00	-	-
34/37	Acero (S275)	IPE 100 (IPE)	8.11	0.001	1.00	1.00	1.00	-	-
35/38	Acero (S275)	2xUPE 240([-]) (UPE)	60.45	0.008	1.00	0.00	0.00	-	-

# Metal 3D

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36/37	Acero (S235)	ZF-225x4.0 (Conformados Z)	21.18	0.003	1.72	0.00	0.00	-	-
36/40	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	1.00	0.00	-	-
37/38	Acero (S235)	ZF-225x4.0 (Conformados Z)	15.64	0.002	1.27	0.00	0.00	-	-
37/39	Acero (S275)	IPE 100 (IPE)	2.00	0.000	0.25	1.00	1.00	-	-
38/42	Acero (S275)	2xUPE 240([-]) (UPE)	60.45	0.008	1.00	0.00	0.00	-	-
39/41	Acero (S275)	IPE 100 (IPE)	6.11	0.001	0.76	1.00	1.00	-	-
39/124	Acero (S235)	ZF-300x4.0 (Conformados Z)	28.62	0.004	1.95	0.00	0.00	-	1.95
40/41	Acero (S235)	ZF-225x4.0 (Conformados Z)	22.04	0.003	1.79	0.00	0.00	-	-
40/45	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.41	0.001	0.99	1.00	0.00	-	-
41/42	Acero (S235)	ZF-225x4.0 (Conformados Z)	14.78	0.002	1.20	0.00	0.00	-	-
41/43	Acero (S275)	IPE 100 (IPE)	7.44	0.001	0.92	1.00	1.00	-	-
42/47	Acero (S275)	2xUPE 240([-]) (UPE)	60.02	0.008	0.99	0.00	0.00	-	-
43/46	Acero (S275)	IPE 100 (IPE)	0.61	0.000	0.08	1.00	1.00	-	-
43/133	Acero (S235)	ZF-300x4.0 (Conformados Z)	43.33	0.006	2.96	0.00	0.00	-	2.96
44/45	Acero (S275)	HE 120 B (HEB)	128.65	0.016	4.82	0.70	1.00	-	-
45/46	Acero (S275)	HE 120 B (HEB)	49.65	0.006	1.86	1.00	1.00	-	-
45/48	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.52	0.001	1.01	1.00	0.00	-	-
46/47	Acero (S235)	ZF-225x4.0 (Conformados Z)	13.92	0.002	1.13	0.00	0.00	-	-
46/49	Acero (S275)	IPE 100 (IPE)	8.16	0.001	1.01	1.00	1.00	-	-
47/50	Acero (S275)	2xUPE 240([-]) (UPE)	60.87	0.008	1.01	0.00	0.00	-	-
48/49	Acero (S235)	ZF-225x4.0 (Conformados Z)	23.76	0.003	1.93	0.00	0.00	-	-
48/52	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	1.00	0.00	-	-
49/50	Acero (S235)	ZF-225x4.0 (Conformados Z)	13.06	0.002	1.06	0.00	0.00	-	-
49/51	Acero (S275)	IPE 100 (IPE)	4.78	0.001	0.59	1.00	1.00	-	-
50/54	Acero (S275)	2xUPE 240([-]) (UPE)	60.44	0.008	1.00	0.00	0.00	-	-
51/53	Acero (S275)	IPE 100 (IPE)	3.33	0.000	0.41	1.00	1.00	-	-
51/129	Acero (S235)	ZF-300x4.0 (Conformados Z)	29.94	0.004	2.04	0.00	0.00	-	2.04
52/53	Acero (S235)	ZF-225x4.0 (Conformados Z)	24.62	0.003	2.00	0.00	0.00	-	-
52/55	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	1.00	0.00	-	-
53/54	Acero (S235)	ZF-225x4.0 (Conformados Z)	12.19	0.002	0.99	0.00	0.00	-	-
53/56	Acero (S275)	IPE 100 (IPE)	8.11	0.001	1.00	1.00	1.00	-	-
54/57	Acero (S275)	2xUPE 240([-]) (UPE)	60.45	0.008	1.00	0.00	0.00	-	-
55/56	Acero (S235)	ZF-225x4.0 (Conformados Z)	25.49	0.003	2.07	0.00	0.00	-	-
55/59	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	1.00	0.00	-	-
56/57	Acero (S235)	ZF-225x4.0 (Conformados Z)	11.33	0.001	0.92	0.00	0.00	-	-
56/58	Acero (S275)	IPE 100 (IPE)	2.12	0.000	0.26	1.00	1.00	-	-
57/61	Acero (S275)	2xUPE 240([-]) (UPE)	60.45	0.008	1.00	0.00	0.00	-	-
58/60	Acero (S275)	IPE 100 (IPE)	5.99	0.001	0.74	1.00	1.00	-	-
58/118	Acero (S235)	ZF-300x4.0 (Conformados Z)	15.23	0.002	1.04	0.00	0.00	-	1.04
59/60	Acero (S235)	ZF-225x4.0 (Conformados Z)	26.35	0.003	2.14	0.00	0.00	-	-
59/64	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.41	0.001	0.99	1.00	0.00	-	-
60/61	Acero (S235)	ZF-225x4.0 (Conformados Z)	10.47	0.001	0.85	0.00	0.00	-	-
60/62	Acero (S275)	IPE 100 (IPE)	7.56	0.001	0.94	1.00	1.00	-	-
61/66	Acero (S275)	2xUPE 240([-]) (UPE)	60.02	0.008	0.99	0.00	0.00	-	-
62/65	Acero (S275)	IPE 100 (IPE)	0.48	0.000	0.06	1.00	1.00	-	-
62/106	Acero (S235)	ZF-300x4.0 (Conformados Z)	0.53	0.000	0.04	1.00	1.00	-	-
63/64	Acero (S275)	HE 120 B (HEB)	128.65	0.016	4.82	0.70	1.00	-	-
64/65	Acero (S275)	HE 120 B (HEB)	58.99	0.008	2.21	1.00	1.00	-	-
64/68	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.52	0.001	1.01	1.00	0.00	-	-
65/66	Acero (S235)	ZF-225x4.0 (Conformados Z)	9.62	0.001	0.78	0.00	0.00	-	-
67/65	Acero (S275)	IPE 100 (IPE)	0.48	0.000	0.06	1.00	1.00	-	-
106/65	Acero (S275)	Ø20 (Redondos)	0.17	0.000	0.07	1.00	1.00	-	-
107/65	Acero (S275)	Ø20 (Redondos)	0.17	0.000	0.07	1.00	1.00	-	-
66/70	Acero (S275)	2xUPE 240([-]) (UPE)	60.87	0.008	1.01	0.00	0.00	-	-
69/67	Acero (S275)	IPE 100 (IPE)	7.68	0.001	0.95	1.00	1.00	-	-
67/107	Acero (S235)	ZF-300x4.0 (Conformados Z)	0.53	0.000	0.04	1.00	1.00	-	-
68/69	Acero (S235)	ZF-225x4.0 (Conformados Z)	26.35	0.003	2.14	0.00	0.00	-	-
68/72	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	1.00	0.00	-	-
69/70	Acero (S235)	ZF-225x4.0 (Conformados Z)	10.47	0.001	0.85	0.00	0.00	-	-
71/69	Acero (S275)	IPE 100 (IPE)	5.04	0.001	0.62	1.00	1.00	-	-
70/74	Acero (S275)	2xUPE 240([-]) (UPE)	60.45	0.008	1.00	0.00	0.00	-	-
73/71	Acero (S275)	IPE 100 (IPE)	3.07	0.000	0.38	1.00	1.00	-	-
71/112	Acero (S235)	ZF-300x4.0 (Conformados Z)	14.33	0.002	0.98	0.00	0.00	-	0.98
72/73	Acero (S235)	ZF-225x4.0 (Conformados Z)	25.49	0.003	2.07	0.00	0.00	-	-
72/75	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	1.00	0.00	-	-
73/74	Acero (S235)	ZF-225x4.0 (Conformados Z)	11.33	0.001	0.92	0.00	0.00	-	-
76/73	Acero (S275)	IPE 100 (IPE)	8.11	0.001	1.00	1.00	1.00	-	-
74/77	Acero (S275)	2xUPE 240([-]) (UPE)	60.45	0.008	1.00	0.00	0.00	-	-
75/76	Acero (S235)	ZF-225x4.0 (Conformados Z)	24.62	0.003	2.00	0.00	0.00	-	-
75/79	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	1.00	0.00	-	-
76/77	Acero (S235)	ZF-225x4.0 (Conformados Z)	12.19	0.002	0.99	0.00	0.00	-	-
78/76	Acero (S275)	IPE 100 (IPE)	1.55	0.000	0.19	1.00	1.00	-	-

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77/81	Acero (S275)	2xUPE 240([-]) (UPE)	60.45	0.008	1.00	0.00	0.00	-	-
80/78	Acero (S275)	IPE 100 (IPE)	6.56	0.001	0.81	1.00	1.00	-	-
78/123	Acero (S235)	ZF-300x4.0 (Conformados Z)	28.13	0.004	1.92	0.00	0.00	-	1.92
79/80	Acero (S235)	ZF-225x4.0 (Conformados Z)	23.76	0.003	1.93	0.00	0.00	-	-
79/84	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.41	0.001	0.99	1.00	0.00	-	-
80/81	Acero (S235)	ZF-225x4.0 (Conformados Z)	13.06	0.002	1.06	0.00	0.00	-	-
82/80	Acero (S275)	IPE 100 (IPE)	6.16	0.001	0.76	1.00	1.00	-	-
81/86	Acero (S275)	2xUPE 240([-]) (UPE)	60.02	0.008	0.99	0.00	0.00	-	-
85/82	Acero (S275)	IPE 100 (IPE)	1.89	0.000	0.23	1.00	1.00	-	-
82/132	Acero (S235)	ZF-300x4.0 (Conformados Z)	41.93	0.005	2.86	0.00	0.00	-	2.86
83/84	Acero (S275)	HE 120 B (HEB)	128.65	0.016	4.82	0.70	1.00	-	-
84/85	Acero (S275)	HE 120 B (HEB)	49.65	0.006	1.86	1.00	1.00	-	-
84/87	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.52	0.001	1.01	1.00	0.00	-	-
85/86	Acero (S235)	ZF-225x4.0 (Conformados Z)	13.92	0.002	1.13	0.00	0.00	-	-
88/85	Acero (S275)	IPE 100 (IPE)	8.16	0.001	1.01	1.00	1.00	-	-
86/89	Acero (S275)	2xUPE 240([-]) (UPE)	60.87	0.008	1.01	0.00	0.00	-	-
87/88	Acero (S235)	ZF-225x4.0 (Conformados Z)	22.04	0.003	1.79	0.00	0.00	-	-
87/91	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	1.00	0.00	-	-
88/89	Acero (S235)	ZF-225x4.0 (Conformados Z)	14.78	0.002	1.20	0.00	0.00	-	-
90/88	Acero (S275)	IPE 100 (IPE)	2.66	0.000	0.33	1.00	1.00	-	-
89/93	Acero (S275)	2xUPE 240([-]) (UPE)	60.45	0.008	1.00	0.00	0.00	-	-
92/90	Acero (S275)	IPE 100 (IPE)	5.44	0.001	0.67	1.00	1.00	-	-
90/130	Acero (S235)	ZF-300x4.0 (Conformados Z)	32.24	0.004	2.20	0.00	0.00	-	2.20
91/92	Acero (S235)	ZF-225x4.0 (Conformados Z)	21.18	0.003	1.72	0.00	0.00	-	-
91/95	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	1.00	0.00	-	-
92/93	Acero (S235)	ZF-225x4.0 (Conformados Z)	15.64	0.002	1.27	0.00	0.00	-	-
94/92	Acero (S275)	IPE 100 (IPE)	7.27	0.001	0.90	1.00	1.00	-	-
93/97	Acero (S275)	2xUPE 240([-]) (UPE)	60.44	0.008	1.00	0.00	0.00	-	-
96/94	Acero (S275)	IPE 100 (IPE)	0.83	0.000	0.10	1.00	1.00	-	-
94/119	Acero (S235)	ZF-300x4.0 (Conformados Z)	18.44	0.002	1.26	0.00	0.00	-	1.26
95/96	Acero (S235)	ZF-225x4.0 (Conformados Z)	20.32	0.003	1.65	0.00	0.00	-	-
95/98	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	1.00	0.00	-	-
96/97	Acero (S235)	ZF-225x4.0 (Conformados Z)	16.50	0.002	1.34	0.00	0.00	-	-
99/96	Acero (S275)	IPE 100 (IPE)	8.11	0.001	1.00	1.00	1.00	-	-
97/100	Acero (S275)	2xUPE 240([-]) (UPE)	60.45	0.008	1.00	0.00	0.00	-	-
98/99	Acero (S235)	ZF-225x4.0 (Conformados Z)	19.46	0.002	1.58	0.00	0.00	-	-
98/103	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.41	0.001	0.99	1.00	0.00	-	-
99/100	Acero (S235)	ZF-225x4.0 (Conformados Z)	17.36	0.002	1.41	0.00	0.00	-	-
101/99	Acero (S275)	IPE 100 (IPE)	3.78	0.000	0.47	1.00	1.00	-	-
100/105	Acero (S275)	2xUPE 240([-]) (UPE)	60.02	0.008	0.99	0.00	0.00	-	-
104/101	Acero (S275)	IPE 100 (IPE)	4.27	0.001	0.53	1.00	1.00	-	-
101/109	Acero (S275)	IPE 300 (IPE)	13.35	0.002	0.32	0.00	1.00	-	0.32
102/103	Acero (S275)	HE 240 B (HEB)	401.07	0.051	4.82	0.70	1.00	-	-
102/140	Acero (S275)	Ø20 (Redondos)	10.75	0.001	4.36	0.00	0.00	-	-
103/104	Acero (S275)	HE 240 B (HEB)	125.67	0.016	1.51	1.00	1.00	-	-
103/115	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	0.00	0.00	-	-
104/105	Acero (S235)	ZF-120x2.0 (Conformados Z)	5.95	0.001	1.48	0.00	0.00	-	-
104/109	Acero (S275)	Ø20 (Redondos)	1.52	0.000	0.62	1.00	1.00	-	-
116/104	Acero (S275)	Ø20 (Redondos)	3.58	0.000	1.45	0.00	0.00	-	-
105/117	Acero (S275)	2xUPE 240([-]) (UPE)	60.45	0.008	1.00	0.00	0.00	-	-
118/106	Acero (S275)	Ø20 (Redondos)	4.82	0.001	1.95	0.00	0.00	-	-
106/169	Acero (S235)	ZF-300x4.0 (Conformados Z)	86.92	0.011	5.93	0.00	0.00	-	5.93
112/107	Acero (S275)	Ø20 (Redondos)	4.52	0.001	1.83	0.00	0.00	-	-
107/170	Acero (S235)	ZF-300x4.0 (Conformados Z)	86.92	0.011	5.93	0.00	0.00	-	5.93
121/108	Acero (S275)	Ø20 (Redondos)	4.70	0.001	1.91	0.00	0.00	-	-
108/168	Acero (S235)	ZF-300x4.0 (Conformados Z)	85.33	0.011	5.82	0.00	0.00	-	5.82
109/119	Acero (S275)	Ø20 (Redondos)	4.52	0.001	1.83	0.00	0.00	-	-
109/167	Acero (S275)	IPE 300 (IPE)	226.71	0.029	5.37	0.00	0.00	-	5.37
110/122	Acero (S275)	Ø20 (Redondos)	4.70	0.001	1.91	0.00	0.00	-	-
110/166	Acero (S275)	IPE 300 (IPE)	208.92	0.027	4.95	0.00	0.00	-	4.95
111/124	Acero (S275)	Ø20 (Redondos)	4.82	0.001	1.95	0.00	0.00	-	-
111/165	Acero (S235)	ZF-300x4.0 (Conformados Z)	60.14	0.008	4.10	0.00	0.00	-	4.10
123/112	Acero (S275)	Ø20 (Redondos)	4.52	0.001	1.83	0.00	0.00	-	-
112/164	Acero (S235)	ZF-300x4.0 (Conformados Z)	59.32	0.008	4.05	0.00	0.00	-	4.05
113/114	Acero (S235)	ZF-120x2.0 (Conformados Z)	12.02	0.002	2.99	0.00	0.00	-	-
113/125	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	0.00	0.00	-	-
114/126	Acero (S275)	2xUPE 240([-]) (UPE)	60.45	0.008	1.00	0.00	0.00	-	-
115/116	Acero (S235)	ZF-120x2.0 (Conformados Z)	1.83	0.000	0.46	0.00	0.00	-	-
115/120	Acero (S235)	ZF-200x2.5 (Conformados Z)	3.22	0.000	0.43	1.00	0.00	-	-
116/117	Acero (S235)	ZF-120x2.0 (Conformados Z)	10.19	0.001	2.54	0.00	0.00	-	-
120/116	Acero (S275)	Ø20 (Redondos)	1.55	0.000	0.63	0.00	0.00	-	-
117/128	Acero (S275)	2xUPE 240([-]) (UPE)	60.45	0.008	1.00	0.00	0.00	-	-

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129/118	Acero (S275)	Ø20 (Redondos)	4.82	0.001	1.95	0.00	0.00	-	-
118/158	Acero (S235)	ZF-300x4.0 (Conformados Z)	57.51	0.007	3.92	0.00	0.00	-	3.92
119/130	Acero (S275)	Ø20 (Redondos)	4.52	0.001	1.83	0.00	0.00	-	-
119/157	Acero (S235)	ZF-300x4.0 (Conformados Z)	51.10	0.007	3.49	0.00	0.00	-	3.49
120/127	Acero (S235)	ZF-200x2.5 (Conformados Z)	4.24	0.001	0.57	0.00	0.00	-	-
140/120	Acero (S275)	Ø20 (Redondos)	5.62	0.001	2.28	0.00	0.00	-	-
131/121	Acero (S275)	Ø20 (Redondos)	4.70	0.001	1.91	0.00	0.00	-	-
121/155	Acero (S235)	ZF-300x4.0 (Conformados Z)	45.86	0.006	3.13	0.00	0.00	-	3.13
122/136	Acero (S275)	Ø20 (Redondos)	3.94	0.001	1.60	0.00	0.00	-	-
122/154	Acero (S235)	ZF-300x4.0 (Conformados Z)	33.06	0.004	2.26	0.00	0.00	-	2.26
132/123	Acero (S275)	Ø20 (Redondos)	4.52	0.001	1.83	0.00	0.00	-	-
123/153	Acero (S235)	ZF-300x4.0 (Conformados Z)	31.71	0.004	2.16	0.00	0.00	-	2.16
124/133	Acero (S275)	Ø20 (Redondos)	4.82	0.001	1.95	0.00	0.00	-	-
124/152	Acero (S235)	ZF-300x4.0 (Conformados Z)	30.73	0.004	2.10	0.00	0.00	-	2.10
125/126	Acero (S235)	ZF-120x2.0 (Conformados Z)	12.02	0.002	2.99	0.00	0.00	-	-
125/134	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	0.00	0.00	-	-
126/135	Acero (S275)	2xUPE 240([-]) (UPE)	60.44	0.008	1.00	0.00	0.00	-	-
127/128	Acero (S235)	ZF-120x2.0 (Conformados Z)	12.02	0.002	2.99	0.00	0.00	-	-
127/141	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	0.00	0.00	-	-
128/142	Acero (S275)	2xUPE 240([-]) (UPE)	60.44	0.008	1.00	0.00	0.00	-	-
138/129	Acero (S275)	Ø20 (Redondos)	4.60	0.001	1.87	0.00	0.00	-	-
129/147	Acero (S235)	ZF-300x4.0 (Conformados Z)	28.09	0.004	1.92	0.00	1.00	-	1.92
130/139	Acero (S275)	Ø20 (Redondos)	3.85	0.000	1.56	0.00	0.00	-	-
130/146	Acero (S235)	ZF-300x4.0 (Conformados Z)	23.50	0.003	1.60	0.00	0.00	-	1.60
136/131	Acero (S275)	Ø20 (Redondos)	0.76	0.000	0.31	1.00	1.00	-	-
131/145	Acero (S235)	ZF-300x4.0 (Conformados Z)	6.40	0.001	0.44	1.00	1.00	-	-
139/132	Acero (S275)	Ø20 (Redondos)	0.67	0.000	0.27	1.00	1.00	-	-
132/144	Acero (S235)	ZF-300x4.0 (Conformados Z)	4.11	0.001	0.28	0.00	1.00	-	-
133/138	Acero (S275)	Ø20 (Redondos)	0.22	0.000	0.09	1.00	1.00	-	-
133/143	Acero (S235)	ZF-300x4.0 (Conformados Z)	1.32	0.000	0.09	0.00	1.00	-	-
134/135	Acero (S235)	ZF-120x2.0 (Conformados Z)	12.02	0.002	2.99	0.00	0.00	-	-
134/148	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	0.00	0.00	-	-
135/149	Acero (S275)	2xUPE 240([-]) (UPE)	60.45	0.008	1.00	0.00	0.00	-	-
136/145	Acero (S275)	Ø20 (Redondos)	0.76	0.000	0.31	1.00	1.00	-	-
154/136	Acero (S275)	Ø20 (Redondos)	3.94	0.001	1.60	0.00	0.00	-	-
180/137	Acero (S275)	Ø20 (Redondos)	10.75	0.001	4.36	0.00	0.00	-	-
137/181	Acero (S275)	Ø20 (Redondos)	10.75	0.001	4.36	0.00	0.00	-	-
143/138	Acero (S275)	Ø20 (Redondos)	0.22	0.000	0.09	1.00	1.00	-	-
138/147	Acero (S275)	Ø20 (Redondos)	4.60	0.001	1.87	0.00	0.00	-	-
139/144	Acero (S275)	Ø20 (Redondos)	0.67	0.000	0.27	1.00	1.00	-	-
146/139	Acero (S275)	Ø20 (Redondos)	3.85	0.000	1.56	0.00	0.00	-	-
140/156	Acero (S275)	Ø20 (Redondos)	5.62	0.001	2.28	0.00	0.00	-	-
196/140	Acero (S275)	Ø20 (Redondos)	10.75	0.001	4.36	0.00	0.00	-	-
141/142	Acero (S235)	ZF-120x2.0 (Conformados Z)	12.02	0.002	2.99	0.00	0.00	-	-
141/150	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	0.00	0.00	-	-
142/151	Acero (S275)	2xUPE 240([-]) (UPE)	60.45	0.008	1.00	0.00	0.00	-	-
152/143	Acero (S275)	Ø20 (Redondos)	4.82	0.001	1.95	0.00	0.00	-	-
143/184	Acero (S235)	ZF-300x4.0 (Conformados Z)	43.33	0.006	2.96	0.00	1.00	-	2.96
144/153	Acero (S275)	Ø20 (Redondos)	4.52	0.001	1.83	0.00	0.00	-	-
144/192	Acero (S235)	ZF-300x4.0 (Conformados Z)	41.93	0.005	2.86	0.00	0.00	-	2.86
145/155	Acero (S275)	Ø20 (Redondos)	4.70	0.001	1.91	0.00	0.00	-	-
145/177	Acero (S235)	ZF-300x4.0 (Conformados Z)	40.79	0.005	2.78	0.00	0.00	-	2.78
157/146	Acero (S275)	Ø20 (Redondos)	4.52	0.001	1.83	0.00	0.00	-	-
146/193	Acero (S235)	ZF-300x4.0 (Conformados Z)	32.24	0.004	2.20	0.00	0.00	-	2.20
147/158	Acero (S275)	Ø20 (Redondos)	4.82	0.001	1.95	0.00	0.00	-	-
147/185	Acero (S235)	ZF-300x4.0 (Conformados Z)	29.94	0.004	2.04	0.00	1.00	-	2.04
148/149	Acero (S235)	ZF-120x2.0 (Conformados Z)	12.02	0.002	2.99	0.00	0.00	-	-
148/159	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	0.00	0.00	-	-
149/160	Acero (S275)	2xUPE 240([-]) (UPE)	60.45	0.008	1.00	0.00	0.00	-	-
150/151	Acero (S235)	ZF-120x2.0 (Conformados Z)	12.02	0.002	2.99	0.00	0.00	-	-
150/156	Acero (S235)	ZF-200x2.5 (Conformados Z)	4.24	0.001	0.57	0.00	0.00	-	-
151/163	Acero (S275)	2xUPE 240([-]) (UPE)	60.45	0.008	1.00	0.00	0.00	-	-
165/152	Acero (S275)	Ø20 (Redondos)	4.82	0.001	1.95	0.00	0.00	-	-
152/183	Acero (S235)	ZF-300x4.0 (Conformados Z)	28.62	0.004	1.95	0.00	0.00	-	1.95
153/164	Acero (S275)	Ø20 (Redondos)	4.52	0.001	1.83	0.00	0.00	-	-
153/191	Acero (S235)	ZF-300x4.0 (Conformados Z)	28.13	0.004	1.92	0.00	0.00	-	1.92
166/154	Acero (S275)	Ø20 (Redondos)	4.70	0.001	1.91	0.00	0.00	-	-
154/176	Acero (S235)	ZF-300x4.0 (Conformados Z)	27.45	0.003	1.87	0.00	0.00	-	1.87
155/168	Acero (S275)	Ø20 (Redondos)	4.70	0.001	1.91	0.00	0.00	-	-
155/178	Acero (S235)	ZF-300x4.0 (Conformados Z)	21.05	0.003	1.44	0.00	0.00	-	1.44
156/161	Acero (S235)	ZF-200x2.5 (Conformados Z)	3.22	0.000	0.43	0.00	0.00	-	-
156/162	Acero (S275)	Ø20 (Redondos)	1.55	0.000	0.63	1.00	0.00	-	-

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## NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

167/157	Acero (S275)	Ø20 (Redondos)	4.52	0.001	1.83	0.00	0.00	-	-
157/194	Acero (S235)	ZF-300x4.0 (Conformados Z)	18.44	0.002	1.26	0.00	0.00	-	1.26
158/169	Acero (S275)	Ø20 (Redondos)	4.82	0.001	1.95	0.00	0.00	-	-
158/186	Acero (S235)	ZF-300x4.0 (Conformados Z)	15.23	0.002	1.04	0.00	0.00	-	1.04
159/160	Acero (S235)	ZF-120x2.0 (Conformados Z)	12.02	0.002	2.99	0.00	0.00	-	-
159/172	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	0.00	0.00	-	-
160/174	Acero (S275)	2xUPE 240([-]) (UPE)	60.45	0.008	1.00	0.00	0.00	-	-
161/162	Acero (S235)	ZF-120x2.0 (Conformados Z)	1.83	0.000	0.46	0.00	1.00	-	-
161/197	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	0.00	0.00	-	-
162/163	Acero (S235)	ZF-120x2.0 (Conformados Z)	10.19	0.001	2.54	0.00	0.00	-	-
162/198	Acero (S275)	Ø20 (Redondos)	3.58	0.000	1.45	0.00	0.00	-	-
163/199	Acero (S275)	2xUPE 240([-]) (UPE)	60.45	0.008	1.00	0.00	0.00	-	-
164/170	Acero (S275)	Ø20 (Redondos)	4.52	0.001	1.83	0.00	0.00	-	-
164/190	Acero (S235)	ZF-300x4.0 (Conformados Z)	14.33	0.002	0.98	0.00	0.00	-	0.98
181/165	Acero (S275)	Ø20 (Redondos)	4.56	0.001	1.85	0.00	0.00	-	-
165/182	Acero (S235)	ZF-300x4.0 (Conformados Z)	13.91	0.002	0.95	0.00	0.00	-	0.95
173/166	Acero (S275)	Ø20 (Redondos)	1.84	0.000	0.75	0.00	1.00	-	-
166/175	Acero (S275)	IPE 300 (IPE)	22.24	0.003	0.53	0.00	0.00	-	0.53
167/195	Acero (S275)	IPE 300 (IPE)	13.35	0.002	0.32	0.00	1.00	-	0.32
198/167	Acero (S275)	Ø20 (Redondos)	1.52	0.000	0.62	1.00	1.00	-	-
168/179	Acero (S235)	ZF-300x4.0 (Conformados Z)	1.32	0.000	0.09	1.00	1.00	-	-
168/181	Acero (S275)	Ø20 (Redondos)	0.31	0.000	0.13	1.00	1.00	-	-
169/187	Acero (S235)	ZF-300x4.0 (Conformados Z)	0.53	0.000	0.04	1.00	1.00	-	-
169/188	Acero (S275)	Ø20 (Redondos)	0.17	0.000	0.07	1.00	1.00	-	-
170/188	Acero (S275)	Ø20 (Redondos)	0.17	0.000	0.07	1.00	1.00	-	-
170/189	Acero (S235)	ZF-300x4.0 (Conformados Z)	0.53	0.000	0.04	1.00	1.00	-	-
171/172	Acero (S275)	HE 120 B (HEB)	128.65	0.016	4.82	0.70	1.00	-	-
172/173	Acero (S275)	HE 120 B (HEB)	29.11	0.004	1.09	1.00	1.00	-	-
172/200	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	0.00	0.00	-	-
173/174	Acero (S235)	ZF-120x2.0 (Conformados Z)	7.64	0.001	1.90	0.00	0.00	-	-
173/175	Acero (S275)	IPE 180 (IPE)	9.90	0.001	0.53	1.00	1.00	-	-
174/201	Acero (S275)	2xUPE 240([-]) (UPE)	60.44	0.008	1.00	0.00	0.00	-	-
175/176	Acero (S275)	IPE 180 (IPE)	25.31	0.003	1.35	1.00	1.00	-	-
175/224	Acero (S275)	IPE 300 (IPE)	253.40	0.032	6.00	0.00	0.00	-	6.00
176/177	Acero (S275)	IPE 180 (IPE)	25.31	0.003	1.35	1.00	1.00	-	-
176/225	Acero (S235)	ZF-300x4.0 (Conformados Z)	87.97	0.011	6.00	0.00	0.00	-	6.00
177/178	Acero (S275)	IPE 180 (IPE)	25.31	0.003	1.35	1.00	1.00	-	-
177/226	Acero (S235)	ZF-300x4.0 (Conformados Z)	87.97	0.011	6.00	0.00	0.00	-	-
178/179	Acero (S275)	IPE 180 (IPE)	25.31	0.003	1.35	1.00	1.00	-	-
178/227	Acero (S235)	ZF-300x4.0 (Conformados Z)	87.97	0.011	6.00	0.00	0.00	-	6.00
179/181	Acero (S275)	IPE 180 (IPE)	1.69	0.000	0.09	1.00	1.00	-	-
179/228	Acero (S235)	ZF-300x4.0 (Conformados Z)	87.97	0.011	6.00	0.00	0.00	-	6.00
180/181	Acero (S275)	HE 240 B (HEB)	526.75	0.067	6.33	1.00	1.00	-	-
181/182	Acero (S275)	IPE 270 (IPE) + cart. inf. 2.506 m	88.31	0.011	1.59	1.00	1.00	-	-
182/183	Acero (S275)	IPE 270 (IPE)	72.53	0.009	1.68	1.00	1.00	-	-
182/231	Acero (S235)	ZF-300x4.0 (Conformados Z)	87.97	0.011	6.00	0.00	0.00	-	6.00
183/184	Acero (S275)	IPE 270 (IPE)	60.38	0.008	1.68	1.00	1.00	-	-
183/232	Acero (S235)	ZF-300x4.0 (Conformados Z)	87.97	0.011	6.00	0.00	0.00	-	6.00
184/185	Acero (S275)	IPE 270 (IPE)	60.38	0.008	1.68	1.00	1.00	-	-
184/233	Acero (S235)	ZF-300x4.0 (Conformados Z)	87.97	0.011	6.00	0.00	0.00	-	6.00
185/186	Acero (S275)	IPE 270 (IPE)	60.38	0.008	1.68	1.00	1.00	-	-
185/234	Acero (S235)	ZF-300x4.0 (Conformados Z)	87.97	0.011	6.00	0.00	0.00	-	6.00
186/187	Acero (S275)	IPE 270 (IPE)	60.38	0.008	1.68	1.00	1.00	-	-
186/235	Acero (S235)	ZF-300x4.0 (Conformados Z)	87.97	0.011	6.00	0.00	0.00	-	6.00
187/188	Acero (S275)	IPE 270 (IPE)	2.16	0.000	0.06	1.00	1.00	-	-
187/236	Acero (S235)	ZF-300x4.0 (Conformados Z)	87.97	0.011	6.00	0.00	0.00	-	6.00
189/188	Acero (S275)	IPE 270 (IPE)	2.16	0.000	0.06	1.00	1.00	-	-
190/189	Acero (S275)	IPE 270 (IPE)	56.67	0.007	1.57	1.00	1.00	-	-
189/238	Acero (S235)	ZF-300x4.0 (Conformados Z)	87.97	0.011	6.00	0.00	0.00	-	6.00
191/190	Acero (S275)	IPE 270 (IPE)	56.67	0.007	1.57	1.00	1.00	-	-
190/239	Acero (S235)	ZF-300x4.0 (Conformados Z)	87.97	0.011	6.00	0.00	0.00	-	6.00
192/191	Acero (S275)	IPE 270 (IPE)	56.67	0.007	1.57	1.00	1.00	-	-
191/240	Acero (S235)	ZF-300x4.0 (Conformados Z)	87.97	0.011	6.00	0.00	0.00	-	6.00
193/192	Acero (S275)	IPE 270 (IPE)	56.67	0.007	1.57	1.00	1.00	-	-
192/241	Acero (S235)	ZF-300x4.0 (Conformados Z)	87.97	0.011	6.00	0.00	0.00	-	6.00
194/193	Acero (S275)	IPE 270 (IPE)	61.48	0.008	1.57	1.00	1.00	-	-
193/242	Acero (S235)	ZF-300x4.0 (Conformados Z)	87.97	0.011	6.00	0.00	0.00	-	6.00
195/194	Acero (S275)	IPE 270 (IPE)	83.37	0.011	1.57	1.00	1.00	-	-
194/243	Acero (S235)	ZF-300x4.0 (Conformados Z)	87.97	0.011	6.00	0.00	0.00	-	6.00
198/195	Acero (S275)	IPE 270 (IPE) + cart. inf. 2.506 m	30.84	0.004	0.53	1.00	1.00	-	-
195/244	Acero (S275)	IPE 300 (IPE)	253.40	0.032	6.00	0.00	0.00	-	6.00
196/197	Acero (S275)	HE 240 B (HEB)	401.07	0.051	4.82	0.70	1.00	-	-



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197/198	Acero (S275)	HE 240 B (HEB)	125.67	0.016	1.51	1.00	1.00	-	-
197/202	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	0.00	0.00	-	-
198/199	Acero (S235)	ZF-120x2.0 (Conformados Z)	5.95	0.001	1.48	0.00	0.00	-	-
199/203	Acero (S275)	2xUPE 240([-]) (UPE)	60.44	0.008	1.00	0.00	0.00	-	-
200/201	Acero (S235)	ZF-120x2.0 (Conformados Z)	12.02	0.002	2.99	0.00	0.00	-	-
200/204	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	0.00	0.00	-	-
201/205	Acero (S275)	2xUPE 240([-]) (UPE)	60.45	0.008	1.00	0.00	0.00	-	-
202/203	Acero (S235)	ZF-120x2.0 (Conformados Z)	12.02	0.002	2.99	0.00	0.00	-	-
202/206	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	0.00	0.00	-	-
203/207	Acero (S275)	2xUPE 240([-]) (UPE)	60.45	0.008	1.00	0.00	0.00	-	-
204/205	Acero (S235)	ZF-120x2.0 (Conformados Z)	12.02	0.002	2.99	0.00	0.00	-	-
204/208	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	0.00	0.00	-	-
205/209	Acero (S275)	2xUPE 240([-]) (UPE)	60.44	0.008	1.00	0.00	0.00	-	-
206/207	Acero (S235)	ZF-120x2.0 (Conformados Z)	12.02	0.002	2.99	0.00	0.00	-	-
206/210	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	0.00	0.00	-	-
207/211	Acero (S275)	2xUPE 240([-]) (UPE)	60.44	0.008	1.00	0.00	0.00	-	-
208/209	Acero (S235)	ZF-120x2.0 (Conformados Z)	12.02	0.002	2.99	0.00	0.00	-	-
208/212	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	0.00	0.00	-	-
209/213	Acero (S275)	2xUPE 240([-]) (UPE)	60.45	0.008	1.00	0.00	0.00	-	-
210/211	Acero (S235)	ZF-120x2.0 (Conformados Z)	12.02	0.002	2.99	0.00	0.00	-	-
210/214	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	0.00	0.00	-	-
211/215	Acero (S275)	2xUPE 240([-]) (UPE)	60.45	0.008	1.00	0.00	0.00	-	-
212/213	Acero (S235)	ZF-120x2.0 (Conformados Z)	12.02	0.002	2.99	0.00	0.00	-	-
212/216	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	0.00	0.00	-	-
213/217	Acero (S275)	2xUPE 240([-]) (UPE)	60.45	0.008	1.00	0.00	0.00	-	-
214/215	Acero (S235)	ZF-120x2.0 (Conformados Z)	12.02	0.002	2.99	0.00	0.00	-	-
214/218	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	0.00	0.00	-	-
215/219	Acero (S275)	2xUPE 240([-]) (UPE)	60.45	0.008	1.00	0.00	0.00	-	-
216/217	Acero (S235)	ZF-120x2.0 (Conformados Z)	12.02	0.002	2.99	0.00	0.00	-	-
216/221	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	0.00	0.00	-	-
217/223	Acero (S275)	2xUPE 240([-]) (UPE)	60.45	0.008	1.00	0.00	0.00	-	-
218/219	Acero (S235)	ZF-120x2.0 (Conformados Z)	12.02	0.002	2.99	0.00	0.00	-	-
218/246	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	0.00	0.00	-	-
219/248	Acero (S275)	2xUPE 240([-]) (UPE)	60.45	0.008	1.00	0.00	0.00	-	-
220/221	Acero (S275)	HE 120 B (HEB)	128.65	0.016	4.82	0.70	1.00	-	-
221/222	Acero (S275)	HE 120 B (HEB)	29.11	0.004	1.09	1.00	1.00	-	-
221/249	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	0.00	0.00	-	-
222/223	Acero (S235)	ZF-120x2.0 (Conformados Z)	7.64	0.001	1.90	0.00	0.00	-	-
222/224	Acero (S275)	IPE 180 (IPE)	9.90	0.001	0.53	1.00	1.00	-	-
223/250	Acero (S275)	2xUPE 240([-]) (UPE)	60.45	0.008	1.00	0.00	0.00	-	-
224/225	Acero (S275)	IPE 180 (IPE)	25.31	0.003	1.35	1.00	1.00	-	-
224/273	Acero (S275)	IPE 300 (IPE)	253.40	0.032	6.00	0.00	0.00	-	6.00
225/226	Acero (S275)	IPE 180 (IPE)	25.31	0.003	1.35	1.00	1.00	-	-
225/274	Acero (S235)	ZF-300x4.0 (Conformados Z)	87.97	0.011	6.00	0.00	0.00	-	6.00
226/227	Acero (S275)	IPE 180 (IPE)	25.31	0.003	1.35	1.00	1.00	-	-
226/275	Acero (S235)	ZF-300x4.0 (Conformados Z)	87.97	0.011	6.00	0.00	0.00	-	6.00
227/228	Acero (S275)	IPE 180 (IPE)	25.31	0.003	1.35	1.00	1.00	-	-
227/276	Acero (S235)	ZF-300x4.0 (Conformados Z)	87.97	0.011	6.00	0.00	0.00	-	6.00
228/230	Acero (S275)	IPE 180 (IPE)	1.69	0.000	0.09	1.00	1.00	-	-
228/277	Acero (S235)	ZF-300x4.0 (Conformados Z)	87.97	0.011	6.00	0.00	0.00	-	6.00
229/230	Acero (S275)	HE 240 B (HEB)	526.75	0.067	6.33	1.00	1.00	-	-
230/231	Acero (S275)	IPE 270 (IPE) + cart. inf. 2.506 m	88.31	0.011	1.59	1.00	1.00	-	-
231/232	Acero (S275)	IPE 270 (IPE)	72.53	0.009	1.68	1.00	1.00	-	-
231/280	Acero (S235)	ZF-300x4.0 (Conformados Z)	87.97	0.011	6.00	0.00	0.00	-	6.00
232/233	Acero (S275)	IPE 270 (IPE)	60.38	0.008	1.68	1.00	1.00	-	-
232/281	Acero (S235)	ZF-300x4.0 (Conformados Z)	87.97	0.011	6.00	0.00	0.00	-	6.00
233/234	Acero (S275)	IPE 270 (IPE)	60.38	0.008	1.68	1.00	1.00	-	-
233/282	Acero (S235)	ZF-300x4.0 (Conformados Z)	87.97	0.011	6.00	0.00	0.00	-	6.00
234/235	Acero (S275)	IPE 270 (IPE)	60.38	0.008	1.68	1.00	1.00	-	-
234/283	Acero (S235)	ZF-300x4.0 (Conformados Z)	87.97	0.011	6.00	0.00	0.00	-	6.00
235/236	Acero (S275)	IPE 270 (IPE)	60.38	0.008	1.68	1.00	1.00	-	-
235/284	Acero (S235)	ZF-300x4.0 (Conformados Z)	87.97	0.011	6.00	0.00	0.00	-	6.00
236/237	Acero (S275)	IPE 270 (IPE)	2.16	0.000	0.06	1.00	1.00	-	-
236/285	Acero (S235)	ZF-300x4.0 (Conformados Z)	87.97	0.011	6.00	0.00	0.00	-	6.00
238/237	Acero (S275)	IPE 270 (IPE)	2.16	0.000	0.06	1.00	1.00	-	-
239/238	Acero (S275)	IPE 270 (IPE)	56.67	0.007	1.57	1.00	1.00	-	-
238/287	Acero (S235)	ZF-300x4.0 (Conformados Z)	87.97	0.011	6.00	0.00	0.00	-	6.00
240/239	Acero (S275)	IPE 270 (IPE)	56.67	0.007	1.57	1.00	1.00	-	-
239/288	Acero (S235)	ZF-300x4.0 (Conformados Z)	87.97	0.011	6.00	0.00	0.00	-	6.00
241/240	Acero (S275)	IPE 270 (IPE)	56.67	0.007	1.57	1.00	1.00	-	-
240/289	Acero (S235)	ZF-300x4.0 (Conformados Z)	87.97	0.011	6.00	0.00	0.00	-	6.00
242/241	Acero (S275)	IPE 270 (IPE)	56.67	0.007	1.57	1.00	1.00	-	-

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241/290	Acero (S235)	ZF-300x4.0 (Conformados Z)	87.97	0.011	6.00	0.00	0.00	-	6.00
243/242	Acero (S275)	IPE 270 (IPE)	61.48	0.008	1.57	1.00	1.00	-	-
242/291	Acero (S235)	ZF-300x4.0 (Conformados Z)	87.97	0.011	6.00	0.00	0.00	-	6.00
244/243	Acero (S275)	IPE 270 (IPE)	83.37	0.011	1.57	1.00	1.00	-	-
243/292	Acero (S235)	ZF-300x4.0 (Conformados Z)	87.97	0.011	6.00	0.00	0.00	-	6.00
247/244	Acero (S275)	IPE 270 (IPE) + cart. inf. 2.506 m	30.84	0.004	0.53	1.00	1.00	-	-
244/293	Acero (S275)	IPE 300 (IPE)	253.40	0.032	6.00	0.00	0.00	-	6.00
245/246	Acero (S275)	HE 240 B (HEB)	401.07	0.051	4.82	0.70	1.00	-	-
246/247	Acero (S275)	HE 240 B (HEB)	125.67	0.016	1.51	1.00	1.00	-	-
246/251	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	0.00	0.00	-	-
247/248	Acero (S235)	ZF-120x2.0 (Conformados Z)	5.95	0.001	1.48	0.00	0.00	-	-
248/252	Acero (S275)	2xUPE 240([-]) (UPE)	60.45	0.008	1.00	0.00	0.00	-	-
249/250	Acero (S235)	ZF-120x2.0 (Conformados Z)	12.02	0.002	2.99	0.00	0.00	-	-
249/253	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	0.00	0.00	-	-
250/254	Acero (S275)	2xUPE 240([-]) (UPE)	60.45	0.008	1.00	1.00	0.00	-	-
251/252	Acero (S235)	ZF-120x2.0 (Conformados Z)	12.02	0.002	2.99	0.00	0.00	-	-
251/255	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	0.00	0.00	-	-
252/256	Acero (S275)	2xUPE 240([-]) (UPE)	60.45	0.008	1.00	0.00	0.00	-	-
253/254	Acero (S235)	ZF-120x2.0 (Conformados Z)	12.02	0.002	2.99	0.00	0.00	-	-
253/257	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	0.00	0.00	-	-
254/258	Acero (S275)	2xUPE 240([-]) (UPE)	60.44	0.008	1.00	0.00	0.00	-	-
255/256	Acero (S235)	ZF-120x2.0 (Conformados Z)	12.02	0.002	2.99	0.00	0.00	-	-
255/259	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	0.00	0.00	-	-
256/260	Acero (S275)	2xUPE 240([-]) (UPE)	60.44	0.008	1.00	0.00	0.00	-	-
257/258	Acero (S235)	ZF-120x2.0 (Conformados Z)	12.02	0.002	2.99	0.00	0.00	-	-
257/261	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	1.00	0.00	-	-
258/262	Acero (S275)	2xUPE 240([-]) (UPE)	60.45	0.008	1.00	0.00	0.00	-	-
259/260	Acero (S235)	ZF-120x2.0 (Conformados Z)	12.02	0.002	2.99	0.00	0.00	-	-
259/263	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	0.00	0.00	-	-
260/264	Acero (S275)	2xUPE 240([-]) (UPE)	60.45	0.008	1.00	0.00	0.00	-	-
261/262	Acero (S235)	ZF-120x2.0 (Conformados Z)	12.02	0.002	2.99	0.00	0.00	-	-
261/265	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.45	0.001	1.00	0.00	0.00	-	-
262/266	Acero (S275)	2xUPE 240([-]) (UPE)	60.32	0.008	1.00	0.00	0.00	-	-
263/264	Acero (S235)	ZF-120x2.0 (Conformados Z)	12.02	0.002	2.99	0.00	0.00	-	-
263/267	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.45	0.001	1.00	0.00	0.00	-	-
264/268	Acero (S275)	2xUPE 240([-]) (UPE)	60.32	0.008	1.00	0.00	0.00	-	-
265/266	Acero (S235)	ZF-120x2.0 (Conformados Z)	12.02	0.002	2.99	0.00	0.00	-	-
265/270	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.48	0.001	1.00	0.00	0.00	-	-
266/272	Acero (S275)	2xUPE 240([-]) (UPE)	60.57	0.008	1.00	0.00	0.00	-	-
267/268	Acero (S235)	ZF-120x2.0 (Conformados Z)	12.02	0.002	2.99	0.00	0.00	-	-
267/295	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.48	0.001	1.00	0.00	0.00	-	-
268/297	Acero (S275)	2xUPE 240([-]) (UPE)	60.57	0.008	1.00	0.00	0.00	-	-
269/270	Acero (S275)	HE 120 B (HEB)	128.65	0.016	4.82	0.70	1.00	-	-
270/271	Acero (S275)	HE 120 B (HEB)	29.11	0.004	1.09	1.00	1.00	-	-
270/298	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	0.00	0.00	-	-
271/272	Acero (S235)	ZF-120x2.0 (Conformados Z)	7.64	0.001	1.90	0.00	0.00	-	-
271/273	Acero (S275)	IPE 180 (IPE)	9.90	0.001	0.53	1.00	1.00	-	-
272/299	Acero (S275)	2xUPE 240([-]) (UPE)	60.45	0.008	1.00	0.00	0.00	-	-
273/274	Acero (S275)	IPE 180 (IPE)	25.31	0.003	1.35	1.00	1.00	-	-
273/322	Acero (S275)	IPE 300 (IPE)	253.40	0.032	6.00	0.00	0.00	-	6.00
274/275	Acero (S275)	IPE 180 (IPE)	25.31	0.003	1.35	1.00	1.00	-	-
274/323	Acero (S235)	ZF-300x4.0 (Conformados Z)	87.97	0.011	6.00	0.00	0.00	-	6.00
275/276	Acero (S275)	IPE 180 (IPE)	25.31	0.003	1.35	1.00	1.00	-	-
275/324	Acero (S235)	ZF-300x4.0 (Conformados Z)	87.97	0.011	6.00	0.00	0.00	-	6.00
276/277	Acero (S275)	IPE 180 (IPE)	25.31	0.003	1.35	1.00	1.00	-	-
276/325	Acero (S235)	ZF-300x4.0 (Conformados Z)	87.97	0.011	6.00	0.00	0.00	-	6.00
277/279	Acero (S275)	IPE 180 (IPE)	1.69	0.000	0.09	1.00	1.00	-	-
277/326	Acero (S235)	ZF-300x4.0 (Conformados Z)	87.97	0.011	6.00	0.00	0.00	-	6.00
278/279	Acero (S275)	HE 240 B (HEB)	526.75	0.067	6.33	1.00	1.00	-	-
279/280	Acero (S275)	IPE 270 (IPE) + cart. inf. 2.506 m	88.31	0.011	1.59	1.00	1.00	-	-
280/281	Acero (S275)	IPE 270 (IPE)	72.53	0.009	1.68	1.00	1.00	-	-
280/331	Acero (S235)	ZF-300x4.0 (Conformados Z)	87.97	0.011	6.00	0.00	0.00	-	6.00
281/282	Acero (S275)	IPE 270 (IPE)	60.38	0.008	1.68	1.00	1.00	-	-
281/332	Acero (S235)	ZF-300x4.0 (Conformados Z)	87.97	0.011	6.00	0.00	0.00	-	6.00
282/283	Acero (S275)	IPE 270 (IPE)	60.38	0.008	1.68	1.00	1.00	-	-
282/333	Acero (S235)	ZF-300x4.0 (Conformados Z)	87.97	0.011	6.00	0.00	0.00	-	6.00
283/284	Acero (S275)	IPE 270 (IPE)	60.38	0.008	1.68	1.00	1.00	-	-
283/336	Acero (S235)	ZF-300x4.0 (Conformados Z)	87.97	0.011	6.00	0.00	0.00	-	6.00
284/285	Acero (S275)	IPE 270 (IPE)	60.38	0.008	1.68	1.00	1.00	-	-
284/337	Acero (S235)	ZF-300x4.0 (Conformados Z)	87.97	0.011	6.00	0.00	0.00	-	6.00
285/286	Acero (S275)	IPE 270 (IPE)	2.16	0.000	0.06	1.00	1.00	-	-
285/338	Acero (S235)	ZF-300x4.0 (Conformados Z)	87.97	0.011	6.00	0.00	0.00	-	6.00

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287/286	Acero (S275)	IPE 270 (IPE)	2.16	0.000	0.06	1.00	1.00	-	-
288/287	Acero (S275)	IPE 270 (IPE)	56.67	0.007	1.57	1.00	1.00	-	-
287/342	Acero (S235)	ZF-300x4.0 (Conformados Z)	87.97	0.011	6.00	0.00	0.00	-	6.00
289/288	Acero (S275)	IPE 270 (IPE)	56.67	0.007	1.57	1.00	1.00	-	-
288/343	Acero (S235)	ZF-300x4.0 (Conformados Z)	87.97	0.011	6.00	0.00	0.00	-	6.00
290/289	Acero (S275)	IPE 270 (IPE)	56.67	0.007	1.57	1.00	1.00	-	-
289/344	Acero (S235)	ZF-300x4.0 (Conformados Z)	87.97	0.011	6.00	0.00	0.00	-	6.00
291/290	Acero (S275)	IPE 270 (IPE)	56.67	0.007	1.57	1.00	1.00	-	-
290/345	Acero (S235)	ZF-300x4.0 (Conformados Z)	87.97	0.011	6.00	0.00	0.00	-	6.00
292/291	Acero (S275)	IPE 270 (IPE)	61.48	0.008	1.57	1.00	1.00	-	-
291/348	Acero (S235)	ZF-300x4.0 (Conformados Z)	87.97	0.011	6.00	0.00	0.00	-	6.00
293/292	Acero (S275)	IPE 270 (IPE)	83.37	0.011	1.57	1.00	1.00	-	-
292/349	Acero (S235)	ZF-300x4.0 (Conformados Z)	87.97	0.011	6.00	0.00	0.00	-	6.00
296/293	Acero (S275)	IPE 270 (IPE) + cart. inf. 2.506 m	30.84	0.004	0.53	1.00	1.00	-	-
293/350	Acero (S275)	IPE 300 (IPE)	253.40	0.032	6.00	0.00	0.00	-	6.00
294/295	Acero (S275)	HE 240 B (HEB)	401.07	0.051	4.82	0.70	1.00	-	-
295/296	Acero (S275)	HE 240 B (HEB)	125.67	0.016	1.51	1.00	1.00	-	-
295/300	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	2.00	0.00	0.00	-	-
296/297	Acero (S235)	ZF-120x2.0 (Conformados Z)	5.95	0.001	1.48	0.00	0.00	-	-
297/301	Acero (S275)	2xUPE 240([-]) (UPE)	60.45	0.008	1.00	0.00	0.00	-	-
298/299	Acero (S235)	ZF-120x2.0 (Conformados Z)	12.02	0.002	2.99	0.00	0.00	-	-
298/302	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	0.00	0.00	-	-
299/303	Acero (S275)	2xUPE 240([-]) (UPE)	60.45	0.008	1.00	0.00	0.00	-	-
300/301	Acero (S235)	ZF-120x2.0 (Conformados Z)	12.02	0.002	2.99	0.00	0.00	-	-
300/304	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	0.00	0.00	-	-
301/305	Acero (S275)	2xUPE 240([-]) (UPE)	60.45	0.008	1.00	0.00	0.00	-	-
302/303	Acero (S235)	ZF-120x2.0 (Conformados Z)	12.02	0.002	2.99	0.00	0.00	-	-
302/306	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	0.00	0.00	-	-
303/307	Acero (S275)	2xUPE 240([-]) (UPE)	60.44	0.008	1.00	0.00	0.00	-	-
304/305	Acero (S235)	ZF-120x2.0 (Conformados Z)	12.02	0.002	2.99	0.00	0.00	-	-
304/308	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	0.00	0.00	-	-
305/309	Acero (S275)	2xUPE 240([-]) (UPE)	60.44	0.008	1.00	0.00	0.00	-	-
306/307	Acero (S235)	ZF-120x2.0 (Conformados Z)	12.02	0.002	2.99	0.00	0.00	-	-
306/310	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	2.00	0.00	0.00	-	-
307/311	Acero (S275)	2xUPE 240([-]) (UPE)	60.45	0.008	1.00	0.00	0.00	-	-
308/309	Acero (S235)	ZF-120x2.0 (Conformados Z)	12.02	0.002	2.99	0.00	0.00	-	-
308/312	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	1.00	0.00	-	-
309/313	Acero (S275)	2xUPE 240([-]) (UPE)	60.45	0.008	1.00	0.00	0.00	-	-
310/311	Acero (S235)	ZF-120x2.0 (Conformados Z)	12.02	0.002	2.99	0.00	0.00	-	-
310/314	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	2.00	0.00	0.00	-	-
311/315	Acero (S275)	2xUPE 240([-]) (UPE)	60.45	0.008	1.00	0.00	0.00	-	-
312/313	Acero (S235)	ZF-120x2.0 (Conformados Z)	12.02	0.002	2.99	0.00	0.00	-	-
312/316	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	0.00	0.00	-	-
313/317	Acero (S275)	2xUPE 240([-]) (UPE)	60.45	0.008	1.00	0.00	0.00	-	-
314/315	Acero (S235)	ZF-120x2.0 (Conformados Z)	12.02	0.002	2.99	0.00	0.00	-	-
314/319	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	0.00	0.00	-	-
315/321	Acero (S275)	2xUPE 240([-]) (UPE)	60.45	0.008	1.00	0.00	0.00	-	-
316/317	Acero (S235)	ZF-120x2.0 (Conformados Z)	12.02	0.002	2.99	0.00	0.00	-	-
316/353	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	0.00	0.00	-	-
317/356	Acero (S275)	2xUPE 240([-]) (UPE)	60.45	0.008	1.00	0.00	0.00	-	-
318/319	Acero (S275)	HE 120 B (HEB)	128.65	0.016	4.82	0.70	1.00	-	-
319/320	Acero (S275)	HE 120 B (HEB)	29.11	0.004	1.09	1.00	1.00	-	-
319/364	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	0.00	0.00	-	-
320/321	Acero (S235)	ZF-120x2.0 (Conformados Z)	7.64	0.001	1.90	0.00	0.00	-	-
320/322	Acero (S275)	IPE 180 (IPE)	9.90	0.001	0.53	1.00	1.00	-	-
320/361	Acero (S275)	Ø20 (Redondos)	1.84	0.000	0.75	0.00	0.00	-	-
321/365	Acero (S275)	2xUPE 240([-]) (UPE)	60.45	0.008	1.00	0.00	0.00	-	-
322/323	Acero (S275)	IPE 180 (IPE)	25.31	0.003	1.35	1.00	1.00	-	-
322/361	Acero (S275)	IPE 300 (IPE)	22.24	0.003	0.53	1.00	1.00	-	0.53
323/324	Acero (S275)	IPE 180 (IPE)	25.31	0.003	1.35	1.00	1.00	-	-
323/373	Acero (S235)	ZF-300x4.0 (Conformados Z)	27.45	0.003	1.87	0.00	0.00	-	1.87
324/325	Acero (S275)	IPE 180 (IPE)	25.31	0.003	1.35	1.00	1.00	-	-
324/384	Acero (S235)	ZF-300x4.0 (Conformados Z)	40.79	0.005	2.78	0.00	0.00	-	2.78
325/326	Acero (S275)	IPE 180 (IPE)	25.31	0.003	1.35	1.00	1.00	-	-
325/372	Acero (S235)	ZF-300x4.0 (Conformados Z)	21.05	0.003	1.44	0.00	0.00	-	1.44
326/330	Acero (S275)	IPE 180 (IPE)	1.69	0.000	0.09	1.00	1.00	-	-
326/359	Acero (S235)	ZF-300x4.0 (Conformados Z)	1.32	0.000	0.09	1.00	1.00	-	-
327/328	Acero (S275)	HE 240 B (HEB)	245.51	0.031	2.95	0.70	1.00	-	-
328/329	Acero (S275)	HE 240 B (HEB)	155.56	0.020	1.87	1.00	1.00	-	-
328/335	Acero (S275)	IPE 270 (IPE)	180.16	0.023	5.00	1.00	1.00	-	-
328/453	Acero (S275)	IPE 330 (IPE)	294.85	0.038	6.00	1.00	1.00	-	-
329/330	Acero (S275)	HE 240 B (HEB)	125.67	0.016	1.51	1.00	1.00	-	-

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329/391	Acero (S275)	Ø20 (Redondos)	7.63	0.001	3.09	0.00	0.00	-	-
330/331	Acero (S275)	IPE 270 (IPE) + cart. inf. 2.506 m	88.31	0.011	1.59	1.00	1.00	-	-
359/330	Acero (S275)	Ø20 (Redondos)	0.31	0.000	0.13	1.00	1.00	-	-
330/362	Acero (S275)	Ø20 (Redondos)	4.56	0.001	1.85	0.00	0.00	-	-
391/330	Acero (S275)	Ø20 (Redondos)	7.63	0.001	3.09	0.00	0.00	-	-
331/332	Acero (S275)	IPE 270 (IPE)	72.53	0.009	1.68	1.00	1.00	-	-
331/362	Acero (S235)	ZF-300x4.0 (Conformados Z)	13.91	0.002	0.95	1.00	0.00	-	0.95
332/333	Acero (S275)	IPE 270 (IPE)	60.38	0.008	1.68	1.00	1.00	-	-
332/375	Acero (S235)	ZF-300x4.0 (Conformados Z)	28.62	0.004	1.95	0.00	0.00	-	1.95
333/336	Acero (S275)	IPE 270 (IPE)	60.38	0.008	1.68	1.00	1.00	-	-
333/387	Acero (S235)	ZF-300x4.0 (Conformados Z)	43.33	0.006	2.96	0.00	0.00	-	2.96
334/335	Acero (S275)	HE 100 B (HEB)	60.22	0.008	2.95	0.70	1.00	-	-
335/340	Acero (S275)	IPE 270 (IPE)	180.16	0.023	5.00	1.00	1.00	-	-
336/337	Acero (S275)	IPE 270 (IPE)	60.38	0.008	1.68	1.00	1.00	-	-
336/382	Acero (S235)	ZF-300x4.0 (Conformados Z)	29.94	0.004	2.04	0.00	0.00	-	2.04
337/338	Acero (S275)	IPE 270 (IPE)	60.38	0.008	1.68	1.00	1.00	-	-
337/370	Acero (S235)	ZF-300x4.0 (Conformados Z)	15.23	0.002	1.04	0.00	0.00	-	1.04
338/341	Acero (S275)	IPE 270 (IPE)	2.16	0.000	0.06	1.00	1.00	-	-
338/357	Acero (S235)	ZF-300x4.0 (Conformados Z)	0.53	0.000	0.04	1.00	1.00	-	-
339/340	Acero (S275)	HE 100 B (HEB)	60.22	0.008	2.95	0.70	1.00	-	-
340/347	Acero (S275)	IPE 270 (IPE)	180.16	0.023	5.00	1.00	1.00	-	-
342/341	Acero (S275)	IPE 270 (IPE)	2.16	0.000	0.06	1.00	1.00	-	-
357/341	Acero (S275)	Ø20 (Redondos)	0.17	0.000	0.07	1.00	1.00	-	-
358/341	Acero (S275)	Ø20 (Redondos)	0.17	0.000	0.07	1.00	1.00	-	-
343/342	Acero (S275)	IPE 270 (IPE)	56.67	0.007	1.57	1.00	1.00	-	-
342/358	Acero (S235)	ZF-300x4.0 (Conformados Z)	0.53	0.000	0.04	1.00	1.00	-	-
344/343	Acero (S275)	IPE 270 (IPE)	56.67	0.007	1.57	1.00	1.00	-	-
343/363	Acero (S235)	ZF-300x4.0 (Conformados Z)	14.33	0.002	0.98	1.00	0.00	-	0.98
345/344	Acero (S275)	IPE 270 (IPE)	56.67	0.007	1.57	1.00	1.00	-	-
344/374	Acero (S235)	ZF-300x4.0 (Conformados Z)	28.13	0.004	1.92	0.00	0.00	-	1.92
348/345	Acero (S275)	IPE 270 (IPE)	56.67	0.007	1.57	1.00	1.00	-	-
345/385	Acero (S235)	ZF-300x4.0 (Conformados Z)	41.93	0.005	2.86	0.00	0.00	-	2.86
346/347	Acero (S275)	HE 100 B (HEB)	60.22	0.008	2.95	0.70	1.00	-	-
347/352	Acero (S275)	IPE 270 (IPE)	180.16	0.023	5.00	1.00	1.00	-	-
349/348	Acero (S275)	IPE 270 (IPE)	61.48	0.008	1.57	1.00	1.00	-	-
348/383	Acero (S235)	ZF-300x4.0 (Conformados Z)	32.24	0.004	2.20	0.00	0.00	-	2.20
350/349	Acero (S275)	IPE 270 (IPE)	83.37	0.011	1.57	1.00	1.00	-	-
349/371	Acero (S235)	ZF-300x4.0 (Conformados Z)	18.44	0.002	1.26	0.00	0.00	-	1.26
355/350	Acero (S275)	IPE 270 (IPE) + cart. inf. 2.506 m	30.84	0.004	0.53	1.00	1.00	-	-
350/360	Acero (S275)	IPE 300 (IPE)	13.35	0.002	0.32	1.00	1.00	-	-
351/352	Acero (S275)	HE 240 B (HEB)	245.51	0.031	2.95	0.70	1.00	-	-
352/353	Acero (S275)	HE 240 B (HEB)	155.56	0.020	1.87	1.00	1.00	-	-
352/534	Acero (S275)	IPE 330 (IPE)	294.85	0.038	6.00	1.00	1.00	-	-
353/354	Acero (S275)	HE 240 B (HEB)	117.32	0.015	1.41	1.00	1.00	-	-
353/366	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	0.00	0.00	-	-
353/367	Acero (S275)	Ø6 (Redondos)	0.23	0.000	1.03	0.00	0.00	-	-
354/355	Acero (S275)	HE 240 B (HEB)	8.35	0.001	0.10	1.00	1.00	-	-
368/354	Acero (S275)	Ø6 (Redondos)	0.23	0.000	1.03	0.00	0.00	-	-
355/356	Acero (S235)	ZF-120x2.0 (Conformados Z)	5.95	0.001	1.48	0.00	0.00	-	-
355/360	Acero (S275)	Ø20 (Redondos)	1.52	0.000	0.62	1.00	1.00	-	-
356/369	Acero (S275)	2xUPE 240([-]) (UPE)	60.45	0.008	1.00	0.00	0.00	-	-
370/357	Acero (S275)	Ø20 (Redondos)	4.82	0.001	1.95	0.00	0.00	-	-
357/426	Acero (S235)	ZF-300x4.0 (Conformados Z)	86.92	0.011	5.93	0.00	0.00	-	5.93
363/358	Acero (S275)	Ø20 (Redondos)	4.52	0.001	1.83	0.00	0.00	-	-
358/427	Acero (S235)	ZF-300x4.0 (Conformados Z)	86.92	0.011	5.93	0.00	0.00	-	5.93
372/359	Acero (S275)	Ø20 (Redondos)	4.70	0.001	1.91	0.00	0.00	-	-
359/425	Acero (S235)	ZF-300x4.0 (Conformados Z)	85.33	0.011	5.82	0.00	0.00	-	5.82
360/371	Acero (S275)	Ø20 (Redondos)	4.52	0.001	1.83	0.00	0.00	-	-
360/424	Acero (S275)	IPE 300 (IPE)	226.71	0.029	5.37	0.00	0.00	-	5.37
361/373	Acero (S275)	Ø20 (Redondos)	4.70	0.001	1.91	0.00	0.00	-	-
361/423	Acero (S275)	IPE 300 (IPE)	208.92	0.027	4.95	0.00	0.00	-	4.95
362/375	Acero (S275)	Ø20 (Redondos)	4.82	0.001	1.95	0.00	0.00	-	-
362/422	Acero (S235)	ZF-300x4.0 (Conformados Z)	60.14	0.008	4.10	0.00	0.00	-	4.10
374/363	Acero (S275)	Ø20 (Redondos)	4.52	0.001	1.83	0.00	0.00	-	-
363/421	Acero (S235)	ZF-300x4.0 (Conformados Z)	59.32	0.008	4.05	0.00	0.00	-	4.05
364/365	Acero (S235)	ZF-120x2.0 (Conformados Z)	12.02	0.002	2.99	0.00	0.00	-	-
364/376	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	0.00	0.00	-	-
365/377	Acero (S275)	2xUPE 240([-]) (UPE)	60.45	0.008	1.00	0.00	0.00	-	-
366/367	Acero (S235)	ZF-120x2.0 (Conformados Z)	1.01	0.000	0.25	0.00	0.00	-	-
366/378	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	0.00	0.00	-	-
367/368	Acero (S235)	ZF-120x2.0 (Conformados Z)	3.71	0.000	0.92	0.00	0.00	-	-
367/379	Acero (S275)	Ø6 (Redondos)	0.23	0.000	1.03	0.00	0.00	-	-

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368/369	Acero (S235)	ZF-120x2.0 (Conformados Z)	7.30	0.001	1.82	0.00	0.00	-	-
380/368	Acero (S275)	Ø6 (Redondos)	0.23	0.000	1.03	0.00	0.00	-	-
369/381	Acero (S275)	2xUPE 240([-]) (UPE)	60.45	0.008	1.00	0.00	0.00	-	-
382/370	Acero (S275)	Ø20 (Redondos)	4.82	0.001	1.95	0.00	0.00	-	-
370/414	Acero (S235)	ZF-300x4.0 (Conformados Z)	57.51	0.007	3.92	0.00	0.00	-	3.92
371/383	Acero (S275)	Ø20 (Redondos)	4.52	0.001	1.83	0.00	0.00	-	-
371/413	Acero (S235)	ZF-300x4.0 (Conformados Z)	51.10	0.007	3.49	0.00	0.00	-	3.49
384/372	Acero (S275)	Ø20 (Redondos)	4.70	0.001	1.91	0.00	0.00	-	-
372/412	Acero (S235)	ZF-300x4.0 (Conformados Z)	45.86	0.006	3.13	0.00	0.00	-	3.13
373/390	Acero (S275)	Ø20 (Redondos)	3.94	0.001	1.60	0.00	0.00	-	-
373/411	Acero (S235)	ZF-300x4.0 (Conformados Z)	33.06	0.004	2.26	0.00	0.00	-	2.26
385/374	Acero (S275)	Ø20 (Redondos)	4.52	0.001	1.83	0.00	0.00	-	-
374/410	Acero (S235)	ZF-300x4.0 (Conformados Z)	31.71	0.004	2.16	0.00	0.00	-	2.16
375/387	Acero (S275)	Ø20 (Redondos)	4.82	0.001	1.95	0.00	0.00	-	-
375/409	Acero (S235)	ZF-300x4.0 (Conformados Z)	30.73	0.004	2.10	0.00	0.00	-	2.10
376/377	Acero (S235)	ZF-120x2.0 (Conformados Z)	12.02	0.002	2.99	0.00	0.00	-	-
376/388	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	0.00	0.00	-	-
377/389	Acero (S275)	2xUPE 240([-]) (UPE)	60.44	0.008	1.00	0.00	0.00	-	-
378/379	Acero (S235)	ZF-120x2.0 (Conformados Z)	2.02	0.000	0.50	0.00	0.00	-	-
378/394	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	0.00	0.00	-	-
379/380	Acero (S235)	ZF-120x2.0 (Conformados Z)	1.75	0.000	0.44	0.00	0.00	-	-
379/386	Acero (S275)	Ø6 (Redondos)	0.21	0.000	0.92	0.00	0.00	-	-
380/381	Acero (S235)	ZF-120x2.0 (Conformados Z)	8.24	0.001	2.05	0.00	0.00	-	-
386/380	Acero (S275)	Ø6 (Redondos)	0.20	0.000	0.92	0.00	0.00	-	-
381/397	Acero (S275)	2xUPE 240([-]) (UPE)	60.44	0.008	1.00	0.00	0.00	-	-
392/382	Acero (S275)	Ø20 (Redondos)	4.60	0.001	1.87	0.00	0.00	-	-
382/402	Acero (S235)	ZF-300x4.0 (Conformados Z)	28.09	0.004	1.92	0.00	0.00	-	1.92
383/393	Acero (S275)	Ø20 (Redondos)	3.85	0.000	1.56	0.00	0.00	-	-
383/401	Acero (S235)	ZF-300x4.0 (Conformados Z)	23.50	0.003	1.60	0.00	0.00	-	1.60
390/384	Acero (S275)	Ø20 (Redondos)	0.76	0.000	0.31	1.00	1.00	-	-
384/400	Acero (S235)	ZF-300x4.0 (Conformados Z)	6.40	0.001	0.44	1.00	1.00	-	0.44
393/385	Acero (S275)	Ø20 (Redondos)	0.67	0.000	0.27	1.00	1.00	-	-
385/399	Acero (S235)	ZF-300x4.0 (Conformados Z)	4.11	0.001	0.28	1.00	1.00	-	-
395/386	Acero (S275)	Ø6 (Redondos)	0.02	0.000	0.11	1.00	1.00	-	-
386/396	Acero (S275)	Ø6 (Redondos)	0.02	0.000	0.11	0.00	0.00	-	-
387/392	Acero (S275)	Ø20 (Redondos)	0.22	0.000	0.09	1.00	1.00	-	-
387/398	Acero (S235)	ZF-300x4.0 (Conformados Z)	1.32	0.000	0.09	1.00	1.00	-	-
388/389	Acero (S235)	ZF-120x2.0 (Conformados Z)	12.02	0.002	2.99	0.00	0.00	-	-
388/403	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	0.00	0.00	-	-
389/404	Acero (S275)	2xUPE 240([-]) (UPE)	60.45	0.008	1.00	0.00	0.00	-	-
390/400	Acero (S275)	Ø20 (Redondos)	0.76	0.000	0.31	1.00	1.00	-	-
411/390	Acero (S275)	Ø20 (Redondos)	3.94	0.001	1.60	0.00	0.00	-	-
454/391	Acero (S275)	Ø20 (Redondos)	7.63	0.001	3.09	0.00	0.00	-	-
391/455	Acero (S275)	Ø20 (Redondos)	7.63	0.001	3.09	0.00	0.00	-	-
398/392	Acero (S275)	Ø20 (Redondos)	0.22	0.000	0.09	1.00	1.00	-	-
392/402	Acero (S275)	Ø20 (Redondos)	4.60	0.001	1.87	0.00	0.00	-	-
393/399	Acero (S275)	Ø20 (Redondos)	0.67	0.000	0.27	1.00	1.00	-	-
401/393	Acero (S275)	Ø20 (Redondos)	3.85	0.000	1.56	0.00	0.00	-	-
394/395	Acero (S235)	ZF-120x2.0 (Conformados Z)	2.83	0.000	0.70	0.00	0.00	-	-
394/405	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	0.00	0.00	-	-
395/396	Acero (S235)	ZF-120x2.0 (Conformados Z)	0.20	0.000	0.05	0.00	0.00	-	-
406/395	Acero (S275)	Ø6 (Redondos)	0.23	0.000	1.03	0.00	0.00	-	-
396/397	Acero (S235)	ZF-120x2.0 (Conformados Z)	8.98	0.001	2.24	0.00	0.00	-	-
396/407	Acero (S275)	Ø6 (Redondos)	0.23	0.000	1.03	0.00	0.00	-	-
397/408	Acero (S275)	2xUPE 240([-]) (UPE)	60.45	0.008	1.00	0.00	0.00	-	-
409/398	Acero (S275)	Ø20 (Redondos)	4.82	0.001	1.95	0.00	0.00	-	-
398/471	Acero (S235)	ZF-300x4.0 (Conformados Z)	43.33	0.006	2.96	0.00	0.00	-	2.96
399/410	Acero (S275)	Ø20 (Redondos)	4.52	0.001	1.83	0.00	0.00	-	-
399/512	Acero (S235)	ZF-300x4.0 (Conformados Z)	41.93	0.005	2.86	0.00	0.00	-	2.86
400/412	Acero (S275)	Ø20 (Redondos)	4.70	0.001	1.91	0.00	0.00	-	-
400/443	Acero (S235)	ZF-300x4.0 (Conformados Z)	40.79	0.005	2.78	0.00	0.00	-	2.78
413/401	Acero (S275)	Ø20 (Redondos)	4.52	0.001	1.83	0.00	0.00	-	-
401/521	Acero (S235)	ZF-300x4.0 (Conformados Z)	32.24	0.004	2.20	0.00	0.00	-	2.20
402/414	Acero (S275)	Ø20 (Redondos)	4.82	0.001	1.95	0.00	0.00	-	-
402/480	Acero (S235)	ZF-300x4.0 (Conformados Z)	29.94	0.004	2.04	0.00	0.00	-	2.04
403/404	Acero (S235)	ZF-120x2.0 (Conformados Z)	12.02	0.002	2.99	0.00	0.00	-	-
403/415	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	0.00	0.00	-	-
404/416	Acero (S275)	2xUPE 240([-]) (UPE)	60.45	0.008	1.00	0.00	0.00	-	-
405/406	Acero (S235)	ZF-120x2.0 (Conformados Z)	1.89	0.000	0.47	0.00	0.00	-	-
405/417	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	0.00	0.00	-	-
406/407	Acero (S235)	ZF-120x2.0 (Conformados Z)	2.16	0.000	0.54	0.00	0.00	-	-
418/406	Acero (S275)	Ø6 (Redondos)	0.23	0.000	1.03	0.00	0.00	-	-

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407/408	Acero (S235)	ZF-120x2.0 (Conformados Z)	7.97	0.001	1.98	0.00	0.00	-	-
407/419	Acero (S275)	Ø6 (Redondos)	0.23	0.000	1.03	0.00	0.00	-	-
408/420	Acero (S275)	2xUPE 240([-]) (UPE)	60.45	0.008	1.00	0.00	0.00	-	-
422/409	Acero (S275)	Ø20 (Redondos)	4.82	0.001	1.95	0.00	0.00	-	-
409/467	Acero (S235)	ZF-300x4.0 (Conformados Z)	28.62	0.004	1.95	0.00	0.00	-	1.95
410/421	Acero (S275)	Ø20 (Redondos)	4.52	0.001	1.83	0.00	0.00	-	-
410/508	Acero (S235)	ZF-300x4.0 (Conformados Z)	28.13	0.004	1.92	0.00	0.00	-	1.92
423/411	Acero (S275)	Ø20 (Redondos)	4.70	0.001	1.91	0.00	0.00	-	-
411/436	Acero (S235)	ZF-300x4.0 (Conformados Z)	27.45	0.003	1.87	0.00	0.00	-	1.87
412/425	Acero (S275)	Ø20 (Redondos)	4.70	0.001	1.91	0.00	0.00	-	-
412/447	Acero (S235)	ZF-300x4.0 (Conformados Z)	21.05	0.003	1.44	0.00	0.00	-	1.44
424/413	Acero (S275)	Ø20 (Redondos)	4.52	0.001	1.83	0.00	0.00	-	-
413/525	Acero (S235)	ZF-300x4.0 (Conformados Z)	18.44	0.002	1.26	0.00	0.00	-	1.26
414/426	Acero (S275)	Ø20 (Redondos)	4.82	0.001	1.95	0.00	0.00	-	-
414/487	Acero (S235)	ZF-300x4.0 (Conformados Z)	15.23	0.002	1.04	0.00	0.00	-	1.04
415/416	Acero (S235)	ZF-120x2.0 (Conformados Z)	12.02	0.002	2.99	0.00	0.00	-	-
415/429	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	0.00	0.00	-	-
416/431	Acero (S275)	2xUPE 240([-]) (UPE)	60.45	0.008	1.00	0.00	0.00	-	-
417/418	Acero (S235)	ZF-120x2.0 (Conformados Z)	0.94	0.000	0.23	0.00	0.00	-	-
417/535	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	0.00	0.00	-	-
418/419	Acero (S235)	ZF-120x2.0 (Conformados Z)	4.11	0.001	1.02	0.00	0.00	-	-
535/418	Acero (S275)	Ø6 (Redondos)	0.23	0.000	1.03	0.00	0.00	-	-
419/420	Acero (S235)	ZF-120x2.0 (Conformados Z)	6.96	0.001	1.73	0.00	0.00	-	-
419/536	Acero (S275)	Ø6 (Redondos)	0.23	0.000	1.03	0.00	0.00	-	-
420/537	Acero (S275)	2xUPE 240([-]) (UPE)	60.45	0.008	1.00	0.00	0.00	-	-
421/427	Acero (S275)	Ø20 (Redondos)	4.52	0.001	1.83	0.00	0.00	-	-
421/501	Acero (S235)	ZF-300x4.0 (Conformados Z)	14.33	0.002	0.98	0.00	0.00	-	0.98
455/422	Acero (S275)	Ø20 (Redondos)	4.56	0.001	1.85	0.00	0.00	-	-
422/460	Acero (S235)	ZF-300x4.0 (Conformados Z)	13.91	0.002	0.95	1.00	0.00	-	0.95
430/423	Acero (S275)	Ø20 (Redondos)	1.84	0.000	0.75	0.00	0.00	-	-
423/432	Acero (S275)	IPE 300 (IPE)	22.24	0.003	0.53	1.00	1.00	-	0.53
424/532	Acero (S275)	IPE 300 (IPE)	13.35	0.002	0.32	1.00	0.00	-	-
536/424	Acero (S275)	Ø20 (Redondos)	1.52	0.000	0.62	0.00	0.00	-	-
425/451	Acero (S235)	ZF-300x4.0 (Conformados Z)	1.32	0.000	0.09	1.00	1.00	-	-
425/455	Acero (S275)	Ø20 (Redondos)	0.31	0.000	0.13	1.00	1.00	-	-
426/491	Acero (S235)	ZF-300x4.0 (Conformados Z)	0.53	0.000	0.04	1.00	1.00	-	-
426/495	Acero (S275)	Ø20 (Redondos)	0.17	0.000	0.07	1.00	1.00	-	-
427/495	Acero (S275)	Ø20 (Redondos)	0.17	0.000	0.07	1.00	1.00	-	-
427/497	Acero (S235)	ZF-300x4.0 (Conformados Z)	0.53	0.000	0.04	1.00	1.00	-	-
428/429	Acero (S275)	HE 120 B (HEB)	128.65	0.016	4.82	0.70	1.00	-	-
429/430	Acero (S275)	HE 120 B (HEB)	29.11	0.004	1.09	1.00	1.00	-	-
429/433	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	0.00	0.00	-	-
430/431	Acero (S235)	ZF-120x2.0 (Conformados Z)	7.64	0.001	1.90	0.00	0.00	-	-
430/432	Acero (S275)	IPE 180 (IPE)	9.90	0.001	0.53	1.00	1.00	-	-
431/435	Acero (S275)	2xUPE 240([-]) (UPE)	60.44	0.008	1.00	0.00	0.00	-	-
432/434	Acero (S275)	IPE 180 (IPE)	8.90	0.001	0.47	1.00	1.00	-	-
433/434	Acero (S235)	ZF-225x4.0 (Conformados Z)	14.29	0.002	1.16	0.00	0.00	-	-
433/437	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	0.00	0.00	-	-
434/435	Acero (S235)	ZF-225x4.0 (Conformados Z)	22.53	0.003	1.83	0.00	0.00	-	-
434/436	Acero (S275)	IPE 180 (IPE)	16.41	0.002	0.87	1.00	1.00	-	-
435/439	Acero (S275)	2xUPE 240([-]) (UPE)	60.44	0.008	1.00	0.00	0.00	-	-
436/438	Acero (S275)	IPE 180 (IPE)	2.40	0.000	0.13	1.00	1.00	-	-
437/438	Acero (S235)	ZF-225x4.0 (Conformados Z)	15.15	0.002	1.23	0.00	0.00	-	-
437/440	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	0.00	0.00	-	-
438/439	Acero (S235)	ZF-225x4.0 (Conformados Z)	21.67	0.003	1.76	0.00	0.00	-	-
438/441	Acero (S275)	IPE 180 (IPE)	18.81	0.002	1.00	1.00	1.00	-	-
439/442	Acero (S275)	2xUPE 240([-]) (UPE)	60.44	0.008	1.00	0.00	0.00	-	-
440/441	Acero (S235)	ZF-225x4.0 (Conformados Z)	16.01	0.002	1.30	0.00	0.00	-	-
440/444	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	0.00	0.00	-	-
441/442	Acero (S235)	ZF-225x4.0 (Conformados Z)	20.81	0.003	1.69	0.00	0.00	-	-
441/443	Acero (S275)	IPE 180 (IPE)	4.10	0.001	0.22	1.00	1.00	-	-
442/446	Acero (S275)	2xUPE 240([-]) (UPE)	60.44	0.008	1.00	0.00	0.00	-	-
443/445	Acero (S275)	IPE 180 (IPE)	14.70	0.002	0.78	1.00	1.00	-	-
444/445	Acero (S235)	ZF-225x4.0 (Conformados Z)	16.87	0.002	1.37	0.00	0.00	-	-
444/448	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	0.00	0.00	-	-
445/446	Acero (S235)	ZF-225x4.0 (Conformados Z)	19.95	0.003	1.62	0.00	0.00	-	-
445/447	Acero (S275)	IPE 180 (IPE)	10.61	0.001	0.57	1.00	1.00	-	-
446/450	Acero (S275)	2xUPE 240([-]) (UPE)	60.44	0.008	1.00	0.00	0.00	-	-
447/449	Acero (S275)	IPE 180 (IPE)	8.20	0.001	0.44	1.00	1.00	-	-
448/449	Acero (S235)	ZF-225x4.0 (Conformados Z)	17.73	0.002	1.44	0.00	0.00	-	-
448/454	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	0.00	0.00	-	-
449/450	Acero (S235)	ZF-225x4.0 (Conformados Z)	19.09	0.002	1.55	0.00	0.00	-	-

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449/451	Acero (S275)	IPE 180 (IPE)	17.11	0.002	0.91	1.00	1.00	-	-
450/456	Acero (S275)	2xUPE 240([-]) (UPE)	60.45	0.008	1.00	0.00	0.00	-	-
451/455	Acero (S275)	IPE 180 (IPE)	1.69	0.000	0.09	1.00	1.00	-	-
452/453	Acero (S275)	HE 240 B (HEB)	245.51	0.031	2.95	0.70	1.00	-	-
453/454	Acero (S275)	HE 240 B (HEB)	155.56	0.020	1.87	1.00	1.00	-	-
453/473	Acero (S275)	IPE 270 (IPE)	180.16	0.023	5.00	1.00	1.00	-	-
454/455	Acero (S275)	HE 240 B (HEB)	125.67	0.016	1.51	1.00	1.00	-	-
454/457	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.52	0.001	1.01	0.00	0.00	-	-
455/456	Acero (S235)	ZF-225x4.0 (Conformados Z)	18.23	0.002	1.48	0.00	0.00	-	-
455/458	Acero (S275)	IPE 100 (IPE)	8.16	0.001	1.01	1.00	1.00	-	-
456/459	Acero (S275)	2xUPE 240([-]) (UPE)	60.87	0.008	1.01	0.00	0.00	-	-
457/458	Acero (S235)	ZF-225x4.0 (Conformados Z)	19.46	0.002	1.58	0.00	0.00	-	-
457/461	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	0.00	0.00	-	-
458/459	Acero (S235)	ZF-225x4.0 (Conformados Z)	17.36	0.002	1.41	0.00	0.00	-	-
458/460	Acero (S275)	IPE 100 (IPE)	4.66	0.001	0.58	1.00	1.00	-	-
459/463	Acero (S275)	2xUPE 240([-]) (UPE)	60.45	0.008	1.00	0.00	0.00	-	-
460/462	Acero (S275)	IPE 100 (IPE)	3.45	0.000	0.43	1.00	1.00	-	-
461/462	Acero (S235)	ZF-225x4.0 (Conformados Z)	20.32	0.003	1.65	0.00	0.00	-	-
461/464	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	0.00	0.00	-	-
462/463	Acero (S235)	ZF-225x4.0 (Conformados Z)	16.50	0.002	1.34	0.00	0.00	-	-
462/465	Acero (S275)	IPE 100 (IPE)	8.11	0.001	1.00	1.00	1.00	-	-
463/466	Acero (S275)	2xUPE 240([-]) (UPE)	60.45	0.008	1.00	0.00	0.00	-	-
464/465	Acero (S235)	ZF-225x4.0 (Conformados Z)	21.18	0.003	1.72	0.00	0.00	-	-
464/468	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	0.00	0.00	-	-
465/466	Acero (S235)	ZF-225x4.0 (Conformados Z)	15.64	0.002	1.27	0.00	0.00	-	-
465/467	Acero (S275)	IPE 100 (IPE)	2.00	0.000	0.25	1.00	1.00	-	-
466/470	Acero (S275)	2xUPE 240([-]) (UPE)	60.45	0.008	1.00	0.00	0.00	-	-
467/469	Acero (S275)	IPE 100 (IPE)	6.11	0.001	0.76	1.00	1.00	-	-
468/469	Acero (S235)	ZF-225x4.0 (Conformados Z)	22.04	0.003	1.79	0.00	0.00	-	-
468/474	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.41	0.001	0.99	0.00	0.00	-	-
469/470	Acero (S235)	ZF-225x4.0 (Conformados Z)	14.78	0.002	1.20	0.00	0.00	-	-
469/471	Acero (S275)	IPE 100 (IPE)	7.44	0.001	0.92	1.00	1.00	-	-
470/476	Acero (S275)	2xUPE 240([-]) (UPE)	60.02	0.008	0.99	0.00	0.00	-	-
471/475	Acero (S275)	IPE 100 (IPE)	0.61	0.000	0.08	1.00	1.00	-	-
472/473	Acero (S275)	HE 120 B (HEB)	78.75	0.010	2.95	0.70	1.00	-	-
473/474	Acero (S275)	HE 120 B (HEB)	49.90	0.006	1.87	1.00	1.00	-	-
473/493	Acero (S275)	IPE 270 (IPE)	180.16	0.023	5.00	1.00	1.00	-	-
474/475	Acero (S275)	HE 120 B (HEB)	49.65	0.006	1.86	1.00	0.00	-	-
474/477	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.52	0.001	1.01	0.00	0.00	-	-
475/476	Acero (S235)	ZF-225x4.0 (Conformados Z)	13.92	0.002	1.13	0.00	0.00	-	-
475/478	Acero (S275)	IPE 100 (IPE)	8.16	0.001	1.01	1.00	1.00	-	-
476/479	Acero (S275)	2xUPE 240([-]) (UPE)	60.87	0.008	1.01	0.00	0.00	-	-
477/478	Acero (S235)	ZF-225x4.0 (Conformados Z)	23.76	0.003	1.93	0.00	0.00	-	-
477/481	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	0.00	0.00	-	-
478/479	Acero (S235)	ZF-225x4.0 (Conformados Z)	13.06	0.002	1.06	0.00	0.00	-	-
478/480	Acero (S275)	IPE 100 (IPE)	4.78	0.001	0.59	1.00	1.00	-	-
479/483	Acero (S275)	2xUPE 240([-]) (UPE)	60.44	0.008	1.00	0.00	0.00	-	-
480/482	Acero (S275)	IPE 100 (IPE)	3.33	0.000	0.41	1.00	1.00	-	-
481/482	Acero (S235)	ZF-225x4.0 (Conformados Z)	24.62	0.003	2.00	0.00	0.00	-	-
481/484	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	0.00	0.00	-	-
482/483	Acero (S235)	ZF-225x4.0 (Conformados Z)	12.19	0.002	0.99	0.00	0.00	-	-
482/485	Acero (S275)	IPE 100 (IPE)	8.11	0.001	1.00	1.00	1.00	-	-
483/486	Acero (S275)	2xUPE 240([-]) (UPE)	60.45	0.008	1.00	0.00	0.00	-	-
484/485	Acero (S235)	ZF-225x4.0 (Conformados Z)	25.49	0.003	2.07	0.00	0.00	-	-
484/488	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	0.00	0.00	-	-
485/486	Acero (S235)	ZF-225x4.0 (Conformados Z)	11.33	0.001	0.92	0.00	0.00	-	-
485/487	Acero (S275)	IPE 100 (IPE)	2.12	0.000	0.26	1.00	1.00	-	-
486/490	Acero (S275)	2xUPE 240([-]) (UPE)	60.45	0.008	1.00	0.00	0.00	-	-
487/489	Acero (S275)	IPE 100 (IPE)	5.99	0.001	0.74	1.00	1.00	-	-
488/489	Acero (S235)	ZF-225x4.0 (Conformados Z)	26.35	0.003	2.14	0.00	0.00	-	-
488/494	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.41	0.001	0.99	0.00	0.00	-	-
489/490	Acero (S235)	ZF-225x4.0 (Conformados Z)	10.47	0.001	0.85	0.00	0.00	-	-
489/491	Acero (S275)	IPE 100 (IPE)	7.56	0.001	0.94	1.00	1.00	-	-
490/496	Acero (S275)	2xUPE 240([-]) (UPE)	60.02	0.008	0.99	0.00	0.00	-	-
491/495	Acero (S275)	IPE 100 (IPE)	0.48	0.000	0.06	1.00	1.00	-	-
492/493	Acero (S275)	HE 120 B (HEB)	78.75	0.010	2.95	0.70	1.00	-	-
493/494	Acero (S275)	HE 120 B (HEB)	49.90	0.006	1.87	1.00	1.00	-	-
493/514	Acero (S275)	IPE 270 (IPE)	180.16	0.023	5.00	1.00	1.00	-	-
494/495	Acero (S275)	HE 120 B (HEB)	58.99	0.008	2.21	1.00	1.00	-	-
494/498	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.52	0.001	1.01	0.00	0.00	-	-
495/496	Acero (S235)	ZF-225x4.0 (Conformados Z)	9.62	0.001	0.78	0.00	0.00	-	-
497/495	Acero (S275)	IPE 100 (IPE)	0.48	0.000	0.06	1.00	1.00	-	-

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496/500	Acero (S275)	2xUPE 240([-]) (UPE)	60.87	0.008	1.01	0.00	0.00	-	-
499/497	Acero (S275)	IPE 100 (IPE)	7.68	0.001	0.95	1.00	1.00	-	-
498/499	Acero (S235)	ZF-225x4.0 (Conformados Z)	26.35	0.003	2.14	0.00	0.00	-	-
498/502	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	0.00	0.00	-	-
499/500	Acero (S235)	ZF-225x4.0 (Conformados Z)	10.47	0.001	0.85	0.00	0.00	-	-
501/499	Acero (S275)	IPE 100 (IPE)	5.04	0.001	0.62	1.00	1.00	-	-
500/504	Acero (S275)	2xUPE 240([-]) (UPE)	60.45	0.008	1.00	0.00	0.00	-	-
503/501	Acero (S275)	IPE 100 (IPE)	3.07	0.000	0.38	1.00	1.00	-	-
502/503	Acero (S235)	ZF-225x4.0 (Conformados Z)	25.49	0.003	2.07	0.00	0.00	-	-
502/505	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	0.00	0.00	-	-
503/504	Acero (S235)	ZF-225x4.0 (Conformados Z)	11.33	0.001	0.92	0.00	0.00	-	-
506/503	Acero (S275)	IPE 100 (IPE)	8.11	0.001	1.00	1.00	1.00	-	-
504/507	Acero (S275)	2xUPE 240([-]) (UPE)	60.45	0.008	1.00	0.00	0.00	-	-
505/506	Acero (S235)	ZF-225x4.0 (Conformados Z)	24.62	0.003	2.00	0.00	0.00	-	-
505/509	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	0.00	0.00	-	-
506/507	Acero (S235)	ZF-225x4.0 (Conformados Z)	12.19	0.002	0.99	0.00	0.00	-	-
508/506	Acero (S275)	IPE 100 (IPE)	1.55	0.000	0.19	1.00	1.00	-	-
507/511	Acero (S275)	2xUPE 240([-]) (UPE)	60.45	0.008	1.00	0.00	0.00	-	-
510/508	Acero (S275)	IPE 100 (IPE)	6.56	0.001	0.81	1.00	1.00	-	-
509/510	Acero (S235)	ZF-225x4.0 (Conformados Z)	23.76	0.003	1.93	0.00	0.00	-	-
509/515	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.41	0.001	0.99	0.00	0.00	-	-
510/511	Acero (S235)	ZF-225x4.0 (Conformados Z)	13.06	0.002	1.06	0.00	1.00	-	-
512/510	Acero (S275)	IPE 100 (IPE)	6.16	0.001	0.76	1.00	1.00	-	-
511/517	Acero (S275)	2xUPE 240([-]) (UPE)	60.02	0.008	0.99	0.00	0.00	-	-
516/512	Acero (S275)	IPE 100 (IPE)	1.89	0.000	0.23	1.00	1.00	-	-
513/514	Acero (S275)	HE 120 B (HEB)	78.75	0.010	2.95	0.70	1.00	-	-
514/515	Acero (S275)	HE 120 B (HEB)	49.90	0.006	1.87	1.00	1.00	-	-
514/534	Acero (S275)	IPE 270 (IPE)	180.16	0.023	5.00	1.00	1.00	-	-
515/516	Acero (S275)	HE 120 B (HEB)	49.65	0.006	1.86	1.00	1.00	-	-
515/518	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.52	0.001	1.01	0.00	0.00	-	-
516/517	Acero (S235)	ZF-225x4.0 (Conformados Z)	13.92	0.002	1.13	0.00	0.00	-	-
519/516	Acero (S275)	IPE 100 (IPE)	8.16	0.001	1.01	1.00	1.00	-	-
517/520	Acero (S275)	2xUPE 240([-]) (UPE)	60.87	0.008	1.01	0.00	0.00	-	-
518/519	Acero (S235)	ZF-225x4.0 (Conformados Z)	22.04	0.003	1.79	0.00	0.00	-	-
518/522	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	0.00	0.00	-	-
519/520	Acero (S235)	ZF-225x4.0 (Conformados Z)	14.78	0.002	1.20	0.00	0.00	-	-
521/519	Acero (S275)	IPE 100 (IPE)	2.66	0.000	0.33	1.00	1.00	-	-
520/524	Acero (S275)	2xUPE 240([-]) (UPE)	60.45	0.008	1.00	0.00	0.00	-	-
523/521	Acero (S275)	IPE 100 (IPE)	5.44	0.001	0.67	1.00	1.00	-	-
522/523	Acero (S235)	ZF-225x4.0 (Conformados Z)	21.18	0.003	1.72	1.00	0.00	-	-
522/526	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	0.00	0.00	-	-
523/524	Acero (S235)	ZF-225x4.0 (Conformados Z)	15.64	0.002	1.27	1.00	0.00	-	-
525/523	Acero (S275)	IPE 100 (IPE)	7.27	0.001	0.90	1.00	1.00	-	-
524/528	Acero (S275)	2xUPE 240([-]) (UPE)	60.44	0.008	1.00	0.00	0.00	-	-
527/525	Acero (S275)	IPE 100 (IPE)	0.83	0.000	0.10	1.00	1.00	-	-
526/527	Acero (S235)	ZF-225x4.0 (Conformados Z)	20.32	0.003	1.65	0.00	0.00	-	-
526/529	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.47	0.001	1.00	0.00	0.00	-	-
527/528	Acero (S235)	ZF-225x4.0 (Conformados Z)	16.50	0.002	1.34	0.00	0.00	-	-
530/527	Acero (S275)	IPE 100 (IPE)	8.11	0.001	1.00	1.00	1.00	-	-
528/531	Acero (S275)	2xUPE 240([-]) (UPE)	60.45	0.008	1.00	0.00	0.00	-	-
529/530	Acero (S235)	ZF-225x4.0 (Conformados Z)	19.46	0.002	1.58	0.00	0.00	-	-
529/535	Acero (S235)	ZF-200x2.5 (Conformados Z)	7.41	0.001	0.99	0.00	0.00	-	-
530/531	Acero (S235)	ZF-225x4.0 (Conformados Z)	17.36	0.002	1.41	0.00	0.00	-	-
532/530	Acero (S275)	IPE 100 (IPE)	3.78	0.000	0.47	1.00	1.00	-	-
531/537	Acero (S275)	2xUPE 240([-]) (UPE)	60.02	0.008	0.99	0.00	0.00	-	-
536/532	Acero (S275)	IPE 100 (IPE)	4.27	0.001	0.53	1.00	1.00	-	-
533/534	Acero (S275)	HE 240 B (HEB)	245.51	0.031	2.95	0.70	1.00	-	-
534/535	Acero (S275)	HE 240 B (HEB)	155.56	0.020	1.87	1.00	1.00	-	-
535/536	Acero (S275)	HE 240 B (HEB)	125.67	0.016	1.51	1.00	1.00	-	-
536/537	Acero (S235)	ZF-120x2.0 (Conformados Z)	5.95	0.001	1.48	0.00	0.00	-	-



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## 2.- Cargas (Barras)

Barras	Hipót.	Tipo	Cargas				Dirección		
			P1	P2	L1 (m)	L2 (m)	X	Y	Z
1/2	1 (PP 1)	Uniforme	0.027 t/m	-	-	-	0.000	0.000	-1.000
1/2	4 (V 1)	Uniforme	0.200 t/m	-	-	-	0.000	1.000	0.000
1/2	5 (V 2)	Uniforme	0.125 t/m	-	-	-	1.000	0.000	0.000
1/2	5 (V 2)	Uniforme	0.125 t/m	-	-	-	0.000	-1.000	0.000
2/3	1 (PP 1)	Uniforme	0.027 t/m	-	-	-	0.000	0.000	-1.000
2/3	4 (V 1)	Uniforme	0.035 t/m	-	-	-	0.000	1.000	0.000
2/3	5 (V 2)	Uniforme	0.021 t/m	-	-	-	1.000	0.000	0.000
2/3	5 (V 2)	Uniforme	0.020 t/m	-	-	-	0.000	-1.000	0.000
2/6	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
2/113	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
3/4	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
3/4	4 (V 1)	Uniforme	0.035 t/m	-	-	-	0.000	1.000	0.000
3/4	5 (V 2)	Uniforme	0.021 t/m	-	-	-	1.000	0.000	0.000
3/4	5 (V 2)	Uniforme	0.020 t/m	-	-	-	0.000	-1.000	0.000
3/5	1 (PP 1)	Uniforme	0.019 t/m	-	-	-	0.000	0.000	-1.000
3/110	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
4/8	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
4/114	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
5/7	1 (PP 1)	Uniforme	0.019 t/m	-	-	-	0.000	0.000	-1.000
5/110	1 (PP 1)	Uniforme	0.042 t/m	-	-	-	0.000	0.000	-1.000
5/110	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
5/110	5 (V 2)	Uniforme	0.210 t/m	-	-	-	0.000	0.000	1.000
6/7	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
6/7	5 (V 2)	Uniforme	0.042 t/m	-	-	-	1.000	0.000	0.000
6/10	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
7/8	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
7/8	5 (V 2)	Uniforme	0.042 t/m	-	-	-	1.000	0.000	0.000
7/9	1 (PP 1)	Uniforme	0.019 t/m	-	-	-	0.000	0.000	-1.000
8/12	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
9/11	1 (PP 1)	Uniforme	0.019 t/m	-	-	-	0.000	0.000	-1.000
9/122	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
9/122	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
9/122	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
9/122	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
9/122	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
10/11	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
10/11	5 (V 2)	Uniforme	0.042 t/m	-	-	-	1.000	0.000	0.000
10/13	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
11/12	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
11/12	5 (V 2)	Uniforme	0.042 t/m	-	-	-	1.000	0.000	0.000
11/14	1 (PP 1)	Uniforme	0.019 t/m	-	-	-	0.000	0.000	-1.000
12/15	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
13/14	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
13/14	5 (V 2)	Uniforme	0.042 t/m	-	-	-	1.000	0.000	0.000
13/17	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
14/15	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
14/15	5 (V 2)	Uniforme	0.042 t/m	-	-	-	1.000	0.000	0.000

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14/16	1 (PP 1)	Uniforme	0.019 t/m	-	-	-	0.000	0.000	-1.000
15/19	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
16/18	1 (PP 1)	Uniforme	0.019 t/m	-	-	-	0.000	0.000	-1.000
16/131	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
16/131	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
16/131	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
16/131	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
16/131	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
17/18	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
17/18	5 (V 2)	Uniforme	0.042 t/m	-	-	-	1.000	0.000	0.000
17/21	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
18/19	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
18/19	5 (V 2)	Uniforme	0.042 t/m	-	-	-	1.000	0.000	0.000
18/20	1 (PP 1)	Uniforme	0.019 t/m	-	-	-	0.000	0.000	-1.000
19/23	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
20/22	1 (PP 1)	Uniforme	0.019 t/m	-	-	-	0.000	0.000	-1.000
20/121	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
20/121	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
20/121	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
20/121	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
21/22	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
21/22	5 (V 2)	Uniforme	0.042 t/m	-	-	-	0.000	0.000	-1.000
21/22	5 (V 2)	Uniforme	0.042 t/m	-	-	-	1.000	0.000	0.000
21/26	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
22/23	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
22/23	5 (V 2)	Uniforme	0.042 t/m	-	-	-	1.000	0.000	0.000
22/24	1 (PP 1)	Uniforme	0.019 t/m	-	-	-	0.000	0.000	-1.000
23/28	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
24/27	1 (PP 1)	Uniforme	0.019 t/m	-	-	-	0.000	0.000	-1.000
24/108	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
24/108	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
24/108	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
25/26	1 (PP 1)	Uniforme	0.083 t/m	-	-	-	0.000	0.000	-1.000
25/26	5 (V 2)	Uniforme	0.400 t/m	-	-	-	1.000	0.000	0.000
25/137	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
26/27	1 (PP 1)	Uniforme	0.083 t/m	-	-	-	0.000	0.000	-1.000
26/27	5 (V 2)	Uniforme	0.042 t/m	-	-	-	1.000	0.000	0.000
26/29	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
27/28	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
27/28	5 (V 2)	Uniforme	0.042 t/m	-	-	-	1.000	0.000	0.000
27/30	1 (PP 1)	Uniforme	0.008 t/m	-	-	-	0.000	0.000	-1.000
108/27	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
27/111	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
137/27	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
28/31	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
29/30	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
29/30	5 (V 2)	Uniforme	0.042 t/m	-	-	-	1.000	0.000	0.000
29/33	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
30/31	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
30/31	5 (V 2)	Uniforme	0.042 t/m	-	-	-	1.000	0.000	0.000
30/32	1 (PP 1)	Uniforme	0.008 t/m	-	-	-	0.000	0.000	-1.000

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31/35	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
32/34	1 (PP 1)	Uniforme	0.008 t/m	-	-	-	0.000	0.000	-1.000
32/111	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
32/111	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
32/111	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
32/111	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
33/34	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
33/34	5 (V 2)	Uniforme	0.042 t/m	-	-	-	1.000	0.000	0.000
33/36	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
34/35	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
34/35	5 (V 2)	Uniforme	0.042 t/m	-	-	-	1.000	0.000	0.000
34/37	1 (PP 1)	Uniforme	0.008 t/m	-	-	-	0.000	0.000	-1.000
35/38	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
36/37	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
36/37	5 (V 2)	Uniforme	0.042 t/m	-	-	-	1.000	0.000	0.000
36/40	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
37/38	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
37/38	5 (V 2)	Uniforme	0.042 t/m	-	-	-	1.000	0.000	0.000
37/39	1 (PP 1)	Uniforme	0.008 t/m	-	-	-	0.000	0.000	-1.000
38/42	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
39/41	1 (PP 1)	Uniforme	0.008 t/m	-	-	-	0.000	0.000	-1.000
39/124	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
39/124	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
39/124	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
39/124	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
39/124	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
40/41	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
40/41	5 (V 2)	Uniforme	0.042 t/m	-	-	-	1.000	0.000	0.000
40/45	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
41/42	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
41/42	5 (V 2)	Uniforme	0.042 t/m	-	-	-	1.000	0.000	0.000
41/43	1 (PP 1)	Uniforme	0.008 t/m	-	-	-	0.000	0.000	-1.000
42/47	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
43/46	1 (PP 1)	Uniforme	0.008 t/m	-	-	-	0.000	0.000	-1.000
43/133	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
43/133	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
43/133	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
43/133	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
43/133	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
44/45	1 (PP 1)	Uniforme	0.027 t/m	-	-	-	0.000	0.000	-1.000
44/45	5 (V 2)	Uniforme	0.400 t/m	-	-	-	1.000	0.000	0.000
45/46	1 (PP 1)	Uniforme	0.027 t/m	-	-	-	0.000	0.000	-1.000
45/46	5 (V 2)	Uniforme	0.067 t/m	-	-	-	1.000	0.000	0.000
45/48	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
46/47	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
46/47	5 (V 2)	Uniforme	0.067 t/m	-	-	-	1.000	0.000	0.000
46/49	1 (PP 1)	Uniforme	0.008 t/m	-	-	-	0.000	0.000	-1.000
47/50	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
48/49	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
48/49	5 (V 2)	Uniforme	0.067 t/m	-	-	-	1.000	0.000	0.000
48/52	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000

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49/50	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
49/50	5 (V 2)	Uniforme	0.067 t/m	-	-	-	1.000	0.000	0.000
49/51	1 (PP 1)	Uniforme	0.008 t/m	-	-	-	0.000	0.000	-1.000
50/54	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
51/53	1 (PP 1)	Uniforme	0.008 t/m	-	-	-	0.000	0.000	-1.000
51/129	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
51/129	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
51/129	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
51/129	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
51/129	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
52/53	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
52/53	5 (V 2)	Uniforme	0.067 t/m	-	-	-	1.000	0.000	0.000
52/55	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
53/54	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
53/54	5 (V 2)	Uniforme	0.067 t/m	-	-	-	1.000	0.000	0.000
53/56	1 (PP 1)	Uniforme	0.008 t/m	-	-	-	0.000	0.000	-1.000
54/57	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
55/56	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
55/56	5 (V 2)	Uniforme	0.067 t/m	-	-	-	1.000	0.000	0.000
55/59	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
56/57	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
56/57	5 (V 2)	Uniforme	0.067 t/m	-	-	-	1.000	0.000	0.000
56/58	1 (PP 1)	Uniforme	0.008 t/m	-	-	-	0.000	0.000	-1.000
57/61	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
58/60	1 (PP 1)	Uniforme	0.008 t/m	-	-	-	0.000	0.000	-1.000
58/118	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
58/118	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
58/118	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
58/118	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
58/118	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
59/60	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
59/60	5 (V 2)	Uniforme	0.067 t/m	-	-	-	1.000	0.000	0.000
59/64	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
60/61	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
60/61	5 (V 2)	Uniforme	0.067 t/m	-	-	-	1.000	0.000	0.000
60/62	1 (PP 1)	Uniforme	0.008 t/m	-	-	-	0.000	0.000	-1.000
61/66	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
62/65	1 (PP 1)	Uniforme	0.008 t/m	-	-	-	0.000	0.000	-1.000
62/106	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
62/106	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
62/106	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
63/64	1 (PP 1)	Uniforme	0.027 t/m	-	-	-	0.000	0.000	-1.000
63/64	5 (V 2)	Uniforme	0.400 t/m	-	-	-	1.000	0.000	0.000
64/65	1 (PP 1)	Uniforme	0.027 t/m	-	-	-	0.000	0.000	-1.000
64/65	5 (V 2)	Uniforme	0.067 t/m	-	-	-	1.000	0.000	0.000
64/68	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
65/66	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
65/66	5 (V 2)	Uniforme	0.067 t/m	-	-	-	1.000	0.000	0.000
67/65	1 (PP 1)	Uniforme	0.008 t/m	-	-	-	0.000	0.000	-1.000
106/65	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
107/65	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000

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66/70	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
69/67	1 (PP 1)	Uniforme	0.008 t/m	-	-	-	0.000	0.000	-1.000
67/107	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
67/107	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
67/107	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
68/69	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
68/69	5 (V 2)	Uniforme	0.067 t/m	-	-	-	1.000	0.000	0.000
68/72	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
69/70	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
69/70	5 (V 2)	Uniforme	0.067 t/m	-	-	-	1.000	0.000	0.000
71/69	1 (PP 1)	Uniforme	0.008 t/m	-	-	-	0.000	0.000	-1.000
70/74	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
73/71	1 (PP 1)	Uniforme	0.008 t/m	-	-	-	0.000	0.000	-1.000
71/112	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
71/112	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
71/112	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
71/112	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
71/112	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
72/73	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
72/73	5 (V 2)	Uniforme	0.067 t/m	-	-	-	1.000	0.000	0.000
72/75	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
73/74	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
73/74	5 (V 2)	Uniforme	0.067 t/m	-	-	-	1.000	0.000	0.000
76/73	1 (PP 1)	Uniforme	0.008 t/m	-	-	-	0.000	0.000	-1.000
74/77	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
75/76	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
75/76	5 (V 2)	Uniforme	0.067 t/m	-	-	-	1.000	0.000	0.000
75/79	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
76/77	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
76/77	5 (V 2)	Uniforme	0.067 t/m	-	-	-	1.000	0.000	0.000
78/76	1 (PP 1)	Uniforme	0.008 t/m	-	-	-	0.000	0.000	-1.000
77/81	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
80/78	1 (PP 1)	Uniforme	0.008 t/m	-	-	-	0.000	0.000	-1.000
78/123	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
78/123	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
78/123	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
78/123	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
78/123	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
79/80	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
79/80	5 (V 2)	Uniforme	0.067 t/m	-	-	-	1.000	0.000	0.000
79/84	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
80/81	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
80/81	5 (V 2)	Uniforme	0.067 t/m	-	-	-	1.000	0.000	0.000
82/80	1 (PP 1)	Uniforme	0.008 t/m	-	-	-	0.000	0.000	-1.000
81/86	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
85/82	1 (PP 1)	Uniforme	0.008 t/m	-	-	-	0.000	0.000	-1.000
82/132	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
82/132	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
82/132	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
82/132	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
82/132	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000

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83/84	1 (PP 1)	Uniforme	0.027 t/m	-	-	-	0.000	0.000	-1.000
83/84	5 (V 2)	Uniforme	0.400 t/m	-	-	-	1.000	0.000	0.000
84/85	1 (PP 1)	Uniforme	0.027 t/m	-	-	-	0.000	0.000	-1.000
84/85	5 (V 2)	Uniforme	0.067 t/m	-	-	-	1.000	0.000	0.000
84/87	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
85/86	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
85/86	5 (V 2)	Uniforme	0.067 t/m	-	-	-	1.000	0.000	0.000
88/85	1 (PP 1)	Uniforme	0.008 t/m	-	-	-	0.000	0.000	-1.000
86/89	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
87/88	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
87/88	5 (V 2)	Uniforme	0.067 t/m	-	-	-	1.000	0.000	0.000
87/91	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
88/89	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
88/89	5 (V 2)	Uniforme	0.067 t/m	-	-	-	1.000	0.000	0.000
90/88	1 (PP 1)	Uniforme	0.008 t/m	-	-	-	0.000	0.000	-1.000
89/93	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
92/90	1 (PP 1)	Uniforme	0.008 t/m	-	-	-	0.000	0.000	-1.000
90/130	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
90/130	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
90/130	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
90/130	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
90/130	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
91/92	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
91/92	5 (V 2)	Uniforme	0.067 t/m	-	-	-	1.000	0.000	0.000
91/95	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
92/93	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
92/93	5 (V 2)	Uniforme	0.067 t/m	-	-	-	1.000	0.000	0.000
94/92	1 (PP 1)	Uniforme	0.008 t/m	-	-	-	0.000	0.000	-1.000
93/97	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
96/94	1 (PP 1)	Uniforme	0.008 t/m	-	-	-	0.000	0.000	-1.000
94/119	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
94/119	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
94/119	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
94/119	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
94/119	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
95/96	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
95/96	5 (V 2)	Uniforme	0.100 t/m	-	-	-	1.000	0.000	0.000
95/98	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
96/97	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
96/97	5 (V 2)	Uniforme	0.100 t/m	-	-	-	1.000	0.000	0.000
99/96	1 (PP 1)	Uniforme	0.008 t/m	-	-	-	0.000	0.000	-1.000
97/100	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
98/99	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
98/99	5 (V 2)	Uniforme	0.100 t/m	-	-	-	1.000	0.000	0.000
98/103	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
99/100	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
99/100	5 (V 2)	Uniforme	0.100 t/m	-	-	-	1.000	0.000	0.000
101/99	1 (PP 1)	Uniforme	0.008 t/m	-	-	-	0.000	0.000	-1.000
100/105	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
104/101	1 (PP 1)	Uniforme	0.008 t/m	-	-	-	0.000	0.000	-1.000
101/109	1 (PP 1)	Uniforme	0.042 t/m	-	-	-	0.000	0.000	-1.000

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101/109	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
101/109	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
101/109	6 (V 3)	Uniforme	0.210 t/m	-	-	-	0.000	0.000	1.000
102/103	1 (PP 1)	Uniforme	0.083 t/m	-	-	-	0.000	0.000	-1.000
102/103	4 (V 1)	Uniforme	0.125 t/m	-	-	-	0.000	1.000	0.000
102/103	5 (V 2)	Uniforme	0.200 t/m	-	-	-	0.000	-1.000	0.000
102/103	5 (V 2)	Uniforme	0.300 t/m	-	-	-	1.000	0.000	0.000
102/140	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
103/104	1 (PP 1)	Uniforme	0.083 t/m	-	-	-	0.000	0.000	-1.000
103/104	4 (V 1)	Uniforme	0.020 t/m	-	-	-	0.000	1.000	0.000
103/104	5 (V 2)	Uniforme	0.020 t/m	-	-	-	0.000	-1.000	0.000
103/104	5 (V 2)	Uniforme	0.050 t/m	-	-	-	1.000	0.000	0.000
103/115	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
104/105	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
104/105	4 (V 1)	Uniforme	0.020 t/m	-	-	-	0.000	1.000	0.000
104/105	5 (V 2)	Uniforme	0.020 t/m	-	-	-	0.000	-1.000	0.000
104/105	5 (V 2)	Uniforme	0.050 t/m	-	-	-	1.000	0.000	0.000
104/109	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
116/104	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
105/117	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
118/106	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
106/169	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
106/169	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
106/169	2 (SC 1)	Puntual	0.100 t	-	2.964	-	0.000	0.000	-1.000
106/169	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
106/169	4 (V 1)	Uniforme	0.010 t/m	-	-	-	0.000	0.000	-1.000
112/107	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
107/170	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
107/170	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
107/170	2 (SC 1)	Puntual	0.100 t	-	2.964	-	0.000	0.000	-1.000
107/170	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
107/170	4 (V 1)	Uniforme	0.010 t/m	-	-	-	0.000	0.000	-1.000
121/108	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
108/168	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
108/168	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
108/168	2 (SC 1)	Puntual	0.100 t	-	2.910	-	0.000	0.000	-1.000
108/168	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
108/168	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
108/168	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
109/119	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
109/167	1 (PP 1)	Uniforme	0.042 t/m	-	-	-	0.000	0.000	-1.000
109/167	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
109/167	2 (SC 1)	Puntual	0.100 t	-	2.684	-	0.000	0.000	-1.000
109/167	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
109/167	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
109/167	6 (V 3)	Uniforme	0.210 t/m	-	-	-	0.000	0.000	1.000
110/122	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
110/166	1 (PP 1)	Uniforme	0.042 t/m	-	-	-	0.000	0.000	-1.000
110/166	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
110/166	2 (SC 1)	Puntual	0.100 t	-	2.473	-	0.000	0.000	-1.000
110/166	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000

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110/166	5 (V 2)	Uniforme	0.210 t/m	-	-	-	0.000	0.000	1.000
110/166	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
111/124	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
111/165	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
111/165	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
111/165	2 (SC 1)	Puntual	0.100 t	-	2.051	-	0.000	0.000	-1.000
111/165	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
111/165	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
111/165	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
123/112	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
112/164	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
112/164	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
112/164	2 (SC 1)	Puntual	0.100 t	-	2.023	-	0.000	0.000	-1.000
112/164	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
112/164	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
112/164	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
113/114	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
113/114	4 (V 1)	Uniforme	0.070 t/m	-	-	-	0.000	1.000	0.000
113/114	5 (V 2)	Uniforme	0.042 t/m	-	-	-	0.000	-1.000	0.000
113/125	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
114/126	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
115/116	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
115/116	4 (V 1)	Uniforme	0.040 t/m	-	-	-	0.000	1.000	0.000
115/116	5 (V 2)	Uniforme	0.040 t/m	-	-	-	0.000	-1.000	0.000
115/120	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
116/117	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
116/117	4 (V 1)	Uniforme	0.040 t/m	-	-	-	0.000	1.000	0.000
116/117	5 (V 2)	Uniforme	0.040 t/m	-	-	-	0.000	-1.000	0.000
120/116	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
117/128	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
129/118	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
118/158	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
118/158	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
118/158	2 (SC 1)	Puntual	0.100 t	-	1.961	-	0.000	0.000	-1.000
118/158	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
118/158	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
118/158	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
119/130	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
119/157	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
119/157	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
119/157	2 (SC 1)	Puntual	0.100 t	-	1.743	-	0.000	0.000	-1.000
119/157	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
119/157	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
119/157	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
120/127	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
140/120	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
131/121	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
121/155	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
121/155	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
121/155	2 (SC 1)	Puntual	0.100 t	-	1.564	-	0.000	0.000	-1.000
121/155	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000



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121/155	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
121/155	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
122/136	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
122/154	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
122/154	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
122/154	2 (SC 1)	Puntual	0.100 t	-	1.128	-	0.000	0.000	-1.000
122/154	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
122/154	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
122/154	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
132/123	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
123/153	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
123/153	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
123/153	2 (SC 1)	Puntual	0.100 t	-	1.081	-	0.000	0.000	-1.000
123/153	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
123/153	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
123/153	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
124/133	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
124/152	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
124/152	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
124/152	2 (SC 1)	Puntual	0.100 t	-	1.048	-	0.000	0.000	-1.000
124/152	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
124/152	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
124/152	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
125/126	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
125/126	4 (V 1)	Uniforme	0.070 t/m	-	-	-	0.000	1.000	0.000
125/126	5 (V 2)	Uniforme	0.042 t/m	-	-	-	0.000	-1.000	0.000
125/134	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
126/135	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
127/128	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
127/128	4 (V 1)	Uniforme	0.040 t/m	-	-	-	0.000	1.000	0.000
127/128	5 (V 2)	Uniforme	0.040 t/m	-	-	-	0.000	-1.000	0.000
127/141	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
127/141	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
128/142	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
138/129	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
129/147	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
129/147	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
129/147	2 (SC 1)	Puntual	0.100 t	-	0.958	-	0.000	0.000	-1.000
129/147	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
129/147	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
129/147	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
130/139	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
130/146	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
130/146	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
130/146	2 (SC 1)	Puntual	0.100 t	-	0.801	-	0.000	0.000	-1.000
130/146	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
130/146	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
130/146	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
136/131	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
131/145	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
131/145	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000

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131/145	2 (SC 1)	Puntual	0.100 t	-	0.218	-	0.000	0.000	-1.000
131/145	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
131/145	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
131/145	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
139/132	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
132/144	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
132/144	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
132/144	2 (SC 1)	Puntual	0.100 t	-	0.140	-	0.000	0.000	-1.000
132/144	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
133/138	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
133/143	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
133/143	2 (SC 1)	Puntual	0.100 t	-	0.045	-	0.000	0.000	-1.000
133/143	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
134/135	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
134/135	4 (V 1)	Uniforme	0.070 t/m	-	-	-	0.000	1.000	0.000
134/135	5 (V 2)	Uniforme	0.042 t/m	-	-	-	0.000	-1.000	0.000
134/148	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
135/149	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
136/145	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
154/136	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
180/137	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
137/181	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
143/138	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
138/147	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
139/144	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
146/139	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
140/156	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
196/140	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
141/142	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
141/142	4 (V 1)	Uniforme	0.040 t/m	-	-	-	0.000	1.000	0.000
141/142	5 (V 2)	Uniforme	0.040 t/m	-	-	-	0.000	-1.000	0.000
141/150	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
142/151	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
152/143	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
143/184	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
143/184	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
143/184	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
143/184	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
143/184	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
144/153	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
144/192	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
144/192	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
144/192	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
144/192	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
144/192	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
145/155	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
145/177	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
145/177	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
145/177	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
145/177	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
145/177	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000

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157/146	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
146/193	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
146/193	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
146/193	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
146/193	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
146/193	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
147/158	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
147/185	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
147/185	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
147/185	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
147/185	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
147/185	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
148/149	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
148/149	4 (V 1)	Uniforme	0.070 t/m	-	-	-	0.000	1.000	0.000
148/149	5 (V 2)	Uniforme	0.042 t/m	-	-	-	0.000	-1.000	0.000
148/159	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
149/160	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
150/151	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
150/151	4 (V 1)	Uniforme	0.040 t/m	-	-	-	0.000	1.000	0.000
150/151	5 (V 2)	Uniforme	0.040 t/m	-	-	-	0.000	-1.000	0.000
150/156	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
151/163	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
165/152	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
152/183	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
152/183	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
152/183	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
152/183	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
152/183	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
153/164	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
153/191	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
153/191	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
153/191	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
153/191	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
153/191	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
166/154	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
154/176	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
154/176	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
154/176	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
154/176	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
154/176	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
155/168	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
155/178	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
155/178	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
155/178	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
155/178	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
155/178	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
156/161	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
156/162	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
167/157	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
157/194	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
157/194	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000

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157/194	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
157/194	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
158/169	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
158/186	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
158/186	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
158/186	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
158/186	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
158/186	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
159/160	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
159/160	4 (V 1)	Uniforme	0.070 t/m	-	-	-	0.000	1.000	0.000
159/160	5 (V 2)	Uniforme	0.042 t/m	-	-	-	0.000	-1.000	0.000
159/172	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
160/174	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
161/162	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
161/162	4 (V 1)	Uniforme	0.040 t/m	-	-	-	0.000	1.000	0.000
161/197	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
162/163	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
162/163	4 (V 1)	Uniforme	0.040 t/m	-	-	-	0.000	1.000	0.000
162/163	5 (V 2)	Uniforme	0.040 t/m	-	-	-	0.000	-1.000	0.000
162/198	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
163/199	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
164/170	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
164/190	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
164/190	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
164/190	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
164/190	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
164/190	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
181/165	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
165/182	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
165/182	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
165/182	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
165/182	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
165/182	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
173/166	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
166/175	1 (PP 1)	Uniforme	0.042 t/m	-	-	-	0.000	0.000	-1.000
166/175	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
166/175	5 (V 2)	Uniforme	0.210 t/m	-	-	-	0.000	0.000	1.000
167/195	1 (PP 1)	Uniforme	0.042 t/m	-	-	-	0.000	0.000	-1.000
167/195	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
167/195	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
167/195	6 (V 3)	Uniforme	0.210 t/m	-	-	-	0.000	0.000	1.000
198/167	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
168/179	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
168/179	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
168/179	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
168/181	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
169/187	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
169/187	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
169/187	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
169/188	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
170/188	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000

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170/189	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
170/189	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
170/189	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
171/172	1 (PP 1)	Uniforme	0.027 t/m	-	-	-	0.000	0.000	-1.000
171/172	4 (V 1)	Uniforme	0.400 t/m	-	-	-	0.000	1.000	0.000
171/172	5 (V 2)	Uniforme	0.250 t/m	-	-	-	0.000	-1.000	0.000
172/173	1 (PP 1)	Uniforme	0.027 t/m	-	-	-	0.000	0.000	-1.000
172/173	4 (V 1)	Uniforme	0.070 t/m	-	-	-	0.000	1.000	0.000
172/173	5 (V 2)	Uniforme	0.042 t/m	-	-	-	0.000	-1.000	0.000
172/200	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
173/174	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
173/174	4 (V 1)	Uniforme	0.070 t/m	-	-	-	0.000	1.000	0.000
173/174	5 (V 2)	Uniforme	0.042 t/m	-	-	-	0.000	-1.000	0.000
173/175	1 (PP 1)	Uniforme	0.019 t/m	-	-	-	0.000	0.000	-1.000
174/201	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
175/176	1 (PP 1)	Uniforme	0.019 t/m	-	-	-	0.000	0.000	-1.000
175/224	1 (PP 1)	Uniforme	0.042 t/m	-	-	-	0.000	0.000	-1.000
175/224	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
175/224	2 (SC 1)	Puntual	0.100 t	-	3.000	-	0.000	0.000	-1.000
175/224	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
175/224	5 (V 2)	Uniforme	0.150 t/m	-	-	-	0.000	0.000	1.000
175/224	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
176/177	1 (PP 1)	Uniforme	0.019 t/m	-	-	-	0.000	0.000	-1.000
176/225	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
176/225	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
176/225	2 (SC 1)	Puntual	0.100 t	-	3.000	-	0.000	0.000	-1.000
176/225	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
176/225	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
176/225	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
177/178	1 (PP 1)	Uniforme	0.019 t/m	-	-	-	0.000	0.000	-1.000
177/226	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
177/226	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
177/226	2 (SC 1)	Puntual	0.100 t	-	3.000	-	0.000	0.000	-1.000
177/226	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
177/226	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
178/179	1 (PP 1)	Uniforme	0.019 t/m	-	-	-	0.000	0.000	-1.000
178/227	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
178/227	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
178/227	2 (SC 1)	Puntual	0.100 t	-	3.000	-	0.000	0.000	-1.000
178/227	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
178/227	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
178/227	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
179/181	1 (PP 1)	Uniforme	0.019 t/m	-	-	-	0.000	0.000	-1.000
179/228	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
179/228	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
179/228	2 (SC 1)	Puntual	0.100 t	-	3.000	-	0.000	0.000	-1.000
179/228	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
179/228	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
179/228	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
180/181	1 (PP 1)	Uniforme	0.083 t/m	-	-	-	0.000	0.000	-1.000
181/182	1 (PP 1)	Trapez.	0.060 t/m	0.056 t/m	0.000	0.793	0.000	0.000	-1.000

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181/182	1 (PP 1)	Trapez.	0.056 t/m	0.052 t/m	0.793	1.585	0.000	0.000	-1.000
182/183	1 (PP 1)	Trapez.	0.052 t/m	0.049 t/m	0.000	0.460	0.000	0.000	-1.000
182/183	1 (PP 1)	Trapez.	0.049 t/m	0.047 t/m	0.460	0.921	0.000	0.000	-1.000
182/183	1 (PP 1)	Faja	0.036 t/m	-	0.921	1.676	0.000	0.000	-1.000
182/231	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
182/231	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
182/231	2 (SC 1)	Puntual	0.100 t	-	3.000	-	0.000	0.000	-1.000
182/231	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
182/231	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
182/231	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
183/184	1 (PP 1)	Uniforme	0.036 t/m	-	-	-	0.000	0.000	-1.000
183/232	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
183/232	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
183/232	2 (SC 1)	Puntual	0.100 t	-	3.000	-	0.000	0.000	-1.000
183/232	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
183/232	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
183/232	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
184/185	1 (PP 1)	Uniforme	0.036 t/m	-	-	-	0.000	0.000	-1.000
184/233	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
184/233	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
184/233	2 (SC 1)	Puntual	0.100 t	-	3.000	-	0.000	0.000	-1.000
184/233	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
184/233	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
184/233	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
185/186	1 (PP 1)	Uniforme	0.036 t/m	-	-	-	0.000	0.000	-1.000
185/234	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
185/234	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
185/234	2 (SC 1)	Puntual	0.100 t	-	3.000	-	0.000	0.000	-1.000
185/234	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
185/234	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
185/234	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
186/187	1 (PP 1)	Uniforme	0.036 t/m	-	-	-	0.000	0.000	-1.000
186/235	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
186/235	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
186/235	2 (SC 1)	Puntual	0.100 t	-	3.000	-	0.000	0.000	-1.000
186/235	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
186/235	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
186/235	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
187/188	1 (PP 1)	Uniforme	0.036 t/m	-	-	-	0.000	0.000	-1.000
187/236	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
187/236	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
187/236	2 (SC 1)	Puntual	0.100 t	-	3.000	-	0.000	0.000	-1.000
187/236	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
187/236	4 (V 1)	Uniforme	0.010 t/m	-	-	-	0.000	0.000	-1.000
189/188	1 (PP 1)	Uniforme	0.036 t/m	-	-	-	0.000	0.000	-1.000
190/189	1 (PP 1)	Uniforme	0.036 t/m	-	-	-	0.000	0.000	-1.000
189/238	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
189/238	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
189/238	2 (SC 1)	Puntual	0.100 t	-	3.000	-	0.000	0.000	-1.000
189/238	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
189/238	4 (V 1)	Uniforme	0.010 t/m	-	-	-	0.000	0.000	-1.000

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191/190	1 (PP 1)	Uniforme	0.036 t/m	-	-	-	0.000	0.000	-1.000
190/239	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
190/239	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
190/239	2 (SC 1)	Puntual	0.100 t	-	3.000	-	0.000	0.000	-1.000
190/239	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
190/239	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
190/239	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
192/191	1 (PP 1)	Uniforme	0.036 t/m	-	-	-	0.000	0.000	-1.000
191/240	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
191/240	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
191/240	2 (SC 1)	Puntual	0.100 t	-	3.000	-	0.000	0.000	-1.000
191/240	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
191/240	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
191/240	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
193/192	1 (PP 1)	Uniforme	0.036 t/m	-	-	-	0.000	0.000	-1.000
192/241	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
192/241	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
192/241	2 (SC 1)	Puntual	0.100 t	-	3.000	-	0.000	0.000	-1.000
192/241	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
192/241	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
192/241	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
194/193	1 (PP 1)	Trapez.	0.049 t/m	0.048 t/m	0.000	0.203	0.000	0.000	-1.000
194/193	1 (PP 1)	Trapez.	0.048 t/m	0.036 t/m	0.203	0.405	0.000	0.000	-1.000
194/193	1 (PP 1)	Faja	0.036 t/m	-	0.405	1.573	0.000	0.000	-1.000
193/242	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
193/242	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
193/242	2 (SC 1)	Puntual	0.100 t	-	3.000	-	0.000	0.000	-1.000
193/242	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
193/242	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
193/242	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
195/194	1 (PP 1)	Trapez.	0.057 t/m	0.053 t/m	0.000	0.786	0.000	0.000	-1.000
195/194	1 (PP 1)	Trapez.	0.053 t/m	0.049 t/m	0.786	1.573	0.000	0.000	-1.000
194/243	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
194/243	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
194/243	2 (SC 1)	Puntual	0.100 t	-	3.000	-	0.000	0.000	-1.000
194/243	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
194/243	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
194/243	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
198/195	1 (PP 1)	Trapez.	0.060 t/m	0.058 t/m	0.000	0.264	0.000	0.000	-1.000
198/195	1 (PP 1)	Trapez.	0.058 t/m	0.057 t/m	0.264	0.528	0.000	0.000	-1.000
195/244	1 (PP 1)	Uniforme	0.042 t/m	-	-	-	0.000	0.000	-1.000
195/244	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
195/244	2 (SC 1)	Puntual	0.100 t	-	3.000	-	0.000	0.000	-1.000
195/244	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
195/244	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
195/244	6 (V 3)	Uniforme	0.150 t/m	-	-	-	0.000	0.000	1.000
196/197	1 (PP 1)	Uniforme	0.083 t/m	-	-	-	0.000	0.000	-1.000
196/197	4 (V 1)	Uniforme	0.250 t/m	-	-	-	0.000	1.000	0.000
196/197	5 (V 2)	Uniforme	0.400 t/m	-	-	-	0.000	-1.000	0.000
197/198	1 (PP 1)	Uniforme	0.083 t/m	-	-	-	0.000	0.000	-1.000
197/198	4 (V 1)	Uniforme	0.040 t/m	-	-	-	0.000	1.000	0.000

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197/198	5 (V 2)	Uniforme	0.040 t/m	-	-	-	0.000	-1.000	0.000
197/202	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
198/199	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
198/199	4 (V 1)	Uniforme	0.040 t/m	-	-	-	0.000	1.000	0.000
198/199	5 (V 2)	Uniforme	0.040 t/m	-	-	-	0.000	-1.000	0.000
199/203	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
200/201	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
200/201	4 (V 1)	Uniforme	0.070 t/m	-	-	-	0.000	1.000	0.000
200/201	5 (V 2)	Uniforme	0.042 t/m	-	-	-	0.000	-1.000	0.000
200/204	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
201/205	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
202/203	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
202/203	4 (V 1)	Uniforme	0.040 t/m	-	-	-	0.000	1.000	0.000
202/203	5 (V 2)	Uniforme	0.040 t/m	-	-	-	0.000	-1.000	0.000
202/206	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
203/207	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
204/205	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
204/205	4 (V 1)	Uniforme	0.070 t/m	-	-	-	0.000	1.000	0.000
204/205	5 (V 2)	Uniforme	0.042 t/m	-	-	-	0.000	-1.000	0.000
204/208	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
205/209	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
206/207	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
206/207	4 (V 1)	Uniforme	0.040 t/m	-	-	-	0.000	1.000	0.000
206/207	5 (V 2)	Uniforme	0.040 t/m	-	-	-	0.000	-1.000	0.000
206/210	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
207/211	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
208/209	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
208/209	4 (V 1)	Uniforme	0.070 t/m	-	-	-	0.000	1.000	0.000
208/209	5 (V 2)	Uniforme	0.042 t/m	-	-	-	0.000	-1.000	0.000
208/212	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
209/213	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
210/211	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
210/211	4 (V 1)	Uniforme	0.040 t/m	-	-	-	0.000	1.000	0.000
210/211	5 (V 2)	Uniforme	0.040 t/m	-	-	-	0.000	-1.000	0.000
210/214	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
211/215	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
212/213	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
212/213	4 (V 1)	Uniforme	0.070 t/m	-	-	-	0.000	1.000	0.000
212/213	5 (V 2)	Uniforme	0.042 t/m	-	-	-	0.000	-1.000	0.000
212/216	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
213/217	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
214/215	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
214/215	4 (V 1)	Uniforme	0.040 t/m	-	-	-	0.000	1.000	0.000
214/215	5 (V 2)	Uniforme	0.040 t/m	-	-	-	0.000	-1.000	0.000
214/218	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
215/219	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
216/217	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
216/217	4 (V 1)	Uniforme	0.070 t/m	-	-	-	0.000	1.000	0.000
216/217	5 (V 2)	Uniforme	0.042 t/m	-	-	-	0.000	-1.000	0.000
216/221	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
217/223	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000



## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE** Adrián Freijomil Aradas

218/219	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
218/219	4 (V 1)	Uniforme	0.040 t/m	-	-	-	0.000	1.000	0.000
218/219	5 (V 2)	Uniforme	0.040 t/m	-	-	-	0.000	-1.000	0.000
218/246	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
219/248	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
220/221	1 (PP 1)	Uniforme	0.027 t/m	-	-	-	0.000	0.000	-1.000
220/221	4 (V 1)	Uniforme	0.400 t/m	-	-	-	0.000	1.000	0.000
220/221	5 (V 2)	Uniforme	0.250 t/m	-	-	-	0.000	-1.000	0.000
221/222	1 (PP 1)	Uniforme	0.027 t/m	-	-	-	0.000	0.000	-1.000
221/222	4 (V 1)	Uniforme	0.070 t/m	-	-	-	0.000	1.000	0.000
221/222	5 (V 2)	Uniforme	0.042 t/m	-	-	-	0.000	-1.000	0.000
221/249	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
222/223	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
222/223	5 (V 2)	Uniforme	0.042 t/m	-	-	-	0.000	-1.000	0.000
222/224	1 (PP 1)	Uniforme	0.019 t/m	-	-	-	0.000	0.000	-1.000
223/250	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
224/225	1 (PP 1)	Uniforme	0.019 t/m	-	-	-	0.000	0.000	-1.000
224/273	1 (PP 1)	Uniforme	0.042 t/m	-	-	-	0.000	0.000	-1.000
224/273	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
224/273	2 (SC 1)	Puntual	0.100 t	-	3.000	-	0.000	0.000	-1.000
224/273	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
224/273	5 (V 2)	Uniforme	0.150 t/m	-	-	-	0.000	0.000	1.000
224/273	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
225/226	1 (PP 1)	Uniforme	0.019 t/m	-	-	-	0.000	0.000	-1.000
225/274	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
225/274	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
225/274	2 (SC 1)	Puntual	0.100 t	-	3.000	-	0.000	0.000	-1.000
225/274	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
225/274	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
225/274	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
226/227	1 (PP 1)	Uniforme	0.019 t/m	-	-	-	0.000	0.000	-1.000
226/275	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
226/275	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
226/275	2 (SC 1)	Puntual	0.100 t	-	3.000	-	0.000	0.000	-1.000
226/275	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
226/275	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
227/228	1 (PP 1)	Uniforme	0.019 t/m	-	-	-	0.000	0.000	-1.000
227/276	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
227/276	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
227/276	2 (SC 1)	Puntual	0.100 t	-	3.000	-	0.000	0.000	-1.000
227/276	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
227/276	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
227/276	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
228/230	1 (PP 1)	Uniforme	0.019 t/m	-	-	-	0.000	0.000	-1.000
228/277	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
228/277	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
228/277	2 (SC 1)	Puntual	0.100 t	-	3.000	-	0.000	0.000	-1.000
228/277	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
228/277	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
228/277	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
229/230	1 (PP 1)	Uniforme	0.083 t/m	-	-	-	0.000	0.000	-1.000

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE** Adrián Freijomil Aradas

230/231	1 (PP 1)	Trapez.	0.060 t/m	0.056 t/m	0.000	0.793	0.000	0.000	-1.000
230/231	1 (PP 1)	Trapez.	0.056 t/m	0.052 t/m	0.793	1.585	0.000	0.000	-1.000
231/232	1 (PP 1)	Trapez.	0.052 t/m	0.049 t/m	0.000	0.460	0.000	0.000	-1.000
231/232	1 (PP 1)	Trapez.	0.049 t/m	0.047 t/m	0.460	0.921	0.000	0.000	-1.000
231/232	1 (PP 1)	Faja	0.036 t/m	-	0.921	1.676	0.000	0.000	-1.000
231/280	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
231/280	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
231/280	2 (SC 1)	Puntual	0.100 t	-	3.000	-	0.000	0.000	-1.000
231/280	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
231/280	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
231/280	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
232/233	1 (PP 1)	Uniforme	0.036 t/m	-	-	-	0.000	0.000	-1.000
232/281	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
232/281	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
232/281	2 (SC 1)	Puntual	0.100 t	-	3.000	-	0.000	0.000	-1.000
232/281	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
232/281	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
232/281	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
233/234	1 (PP 1)	Uniforme	0.036 t/m	-	-	-	0.000	0.000	-1.000
233/282	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
233/282	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
233/282	2 (SC 1)	Puntual	0.100 t	-	3.000	-	0.000	0.000	-1.000
233/282	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
233/282	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
233/282	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
234/235	1 (PP 1)	Uniforme	0.036 t/m	-	-	-	0.000	0.000	-1.000
234/283	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
234/283	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
234/283	2 (SC 1)	Puntual	0.100 t	-	3.000	-	0.000	0.000	-1.000
234/283	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
234/283	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
234/283	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
235/236	1 (PP 1)	Uniforme	0.036 t/m	-	-	-	0.000	0.000	-1.000
235/284	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
235/284	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
235/284	2 (SC 1)	Puntual	0.100 t	-	3.000	-	0.000	0.000	-1.000
235/284	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
235/284	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
235/284	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
236/237	1 (PP 1)	Uniforme	0.036 t/m	-	-	-	0.000	0.000	-1.000
236/285	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
236/285	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
236/285	2 (SC 1)	Puntual	0.100 t	-	3.000	-	0.000	0.000	-1.000
236/285	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
236/285	4 (V 1)	Uniforme	0.010 t/m	-	-	-	0.000	0.000	-1.000
238/237	1 (PP 1)	Uniforme	0.036 t/m	-	-	-	0.000	0.000	-1.000
239/238	1 (PP 1)	Uniforme	0.036 t/m	-	-	-	0.000	0.000	-1.000
238/287	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
238/287	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
238/287	2 (SC 1)	Puntual	0.100 t	-	3.000	-	0.000	0.000	-1.000
238/287	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE** Adrián Freijomil Aradas

238/287	4 (V 1)	Uniforme	0.010 t/m	-	-	-	0.000	0.000	-1.000
240/239	1 (PP 1)	Uniforme	0.036 t/m	-	-	-	0.000	0.000	-1.000
239/288	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
239/288	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
239/288	2 (SC 1)	Puntual	0.100 t	-	3.000	-	0.000	0.000	-1.000
239/288	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
239/288	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
239/288	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
241/240	1 (PP 1)	Uniforme	0.036 t/m	-	-	-	0.000	0.000	-1.000
240/289	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
240/289	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
240/289	2 (SC 1)	Puntual	0.100 t	-	3.000	-	0.000	0.000	-1.000
240/289	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
240/289	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
240/289	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
242/241	1 (PP 1)	Uniforme	0.036 t/m	-	-	-	0.000	0.000	-1.000
241/290	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
241/290	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
241/290	2 (SC 1)	Puntual	0.100 t	-	3.000	-	0.000	0.000	-1.000
241/290	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
241/290	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
241/290	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
243/242	1 (PP 1)	Trapez.	0.049 t/m	0.048 t/m	0.000	0.203	0.000	0.000	-1.000
243/242	1 (PP 1)	Trapez.	0.048 t/m	0.036 t/m	0.203	0.405	0.000	0.000	-1.000
243/242	1 (PP 1)	Faja	0.036 t/m	-	0.405	1.573	0.000	0.000	-1.000
242/291	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
242/291	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
242/291	2 (SC 1)	Puntual	0.100 t	-	3.000	-	0.000	0.000	-1.000
242/291	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
242/291	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
242/291	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
244/243	1 (PP 1)	Trapez.	0.057 t/m	0.053 t/m	0.000	0.786	0.000	0.000	-1.000
244/243	1 (PP 1)	Trapez.	0.053 t/m	0.049 t/m	0.786	1.573	0.000	0.000	-1.000
243/292	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
243/292	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
243/292	2 (SC 1)	Puntual	0.100 t	-	3.000	-	0.000	0.000	-1.000
243/292	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
243/292	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
243/292	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
247/244	1 (PP 1)	Trapez.	0.060 t/m	0.058 t/m	0.000	0.264	0.000	0.000	-1.000
247/244	1 (PP 1)	Trapez.	0.058 t/m	0.057 t/m	0.264	0.528	0.000	0.000	-1.000
244/293	1 (PP 1)	Uniforme	0.042 t/m	-	-	-	0.000	0.000	-1.000
244/293	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
244/293	2 (SC 1)	Puntual	0.100 t	-	3.000	-	0.000	0.000	-1.000
244/293	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
244/293	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
244/293	6 (V 3)	Uniforme	0.150 t/m	-	-	-	0.000	0.000	1.000
245/246	1 (PP 1)	Uniforme	0.083 t/m	-	-	-	0.000	0.000	-1.000
245/246	4 (V 1)	Uniforme	0.250 t/m	-	-	-	0.000	1.000	0.000
245/246	5 (V 2)	Uniforme	0.400 t/m	-	-	-	0.000	-1.000	0.000
246/247	1 (PP 1)	Uniforme	0.083 t/m	-	-	-	0.000	0.000	-1.000

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246/247	4 (V 1)	Uniforme	0.040 t/m	-	-	-	0.000	1.000	0.000
246/247	5 (V 2)	Uniforme	0.040 t/m	-	-	-	0.000	-1.000	0.000
246/251	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
247/248	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
247/248	4 (V 1)	Uniforme	0.040 t/m	-	-	-	0.000	1.000	0.000
247/248	5 (V 2)	Uniforme	0.040 t/m	-	-	-	0.000	-1.000	0.000
248/252	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
249/250	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
249/250	4 (V 1)	Uniforme	0.070 t/m	-	-	-	0.000	1.000	0.000
249/250	5 (V 2)	Uniforme	0.042 t/m	-	-	-	0.000	-1.000	0.000
249/253	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
250/254	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
251/252	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
251/252	4 (V 1)	Uniforme	0.040 t/m	-	-	-	0.000	1.000	0.000
251/252	5 (V 2)	Uniforme	0.040 t/m	-	-	-	0.000	-1.000	0.000
251/255	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
252/256	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
253/254	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
253/254	4 (V 1)	Uniforme	0.070 t/m	-	-	-	0.000	1.000	0.000
253/254	5 (V 2)	Uniforme	0.042 t/m	-	-	-	0.000	-1.000	0.000
253/257	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
254/258	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
255/256	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
255/256	4 (V 1)	Uniforme	0.040 t/m	-	-	-	0.000	1.000	0.000
255/256	5 (V 2)	Uniforme	0.040 t/m	-	-	-	0.000	-1.000	0.000
255/259	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
256/260	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
257/258	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
257/258	4 (V 1)	Uniforme	0.070 t/m	-	-	-	0.000	1.000	0.000
257/258	5 (V 2)	Uniforme	0.042 t/m	-	-	-	0.000	-1.000	0.000
257/261	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
258/262	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
259/260	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
259/260	4 (V 1)	Uniforme	0.040 t/m	-	-	-	0.000	1.000	0.000
259/260	5 (V 2)	Uniforme	0.040 t/m	-	-	-	0.000	-1.000	0.000
259/263	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
260/264	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
261/262	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
261/262	4 (V 1)	Uniforme	0.070 t/m	-	-	-	0.000	1.000	0.000
261/262	5 (V 2)	Uniforme	0.042 t/m	-	-	-	0.000	-1.000	0.000
261/265	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
262/266	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
263/264	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
263/264	4 (V 1)	Uniforme	0.040 t/m	-	-	-	0.000	1.000	0.000
263/264	5 (V 2)	Uniforme	0.040 t/m	-	-	-	0.000	-1.000	0.000
263/267	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
264/268	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
265/266	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
265/266	4 (V 1)	Uniforme	0.070 t/m	-	-	-	0.000	1.000	0.000
265/266	5 (V 2)	Uniforme	0.042 t/m	-	-	-	0.000	-1.000	0.000
265/270	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000

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266/272	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
267/268	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
267/268	4 (V 1)	Uniforme	0.040 t/m	-	-	-	0.000	1.000	0.000
267/268	5 (V 2)	Uniforme	0.040 t/m	-	-	-	0.000	-1.000	0.000
267/295	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
268/297	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
269/270	1 (PP 1)	Uniforme	0.027 t/m	-	-	-	0.000	0.000	-1.000
269/270	4 (V 1)	Uniforme	0.400 t/m	-	-	-	0.000	1.000	0.000
269/270	5 (V 2)	Uniforme	0.250 t/m	-	-	-	0.000	-1.000	0.000
270/271	1 (PP 1)	Uniforme	0.027 t/m	-	-	-	0.000	0.000	-1.000
270/271	4 (V 1)	Uniforme	0.070 t/m	-	-	-	0.000	1.000	0.000
270/298	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
271/272	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
271/272	4 (V 1)	Uniforme	0.070 t/m	-	-	-	0.000	1.000	0.000
271/272	5 (V 2)	Uniforme	0.042 t/m	-	-	-	0.000	-1.000	0.000
271/273	1 (PP 1)	Uniforme	0.019 t/m	-	-	-	0.000	0.000	-1.000
272/299	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
273/274	1 (PP 1)	Uniforme	0.019 t/m	-	-	-	0.000	0.000	-1.000
273/322	1 (PP 1)	Uniforme	0.042 t/m	-	-	-	0.000	0.000	-1.000
273/322	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
273/322	2 (SC 1)	Puntual	0.100 t	-	3.000	-	0.000	0.000	-1.000
273/322	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
273/322	5 (V 2)	Uniforme	0.150 t/m	-	-	-	0.000	0.000	1.000
273/322	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
274/275	1 (PP 1)	Uniforme	0.019 t/m	-	-	-	0.000	0.000	-1.000
274/323	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
274/323	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
274/323	2 (SC 1)	Puntual	0.100 t	-	3.000	-	0.000	0.000	-1.000
274/323	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
274/323	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
274/323	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
275/276	1 (PP 1)	Uniforme	0.019 t/m	-	-	-	0.000	0.000	-1.000
275/324	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
275/324	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
275/324	2 (SC 1)	Puntual	0.100 t	-	3.000	-	0.000	0.000	-1.000
275/324	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
275/324	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
276/277	1 (PP 1)	Uniforme	0.019 t/m	-	-	-	0.000	0.000	-1.000
276/325	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
276/325	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
276/325	2 (SC 1)	Puntual	0.100 t	-	3.000	-	0.000	0.000	-1.000
276/325	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
276/325	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
276/325	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
277/279	1 (PP 1)	Uniforme	0.019 t/m	-	-	-	0.000	0.000	-1.000
277/326	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
277/326	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
277/326	2 (SC 1)	Puntual	0.100 t	-	3.000	-	0.000	0.000	-1.000
277/326	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
277/326	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
277/326	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000

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278/279	1 (PP 1)	Uniforme	0.083 t/m	-	-	-	0.000	0.000	-1.000
279/280	1 (PP 1)	Trapez.	0.060 t/m	0.056 t/m	0.000	0.793	0.000	0.000	-1.000
279/280	1 (PP 1)	Trapez.	0.056 t/m	0.052 t/m	0.793	1.585	0.000	0.000	-1.000
280/281	1 (PP 1)	Trapez.	0.052 t/m	0.049 t/m	0.000	0.460	0.000	0.000	-1.000
280/281	1 (PP 1)	Trapez.	0.049 t/m	0.047 t/m	0.460	0.921	0.000	0.000	-1.000
280/281	1 (PP 1)	Faja	0.036 t/m	-	0.921	1.676	0.000	0.000	-1.000
280/331	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
280/331	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
280/331	2 (SC 1)	Puntual	0.100 t	-	3.000	-	0.000	0.000	-1.000
280/331	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
280/331	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
280/331	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
281/282	1 (PP 1)	Uniforme	0.036 t/m	-	-	-	0.000	0.000	-1.000
281/332	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
281/332	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
281/332	2 (SC 1)	Puntual	0.100 t	-	3.000	-	0.000	0.000	-1.000
281/332	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
281/332	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
281/332	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
282/283	1 (PP 1)	Uniforme	0.036 t/m	-	-	-	0.000	0.000	-1.000
282/333	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
282/333	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
282/333	2 (SC 1)	Puntual	0.100 t	-	3.000	-	0.000	0.000	-1.000
282/333	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
282/333	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
282/333	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
283/284	1 (PP 1)	Uniforme	0.036 t/m	-	-	-	0.000	0.000	-1.000
283/336	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
283/336	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
283/336	2 (SC 1)	Puntual	0.100 t	-	3.000	-	0.000	0.000	-1.000
283/336	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
283/336	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
283/336	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
284/285	1 (PP 1)	Uniforme	0.036 t/m	-	-	-	0.000	0.000	-1.000
284/337	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
284/337	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
284/337	2 (SC 1)	Puntual	0.100 t	-	3.000	-	0.000	0.000	-1.000
284/337	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
284/337	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
284/337	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
285/286	1 (PP 1)	Uniforme	0.036 t/m	-	-	-	0.000	0.000	-1.000
285/338	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
285/338	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
285/338	2 (SC 1)	Puntual	0.100 t	-	3.000	-	0.000	0.000	-1.000
285/338	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
285/338	4 (V 1)	Uniforme	0.010 t/m	-	-	-	0.000	0.000	-1.000
287/286	1 (PP 1)	Uniforme	0.036 t/m	-	-	-	0.000	0.000	-1.000
288/287	1 (PP 1)	Uniforme	0.036 t/m	-	-	-	0.000	0.000	-1.000
287/342	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
287/342	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
287/342	2 (SC 1)	Puntual	0.100 t	-	3.000	-	0.000	0.000	-1.000

## Metal 3D

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287/342	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
287/342	4 (V 1)	Uniforme	0.010 t/m	-	-	-	0.000	0.000	-1.000
289/288	1 (PP 1)	Uniforme	0.036 t/m	-	-	-	0.000	0.000	-1.000
288/343	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
288/343	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
288/343	2 (SC 1)	Puntual	0.100 t	-	3.000	-	0.000	0.000	-1.000
288/343	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
288/343	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
288/343	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
290/289	1 (PP 1)	Uniforme	0.036 t/m	-	-	-	0.000	0.000	-1.000
289/344	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
289/344	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
289/344	2 (SC 1)	Puntual	0.100 t	-	3.000	-	0.000	0.000	-1.000
289/344	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
289/344	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
289/344	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
291/290	1 (PP 1)	Uniforme	0.036 t/m	-	-	-	0.000	0.000	-1.000
290/345	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
290/345	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
290/345	2 (SC 1)	Puntual	0.100 t	-	3.000	-	0.000	0.000	-1.000
290/345	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
290/345	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
290/345	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
292/291	1 (PP 1)	Trapez.	0.049 t/m	0.048 t/m	0.000	0.203	0.000	0.000	-1.000
292/291	1 (PP 1)	Trapez.	0.048 t/m	0.036 t/m	0.203	0.405	0.000	0.000	-1.000
292/291	1 (PP 1)	Faja	0.036 t/m	-	0.405	1.573	0.000	0.000	-1.000
291/348	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
291/348	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
291/348	2 (SC 1)	Puntual	0.100 t	-	3.000	-	0.000	0.000	-1.000
291/348	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
291/348	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
291/348	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
293/292	1 (PP 1)	Trapez.	0.057 t/m	0.053 t/m	0.000	0.786	0.000	0.000	-1.000
293/292	1 (PP 1)	Trapez.	0.053 t/m	0.049 t/m	0.786	1.573	0.000	0.000	-1.000
292/349	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
292/349	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
292/349	2 (SC 1)	Puntual	0.100 t	-	3.000	-	0.000	0.000	-1.000
292/349	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
292/349	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
292/349	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
296/293	1 (PP 1)	Trapez.	0.060 t/m	0.058 t/m	0.000	0.264	0.000	0.000	-1.000
296/293	1 (PP 1)	Trapez.	0.058 t/m	0.057 t/m	0.264	0.528	0.000	0.000	-1.000
293/350	1 (PP 1)	Uniforme	0.042 t/m	-	-	-	0.000	0.000	-1.000
293/350	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
293/350	2 (SC 1)	Puntual	0.100 t	-	3.000	-	0.000	0.000	-1.000
293/350	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
293/350	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
293/350	6 (V 3)	Uniforme	0.150 t/m	-	-	-	0.000	0.000	1.000
294/295	1 (PP 1)	Uniforme	0.083 t/m	-	-	-	0.000	0.000	-1.000
294/295	4 (V 1)	Uniforme	0.250 t/m	-	-	-	0.000	1.000	0.000
294/295	5 (V 2)	Uniforme	0.400 t/m	-	-	-	0.000	-1.000	0.000

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295/296	1 (PP 1)	Uniforme	0.083 t/m	-	-	-	0.000	0.000	-1.000
295/296	4 (V 1)	Uniforme	0.040 t/m	-	-	-	0.000	1.000	0.000
295/296	5 (V 2)	Uniforme	0.040 t/m	-	-	-	0.000	-1.000	0.000
295/300	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
296/297	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
296/297	4 (V 1)	Uniforme	0.040 t/m	-	-	-	0.000	1.000	0.000
296/297	5 (V 2)	Uniforme	0.040 t/m	-	-	-	0.000	-1.000	0.000
297/301	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
298/299	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
298/299	4 (V 1)	Uniforme	0.070 t/m	-	-	-	0.000	1.000	0.000
298/299	5 (V 2)	Uniforme	0.042 t/m	-	-	-	0.000	-1.000	0.000
298/302	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
299/303	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
300/301	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
300/301	4 (V 1)	Uniforme	0.040 t/m	-	-	-	0.000	1.000	0.000
300/301	5 (V 2)	Uniforme	0.040 t/m	-	-	-	0.000	-1.000	0.000
300/304	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
301/305	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
302/303	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
302/303	4 (V 1)	Uniforme	0.070 t/m	-	-	-	0.000	1.000	0.000
302/303	5 (V 2)	Uniforme	0.042 t/m	-	-	-	0.000	-1.000	0.000
302/306	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
303/307	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
304/305	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
304/305	4 (V 1)	Uniforme	0.040 t/m	-	-	-	0.000	1.000	0.000
304/305	5 (V 2)	Uniforme	0.040 t/m	-	-	-	0.000	-1.000	0.000
304/308	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
305/309	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
306/307	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
306/307	4 (V 1)	Uniforme	0.070 t/m	-	-	-	0.000	1.000	0.000
306/307	5 (V 2)	Uniforme	0.042 t/m	-	-	-	0.000	-1.000	0.000
306/310	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
307/311	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
308/309	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
308/309	4 (V 1)	Uniforme	0.040 t/m	-	-	-	0.000	1.000	0.000
308/309	5 (V 2)	Uniforme	0.040 t/m	-	-	-	0.000	-1.000	0.000
308/312	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
309/313	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
310/311	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
310/311	4 (V 1)	Uniforme	0.070 t/m	-	-	-	0.000	1.000	0.000
310/311	5 (V 2)	Uniforme	0.042 t/m	-	-	-	0.000	-1.000	0.000
310/314	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
311/315	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
312/313	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
312/313	4 (V 1)	Uniforme	0.040 t/m	-	-	-	0.000	1.000	0.000
312/313	5 (V 2)	Uniforme	0.040 t/m	-	-	-	0.000	-1.000	0.000
312/316	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
313/317	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
314/315	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
314/315	4 (V 1)	Uniforme	0.070 t/m	-	-	-	0.000	1.000	0.000
314/315	5 (V 2)	Uniforme	0.042 t/m	-	-	-	0.000	-1.000	0.000



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314/319	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
315/321	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
316/317	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
316/317	4 (V 1)	Uniforme	0.040 t/m	-	-	-	0.000	1.000	0.000
316/317	5 (V 2)	Uniforme	0.040 t/m	-	-	-	0.000	-1.000	0.000
316/353	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
317/356	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
318/319	1 (PP 1)	Uniforme	0.027 t/m	-	-	-	0.000	0.000	-1.000
318/319	4 (V 1)	Uniforme	0.400 t/m	-	-	-	0.000	1.000	0.000
318/319	5 (V 2)	Uniforme	0.250 t/m	-	-	-	0.000	-1.000	0.000
319/320	1 (PP 1)	Uniforme	0.027 t/m	-	-	-	0.000	0.000	-1.000
319/320	4 (V 1)	Uniforme	0.070 t/m	-	-	-	0.000	1.000	0.000
319/320	5 (V 2)	Uniforme	0.040 t/m	-	-	-	0.000	-1.000	0.000
319/364	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
320/321	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
320/321	4 (V 1)	Uniforme	0.070 t/m	-	-	-	0.000	1.000	0.000
320/321	5 (V 2)	Uniforme	0.042 t/m	-	-	-	0.000	-1.000	0.000
320/322	1 (PP 1)	Uniforme	0.019 t/m	-	-	-	0.000	0.000	-1.000
320/361	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
321/365	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
322/323	1 (PP 1)	Uniforme	0.019 t/m	-	-	-	0.000	0.000	-1.000
322/361	1 (PP 1)	Uniforme	0.042 t/m	-	-	-	0.000	0.000	-1.000
322/361	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
322/361	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
322/361	5 (V 2)	Uniforme	0.210 t/m	-	-	-	0.000	0.000	1.000
323/324	1 (PP 1)	Uniforme	0.019 t/m	-	-	-	0.000	0.000	-1.000
323/373	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
323/373	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
323/373	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
323/373	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
323/373	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
324/325	1 (PP 1)	Uniforme	0.019 t/m	-	-	-	0.000	0.000	-1.000
324/384	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
324/384	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
324/384	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
324/384	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
325/326	1 (PP 1)	Uniforme	0.019 t/m	-	-	-	0.000	0.000	-1.000
325/372	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
325/372	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
325/372	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
325/372	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
325/372	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
326/330	1 (PP 1)	Uniforme	0.019 t/m	-	-	-	0.000	0.000	-1.000
326/359	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
327/328	1 (PP 1)	Uniforme	0.083 t/m	-	-	-	0.000	0.000	-1.000
328/329	1 (PP 1)	Uniforme	0.083 t/m	-	-	-	0.000	0.000	-1.000
328/335	1 (PP 1)	Uniforme	0.036 t/m	-	-	-	0.000	0.000	-1.000
328/335	1 (PP 1)	Uniforme	1.290 t/m	-	-	-	0.000	0.000	-1.000
328/335	2 (SC 1)	Uniforme	0.600 t/m	-	-	-	0.000	0.000	-1.000
328/453	1 (PP 1)	Uniforme	0.049 t/m	-	-	-	0.000	0.000	-1.000
329/330	1 (PP 1)	Uniforme	0.083 t/m	-	-	-	0.000	0.000	-1.000

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329/391	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
330/331	1 (PP 1)	Trapez.	0.060 t/m	0.056 t/m	0.000	0.793	0.000	0.000	-1.000
330/331	1 (PP 1)	Trapez.	0.056 t/m	0.052 t/m	0.793	1.585	0.000	0.000	-1.000
359/330	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
330/362	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
391/330	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
331/332	1 (PP 1)	Trapez.	0.052 t/m	0.049 t/m	0.000	0.460	0.000	0.000	-1.000
331/332	1 (PP 1)	Trapez.	0.049 t/m	0.047 t/m	0.460	0.921	0.000	0.000	-1.000
331/332	1 (PP 1)	Faja	0.036 t/m	-	0.921	1.676	0.000	0.000	-1.000
331/362	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
331/362	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
331/362	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
331/362	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
331/362	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
332/333	1 (PP 1)	Uniforme	0.036 t/m	-	-	-	0.000	0.000	-1.000
332/375	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
332/375	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
332/375	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
332/375	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
332/375	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
333/336	1 (PP 1)	Uniforme	0.036 t/m	-	-	-	0.000	0.000	-1.000
333/387	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
333/387	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
333/387	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
333/387	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
333/387	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
334/335	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
335/340	1 (PP 1)	Uniforme	0.036 t/m	-	-	-	0.000	0.000	-1.000
335/340	1 (PP 1)	Uniforme	1.290 t/m	-	-	-	0.000	0.000	-1.000
335/340	2 (SC 1)	Uniforme	0.600 t/m	-	-	-	0.000	0.000	-1.000
336/337	1 (PP 1)	Uniforme	0.036 t/m	-	-	-	0.000	0.000	-1.000
336/382	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
336/382	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
336/382	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
336/382	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
336/382	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
337/338	1 (PP 1)	Uniforme	0.036 t/m	-	-	-	0.000	0.000	-1.000
337/370	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
337/370	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
337/370	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
337/370	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
338/341	1 (PP 1)	Uniforme	0.036 t/m	-	-	-	0.000	0.000	-1.000
338/357	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
338/357	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
339/340	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
340/347	1 (PP 1)	Uniforme	0.036 t/m	-	-	-	0.000	0.000	-1.000
340/347	1 (PP 1)	Uniforme	1.290 t/m	-	-	-	0.000	0.000	-1.000
340/347	2 (SC 1)	Uniforme	0.600 t/m	-	-	-	0.000	0.000	-1.000
342/341	1 (PP 1)	Uniforme	0.036 t/m	-	-	-	0.000	0.000	-1.000
357/341	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
358/341	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000

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343/342	1 (PP 1)	Uniforme	0.036 t/m	-	-	-	0.000	0.000	-1.000
342/358	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
342/358	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
344/343	1 (PP 1)	Uniforme	0.036 t/m	-	-	-	0.000	0.000	-1.000
343/363	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
343/363	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
343/363	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
343/363	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
343/363	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
345/344	1 (PP 1)	Uniforme	0.036 t/m	-	-	-	0.000	0.000	-1.000
344/374	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
344/374	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
344/374	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
344/374	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
344/374	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
348/345	1 (PP 1)	Uniforme	0.036 t/m	-	-	-	0.000	0.000	-1.000
345/385	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
345/385	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
345/385	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
345/385	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
345/385	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
346/347	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
347/352	1 (PP 1)	Uniforme	0.036 t/m	-	-	-	0.000	0.000	-1.000
347/352	1 (PP 1)	Uniforme	1.290 t/m	-	-	-	0.000	0.000	-1.000
347/352	2 (SC 1)	Uniforme	0.600 t/m	-	-	-	0.000	0.000	-1.000
349/348	1 (PP 1)	Trapez.	0.049 t/m	0.048 t/m	0.000	0.203	0.000	0.000	-1.000
349/348	1 (PP 1)	Trapez.	0.048 t/m	0.036 t/m	0.203	0.405	0.000	0.000	-1.000
349/348	1 (PP 1)	Faja	0.036 t/m	-	0.405	1.573	0.000	0.000	-1.000
348/383	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
348/383	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
348/383	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
348/383	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
348/383	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
350/349	1 (PP 1)	Trapez.	0.057 t/m	0.053 t/m	0.000	0.786	0.000	0.000	-1.000
350/349	1 (PP 1)	Trapez.	0.053 t/m	0.049 t/m	0.786	1.573	0.000	0.000	-1.000
349/371	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
349/371	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
349/371	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
349/371	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
349/371	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
355/350	1 (PP 1)	Trapez.	0.060 t/m	0.058 t/m	0.000	0.264	0.000	0.000	-1.000
355/350	1 (PP 1)	Trapez.	0.058 t/m	0.057 t/m	0.264	0.528	0.000	0.000	-1.000
350/360	1 (PP 1)	Uniforme	0.042 t/m	-	-	-	0.000	0.000	-1.000
350/360	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
350/360	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
350/360	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
350/360	6 (V 3)	Uniforme	0.210 t/m	-	-	-	0.000	0.000	1.000
351/352	1 (PP 1)	Uniforme	0.083 t/m	-	-	-	0.000	0.000	-1.000
351/352	4 (V 1)	Uniforme	0.250 t/m	-	-	-	0.000	1.000	0.000
351/352	5 (V 2)	Uniforme	0.400 t/m	-	-	-	0.000	-1.000	0.000
352/353	1 (PP 1)	Uniforme	0.083 t/m	-	-	-	0.000	0.000	-1.000

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352/353	5 (V 2)	Uniforme	0.400 t/m	-	-	-	0.000	-1.000	0.000
352/534	1 (PP 1)	Uniforme	0.049 t/m	-	-	-	0.000	0.000	-1.000
353/354	1 (PP 1)	Uniforme	0.083 t/m	-	-	-	0.000	0.000	-1.000
353/354	4 (V 1)	Uniforme	0.040 t/m	-	-	-	0.000	1.000	0.000
353/354	5 (V 2)	Uniforme	0.040 t/m	-	-	-	0.000	-1.000	0.000
353/366	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
353/367	1 (PP 1)	Uniforme	0.000 t/m	-	-	-	0.000	0.000	-1.000
354/355	1 (PP 1)	Uniforme	0.083 t/m	-	-	-	0.000	0.000	-1.000
354/355	4 (V 1)	Uniforme	0.040 t/m	-	-	-	0.000	1.000	0.000
354/355	5 (V 2)	Uniforme	0.040 t/m	-	-	-	0.000	-1.000	0.000
368/354	1 (PP 1)	Uniforme	0.000 t/m	-	-	-	0.000	0.000	-1.000
355/356	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
355/356	4 (V 1)	Uniforme	0.040 t/m	-	-	-	0.000	1.000	0.000
355/356	5 (V 2)	Uniforme	0.040 t/m	-	-	-	0.000	-1.000	0.000
355/360	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
356/369	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
370/357	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
357/426	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
357/426	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
357/426	2 (SC 1)	Puntual	0.100 t	-	2.964	-	0.000	0.000	-1.000
357/426	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
357/426	4 (V 1)	Uniforme	0.010 t/m	-	-	-	0.000	0.000	-1.000
363/358	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
358/427	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
358/427	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
358/427	2 (SC 1)	Puntual	0.100 t	-	2.964	-	0.000	0.000	-1.000
358/427	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
358/427	4 (V 1)	Uniforme	0.010 t/m	-	-	-	0.000	0.000	-1.000
372/359	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
359/425	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
359/425	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
359/425	2 (SC 1)	Puntual	0.100 t	-	2.910	-	0.000	0.000	-1.000
359/425	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
359/425	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
359/425	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
360/371	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
360/424	1 (PP 1)	Uniforme	0.042 t/m	-	-	-	0.000	0.000	-1.000
360/424	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
360/424	2 (SC 1)	Puntual	0.100 t	-	2.684	-	0.000	0.000	-1.000
360/424	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
360/424	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
360/424	6 (V 3)	Uniforme	0.210 t/m	-	-	-	0.000	0.000	1.000
361/373	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
361/423	1 (PP 1)	Uniforme	0.042 t/m	-	-	-	0.000	0.000	-1.000
361/423	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
361/423	2 (SC 1)	Puntual	0.100 t	-	2.473	-	0.000	0.000	-1.000
361/423	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
361/423	5 (V 2)	Uniforme	0.210 t/m	-	-	-	0.000	0.000	1.000
361/423	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
362/375	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
362/422	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000

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362/422	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
362/422	2 (SC 1)	Puntual	0.100 t	-	2.051	-	0.000	0.000	-1.000
362/422	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
362/422	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
362/422	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
374/363	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
363/421	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
363/421	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
363/421	2 (SC 1)	Puntual	0.100 t	-	2.023	-	0.000	0.000	-1.000
363/421	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
363/421	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
363/421	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
364/365	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
364/365	4 (V 1)	Uniforme	0.070 t/m	-	-	-	0.000	1.000	0.000
364/365	5 (V 2)	Uniforme	0.042 t/m	-	-	-	0.000	-1.000	0.000
364/376	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
365/377	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
366/367	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
366/367	4 (V 1)	Uniforme	0.040 t/m	-	-	-	0.000	1.000	0.000
366/367	5 (V 2)	Uniforme	0.040 t/m	-	-	-	0.000	-1.000	0.000
366/378	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
367/368	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
367/368	4 (V 1)	Uniforme	0.040 t/m	-	-	-	0.000	1.000	0.000
367/368	5 (V 2)	Uniforme	0.040 t/m	-	-	-	0.000	-1.000	0.000
367/379	1 (PP 1)	Uniforme	0.000 t/m	-	-	-	0.000	0.000	-1.000
368/369	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
368/369	4 (V 1)	Uniforme	0.040 t/m	-	-	-	0.000	1.000	0.000
368/369	5 (V 2)	Uniforme	0.040 t/m	-	-	-	0.000	-1.000	0.000
380/368	1 (PP 1)	Uniforme	0.000 t/m	-	-	-	0.000	0.000	-1.000
369/381	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
382/370	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
370/414	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
370/414	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
370/414	2 (SC 1)	Puntual	0.100 t	-	1.961	-	0.000	0.000	-1.000
370/414	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
370/414	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
370/414	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
371/383	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
371/413	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
371/413	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
371/413	2 (SC 1)	Puntual	0.100 t	-	1.743	-	0.000	0.000	-1.000
371/413	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
371/413	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
371/413	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
384/372	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
372/412	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
372/412	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
372/412	2 (SC 1)	Puntual	0.100 t	-	1.564	-	0.000	0.000	-1.000
372/412	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
372/412	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
372/412	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000

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373/390	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
373/411	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
373/411	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
373/411	2 (SC 1)	Puntual	0.100 t	-	1.128	-	0.000	0.000	-1.000
373/411	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
373/411	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
373/411	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
385/374	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
374/410	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
374/410	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
374/410	2 (SC 1)	Puntual	0.100 t	-	1.081	-	0.000	0.000	-1.000
374/410	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
374/410	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
374/410	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
375/387	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
375/409	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
375/409	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
375/409	2 (SC 1)	Puntual	0.100 t	-	1.048	-	0.000	0.000	-1.000
375/409	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
375/409	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
375/409	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
376/377	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
376/377	4 (V 1)	Uniforme	0.070 t/m	-	-	-	0.000	1.000	0.000
376/377	5 (V 2)	Uniforme	0.042 t/m	-	-	-	0.000	-1.000	0.000
376/388	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
377/389	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
378/379	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
378/379	4 (V 1)	Uniforme	0.040 t/m	-	-	-	0.000	1.000	0.000
378/379	5 (V 2)	Uniforme	0.040 t/m	-	-	-	0.000	-1.000	0.000
378/394	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
379/380	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
379/380	4 (V 1)	Uniforme	0.040 t/m	-	-	-	0.000	1.000	0.000
379/380	5 (V 2)	Uniforme	0.040 t/m	-	-	-	0.000	-1.000	0.000
379/386	1 (PP 1)	Uniforme	0.000 t/m	-	-	-	0.000	0.000	-1.000
380/381	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
380/381	4 (V 1)	Uniforme	0.040 t/m	-	-	-	0.000	1.000	0.000
380/381	5 (V 2)	Uniforme	0.040 t/m	-	-	-	0.000	-1.000	0.000
386/380	1 (PP 1)	Uniforme	0.000 t/m	-	-	-	0.000	0.000	-1.000
381/397	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
392/382	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
382/402	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
382/402	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
382/402	2 (SC 1)	Puntual	0.100 t	-	0.958	-	0.000	0.000	-1.000
382/402	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
382/402	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
382/402	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
383/393	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
383/401	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
383/401	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
383/401	2 (SC 1)	Puntual	0.100 t	-	0.801	-	0.000	0.000	-1.000
383/401	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000

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383/401	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
383/401	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
390/384	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
384/400	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
384/400	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
384/400	2 (SC 1)	Puntual	0.100 t	-	0.218	-	0.000	0.000	-1.000
384/400	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
384/400	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
393/385	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
385/399	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
385/399	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
385/399	2 (SC 1)	Puntual	0.100 t	-	0.140	-	0.000	0.000	-1.000
385/399	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
395/386	1 (PP 1)	Uniforme	0.000 t/m	-	-	-	0.000	0.000	-1.000
386/396	1 (PP 1)	Uniforme	0.000 t/m	-	-	-	0.000	0.000	-1.000
387/392	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
387/398	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
387/398	2 (SC 1)	Puntual	0.100 t	-	0.045	-	0.000	0.000	-1.000
387/398	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
388/389	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
388/389	4 (V 1)	Uniforme	0.070 t/m	-	-	-	0.000	1.000	0.000
388/389	5 (V 2)	Uniforme	0.042 t/m	-	-	-	0.000	-1.000	0.000
388/403	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
389/404	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
390/400	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
411/390	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
454/391	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
391/455	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
398/392	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
392/402	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
393/399	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
401/393	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
394/395	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
394/395	4 (V 1)	Uniforme	0.040 t/m	-	-	-	0.000	1.000	0.000
394/395	5 (V 2)	Uniforme	0.040 t/m	-	-	-	0.000	-1.000	0.000
394/405	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
395/396	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
395/396	4 (V 1)	Uniforme	0.040 t/m	-	-	-	0.000	1.000	0.000
395/396	5 (V 2)	Uniforme	0.040 t/m	-	-	-	0.000	-1.000	0.000
406/395	1 (PP 1)	Uniforme	0.000 t/m	-	-	-	0.000	0.000	-1.000
396/397	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
396/397	4 (V 1)	Uniforme	0.040 t/m	-	-	-	0.000	1.000	0.000
396/397	5 (V 2)	Uniforme	0.040 t/m	-	-	-	0.000	-1.000	0.000
396/407	1 (PP 1)	Uniforme	0.000 t/m	-	-	-	0.000	0.000	-1.000
397/408	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
409/398	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
398/471	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
398/471	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
398/471	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
398/471	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
398/471	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000

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399/410	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
399/512	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
399/512	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
399/512	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
399/512	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
399/512	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
400/412	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
400/443	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
400/443	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
400/443	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
400/443	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
413/401	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
401/521	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
401/521	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
401/521	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
401/521	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
401/521	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
402/414	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
402/480	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
402/480	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
402/480	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
402/480	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
402/480	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
403/404	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
403/404	4 (V 1)	Uniforme	0.070 t/m	-	-	-	0.000	1.000	0.000
403/404	5 (V 2)	Uniforme	0.042 t/m	-	-	-	0.000	-1.000	0.000
403/415	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
404/416	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
405/406	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
405/406	4 (V 1)	Uniforme	0.040 t/m	-	-	-	0.000	1.000	0.000
405/406	5 (V 2)	Uniforme	0.040 t/m	-	-	-	0.000	-1.000	0.000
405/417	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
406/407	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
406/407	4 (V 1)	Uniforme	0.040 t/m	-	-	-	0.000	1.000	0.000
406/407	5 (V 2)	Uniforme	0.040 t/m	-	-	-	0.000	-1.000	0.000
418/406	1 (PP 1)	Uniforme	0.000 t/m	-	-	-	0.000	0.000	-1.000
407/408	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
407/408	4 (V 1)	Uniforme	0.040 t/m	-	-	-	0.000	1.000	0.000
407/408	5 (V 2)	Uniforme	0.040 t/m	-	-	-	0.000	-1.000	0.000
407/419	1 (PP 1)	Uniforme	0.000 t/m	-	-	-	0.000	0.000	-1.000
408/420	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
422/409	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
409/467	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
409/467	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
409/467	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
409/467	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
409/467	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
410/421	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
410/508	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
410/508	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
410/508	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000



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410/508	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
410/508	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
423/411	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
411/436	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
411/436	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
411/436	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
411/436	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
411/436	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
412/425	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
412/447	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
412/447	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
412/447	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
412/447	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
412/447	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
424/413	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
413/525	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
413/525	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
413/525	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
413/525	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
413/525	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
414/426	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
414/487	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
414/487	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
414/487	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
414/487	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
414/487	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
415/416	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
415/416	4 (V 1)	Uniforme	0.070 t/m	-	-	-	0.000	1.000	0.000
415/416	5 (V 2)	Uniforme	0.042 t/m	-	-	-	0.000	-1.000	0.000
415/429	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
416/431	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
417/418	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
417/418	4 (V 1)	Uniforme	0.040 t/m	-	-	-	0.000	1.000	0.000
417/418	5 (V 2)	Uniforme	0.040 t/m	-	-	-	0.000	-1.000	0.000
417/535	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
418/419	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
418/419	4 (V 1)	Uniforme	0.040 t/m	-	-	-	0.000	1.000	0.000
418/419	5 (V 2)	Uniforme	0.040 t/m	-	-	-	0.000	-1.000	0.000
535/418	1 (PP 1)	Uniforme	0.000 t/m	-	-	-	0.000	0.000	-1.000
419/420	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
419/420	4 (V 1)	Uniforme	0.040 t/m	-	-	-	0.000	1.000	0.000
419/420	5 (V 2)	Uniforme	0.040 t/m	-	-	-	0.000	-1.000	0.000
419/536	1 (PP 1)	Uniforme	0.000 t/m	-	-	-	0.000	0.000	-1.000
420/537	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
421/427	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
421/501	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
421/501	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
421/501	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
421/501	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
421/501	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
455/422	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000

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422/460	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
422/460	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
422/460	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
422/460	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
422/460	6 (V 3)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
430/423	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
423/432	1 (PP 1)	Uniforme	0.042 t/m	-	-	-	0.000	0.000	-1.000
423/432	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
423/432	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
423/432	5 (V 2)	Uniforme	0.210 t/m	-	-	-	0.000	0.000	1.000
424/532	1 (PP 1)	Uniforme	0.042 t/m	-	-	-	0.000	0.000	-1.000
424/532	1 (PP 1)	Uniforme	0.020 t/m	-	-	-	0.000	0.000	-1.000
424/532	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
424/532	5 (V 2)	Uniforme	0.080 t/m	-	-	-	0.000	0.000	1.000
424/532	6 (V 3)	Uniforme	0.210 t/m	-	-	-	0.000	0.000	1.000
536/424	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
425/451	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
425/455	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
426/491	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
426/491	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
426/495	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
427/495	1 (PP 1)	Uniforme	0.002 t/m	-	-	-	0.000	0.000	-1.000
427/497	1 (PP 1)	Uniforme	0.015 t/m	-	-	-	0.000	0.000	-1.000
427/497	3 (SC 2)	Uniforme	0.040 t/m	-	-	-	0.000	0.000	-1.000
428/429	1 (PP 1)	Uniforme	0.027 t/m	-	-	-	0.000	0.000	-1.000
428/429	4 (V 1)	Uniforme	0.200 t/m	-	-	-	0.000	1.000	0.000
428/429	4 (V 1)	Uniforme	0.300 t/m	-	-	-	1.000	0.000	0.000
428/429	5 (V 2)	Uniforme	0.125 t/m	-	-	-	0.000	-1.000	0.000
429/430	1 (PP 1)	Uniforme	0.027 t/m	-	-	-	0.000	0.000	-1.000
429/430	4 (V 1)	Uniforme	0.100 t/m	-	-	-	1.000	0.000	0.000
429/430	5 (V 2)	Uniforme	0.020 t/m	-	-	-	0.000	-1.000	0.000
429/433	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
430/431	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
430/431	4 (V 1)	Uniforme	0.100 t/m	-	-	-	1.000	0.000	0.000
430/431	5 (V 2)	Uniforme	0.020 t/m	-	-	-	0.000	-1.000	0.000
430/432	1 (PP 1)	Uniforme	0.019 t/m	-	-	-	0.000	0.000	-1.000
431/435	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
432/434	1 (PP 1)	Uniforme	0.019 t/m	-	-	-	0.000	0.000	-1.000
433/434	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
433/434	4 (V 1)	Uniforme	0.100 t/m	-	-	-	1.000	0.000	0.000
433/437	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
434/435	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
434/435	4 (V 1)	Uniforme	0.100 t/m	-	-	-	1.000	0.000	0.000
434/436	1 (PP 1)	Uniforme	0.019 t/m	-	-	-	0.000	0.000	-1.000
435/439	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
436/438	1 (PP 1)	Uniforme	0.019 t/m	-	-	-	0.000	0.000	-1.000
437/438	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
437/438	4 (V 1)	Uniforme	0.100 t/m	-	-	-	1.000	0.000	0.000
437/440	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
438/439	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
438/439	4 (V 1)	Uniforme	0.100 t/m	-	-	-	1.000	0.000	0.000

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438/441	1 (PP 1)	Uniforme	0.019 t/m	-	-	-	0.000	0.000	-1.000
439/442	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
440/441	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
440/441	4 (V 1)	Uniforme	0.070 t/m	-	-	-	1.000	0.000	0.000
440/444	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
441/442	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
441/442	4 (V 1)	Uniforme	0.070 t/m	-	-	-	1.000	0.000	0.000
441/443	1 (PP 1)	Uniforme	0.019 t/m	-	-	-	0.000	0.000	-1.000
442/446	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
443/445	1 (PP 1)	Uniforme	0.019 t/m	-	-	-	0.000	0.000	-1.000
444/445	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
444/445	4 (V 1)	Uniforme	0.070 t/m	-	-	-	1.000	0.000	0.000
444/448	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
445/446	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
445/446	4 (V 1)	Uniforme	0.070 t/m	-	-	-	1.000	0.000	0.000
445/447	1 (PP 1)	Uniforme	0.019 t/m	-	-	-	0.000	0.000	-1.000
446/450	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
447/449	1 (PP 1)	Uniforme	0.019 t/m	-	-	-	0.000	0.000	-1.000
448/449	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
448/449	4 (V 1)	Uniforme	0.070 t/m	-	-	-	1.000	0.000	0.000
448/454	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
449/450	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
449/450	4 (V 1)	Uniforme	0.070 t/m	-	-	-	1.000	0.000	0.000
449/451	1 (PP 1)	Uniforme	0.019 t/m	-	-	-	0.000	0.000	-1.000
450/456	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
451/455	1 (PP 1)	Uniforme	0.019 t/m	-	-	-	0.000	0.000	-1.000
452/453	1 (PP 1)	Uniforme	0.083 t/m	-	-	-	0.000	0.000	-1.000
452/453	4 (V 1)	Uniforme	0.400 t/m	-	-	-	1.000	0.000	0.000
453/454	1 (PP 1)	Uniforme	0.083 t/m	-	-	-	0.000	0.000	-1.000
453/454	4 (V 1)	Uniforme	0.400 t/m	-	-	-	1.000	0.000	0.000
453/473	1 (PP 1)	Uniforme	0.036 t/m	-	-	-	0.000	0.000	-1.000
453/473	1 (PP 1)	Uniforme	1.290 t/m	-	-	-	0.000	0.000	-1.000
453/473	2 (SC 1)	Uniforme	0.600 t/m	-	-	-	0.000	0.000	-1.000
454/455	1 (PP 1)	Uniforme	0.083 t/m	-	-	-	0.000	0.000	-1.000
454/455	4 (V 1)	Uniforme	0.070 t/m	-	-	-	1.000	0.000	0.000
454/457	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
455/456	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
455/456	4 (V 1)	Uniforme	0.070 t/m	-	-	-	1.000	0.000	0.000
455/458	1 (PP 1)	Uniforme	0.008 t/m	-	-	-	0.000	0.000	-1.000
456/459	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
457/458	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
457/458	4 (V 1)	Uniforme	0.070 t/m	-	-	-	1.000	0.000	0.000
457/461	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
458/459	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
458/459	4 (V 1)	Uniforme	0.070 t/m	-	-	-	1.000	0.000	0.000
458/460	1 (PP 1)	Uniforme	0.008 t/m	-	-	-	0.000	0.000	-1.000
459/463	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
460/462	1 (PP 1)	Uniforme	0.008 t/m	-	-	-	0.000	0.000	-1.000
461/462	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
461/462	4 (V 1)	Uniforme	0.070 t/m	-	-	-	1.000	0.000	0.000
461/464	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000

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462/463	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
462/463	4 (V 1)	Uniforme	0.070 t/m	-	-	-	1.000	0.000	0.000
462/465	1 (PP 1)	Uniforme	0.008 t/m	-	-	-	0.000	0.000	-1.000
463/466	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
464/465	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
464/465	4 (V 1)	Uniforme	0.070 t/m	-	-	-	1.000	0.000	0.000
464/468	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
465/466	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
465/466	4 (V 1)	Uniforme	0.070 t/m	-	-	-	1.000	0.000	0.000
465/467	1 (PP 1)	Uniforme	0.008 t/m	-	-	-	0.000	0.000	-1.000
466/470	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
467/469	1 (PP 1)	Uniforme	0.008 t/m	-	-	-	0.000	0.000	-1.000
468/469	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
468/469	4 (V 1)	Uniforme	0.070 t/m	-	-	-	1.000	0.000	0.000
468/474	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
469/470	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
469/470	4 (V 1)	Uniforme	0.070 t/m	-	-	-	1.000	0.000	0.000
469/471	1 (PP 1)	Uniforme	0.008 t/m	-	-	-	0.000	0.000	-1.000
470/476	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
471/475	1 (PP 1)	Uniforme	0.008 t/m	-	-	-	0.000	0.000	-1.000
472/473	1 (PP 1)	Uniforme	0.027 t/m	-	-	-	0.000	0.000	-1.000
472/473	4 (V 1)	Uniforme	0.400 t/m	-	-	-	1.000	0.000	0.000
473/474	1 (PP 1)	Uniforme	0.027 t/m	-	-	-	0.000	0.000	-1.000
473/474	4 (V 1)	Uniforme	0.400 t/m	-	-	-	1.000	0.000	0.000
473/493	1 (PP 1)	Uniforme	0.036 t/m	-	-	-	0.000	0.000	-1.000
473/493	1 (PP 1)	Uniforme	1.290 t/m	-	-	-	0.000	0.000	-1.000
473/493	2 (SC 1)	Uniforme	0.600 t/m	-	-	-	0.000	0.000	-1.000
474/475	1 (PP 1)	Uniforme	0.027 t/m	-	-	-	0.000	0.000	-1.000
474/475	4 (V 1)	Uniforme	0.070 t/m	-	-	-	1.000	0.000	0.000
474/477	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
475/476	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
475/476	4 (V 1)	Uniforme	0.070 t/m	-	-	-	1.000	0.000	0.000
475/478	1 (PP 1)	Uniforme	0.008 t/m	-	-	-	0.000	0.000	-1.000
476/479	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
477/478	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
477/478	4 (V 1)	Uniforme	0.070 t/m	-	-	-	1.000	0.000	0.000
477/481	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
478/479	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
478/479	4 (V 1)	Uniforme	0.070 t/m	-	-	-	1.000	0.000	0.000
478/480	1 (PP 1)	Uniforme	0.008 t/m	-	-	-	0.000	0.000	-1.000
479/483	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
480/482	1 (PP 1)	Uniforme	0.008 t/m	-	-	-	0.000	0.000	-1.000
481/482	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
481/482	4 (V 1)	Uniforme	0.070 t/m	-	-	-	1.000	0.000	0.000
481/484	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
482/483	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
482/483	4 (V 1)	Uniforme	0.070 t/m	-	-	-	1.000	0.000	0.000
482/485	1 (PP 1)	Uniforme	0.008 t/m	-	-	-	0.000	0.000	-1.000
483/486	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
484/485	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
484/485	4 (V 1)	Uniforme	0.070 t/m	-	-	-	1.000	0.000	0.000

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484/488	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
485/486	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
485/486	4 (V 1)	Uniforme	0.070 t/m	-	-	-	1.000	0.000	0.000
485/487	1 (PP 1)	Uniforme	0.008 t/m	-	-	-	0.000	0.000	-1.000
486/490	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
487/489	1 (PP 1)	Uniforme	0.008 t/m	-	-	-	0.000	0.000	-1.000
488/489	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
488/489	4 (V 1)	Uniforme	0.070 t/m	-	-	-	1.000	0.000	0.000
488/494	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
489/490	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
489/490	4 (V 1)	Uniforme	0.070 t/m	-	-	-	1.000	0.000	0.000
489/491	1 (PP 1)	Uniforme	0.008 t/m	-	-	-	0.000	0.000	-1.000
490/496	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
491/495	1 (PP 1)	Uniforme	0.008 t/m	-	-	-	0.000	0.000	-1.000
492/493	1 (PP 1)	Uniforme	0.027 t/m	-	-	-	0.000	0.000	-1.000
492/493	4 (V 1)	Uniforme	0.400 t/m	-	-	-	1.000	0.000	0.000
493/494	1 (PP 1)	Uniforme	0.027 t/m	-	-	-	0.000	0.000	-1.000
493/494	4 (V 1)	Uniforme	0.400 t/m	-	-	-	1.000	0.000	0.000
493/514	1 (PP 1)	Uniforme	0.036 t/m	-	-	-	0.000	0.000	-1.000
493/514	1 (PP 1)	Uniforme	1.290 t/m	-	-	-	0.000	0.000	-1.000
493/514	2 (SC 1)	Uniforme	0.600 t/m	-	-	-	0.000	0.000	-1.000
494/495	1 (PP 1)	Uniforme	0.027 t/m	-	-	-	0.000	0.000	-1.000
494/495	4 (V 1)	Uniforme	0.070 t/m	-	-	-	1.000	0.000	0.000
494/498	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
495/496	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
495/496	4 (V 1)	Uniforme	0.070 t/m	-	-	-	1.000	0.000	0.000
497/495	1 (PP 1)	Uniforme	0.008 t/m	-	-	-	0.000	0.000	-1.000
496/500	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
499/497	1 (PP 1)	Uniforme	0.008 t/m	-	-	-	0.000	0.000	-1.000
498/499	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
498/499	4 (V 1)	Uniforme	0.070 t/m	-	-	-	1.000	0.000	0.000
498/502	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
499/500	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
499/500	4 (V 1)	Uniforme	0.070 t/m	-	-	-	1.000	0.000	0.000
501/499	1 (PP 1)	Uniforme	0.008 t/m	-	-	-	0.000	0.000	-1.000
500/504	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
503/501	1 (PP 1)	Uniforme	0.008 t/m	-	-	-	0.000	0.000	-1.000
502/503	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
502/503	4 (V 1)	Uniforme	0.070 t/m	-	-	-	1.000	0.000	0.000
502/505	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
503/504	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
503/504	4 (V 1)	Uniforme	0.070 t/m	-	-	-	1.000	0.000	0.000
506/503	1 (PP 1)	Uniforme	0.008 t/m	-	-	-	0.000	0.000	-1.000
504/507	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
505/506	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
505/506	4 (V 1)	Uniforme	0.070 t/m	-	-	-	1.000	0.000	0.000
505/509	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
506/507	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
506/507	4 (V 1)	Uniforme	0.070 t/m	-	-	-	1.000	0.000	0.000
508/506	1 (PP 1)	Uniforme	0.008 t/m	-	-	-	0.000	0.000	-1.000
507/511	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000

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510/508	1 (PP 1)	Uniforme	0.008 t/m	-	-	-	0.000	0.000	-1.000
509/510	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
509/510	4 (V 1)	Uniforme	0.070 t/m	-	-	-	1.000	0.000	0.000
509/515	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
510/511	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
510/511	4 (V 1)	Uniforme	0.070 t/m	-	-	-	1.000	0.000	0.000
512/510	1 (PP 1)	Uniforme	0.008 t/m	-	-	-	0.000	0.000	-1.000
511/517	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
516/512	1 (PP 1)	Uniforme	0.008 t/m	-	-	-	0.000	0.000	-1.000
513/514	1 (PP 1)	Uniforme	0.027 t/m	-	-	-	0.000	0.000	-1.000
513/514	4 (V 1)	Uniforme	0.400 t/m	-	-	-	1.000	0.000	0.000
514/515	1 (PP 1)	Uniforme	0.027 t/m	-	-	-	0.000	0.000	-1.000
514/515	4 (V 1)	Uniforme	0.400 t/m	-	-	-	1.000	0.000	0.000
514/534	1 (PP 1)	Uniforme	0.036 t/m	-	-	-	0.000	0.000	-1.000
514/534	1 (PP 1)	Uniforme	1.290 t/m	-	-	-	0.000	0.000	-1.000
514/534	2 (SC 1)	Uniforme	0.600 t/m	-	-	-	0.000	0.000	-1.000
515/516	1 (PP 1)	Uniforme	0.027 t/m	-	-	-	0.000	0.000	-1.000
515/516	4 (V 1)	Uniforme	0.070 t/m	-	-	-	1.000	0.000	0.000
515/518	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
516/517	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
516/517	4 (V 1)	Uniforme	0.070 t/m	-	-	-	1.000	0.000	0.000
519/516	1 (PP 1)	Uniforme	0.008 t/m	-	-	-	0.000	0.000	-1.000
517/520	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
518/519	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
518/519	4 (V 1)	Uniforme	0.040 t/m	-	-	-	1.000	0.000	0.000
518/522	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
519/520	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
519/520	4 (V 1)	Uniforme	0.040 t/m	-	-	-	1.000	0.000	0.000
521/519	1 (PP 1)	Uniforme	0.008 t/m	-	-	-	0.000	0.000	-1.000
520/524	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
523/521	1 (PP 1)	Uniforme	0.008 t/m	-	-	-	0.000	0.000	-1.000
522/523	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
522/523	4 (V 1)	Uniforme	0.040 t/m	-	-	-	1.000	0.000	0.000
522/526	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
523/524	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
523/524	4 (V 1)	Uniforme	0.040 t/m	-	-	-	1.000	0.000	0.000
525/523	1 (PP 1)	Uniforme	0.008 t/m	-	-	-	0.000	0.000	-1.000
524/528	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
527/525	1 (PP 1)	Uniforme	0.008 t/m	-	-	-	0.000	0.000	-1.000
526/527	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
526/527	4 (V 1)	Uniforme	0.040 t/m	-	-	-	1.000	0.000	0.000
526/529	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
527/528	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
527/528	4 (V 1)	Uniforme	0.040 t/m	-	-	-	1.000	0.000	0.000
530/527	1 (PP 1)	Uniforme	0.008 t/m	-	-	-	0.000	0.000	-1.000
528/531	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
529/530	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
529/530	4 (V 1)	Uniforme	0.040 t/m	-	-	-	1.000	0.000	0.000
529/535	1 (PP 1)	Uniforme	0.007 t/m	-	-	-	0.000	0.000	-1.000
530/531	1 (PP 1)	Uniforme	0.012 t/m	-	-	-	0.000	0.000	-1.000
530/531	4 (V 1)	Uniforme	0.040 t/m	-	-	-	1.000	0.000	0.000

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532/530	1 (PP 1)	Uniforme	0.008 t/m	-	-	-	0.000	0.000	-1.000
531/537	1 (PP 1)	Uniforme	0.060 t/m	-	-	-	0.000	0.000	-1.000
536/532	1 (PP 1)	Uniforme	0.008 t/m	-	-	-	0.000	0.000	-1.000
533/534	1 (PP 1)	Uniforme	0.083 t/m	-	-	-	0.000	0.000	-1.000
533/534	4 (V 1)	Uniforme	0.150 t/m	-	-	-	1.000	0.000	0.000
533/534	4 (V 1)	Uniforme	0.125 t/m	-	-	-	0.000	1.000	0.000
533/534	5 (V 2)	Uniforme	0.200 t/m	-	-	-	0.000	-1.000	0.000
534/535	1 (PP 1)	Uniforme	0.083 t/m	-	-	-	0.000	0.000	-1.000
534/535	4 (V 1)	Uniforme	0.150 t/m	-	-	-	1.000	0.000	0.000
534/535	4 (V 1)	Uniforme	0.125 t/m	-	-	-	0.000	1.000	0.000
534/535	5 (V 2)	Uniforme	0.200 t/m	-	-	-	0.000	-1.000	0.000
535/536	1 (PP 1)	Uniforme	0.083 t/m	-	-	-	0.000	0.000	-1.000
535/536	4 (V 1)	Uniforme	0.020 t/m	-	-	-	1.000	0.000	0.000
535/536	4 (V 1)	Uniforme	0.020 t/m	-	-	-	0.000	1.000	0.000
535/536	5 (V 2)	Uniforme	0.020 t/m	-	-	-	0.000	-1.000	0.000
536/537	1 (PP 1)	Uniforme	0.004 t/m	-	-	-	0.000	0.000	-1.000
536/537	4 (V 1)	Uniforme	0.020 t/m	-	-	-	1.000	0.000	0.000
536/537	4 (V 1)	Uniforme	0.020 t/m	-	-	-	0.000	1.000	0.000
536/537	5 (V 2)	Uniforme	0.020 t/m	-	-	-	0.000	-1.000	0.000

## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

### 3.- Esfuerzos

Barras	Esf.	ESFUERZOS (EJES LOCALES) (t)(t-m)								
		0 L	1/8 L	1/4 L	3/8 L	1/2 L	5/8 L	3/4 L	7/8 L	1 L
1/2		0.000 m	0.603 m	1.205 m	1.808 m	2.410 m	3.013 m	3.615 m	4.218 m	4.820 m
		Envolvente (Acero laminado)								
	N-	-1.5924	-1.5707	-1.5490	-1.5273	-1.5056	-1.4839	-1.4622	-1.4405	-1.4187
	N+	0.3955	0.4084	0.4213	0.4341	0.4470	0.4598	0.4727	0.4856	0.4984
	Ty-	-0.0099	-0.0099	-0.0099	-0.0099	-0.0099	-0.0679	-0.1809	-0.2938	-0.4068
	Ty+	0.5059	0.3929	0.2799	0.1670	0.0540	0.0520	0.0520	0.0520	0.0520
	Tz-	-0.5329	-0.4200	-0.3070	-0.1940	-0.0811	-0.0923	-0.2731	-0.4538	-0.6346
	Tz+	0.8138	0.6331	0.4523	0.2716	0.0908	0.0343	0.1473	0.2602	0.3732
	Mt-	-0.0011	-0.0011	-0.0011	-0.0011	-0.0011	-0.0011	-0.0011	-0.0011	-0.0011
	Mt+	0.0016	0.0016	0.0016	0.0016	0.0016	0.0016	0.0016	0.0016	0.0016
	My-	-0.5069	-0.2212	-0.0260	-0.2414	-0.3528	-0.3508	-0.2444	-0.0465	-0.1244
	My+	0.7373	0.3036	0.0009	0.1487	0.2329	0.2464	0.1945	0.0718	0.3078
	Mz-	-0.0154	-0.0094	-0.0173	-0.1478	-0.2157	-0.2129	-0.1447	-0.1201	-0.1514
	Mz+	0.4589	0.1895	0.0365	0.0084	0.0085	0.0145	0.0205	0.0396	0.2282
2/3		0.000 m	0.136 m	0.273 m	0.409 m	0.545 m	0.682 m	0.818 m	0.954 m	1.091 m
		Envolvente (Acero laminado)								
	N-	-1.3730	-1.3681	-1.3632	-1.3583	-1.3533	-1.3484	-1.3435	-1.3386	-1.3337
	N+	0.6137	0.6166	0.6195	0.6224	0.6253	0.6282	0.6312	0.6341	0.6370
	Ty-	-0.2397	-0.2397	-0.2397	-0.2397	-0.2397	-0.2397	-0.2397	-0.2397	-0.2397
	Ty+	0.1587	0.1544	0.1501	0.1458	0.1415	0.1372	0.1329	0.1286	0.1243
	Tz-	-0.2204	-0.2204	-0.2204	-0.2204	-0.2204	-0.2204	-0.2204	-0.2204	-0.2204
	Tz+	0.1448	0.1489	0.1530	0.1571	0.1612	0.1653	0.1693	0.1734	0.1775
	Mt-	-0.0083	-0.0083	-0.0083	-0.0083	-0.0083	-0.0083	-0.0083	-0.0083	-0.0083
	Mt+	0.0047	0.0047	0.0047	0.0047	0.0047	0.0047	0.0047	0.0047	0.0047
	My-	-0.1244	-0.1362	-0.1568	-0.1780	-0.1997	-0.2219	-0.2447	-0.2681	-0.2920
	My+	0.3078	0.3006	0.3024	0.3053	0.3092	0.3140	0.3198	0.3266	0.3343
	Mz-	-0.2592	-0.2266	-0.1939	-0.1612	-0.1285	-0.0959	-0.0632	-0.0305	-0.0005
	Mz+	0.1543	0.1330	0.1122	0.0920	0.0724	0.0534	0.0350	0.0172	0.0022
2/6		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-1.0307	-1.0307	-1.0307	-1.0307	-1.0307	-1.0307	-1.0307	-1.0307	-1.0307
	N+	0.5050	0.5050	0.5050	0.5050	0.5050	0.5050	0.5050	0.5050	0.5050
	Ty-	-0.0198	-0.0185	-0.0173	-0.0160	-0.0147	-0.0135	-0.0122	-0.0110	-0.0097
	Ty+	0.0666	0.0674	0.0681	0.0689	0.0696	0.0703	0.0711	0.0718	0.0726
	Tz-	-0.2136	-0.2136	-0.2136	-0.2136	-0.2136	-0.2136	-0.2136	-0.2136	-0.2136
	Tz+	0.0308	0.0308	0.0308	0.0308	0.0308	0.0308	0.0308	0.0308	0.0308
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0039	-0.0077	-0.0116	-0.0154	-0.0193	-0.0231	-0.0270	-0.0308
	My+	0.0000	0.0267	0.0534	0.0801	0.1068	0.1335	0.1602	0.1869	0.2136
	Mz-	0.0000	-0.0084	-0.0168	-0.0254	-0.0341	-0.0428	-0.0516	-0.0606	-0.0696
	Mz+	0.0000	0.0024	0.0046	0.0067	0.0086	0.0104	0.0120	0.0134	0.0147
2/113		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-0.4663	-0.4663	-0.4663	-0.4663	-0.4663	-0.4663	-0.4663	-0.4663	-0.4663
	N+	0.4892	0.4892	0.4892	0.4892	0.4892	0.4892	0.4892	0.4892	0.4892
	Ty-	-0.1906	-0.1893	-0.1880	-0.1868	-0.1855	-0.1843	-0.1830	-0.1817	-0.1805
	Ty+	0.0012	0.0020	0.0027	0.0035	0.0042	0.0050	0.0057	0.0064	0.0072
	Tz-	-0.2888	-0.2888	-0.2888	-0.2888	-0.2888	-0.2888	-0.2888	-0.2888	-0.2888
	Tz+	0.1661	0.1661	0.1661	0.1661	0.1661	0.1661	0.1661	0.1661	0.1661
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000



## Metal 3D

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	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0097	-0.0161	-0.0368	-0.0576	-0.0784	-0.0991	-0.1199	-0.1407	-0.1614
	My+	0.0057	0.0273	0.0634	0.0995	0.1356	0.1717	0.2078	0.2439	0.2800
	Mz-	-0.1078	-0.1016	-0.0956	-0.0897	-0.0839	-0.0784	-0.0731	-0.0722	-0.0721
	Mz+	0.0042	0.0040	0.0037	0.0034	0.0029	0.0163	0.0341	0.0562	0.0788
3/4		0.000 m	0.238 m	0.475 m	0.713 m	0.950 m	1.188 m	1.426 m	1.663 m	1.901 m
		Envolvente (Acero Conformado)								
	N-	-0.4351	-0.4338	-0.4325	-0.4312	-0.4300	-0.4287	-0.4274	-0.4261	-0.4248
	N+	-0.0177	-0.0169	-0.0161	-0.0154	-0.0146	-0.0139	-0.0131	-0.0123	-0.0116
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0075	-0.0150	-0.0225	-0.0299
	Ty+	0.0299	0.0225	0.0150	0.0075	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.0285	-0.0214	-0.0143	-0.0071	0.0000	-0.0125	-0.0249	-0.0374	-0.0499
	Tz+	0.0499	0.0374	0.0249	0.0125	0.0000	0.0071	0.0143	0.0214	0.0285
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0103	-0.0178	-0.0222	-0.0237	-0.0222	-0.0178	-0.0103	0.0000
	My+	0.0000	0.0059	0.0102	0.0127	0.0136	0.0127	0.0102	0.0059	0.0000
	Mz-	0.0000	-0.0062	-0.0107	-0.0133	-0.0142	-0.0133	-0.0107	-0.0062	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3/5		0.000 m	0.066 m	0.132 m	0.198 m	0.264 m	0.330 m	0.396 m	0.462 m	0.528 m
		Envolvente (Acero laminado)								
	N-	-0.1034	-0.1033	-0.1032	-0.1031	-0.1030	-0.1028	-0.1027	-0.1026	-0.1025
	N+	0.2725	0.2726	0.2726	0.2727	0.2728	0.2728	0.2729	0.2730	0.2730
	Ty-	-0.2564	-0.2564	-0.2564	-0.2564	-0.2564	-0.2564	-0.2564	-0.2564	-0.2564
	Ty+	0.1291	0.1291	0.1291	0.1291	0.1291	0.1291	0.1291	0.1291	0.1291
	Tz-	-0.8848	-0.8832	-0.8815	-0.8798	-0.8782	-0.8765	-0.8748	-0.8732	-0.8715
	Tz+	0.6389	0.6399	0.6409	0.6419	0.6429	0.6439	0.6449	0.6459	0.6468
	Mt-	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004
	Mt+	0.0016	0.0016	0.0016	0.0016	0.0016	0.0016	0.0016	0.0016	0.0016
	My-	-0.3343	-0.2779	-0.2215	-0.1653	-0.1092	-0.0745	-0.0452	-0.0324	-0.0474
	My+	0.2920	0.2498	0.2076	0.1652	0.1228	0.1018	0.0951	0.1466	0.1991
	Mz-	-0.0085	-0.0075	-0.0160	-0.0246	-0.0331	-0.0416	-0.0501	-0.0586	-0.0671
	Mz+	0.0047	0.0147	0.0316	0.0485	0.0655	0.0824	0.0993	0.1162	0.1331
3/110		0.000 m	0.093 m	0.186 m	0.280 m	0.373 m	0.466 m	0.559 m	0.652 m	0.746 m
		Envolvente (Acero laminado)								
	N-	-0.6266	-0.6266	-0.6266	-0.6266	-0.6266	-0.6266	-0.6265	-0.6265	-0.6265
	N+	0.2313	0.2313	0.2313	0.2313	0.2313	0.2313	0.2313	0.2313	0.2314
	Ty-	-0.0004	-0.0002	-0.0001	0.0001	0.0003	0.0005	0.0007	0.0009	0.0010
	Ty+	0.0002	0.0005	0.0008	0.0011	0.0014	0.0018	0.0021	0.0024	0.0027
	Tz-	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003
	Tz+	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0001	-0.0001	-0.0002	-0.0002	-0.0003	-0.0003	-0.0004	-0.0004
	My+	0.0000	0.0000	0.0001	0.0001	0.0001	0.0001	0.0002	0.0002	0.0002
	Mz-	0.0000	0.0000	-0.0001	-0.0002	-0.0003	-0.0005	-0.0006	-0.0008	-0.0011
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0001	-0.0001	-0.0002
4/8		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-2.1529	-2.1529	-2.1529	-2.1529	-2.1529	-2.1529	-2.1529	-2.1529	-2.1529
	N+	1.3263	1.3263	1.3263	1.3263	1.3263	1.3263	1.3263	1.3263	1.3263
	Ty-	-0.2476	-0.2374	-0.2272	-0.2170	-0.2068	-0.1966	-0.1864	-0.1762	-0.1660
	Ty+	0.0231	0.0291	0.0352	0.0412	0.0473	0.0533	0.0593	0.0654	0.0714
	Tz-	-0.1257	-0.1257	-0.1257	-0.1257	-0.1257	-0.1257	-0.1257	-0.1257	-0.1257

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	Tz+	0.0156	0.0156	0.0156	0.0156	0.0156	0.0156	0.0156	0.0156	0.0156
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0020	-0.0039	-0.0059	-0.0078	-0.0098	-0.0117	-0.0137	-0.0156
	My+	0.0000	0.0157	0.0314	0.0471	0.0628	0.0786	0.0943	0.1100	0.1257
	Mz-	0.0000	-0.0033	-0.0073	-0.0121	-0.0176	-0.0239	-0.0309	-0.0387	-0.0473
	Mz+	0.0000	0.0303	0.0594	0.0871	0.1136	0.1388	0.1628	0.1855	0.2068
4/114		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456
	N+	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257
	Ty-	-0.2403	-0.2301	-0.2199	-0.2097	-0.1995	-0.1893	-0.1791	-0.1689	-0.1587
	Ty+	0.0040	0.0100	0.0161	0.0221	0.0282	0.0342	0.0403	0.0463	0.0524
	Tz-	-2.1030	-2.1030	-2.1030	-2.1030	-2.1030	-2.1030	-2.1030	-2.1030	-2.1030
	Tz+	1.2977	1.2977	1.2977	1.2977	1.2977	1.2977	1.2977	1.2977	1.2977
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.1622	-0.3244	-0.4867	-0.6489	-0.8111	-0.9733	-1.1355	-1.2977
	My+	0.0000	0.2629	0.5258	0.7886	1.0515	1.3144	1.5773	1.8401	2.1030
	Mz-	0.0000	-0.0009	-0.0025	-0.0049	-0.0080	-0.0119	-0.0166	-0.0220	-0.0282
	Mz+	0.0000	0.0294	0.0575	0.0844	0.1099	0.1342	0.1573	0.1790	0.1995
5/7		0.000 m	0.059 m	0.119 m	0.178 m	0.237 m	0.297 m	0.356 m	0.415 m	0.475 m
		Envolvente (Acero laminado)								
	N-	-0.4205	-0.4204	-0.4204	-0.4203	-0.4202	-0.4202	-0.4201	-0.4201	-0.4200
	N+	0.7661	0.7662	0.7663	0.7664	0.7665	0.7666	0.7667	0.7668	0.7669
	Ty-	-0.1034	-0.1034	-0.1034	-0.1034	-0.1034	-0.1034	-0.1034	-0.1034	-0.1034
	Ty+	0.2661	0.2661	0.2661	0.2661	0.2661	0.2661	0.2661	0.2661	0.2661
	Tz-	-0.5704	-0.5689	-0.5674	-0.5659	-0.5644	-0.5629	-0.5614	-0.5599	-0.5584
	Tz+	0.0491	0.0500	0.0509	0.0518	0.0527	0.0536	0.0545	0.0553	0.0562
	Mt-	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004
	Mt+	0.0016	0.0016	0.0016	0.0016	0.0016	0.0016	0.0016	0.0016	0.0016
	My-	-0.0474	-0.0472	-0.0502	-0.0532	-0.0563	-0.0594	-0.0626	-0.0659	-0.0692
	My+	0.1991	0.2250	0.2507	0.2764	0.3020	0.3274	0.3528	0.3809	0.4120
	Mz-	-0.0671	-0.0610	-0.0549	-0.0487	-0.0426	-0.0372	-0.0438	-0.0503	-0.0569
	Mz+	0.1331	0.1226	0.1121	0.1016	0.0910	0.0805	0.0700	0.0594	0.0489
5/110		0.000 m	0.066 m	0.132 m	0.197 m	0.263 m	0.329 m	0.395 m	0.461 m	0.527 m
		Envolvente (Acero laminado)								
	N-	-0.2325	-0.2325	-0.2325	-0.2325	-0.2325	-0.2325	-0.2325	-0.2325	-0.2325
	N+	0.4952	0.4952	0.4952	0.4952	0.4952	0.4952	0.4952	0.4952	0.4952
	Ty-	-0.6498	-0.6498	-0.6498	-0.6498	-0.6498	-0.6498	-0.6498	-0.6498	-0.6498
	Ty+	0.3094	0.3094	0.3094	0.3094	0.3094	0.3094	0.3094	0.3094	0.3094
	Tz-	-0.4049	-0.3972	-0.3895	-0.3818	-0.3741	-0.3664	-0.3587	-0.3510	-0.3433
	Tz+	0.6682	0.6496	0.6311	0.6126	0.5941	0.5756	0.5571	0.5386	0.5201
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0433	-0.0855	-0.1264	-0.1662	-0.2047	-0.2420	-0.2780	-0.3129
	My+	0.0000	0.0264	0.0523	0.0777	0.1026	0.1269	0.1508	0.1741	0.1970
	Mz-	0.0000	-0.0204	-0.0407	-0.0611	-0.0815	-0.1018	-0.1222	-0.1425	-0.1629
	Mz+	0.0000	0.0428	0.0855	0.1283	0.1711	0.2139	0.2566	0.2994	0.3422
6/7		0.000 m	0.145 m	0.290 m	0.435 m	0.580 m	0.725 m	0.871 m	1.016 m	1.161 m
		Envolvente (Acero Conformado)								
	N-	-0.0125	-0.0101	-0.0079	-0.0065	-0.0051	-0.0036	-0.0022	-0.0008	0.0007
	N+	0.1136	0.1151	0.1168	0.1192	0.1216	0.1240	0.1264	0.1288	0.1312
	Ty-	-0.1166	-0.1166	-0.1166	-0.1166	-0.1166	-0.1166	-0.1166	-0.1166	-0.1166

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas**

	Ty+	0.0134	0.0134	0.0134	0.0134	0.0134	0.0134	0.0134	0.0134	0.0134
	Tz-	-0.0425	-0.0425	-0.0425	-0.0425	-0.0425	-0.0425	-0.0425	-0.0425	-0.0425
	Tz+	0.3341	0.3341	0.3341	0.3341	0.3341	0.3341	0.3341	0.3341	0.3341
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0485	-0.0969	-0.1454	-0.1939	-0.2424	-0.2908	-0.3393	-0.3878
	My+	0.0000	0.0062	0.0123	0.0185	0.0247	0.0308	0.0370	0.0432	0.0493
	Mz-	0.0000	-0.0019	-0.0039	-0.0058	-0.0078	-0.0097	-0.0117	-0.0136	-0.0156
	Mz+	0.0000	0.0169	0.0338	0.0507	0.0676	0.0846	0.1015	0.1184	0.1353
6/10		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-0.9141	-0.9141	-0.9141	-0.9141	-0.9141	-0.9141	-0.9141	-0.9141	-0.9141
	N+	0.5169	0.5169	0.5169	0.5169	0.5169	0.5169	0.5169	0.5169	0.5169
	Ty-	-0.0411	-0.0403	-0.0396	-0.0388	-0.0381	-0.0373	-0.0366	-0.0358	-0.0351
	Ty+	0.0028	0.0040	0.0053	0.0065	0.0078	0.0091	0.0103	0.0116	0.0128
	Tz-	-0.0117	-0.0117	-0.0117	-0.0117	-0.0117	-0.0117	-0.0117	-0.0117	-0.0117
	Tz+	0.1205	0.1205	0.1205	0.1205	0.1205	0.1205	0.1205	0.1205	0.1205
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0308	-0.0293	-0.0279	-0.0264	-0.0250	-0.0235	-0.0220	-0.0206	-0.0191
	My+	0.2136	0.1986	0.1835	0.1684	0.1534	0.1383	0.1233	0.1082	0.0931
	Mz-	-0.0696	-0.0645	-0.0595	-0.0546	-0.0498	-0.0451	-0.0405	-0.0360	-0.0315
	Mz+	0.0147	0.0143	0.0137	0.0130	0.0121	0.0110	0.0098	0.0085	0.0069
7/8		0.000 m	0.229 m	0.458 m	0.687 m	0.915 m	1.144 m	1.373 m	1.602 m	1.831 m
		Envolvente (Acero Conformado)								
	N-	-0.1180	-0.1157	-0.1134	-0.1112	-0.1089	-0.1067	-0.1044	-0.1022	-0.0999
	N+	0.1535	0.1573	0.1611	0.1649	0.1687	0.1725	0.1763	0.1801	0.1839
	Ty-	-0.0209	-0.0209	-0.0209	-0.0209	-0.0209	-0.0209	-0.0209	-0.0209	-0.0209
	Ty+	0.0608	0.0608	0.0608	0.0608	0.0608	0.0608	0.0608	0.0608	0.0608
	Tz-	-0.1082	-0.0938	-0.0854	-0.0854	-0.0854	-0.0854	-0.0854	-0.0854	-0.0854
	Tz+	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0072
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.1564	-0.1368	-0.1173	-0.0977	-0.0782	-0.0586	-0.0391	-0.0195	0.0000
	My+	0.0003	0.0003	0.0002	0.0002	0.0001	0.0001	0.0001	0.0002	0.0000
	Mz-	-0.0382	-0.0334	-0.0287	-0.0239	-0.0191	-0.0143	-0.0096	-0.0048	0.0000
	Mz+	0.1113	0.0973	0.0834	0.0695	0.0556	0.0417	0.0278	0.0139	0.0000
7/9		0.000 m	0.109 m	0.219 m	0.328 m	0.437 m	0.547 m	0.656 m	0.765 m	0.875 m
		Envolvente (Acero laminado)								
	N-	-0.7041	-0.7039	-0.7037	-0.7035	-0.7033	-0.7031	-0.7029	-0.7027	-0.7026
	N+	0.2279	0.2280	0.2281	0.2282	0.2284	0.2285	0.2286	0.2287	0.2288
	Ty-	-0.0016	-0.0016	-0.0016	-0.0016	-0.0016	-0.0016	-0.0016	-0.0016	-0.0016
	Ty+	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022
	Tz-	-0.4686	-0.4658	-0.4630	-0.4603	-0.4575	-0.4548	-0.4520	-0.4492	-0.4465
	Tz+	0.1513	0.1530	0.1546	0.1562	0.1579	0.1595	0.1612	0.1628	0.1644
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.2283	-0.1772	-0.1265	-0.0760	-0.0258	-0.0085	-0.0260	-0.0437	-0.0616
	My+	0.0765	0.0598	0.0430	0.0260	0.0089	0.0240	0.0736	0.1228	0.1718
	Mz-	-0.0005	-0.0004	-0.0002	0.0000	-0.0002	-0.0005	-0.0007	-0.0009	-0.0012
	Mz+	0.0007	0.0005	0.0002	0.0000	0.0002	0.0004	0.0005	0.0007	0.0009
8/12		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-2.0922	-2.0922	-2.0922	-2.0922	-2.0922	-2.0922	-2.0922	-2.0922	-2.0922

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE** Adrián Freijomil Aradas

	N+	1.3055	1.3055	1.3055	1.3055	1.3055	1.3055	1.3055	1.3055	1.3055
	Ty-	-0.0294	-0.0225	-0.0164	-0.0104	-0.0043	0.0017	0.0078	0.0138	0.0199
	Ty+	0.0188	0.0280	0.0382	0.0484	0.0586	0.0688	0.0790	0.0892	0.0994
	Tz-	-0.0404	-0.0404	-0.0404	-0.0404	-0.0404	-0.0404	-0.0404	-0.0404	-0.0404
	Tz+	0.0085	0.0085	0.0085	0.0085	0.0085	0.0085	0.0085	0.0085	0.0085
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0156	-0.0167	-0.0178	-0.0188	-0.0199	-0.0209	-0.0220	-0.0231	-0.0241
	My+	0.1257	0.1307	0.1358	0.1408	0.1459	0.1509	0.1560	0.1610	0.1661
	Mz-	-0.0473	-0.0441	-0.0416	-0.0400	-0.0391	-0.0389	-0.0395	-0.0408	-0.0429
	Mz+	0.2068	0.2040	0.1998	0.1944	0.1877	0.1798	0.1705	0.1600	0.1482
9/11		0.000 m	0.016 m	0.032 m	0.048 m	0.064 m	0.080 m	0.096 m	0.112 m	0.128 m
		Envolvente (Acero laminado)								
	N-	-0.7105	-0.7104	-0.7104	-0.7104	-0.7104	-0.7103	-0.7103	-0.7103	-0.7102
	N+	0.2394	0.2394	0.2394	0.2394	0.2395	0.2395	0.2395	0.2395	0.2395
	Ty-	-0.0439	-0.0439	-0.0439	-0.0439	-0.0439	-0.0439	-0.0439	-0.0439	-0.0439
	Ty+	0.0332	0.0332	0.0332	0.0332	0.0332	0.0332	0.0332	0.0332	0.0332
	Tz-	-0.1880	-0.1876	-0.1872	-0.1868	-0.1864	-0.1860	-0.1856	-0.1852	-0.1848
	Tz+	-0.0656	-0.0654	-0.0651	-0.0649	-0.0646	-0.0644	-0.0642	-0.0639	-0.0637
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0616	-0.0605	-0.0595	-0.0585	-0.0574	-0.0564	-0.0554	-0.0543	-0.0533
	My+	0.1718	0.1744	0.1770	0.1797	0.1823	0.1849	0.1878	0.1906	0.1934
	Mz-	-0.0012	-0.0005	-0.0002	-0.0007	-0.0012	-0.0018	-0.0023	-0.0028	-0.0033
	Mz+	0.0009	0.0004	0.0002	0.0009	0.0016	0.0023	0.0030	0.0037	0.0044
9/122		0.000 m	0.234 m	0.468 m	0.702 m	0.936 m	1.170 m	1.404 m	1.638 m	1.872 m
		Envolvente (Acero Conformado)								
	N-	-0.0461	-0.0461	-0.0461	-0.0461	-0.0461	-0.0461	-0.0461	-0.0461	-0.0461
	N+	0.0348	0.0348	0.0348	0.0348	0.0348	0.0348	0.0348	0.0348	0.0348
	Ty-	-0.0266	-0.0266	-0.0266	-0.0266	-0.0266	-0.0266	-0.0266	-0.0266	-0.0266
	Ty+	0.0283	0.0283	0.0283	0.0283	0.0283	0.0283	0.0283	0.0283	0.0283
	Tz-	-0.2810	-0.2560	-0.2310	-0.2060	-0.1810	-0.1560	-0.1310	-0.1077	-0.0956
	Tz+	0.2287	0.2071	0.1855	0.1639	0.1423	0.1207	0.0991	0.0775	0.0559
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0509	-0.0970	-0.1378	-0.1737	-0.2044	-0.2302	-0.2508	-0.2665
	My+	0.0000	0.0627	0.1198	0.1709	0.2163	0.2556	0.2893	0.3169	0.3389
	Mz-	0.0000	-0.0066	-0.0133	-0.0199	-0.0265	-0.0332	-0.0398	-0.0464	-0.0530
	Mz+	0.0000	0.0062	0.0124	0.0187	0.0249	0.0311	0.0373	0.0436	0.0498
10/11		0.000 m	0.154 m	0.308 m	0.461 m	0.615 m	0.769 m	0.923 m	1.077 m	1.231 m
		Envolvente (Acero Conformado)								
	N-	-0.0070	-0.0055	-0.0040	-0.0025	-0.0009	0.0006	0.0021	0.0036	0.0051
	N+	0.0152	0.0177	0.0203	0.0228	0.0254	0.0279	0.0305	0.0330	0.0356
	Ty-	-0.0065	-0.0065	-0.0065	-0.0065	-0.0065	-0.0065	-0.0065	-0.0065	-0.0065
	Ty+	0.0277	0.0277	0.0277	0.0277	0.0277	0.0277	0.0277	0.0277	0.0277
	Tz-	-0.0434	-0.0434	-0.0434	-0.0434	-0.0434	-0.0434	-0.0434	-0.0434	-0.0434
	Tz+	0.0004	0.0004	0.0004	0.0004	0.0004	0.0091	0.0188	0.0285	0.0382
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0001	-0.0001	-0.0002	-0.0003	-0.0003	-0.0004	-0.0005	-0.0005
	My+	0.0000	0.0067	0.0134	0.0200	0.0267	0.0334	0.0401	0.0468	0.0534
	Mz-	0.0000	-0.0043	-0.0085	-0.0128	-0.0170	-0.0213	-0.0255	-0.0298	-0.0340
	Mz+	0.0000	0.0010	0.0020	0.0030	0.0040	0.0050	0.0060	0.0070	0.0080
10/13		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m

## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

		Envolvente (Acero Conformado)								
	N-	-0.9076	-0.9076	-0.9076	-0.9076	-0.9076	-0.9076	-0.9076	-0.9076	-0.9076
	N+	0.4892	0.4892	0.4892	0.4892	0.4892	0.4892	0.4892	0.4892	0.4892
	Ty-	-0.0309	-0.0297	-0.0284	-0.0272	-0.0265	-0.0257	-0.0250	-0.0242	-0.0235
	Ty+	-0.0008	-0.0001	0.0007	0.0015	0.0027	0.0040	0.0053	0.0065	0.0078
	Tz-	-0.0113	-0.0113	-0.0113	-0.0113	-0.0113	-0.0113	-0.0113	-0.0113	-0.0113
	Tz+	0.0771	0.0771	0.0771	0.0771	0.0771	0.0771	0.0771	0.0771	0.0771
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0191	-0.0177	-0.0163	-0.0149	-0.0135	-0.0121	-0.0107	-0.0092	-0.0078
	My+	0.0931	0.0835	0.0739	0.0643	0.0546	0.0466	0.0456	0.0446	0.0436
	Mz-	-0.0315	-0.0279	-0.0244	-0.0209	-0.0176	-0.0159	-0.0158	-0.0157	-0.0157
	Mz+	0.0069	0.0071	0.0072	0.0071	0.0068	0.0064	0.0058	0.0051	0.0042
11/12		0.000 m	0.220 m	0.440 m	0.660 m	0.881 m	1.101 m	1.321 m	1.541 m	1.761 m
		Envolvente (Acero Conformado)								
	N-	-0.1465	-0.1429	-0.1392	-0.1356	-0.1319	-0.1283	-0.1246	-0.1209	-0.1173
	N+	-0.0636	-0.0615	-0.0593	-0.0571	-0.0550	-0.0528	-0.0506	-0.0485	-0.0463
	Ty-	-0.0258	-0.0258	-0.0258	-0.0258	-0.0258	-0.0258	-0.0258	-0.0258	-0.0258
	Ty+	0.0561	0.0561	0.0561	0.0561	0.0561	0.0561	0.0561	0.0561	0.0561
	Tz-	-0.1014	-0.0875	-0.0736	-0.0598	-0.0530	-0.0530	-0.0530	-0.0530	-0.0530
	Tz+	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0098
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0933	-0.0817	-0.0700	-0.0583	-0.0467	-0.0350	-0.0233	-0.0117	0.0000
	My+	0.0005	0.0005	0.0004	0.0003	0.0003	0.0002	0.0001	0.0006	0.0000
	Mz-	-0.0454	-0.0397	-0.0340	-0.0284	-0.0227	-0.0170	-0.0113	-0.0057	0.0000
	Mz+	0.0988	0.0865	0.0741	0.0618	0.0494	0.0371	0.0247	0.0124	0.0000
11/14		0.000 m	0.125 m	0.251 m	0.376 m	0.501 m	0.627 m	0.752 m	0.877 m	1.002 m
		Envolvente (Acero laminado)								
	N-	-0.0978	-0.0976	-0.0973	-0.0971	-0.0969	-0.0967	-0.0965	-0.0962	-0.0960
	N+	0.0610	0.0611	0.0613	0.0614	0.0615	0.0617	0.0618	0.0619	0.0621
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.0726	-0.0694	-0.0662	-0.0631	-0.0599	-0.0567	-0.0536	-0.0516	-0.0498
	Tz+	0.0305	0.0324	0.0343	0.0362	0.0380	0.0399	0.0418	0.0449	0.0481
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0321	-0.0232	-0.0147	-0.0067	0.0006	-0.0043	-0.0094	-0.0147	-0.0203
	My+	0.0178	0.0139	0.0097	0.0053	0.0011	0.0084	0.0153	0.0218	0.0279
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
12/15		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-2.0361	-2.0361	-2.0361	-2.0361	-2.0361	-2.0361	-2.0361	-2.0361	-2.0361
	N+	1.2797	1.2797	1.2797	1.2797	1.2797	1.2797	1.2797	1.2797	1.2797
	Ty-	-0.0405	-0.0303	-0.0201	-0.0124	-0.0063	-0.0003	0.0058	0.0118	0.0179
	Ty+	-0.0040	0.0021	0.0081	0.0166	0.0268	0.0370	0.0472	0.0574	0.0676
	Tz-	-0.0014	-0.0014	-0.0014	-0.0014	-0.0014	-0.0014	-0.0014	-0.0014	-0.0014
	Tz+	0.0127	0.0127	0.0127	0.0127	0.0127	0.0127	0.0127	0.0127	0.0127
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0241	-0.0239	-0.0238	-0.0236	-0.0234	-0.0233	-0.0231	-0.0229	-0.0228
	My+	0.1661	0.1645	0.1629	0.1613	0.1597	0.1582	0.1566	0.1550	0.1534
	Mz-	-0.0429	-0.0400	-0.0378	-0.0364	-0.0358	-0.0359	-0.0367	-0.0383	-0.0407

## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

	Mz+	0.1482	0.1493	0.1492	0.1477	0.1450	0.1410	0.1358	0.1292	0.1214
13/14		0.000 m	0.163 m	0.325 m	0.488 m	0.650 m	0.813 m	0.975 m	1.138 m	1.301 m
		Envolvente (Acero Conformado)								
	N-	-0.0159	-0.0143	-0.0127	-0.0111	-0.0095	-0.0079	-0.0063	-0.0047	-0.0031
	N+	0.0100	0.0127	0.0154	0.0181	0.0208	0.0235	0.0262	0.0289	0.0316
	Ty-	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002
	Ty+	0.0215	0.0215	0.0215	0.0215	0.0215	0.0215	0.0215	0.0215	0.0215
	Tz-	-0.0603	-0.0603	-0.0603	-0.0603	-0.0603	-0.0603	-0.0603	-0.0603	-0.0603
	Tz+	0.0032	0.0032	0.0032	0.0032	0.0073	0.0176	0.0278	0.0381	0.0483
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0005	-0.0011	-0.0016	-0.0021	-0.0026	-0.0032	-0.0039	-0.0095
	My+	0.0000	0.0098	0.0196	0.0294	0.0392	0.0490	0.0588	0.0686	0.0784
	Mz-	0.0000	-0.0035	-0.0070	-0.0105	-0.0140	-0.0174	-0.0209	-0.0244	-0.0279
Mz+	0.0000	0.0000	0.0001	0.0001	0.0002	0.0002	0.0002	0.0003	0.0003	
13/17		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-0.9096	-0.9096	-0.9096	-0.9096	-0.9096	-0.9096	-0.9096	-0.9096	-0.9096
	N+	0.4679	0.4679	0.4679	0.4679	0.4679	0.4679	0.4679	0.4679	0.4679
	Ty-	-0.0087	-0.0074	-0.0064	-0.0056	-0.0049	-0.0041	-0.0034	-0.0026	-0.0019
	Ty+	0.0067	0.0074	0.0083	0.0096	0.0109	0.0121	0.0134	0.0146	0.0159
	Tz-	-0.0316	-0.0316	-0.0316	-0.0316	-0.0316	-0.0316	-0.0316	-0.0316	-0.0316
	Tz+	0.0168	0.0168	0.0168	0.0168	0.0168	0.0168	0.0168	0.0168	0.0168
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0078	-0.0068	-0.0058	-0.0048	-0.0038	-0.0028	-0.0019	-0.0013	-0.0011
	My+	0.0436	0.0471	0.0505	0.0539	0.0573	0.0608	0.0644	0.0680	0.0717
	Mz-	-0.0157	-0.0164	-0.0172	-0.0181	-0.0191	-0.0202	-0.0214	-0.0227	-0.0244
Mz+	0.0042	0.0042	0.0039	0.0036	0.0031	0.0024	0.0016	0.0006	-0.0002	
14/15		0.000 m	0.211 m	0.423 m	0.634 m	0.846 m	1.057 m	1.268 m	1.480 m	1.691 m
		Envolvente (Acero Conformado)								
	N-	-0.1276	-0.1241	-0.1206	-0.1171	-0.1136	-0.1101	-0.1066	-0.1031	-0.0995
	N+	-0.0687	-0.0666	-0.0645	-0.0624	-0.0604	-0.0583	-0.0562	-0.0541	-0.0520
	Ty-	-0.0324	-0.0324	-0.0324	-0.0324	-0.0324	-0.0324	-0.0324	-0.0324	-0.0324
	Ty+	0.0541	0.0541	0.0541	0.0541	0.0541	0.0541	0.0541	0.0541	0.0541
	Tz-	-0.0911	-0.0778	-0.0645	-0.0512	-0.0378	-0.0271	-0.0271	-0.0271	-0.0271
	Tz+	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0032	0.0162
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0640	-0.0462	-0.0343	-0.0286	-0.0229	-0.0172	-0.0114	-0.0057	0.0000
	My+	0.0014	0.0012	0.0010	0.0009	0.0007	0.0005	0.0012	0.0020	0.0000
	Mz-	-0.0548	-0.0479	-0.0411	-0.0342	-0.0274	-0.0205	-0.0137	-0.0068	0.0000
Mz+	0.0914	0.0800	0.0686	0.0571	0.0457	0.0343	0.0229	0.0114	0.0000	
14/16		0.000 m	0.027 m	0.055 m	0.082 m	0.109 m	0.137 m	0.164 m	0.191 m	0.219 m
		Envolvente (Acero laminado)								
	N-	-0.1256	-0.1256	-0.1256	-0.1255	-0.1255	-0.1255	-0.1255	-0.1254	-0.1254
	N+	0.5864	0.5865	0.5865	0.5866	0.5866	0.5867	0.5867	0.5868	0.5868
	Ty-	-0.2065	-0.2065	-0.2065	-0.2065	-0.2065	-0.2065	-0.2065	-0.2065	-0.2065
	Ty+	0.3560	0.3560	0.3560	0.3560	0.3560	0.3560	0.3560	0.3560	0.3560
	Tz-	0.0033	0.0037	0.0041	0.0045	0.0049	0.0053	0.0058	0.0062	0.0066
	Tz+	0.2073	0.2080	0.2087	0.2094	0.2101	0.2108	0.2115	0.2122	0.2129
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0029	-0.0072	-0.0115	-0.0158	-0.0201	-0.0245	-0.0288	-0.0332	-0.0375

## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

	My+	0.1408	0.1380	0.1352	0.1324	0.1296	0.1267	0.1239	0.1210	0.1181
	Mz-	-0.0312	-0.0256	-0.0199	-0.0143	-0.0086	-0.0030	-0.0046	-0.0143	-0.0240
	Mz+	0.0538	0.0441	0.0344	0.0246	0.0149	0.0052	0.0027	0.0083	0.0139
15/19		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-1.9822	-1.9822	-1.9822	-1.9822	-1.9822	-1.9822	-1.9822	-1.9822	-1.9822
	N+	1.2474	1.2474	1.2474	1.2474	1.2474	1.2474	1.2474	1.2474	1.2474
	Ty-	-0.0548	-0.0446	-0.0344	-0.0242	-0.0180	-0.0120	-0.0059	0.0001	0.0062
	Ty+	-0.0102	-0.0041	0.0019	0.0080	0.0180	0.0282	0.0384	0.0486	0.0588
	Tz-	-0.0176	-0.0176	-0.0176	-0.0176	-0.0176	-0.0176	-0.0176	-0.0176	-0.0176
	Tz+	0.0397	0.0397	0.0397	0.0397	0.0397	0.0397	0.0397	0.0397	0.0397
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0228	-0.0206	-0.0184	-0.0162	-0.0140	-0.0118	-0.0096	-0.0074	-0.0052
	My+	0.1534	0.1485	0.1435	0.1385	0.1336	0.1286	0.1237	0.1187	0.1137
	Mz-	-0.0407	-0.0361	-0.0322	-0.0291	-0.0267	-0.0251	-0.0242	-0.0241	-0.0248
	Mz+	0.1214	0.1236	0.1245	0.1242	0.1226	0.1199	0.1170	0.1128	0.1074
16/18		0.000 m	0.098 m	0.196 m	0.294 m	0.392 m	0.490 m	0.588 m	0.686 m	0.784 m
		Envolvente (Acero laminado)								
	N-	-0.1047	-0.1046	-0.1045	-0.1044	-0.1043	-0.1042	-0.1041	-0.1040	-0.1039
	N+	0.5613	0.5615	0.5617	0.5618	0.5620	0.5622	0.5624	0.5625	0.5627
	Ty-	-0.0508	-0.0508	-0.0508	-0.0508	-0.0508	-0.0508	-0.0508	-0.0508	-0.0508
	Ty+	0.0294	0.0294	0.0294	0.0294	0.0294	0.0294	0.0294	0.0294	0.0294
	Tz-	-0.1141	-0.1126	-0.1111	-0.1097	-0.1082	-0.1067	-0.1053	-0.1038	-0.1023
	Tz+	0.3871	0.3895	0.3920	0.3945	0.3970	0.3994	0.4019	0.4044	0.4069
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0375	-0.0264	-0.0155	-0.0047	-0.0355	-0.0745	-0.1138	-0.1533	-0.1930
	My+	0.1181	0.0800	0.0418	0.0035	0.0060	0.0165	0.0269	0.0372	0.0473
	Mz-	-0.0240	-0.0191	-0.0141	-0.0091	-0.0042	-0.0005	-0.0034	-0.0062	-0.0091
	Mz+	0.0139	0.0111	0.0082	0.0053	0.0024	0.0008	0.0058	0.0108	0.0157
16/131		0.000 m	0.348 m	0.695 m	1.043 m	1.391 m	1.739 m	2.086 m	2.434 m	2.782 m
		Envolvente (Acero Conformado)								
	N-	-0.4068	-0.4068	-0.4068	-0.4068	-0.4068	-0.4068	-0.4068	-0.4068	-0.4068
	N+	0.2359	0.2359	0.2359	0.2359	0.2359	0.2359	0.2359	0.2359	0.2359
	Ty-	-0.0398	-0.0398	-0.0398	-0.0398	-0.0398	-0.0398	-0.0398	-0.0398	-0.0398
	Ty+	0.0450	0.0450	0.0450	0.0450	0.0450	0.0450	0.0450	0.0450	0.0450
	Tz-	-0.2781	-0.2410	-0.2038	-0.1667	-0.1296	-0.0996	-0.0833	-0.0679	-0.0744
	Tz+	0.2721	0.2401	0.2080	0.1759	0.1438	0.1117	0.0796	0.0476	0.0354
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0888	-0.1669	-0.2335	-0.2893	-0.3335	-0.3670	-0.3888	-0.4000
	My+	0.0000	0.0900	0.1676	0.2317	0.2835	0.3218	0.3478	0.3603	0.3604
	Mz-	0.0000	-0.0157	-0.0313	-0.0470	-0.0626	-0.0783	-0.0939	-0.1096	-0.1252
	Mz+	0.0000	0.0138	0.0277	0.0415	0.0554	0.0692	0.0830	0.0969	0.1107
17/18		0.000 m	0.171 m	0.343 m	0.514 m	0.685 m	0.857 m	1.028 m	1.199 m	1.370 m
		Envolvente (Acero Conformado)								
	N-	0.0036	0.0053	0.0069	0.0086	0.0103	0.0120	0.0137	0.0154	0.0171
	N+	0.0351	0.0379	0.0408	0.0436	0.0465	0.0493	0.0521	0.0550	0.0578
	Ty-	-0.0116	-0.0116	-0.0116	-0.0116	-0.0116	-0.0116	-0.0116	-0.0116	-0.0116
	Ty+	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009
	Tz-	-0.0147	-0.0147	-0.0147	-0.0147	-0.0147	-0.0147	-0.0147	-0.0147	-0.0147
	Tz+	0.0703	0.0810	0.0918	0.1026	0.1134	0.1242	0.1350	0.1458	0.1566
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0130	-0.0278	-0.0445	-0.0629	-0.0833	-0.1055	-0.1296	-0.1554
	My+	0.0000	0.0025	0.0051	0.0076	0.0101	0.0126	0.0152	0.0177	0.0202
	Mz-	0.0000	-0.0002	-0.0003	-0.0005	-0.0006	-0.0008	-0.0009	-0.0011	-0.0012
	Mz+	0.0000	0.0020	0.0040	0.0059	0.0079	0.0099	0.0119	0.0139	0.0159
17/21		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-0.9019	-0.9019	-0.9019	-0.9019	-0.9019	-0.9019	-0.9019	-0.9019	-0.9019
	N+	0.4794	0.4794	0.4794	0.4794	0.4794	0.4794	0.4794	0.4794	0.4794
	Ty-	-0.0192	-0.0179	-0.0166	-0.0154	-0.0141	-0.0129	-0.0122	-0.0114	-0.0107
	Ty+	-0.0020	-0.0013	-0.0005	0.0002	0.0010	0.0018	0.0030	0.0043	0.0055
	Tz-	-0.0057	-0.0057	-0.0057	-0.0057	-0.0057	-0.0057	-0.0057	-0.0057	-0.0057
	Tz+	0.0413	0.0413	0.0413	0.0413	0.0413	0.0413	0.0413	0.0413	0.0413
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0011	-0.0010	-0.0012	-0.0014	-0.0017	-0.0019	-0.0022	-0.0025	-0.0027
	My+	0.0717	0.0666	0.0617	0.0569	0.0521	0.0473	0.0424	0.0376	0.0328
	Mz-	-0.0244	-0.0222	-0.0203	-0.0185	-0.0169	-0.0153	-0.0138	-0.0124	-0.0112
	Mz+	-0.0002	0.0007	0.0016	0.0024	0.0031	0.0036	0.0039	0.0041	0.0042
18/19		0.000 m	0.203 m	0.405 m	0.608 m	0.811 m	1.013 m	1.216 m	1.419 m	1.621 m
		Envolvente (Acero Conformado)								
	N-	-0.1021	-0.0987	-0.0954	-0.0920	-0.0886	-0.0853	-0.0819	-0.0785	-0.0752
	N+	0.0222	0.0242	0.0262	0.0282	0.0302	0.0322	0.0342	0.0362	0.0382
	Ty-	-0.0411	-0.0411	-0.0411	-0.0411	-0.0411	-0.0411	-0.0411	-0.0411	-0.0411
	Ty+	0.0554	0.0554	0.0554	0.0554	0.0554	0.0554	0.0554	0.0554	0.0554
	Tz-	-0.0763	-0.0635	-0.0507	-0.0380	-0.0252	-0.0125	-0.0100	-0.0100	-0.0100
	Tz+	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0018	0.0146	0.0273
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0409	-0.0268	-0.0151	-0.0101	-0.0081	-0.0061	-0.0040	-0.0020	0.0000
	My+	0.0025	0.0022	0.0019	0.0015	0.0015	0.0049	0.0059	0.0042	0.0000
	Mz-	-0.0667	-0.0583	-0.0500	-0.0417	-0.0333	-0.0250	-0.0167	-0.0083	0.0000
	Mz+	0.0899	0.0786	0.0674	0.0562	0.0449	0.0337	0.0225	0.0112	0.0000
18/20		0.000 m	0.071 m	0.141 m	0.212 m	0.283 m	0.353 m	0.424 m	0.495 m	0.565 m
		Envolvente (Acero laminado)								
	N-	-0.2056	-0.2055	-0.2055	-0.2054	-0.2053	-0.2052	-0.2052	-0.2051	-0.2050
	N+	0.9927	0.9928	0.9930	0.9931	0.9932	0.9933	0.9935	0.9936	0.9937
	Ty-	-0.0281	-0.0281	-0.0281	-0.0281	-0.0281	-0.0281	-0.0281	-0.0281	-0.0281
	Ty+	0.0166	0.0166	0.0166	0.0166	0.0166	0.0166	0.0166	0.0166	0.0166
	Tz-	-0.0564	-0.0553	-0.0543	-0.0532	-0.0521	-0.0511	-0.0500	-0.0490	-0.0479
	Tz+	0.4856	0.4874	0.4892	0.4910	0.4928	0.4945	0.4963	0.4981	0.4999
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0371	-0.0344	-0.0319	-0.0293	-0.0269	-0.0245	-0.0223	-0.0200	-0.0228
	My+	0.2723	0.2379	0.2034	0.1687	0.1339	0.0991	0.0640	0.0289	0.0016
	Mz-	-0.0075	-0.0055	-0.0035	-0.0015	-0.0003	-0.0014	-0.0026	-0.0038	-0.0050
	Mz+	0.0044	0.0032	0.0021	0.0009	0.0005	0.0024	0.0044	0.0064	0.0084
19/23		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-1.9271	-1.9271	-1.9271	-1.9271	-1.9271	-1.9271	-1.9271	-1.9271	-1.9271
	N+	1.2066	1.2066	1.2066	1.2066	1.2066	1.2066	1.2066	1.2066	1.2066
	Ty-	-0.0445	-0.0384	-0.0324	-0.0263	-0.0203	-0.0142	-0.0082	-0.0022	0.0039
	Ty+	0.0532	0.0634	0.0736	0.0838	0.0940	0.1042	0.1144	0.1246	0.1348
	Tz-	-0.0449	-0.0449	-0.0449	-0.0449	-0.0449	-0.0449	-0.0449	-0.0449	-0.0449



## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE** Adrián Freijomil Aradas

	Tz+	0.0497	0.0497	0.0497	0.0497	0.0497	0.0497	0.0497	0.0497	0.0497
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0052	-0.0003	-0.0008	-0.0012	-0.0017	-0.0021	-0.0026	-0.0030	-0.0035
	My+	0.1137	0.1077	0.1018	0.0958	0.0899	0.0840	0.0780	0.0721	0.0661
	Mz-	-0.0248	-0.0232	-0.0248	-0.0321	-0.0402	-0.0491	-0.0587	-0.0690	-0.0801
	Mz+	0.1074	0.1083	0.1080	0.1076	0.1075	0.1061	0.1035	0.0995	0.0943
20/22		0.000 m	0.055 m	0.109 m	0.164 m	0.218 m	0.273 m	0.328 m	0.382 m	0.437 m
		Envolvente (Acero laminado)								
	N-	-0.1797	-0.1796	-0.1796	-0.1795	-0.1794	-0.1794	-0.1793	-0.1793	-0.1792
	N+	0.9621	0.9622	0.9623	0.9624	0.9625	0.9626	0.9627	0.9628	0.9629
	Ty-	-0.0243	-0.0243	-0.0243	-0.0243	-0.0243	-0.0243	-0.0243	-0.0243	-0.0243
	Ty+	0.0412	0.0412	0.0412	0.0412	0.0412	0.0412	0.0412	0.0412	0.0412
	Tz-	-0.2446	-0.2438	-0.2430	-0.2421	-0.2413	-0.2405	-0.2397	-0.2389	-0.2381
	Tz+	0.7584	0.7597	0.7611	0.7625	0.7639	0.7653	0.7666	0.7680	0.7694
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0228	-0.0478	-0.0894	-0.1310	-0.1727	-0.2144	-0.2563	-0.2982	-0.3402
	My+	0.0016	0.0037	0.0098	0.0220	0.0352	0.0484	0.0615	0.0745	0.0876
	Mz-	-0.0050	-0.0036	-0.0023	-0.0010	-0.0006	-0.0029	-0.0051	-0.0074	-0.0096
	Mz+	0.0084	0.0062	0.0039	0.0017	0.0004	0.0017	0.0030	0.0043	0.0057
20/121		0.000 m	0.179 m	0.359 m	0.538 m	0.718 m	0.897 m	1.077 m	1.256 m	1.436 m
		Envolvente (Acero Conformado)								
	N-	-0.0409	-0.0409	-0.0409	-0.0409	-0.0409	-0.0409	-0.0409	-0.0409	-0.0409
	N+	0.0693	0.0693	0.0693	0.0693	0.0693	0.0693	0.0693	0.0693	0.0693
	Ty-	-0.0403	-0.0403	-0.0403	-0.0403	-0.0403	-0.0403	-0.0403	-0.0403	-0.0403
	Ty+	0.0495	0.0495	0.0495	0.0495	0.0495	0.0495	0.0495	0.0495	0.0495
	Tz-	-0.2556	-0.2364	-0.2173	-0.1981	-0.1789	-0.1598	-0.1406	-0.1214	-0.1023
	Tz+	0.2126	0.1960	0.1794	0.1629	0.1463	0.1298	0.1132	0.0989	0.1018
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0366	-0.0704	-0.1010	-0.1288	-0.1535	-0.1754	-0.1942	-0.2101
	My+	0.0000	0.0441	0.0849	0.1221	0.1560	0.1863	0.2134	0.2368	0.2569
	Mz-	0.0000	-0.0089	-0.0178	-0.0267	-0.0356	-0.0445	-0.0534	-0.0622	-0.0711
	Mz+	0.0000	0.0072	0.0145	0.0217	0.0289	0.0361	0.0434	0.0506	0.0578
21/22		0.000 m	0.180 m	0.360 m	0.540 m	0.720 m	0.900 m	1.080 m	1.260 m	1.440 m
		Envolvente (Acero Conformado)								
	N-	-0.0081	-0.0052	-0.0033	-0.0015	0.0003	0.0020	0.0038	0.0056	0.0073
	N+	0.0932	0.1065	0.1207	0.1350	0.1493	0.1637	0.1780	0.1923	0.2067
	Ty-	-0.0694	-0.0694	-0.0694	-0.0694	-0.0694	-0.0694	-0.0694	-0.0694	-0.0694
	Ty+	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019
	Tz-	-0.0061	-0.0061	-0.0061	-0.0061	-0.0061	-0.0061	-0.0061	-0.0061	-0.0061
	Tz+	0.2664	0.2777	0.2891	0.3004	0.3118	0.3231	0.3345	0.3458	0.3571
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0490	-0.1000	-0.1531	-0.2082	-0.2654	-0.3246	-0.3858	-0.4491
	My+	0.0000	0.0011	0.0022	0.0033	0.0044	0.0055	0.0066	0.0077	0.0088
	Mz-	0.0000	-0.0003	-0.0007	-0.0010	-0.0014	-0.0017	-0.0021	-0.0024	-0.0028
	Mz+	0.0000	0.0125	0.0250	0.0375	0.0500	0.0625	0.0750	0.0875	0.1000
21/26		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-0.8852	-0.8852	-0.8852	-0.8852	-0.8852	-0.8852	-0.8852	-0.8852	-0.8852
	N+	0.5489	0.5489	0.5489	0.5489	0.5489	0.5489	0.5489	0.5489	0.5489
	Ty-	-0.1031	-0.1024	-0.1017	-0.1009	-0.1002	-0.0994	-0.0987	-0.0979	-0.0972

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas**

	Ty+	0.0109	0.0121	0.0134	0.0146	0.0159	0.0172	0.0184	0.0197	0.0209
	Tz-	-0.0061	-0.0061	-0.0061	-0.0061	-0.0061	-0.0061	-0.0061	-0.0061	-0.0061
	Tz+	0.3050	0.3050	0.3050	0.3050	0.3050	0.3050	0.3050	0.3050	0.3050
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0027	-0.0079	-0.0456	-0.0835	-0.1214	-0.1594	-0.1975	-0.2356	-0.2738
	My+	0.0328	0.0053	0.0047	0.0041	0.0038	0.0045	0.0053	0.0060	0.0068
	Mz-	-0.0112	-0.0009	-0.0014	-0.0031	-0.0050	-0.0071	-0.0093	-0.0117	-0.0142
	Mz+	0.0042	0.0040	0.0145	0.0271	0.0397	0.0521	0.0645	0.0768	0.0890
22/23		0.000 m	0.194 m	0.388 m	0.582 m	0.776 m	0.970 m	1.163 m	1.357 m	1.551 m
		Envolvente (Acero Conformado)								
	N-	-0.2127	-0.2108	-0.2089	-0.2070	-0.2051	-0.2032	-0.2013	-0.1994	-0.1975
	N+	0.4711	0.4743	0.4775	0.4808	0.4840	0.4872	0.4904	0.4937	0.4969
	Ty-	-0.0519	-0.0519	-0.0519	-0.0519	-0.0519	-0.0519	-0.0519	-0.0519	-0.0519
	Ty+	0.0604	0.0604	0.0604	0.0604	0.0604	0.0604	0.0604	0.0604	0.0604
	Tz-	-0.0575	-0.0453	-0.0331	-0.0209	-0.0086	-0.0040	-0.0040	-0.0040	-0.0040
	Tz+	0.0024	0.0024	0.0024	0.0024	0.0024	0.0059	0.0181	0.0304	0.0426
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0134	-0.0056	-0.0047	-0.0039	-0.0031	-0.0023	-0.0016	-0.0008	0.0000
	My+	0.0037	0.0033	0.0069	0.0116	0.0141	0.0141	0.0118	0.0070	0.0000
	Mz-	-0.0806	-0.0705	-0.0604	-0.0504	-0.0403	-0.0302	-0.0201	-0.0101	0.0000
	Mz+	0.0937	0.0820	0.0703	0.0586	0.0468	0.0351	0.0234	0.0117	0.0000
22/24		0.000 m	0.114 m	0.228 m	0.342 m	0.456 m	0.570 m	0.684 m	0.798 m	0.912 m
		Envolvente (Acero laminado)								
	N-	-2.6959	-2.6957	-2.6955	-2.6953	-2.6951	-2.6949	-2.6947	-2.6945	-2.6943
	N+	1.1286	1.1287	1.1288	1.1289	1.1291	1.1292	1.1293	1.1294	1.1295
	Ty-	-0.0576	-0.0576	-0.0576	-0.0576	-0.0576	-0.0576	-0.0576	-0.0576	-0.0576
	Ty+	0.0563	0.0563	0.0563	0.0563	0.0563	0.0563	0.0563	0.0563	0.0563
	Tz-	-0.1473	-0.1456	-0.1439	-0.1421	-0.1404	-0.1387	-0.1370	-0.1353	-0.1336
	Tz+	0.6540	0.6569	0.6598	0.6627	0.6656	0.6684	0.6713	0.6742	0.6771
	Mt-	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0861	-0.0694	-0.0625	-0.0984	-0.1344	-0.1743	-0.2467	-0.3195	-0.3926
	My+	0.3471	0.2766	0.2167	0.1653	0.1266	0.0912	0.0878	0.0842	0.0804
	Mz-	-0.0324	-0.0258	-0.0201	-0.0172	-0.0159	-0.0210	-0.0274	-0.0338	-0.0403
	Mz+	0.0111	0.0046	-0.0005	0.0040	0.0099	0.0158	0.0216	0.0275	0.0334
23/28		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-1.8673	-1.8673	-1.8673	-1.8673	-1.8673	-1.8673	-1.8673	-1.8673	-1.8673
	N+	1.1553	1.1553	1.1553	1.1553	1.1553	1.1553	1.1553	1.1553	1.1553
	Ty-	-0.1122	-0.1062	-0.1001	-0.0941	-0.0880	-0.0820	-0.0759	-0.0699	-0.0638
	Ty+	0.5661	0.5763	0.5865	0.5967	0.6069	0.6171	0.6273	0.6375	0.6477
	Tz-	-0.0875	-0.0875	-0.0875	-0.0875	-0.0875	-0.0875	-0.0875	-0.0875	-0.0875
	Tz+	0.0515	0.0515	0.0515	0.0515	0.0515	0.0515	0.0515	0.0515	0.0515
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0035	-0.0045	-0.0054	-0.0064	-0.0073	-0.0083	-0.0092	-0.0102	-0.0111
	My+	0.0661	0.0603	0.0615	0.0725	0.0834	0.0943	0.1053	0.1162	0.1271
	Mz-	-0.0801	-0.0770	-0.1020	-0.1657	-0.2386	-0.3129	-0.3884	-0.4651	-0.5432
	Mz+	0.0943	0.0388	0.0063	0.0053	0.0167	0.0273	0.0372	0.0463	0.0546
24/27		0.000 m	0.011 m	0.023 m	0.034 m	0.045 m	0.056 m	0.068 m	0.079 m	0.090 m
		Envolvente (Acero laminado)								
	N-	-3.2209	-3.2209	-3.2209	-3.2209	-3.2208	-3.2208	-3.2208	-3.2208	-3.2208

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE** Adrián Freijomil Aradas

	N+	1.5861	1.5861	1.5861	1.5861	1.5861	1.5862	1.5862	1.5862	1.5862
	Ty-	-0.5944	-0.5944	-0.5944	-0.5944	-0.5944	-0.5944	-0.5944	-0.5944	-0.5944
	Ty+	0.4641	0.4641	0.4641	0.4641	0.4641	0.4641	0.4641	0.4641	0.4641
	Tz-	-0.3237	-0.3235	-0.3234	-0.3232	-0.3230	-0.3229	-0.3227	-0.3225	-0.3224
	Tz+	0.8903	0.8906	0.8909	0.8912	0.8914	0.8917	0.8920	0.8923	0.8926
	Mt-	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.3926	-0.3994	-0.4062	-0.4131	-0.4199	-0.4267	-0.4336	-0.4404	-0.4473
	My+	0.0804	0.0794	0.0784	0.0774	0.0763	0.0753	0.0743	0.0733	0.0722
	Mz-	-0.0403	-0.0336	-0.0268	-0.0201	-0.0134	-0.0067	-0.0003	-0.0033	-0.0085
	Mz+	0.0334	0.0282	0.0229	0.0177	0.0147	0.0133	0.0121	0.0143	0.0168
24/108		0.000 m	0.011 m	0.023 m	0.034 m	0.045 m	0.056 m	0.068 m	0.079 m	0.090 m
		Envolvente (Acero Conformado)								
	N-	-0.6506	-0.6506	-0.6506	-0.6506	-0.6506	-0.6506	-0.6506	-0.6506	-0.6506
	N+	0.5157	0.5157	0.5157	0.5157	0.5157	0.5157	0.5157	0.5157	0.5157
	Ty-	-0.5452	-0.5452	-0.5452	-0.5452	-0.5452	-0.5452	-0.5452	-0.5452	-0.5452
	Ty+	0.5503	0.5503	0.5503	0.5503	0.5503	0.5503	0.5503	0.5503	0.5503
	Tz-	-0.2132	-0.2120	-0.2108	-0.2096	-0.2084	-0.2072	-0.2060	-0.2048	-0.2036
	Tz+	0.1578	0.1581	0.1584	0.1587	0.1590	0.1594	0.1597	0.1600	0.1603
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0018	-0.0036	-0.0053	-0.0071	-0.0089	-0.0107	-0.0125	-0.0143
	My+	0.0000	0.0024	0.0048	0.0071	0.0095	0.0118	0.0142	0.0165	0.0188
	Mz-	0.0000	-0.0062	-0.0124	-0.0186	-0.0248	-0.0310	-0.0372	-0.0434	-0.0496
	Mz+	0.0000	0.0061	0.0123	0.0184	0.0246	0.0307	0.0368	0.0430	0.0491
25/26		0.000 m	0.603 m	1.205 m	1.808 m	2.410 m	3.013 m	3.615 m	4.218 m	4.820 m
		Envolvente (Acero laminado)								
	N-	-2.9245	-2.8569	-2.7892	-2.7215	-2.6538	-2.5861	-2.5185	-2.4508	-2.3831
	N+	-0.0904	-0.0502	-0.0101	0.0300	0.0701	0.1102	0.1503	0.1904	0.2305
	Ty-	-0.0061	-0.0061	-0.0061	-0.0061	-0.0061	-0.0061	-0.2419	-0.6034	-0.9649
	Ty+	1.9298	1.5683	1.2068	0.8453	0.4838	0.1223	0.0055	0.0055	0.0055
	Tz-	-0.3738	-0.3738	-0.3738	-0.3738	-0.3738	-0.3738	-0.3738	-0.3738	-0.3738
	Tz+	0.2417	0.2417	0.2417	0.2417	0.2417	0.2417	0.2417	0.2417	0.2417
	Mt-	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010
	Mt+	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006
	My-	-0.7475	-0.5223	-0.2971	-0.0739	-0.1029	-0.2485	-0.3942	-0.5398	-0.6855
	My+	0.4797	0.3341	0.1884	0.0448	0.1533	0.3785	0.6037	0.8289	1.0541
	Mz-	-0.0038	-0.0038	-0.0038	-0.4008	-0.8039	-0.9806	-0.9490	-0.6909	-0.2240
	Mz+	2.1079	1.0585	0.2181	0.0147	0.0167	0.0188	0.0217	0.0248	0.0282
25/137		0.000 m	0.545 m	1.090 m	1.635 m	2.180 m	2.726 m	3.271 m	3.816 m	4.361 m
		Envolvente (Acero laminado)								
	N-	-0.0627	-0.0614	-0.0601	-0.0588	-0.0575	-0.0561	-0.0548	-0.0535	-0.0522
	N+	0.1692	0.1699	0.1707	0.1715	0.1723	0.1731	0.1738	0.1746	0.1754
	Ty-	-0.0039	-0.0027	-0.0014	-0.0002	0.0006	0.0014	0.0021	0.0029	0.0036
	Ty+	-0.0023	-0.0016	-0.0008	-0.0001	0.0011	0.0023	0.0036	0.0048	0.0061
	Tz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz-	0.0000	0.0011	0.0017	0.0020	0.0018	0.0013	0.0003	-0.0017	-0.0047
	Mz+	0.0000	0.0018	0.0029	0.0034	0.0031	0.0022	0.0006	-0.0010	-0.0028
26/27		0.000 m	0.189 m	0.378 m	0.566 m	0.755 m	0.944 m	1.133 m	1.322 m	1.510 m

## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

		Envolvente (Acero laminado)								
	N-	-2.3420	-2.3208	-2.2995	-2.2783	-2.2571	-2.2359	-2.2147	-2.1935	-2.1723
	N+	0.2371	0.2497	0.2623	0.2748	0.2874	0.3000	0.3126	0.3251	0.3377
	Ty-	-0.3438	-0.3557	-0.3675	-0.3794	-0.3913	-0.4032	-0.4151	-0.4270	-0.4389
	Ty+	0.0657	0.0657	0.0657	0.0657	0.0657	0.0657	0.0657	0.0657	0.0657
	Tz-	-0.5825	-0.5825	-0.5825	-0.5825	-0.5825	-0.5825	-0.5825	-0.5825	-0.5825
	Tz+	0.9880	0.9880	0.9880	0.9880	0.9880	0.9880	0.9880	0.9880	0.9880
	Mt-	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010
	Mt+	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006
	My-	-0.6855	-0.5871	-0.4887	-0.3903	-0.2919	-0.1986	-0.1911	-0.2793	-0.4658
	My+	1.0541	0.8792	0.7042	0.5292	0.3543	0.1793	0.0628	0.1120	0.2219
	Mz-	-0.2240	-0.1596	-0.0930	-0.0272	-0.0248	-0.0372	-0.0496	-0.0620	-0.0744
	Mz+	0.0282	0.0171	0.0063	0.0039	0.0566	0.1317	0.2089	0.2884	0.3701
26/29		0.000 m	0.126 m	0.252 m	0.378 m	0.503 m	0.629 m	0.755 m	0.881 m	1.007 m
		Envolvente (Acero Conformado)								
	N-	-0.8599	-0.8599	-0.8599	-0.8599	-0.8599	-0.8599	-0.8599	-0.8599	-0.8599
	N+	0.1072	0.1072	0.1072	0.1072	0.1072	0.1072	0.1072	0.1072	0.1072
	Ty-	-0.0202	-0.0189	-0.0176	-0.0164	-0.0151	-0.0138	-0.0126	-0.0113	-0.0100
	Ty+	0.1003	0.1010	0.1018	0.1025	0.1033	0.1040	0.1048	0.1056	0.1063
	Tz-	-0.3226	-0.3226	-0.3226	-0.3226	-0.3226	-0.3226	-0.3226	-0.3226	-0.3226
	Tz+	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.2738	-0.2332	-0.1926	-0.1519	-0.1114	-0.0709	-0.0305	-0.0011	-0.0020
	My+	0.0068	0.0058	0.0048	0.0038	0.0030	0.0029	0.0032	0.0115	0.0520
	Mz-	-0.0142	-0.0118	-0.0095	-0.0073	-0.0053	-0.0035	-0.0019	-0.0018	-0.0150
	Mz+	0.0890	0.0763	0.0636	0.0507	0.0378	0.0247	0.0116	0.0005	0.0010
27/28		0.000 m	0.185 m	0.370 m	0.556 m	0.741 m	0.926 m	1.111 m	1.296 m	1.481 m
		Envolvente (Acero Conformado)								
	N-	-1.2378	-1.2347	-1.2316	-1.2286	-1.2255	-1.2224	-1.2193	-1.2163	-1.2132
	N+	0.0540	0.0558	0.0576	0.0595	0.0613	0.0631	0.0649	0.0668	0.0686
	Ty-	-0.0047	-0.0047	-0.0047	-0.0047	-0.0047	-0.0047	-0.0047	-0.0047	-0.0047
	Ty+	0.0653	0.0653	0.0653	0.0653	0.0653	0.0653	0.0653	0.0653	0.0653
	Tz-	-0.2961	-0.2844	-0.2728	-0.2611	-0.2494	-0.2378	-0.2261	-0.2144	-0.2028
	Tz+	0.0503	0.0503	0.0503	0.0503	0.0503	0.0503	0.0503	0.0503	0.0503
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.3695	-0.3158	-0.2642	-0.2148	-0.1675	-0.1224	-0.0794	-0.0387	0.0000
	My+	0.0745	0.0652	0.0559	0.0465	0.0372	0.0279	0.0186	0.0093	0.0000
	Mz-	-0.0070	-0.0061	-0.0052	-0.0044	-0.0035	-0.0026	-0.0017	-0.0009	0.0000
	Mz+	0.0968	0.0847	0.0726	0.0605	0.0484	0.0363	0.0242	0.0121	0.0000
27/30		0.000 m	0.126 m	0.252 m	0.379 m	0.505 m	0.631 m	0.757 m	0.883 m	1.009 m
		Envolvente (Acero laminado)								
	N-	-0.6700	-0.6699	-0.6698	-0.6698	-0.6697	-0.6697	-0.6696	-0.6696	-0.6695
	N+	1.2566	1.2567	1.2568	1.2569	1.2570	1.2571	1.2572	1.2573	1.2574
	Ty-	-0.0125	-0.0125	-0.0125	-0.0125	-0.0125	-0.0125	-0.0125	-0.0125	-0.0125
	Ty+	0.0276	0.0276	0.0276	0.0276	0.0276	0.0276	0.0276	0.0276	0.0276
	Tz-	-0.1512	-0.1498	-0.1485	-0.1471	-0.1457	-0.1443	-0.1430	-0.1416	-0.1402
	Tz+	0.0522	0.0530	0.0539	0.0547	0.0555	0.0563	0.0571	0.0579	0.0587
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
	My-	-0.0880	-0.0692	-0.0505	-0.0320	-0.0136	-0.0015	0.0012	-0.0020	-0.0094
	My+	0.0466	0.0400	0.0332	0.0264	0.0194	0.0184	0.0287	0.0446	0.0622
	Mz-	-0.0079	-0.0063	-0.0047	-0.0032	-0.0016	-0.0015	-0.0050	-0.0085	-0.0120

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	Mz+	0.0159	0.0124	0.0090	0.0057	0.0023	0.0000	0.0016	0.0031	0.0047
108/27		0.000 m	0.016 m	0.032 m	0.048 m	0.064 m	0.080 m	0.096 m	0.112 m	0.128 m
		Envolvente (Acero laminado)								
	N-	-1.6700	-1.6700	-1.6700	-1.6700	-1.6700	-1.6700	-1.6700	-1.6700	-1.6700
	N+	2.9893	2.9893	2.9893	2.9893	2.9893	2.9893	2.9893	2.9893	2.9893
	Ty-	-0.0088	-0.0088	-0.0087	-0.0087	-0.0086	-0.0085	-0.0085	-0.0084	-0.0084
	Ty+	-0.0036	-0.0035	-0.0035	-0.0035	-0.0034	-0.0034	-0.0034	-0.0033	-0.0033
	Tz-	-0.0009	-0.0009	-0.0009	-0.0009	-0.0009	-0.0009	-0.0009	-0.0009	-0.0009
	Tz+	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	0.0000	0.0000	0.0000	0.0000
	My+	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0000	0.0000	0.0000
	Mz-	-0.0011	-0.0010	-0.0008	-0.0007	-0.0005	-0.0004	-0.0003	-0.0001	0.0000
Mz+	-0.0004	-0.0004	-0.0003	-0.0003	-0.0002	-0.0002	-0.0001	-0.0001	0.0000	
27/111		0.000 m	0.231 m	0.462 m	0.693 m	0.924 m	1.155 m	1.386 m	1.617 m	1.848 m
		Envolvente (Acero laminado)								
	N-	-2.6879	-2.6878	-2.6878	-2.6877	-2.6877	-2.6876	-2.6876	-2.6875	-2.6875
	N+	1.2501	1.2501	1.2501	1.2502	1.2502	1.2502	1.2503	1.2503	1.2503
	Ty-	-0.0025	-0.0017	-0.0009	-0.0002	0.0003	0.0008	0.0012	0.0017	0.0021
	Ty+	-0.0013	-0.0008	-0.0004	0.0001	0.0008	0.0016	0.0024	0.0031	0.0039
	Tz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz-	0.0000	0.0002	0.0004	0.0004	0.0003	0.0002	-0.0001	-0.0007	-0.0016
Mz+	0.0000	0.0005	0.0008	0.0009	0.0009	0.0006	0.0002	-0.0001	-0.0005	
137/27		0.000 m	0.545 m	1.090 m	1.635 m	2.180 m	2.726 m	3.271 m	3.816 m	4.361 m
		Envolvente (Acero laminado)								
	N-	-0.2315	-0.2302	-0.2289	-0.2276	-0.2263	-0.2249	-0.2236	-0.2223	-0.2210
	N+	0.0477	0.0485	0.0493	0.0500	0.0508	0.0516	0.0524	0.0532	0.0539
	Ty-	-0.0062	-0.0050	-0.0037	-0.0025	-0.0012	0.0000	0.0007	0.0015	0.0022
	Ty+	-0.0037	-0.0030	-0.0022	-0.0015	-0.0007	0.0000	0.0012	0.0025	0.0037
	Tz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0001	-0.0001	-0.0001	-0.0001	0.0000	0.0000	0.0000	0.0000	0.0000
	My+	0.0002	0.0002	0.0001	0.0001	0.0001	0.0001	0.0000	0.0000	0.0000
	Mz-	-0.0054	-0.0024	0.0000	0.0010	0.0016	0.0018	0.0016	0.0010	0.0000
Mz+	-0.0032	-0.0014	0.0000	0.0017	0.0027	0.0031	0.0027	0.0017	0.0000	
28/31		0.000 m	0.126 m	0.252 m	0.378 m	0.503 m	0.629 m	0.755 m	0.881 m	1.007 m
		Envolvente (Acero laminado)								
	N-	-1.8023	-1.8023	-1.8023	-1.8023	-1.8023	-1.8023	-1.8023	-1.8023	-1.8023
	N+	1.1510	1.1510	1.1510	1.1510	1.1510	1.1510	1.1510	1.1510	1.1510
	Ty-	-0.5838	-0.5735	-0.5632	-0.5529	-0.5427	-0.5324	-0.5221	-0.5119	-0.5016
	Ty+	0.0047	0.0108	0.0169	0.0230	0.0291	0.0352	0.0413	0.0473	0.0534
	Tz-	-0.0110	-0.0110	-0.0110	-0.0110	-0.0110	-0.0110	-0.0110	-0.0110	-0.0110
	Tz+	0.1153	0.1153	0.1153	0.1153	0.1153	0.1153	0.1153	0.1153	0.1153
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0111	-0.0098	-0.0084	-0.0070	-0.0056	-0.0042	-0.0028	-0.0014	-0.0002

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	My+	0.1271	0.1126	0.0981	0.0836	0.0691	0.0546	0.0401	0.0255	0.0116
	Mz-	-0.5432	-0.4703	-0.3988	-0.3285	-0.2620	-0.1988	-0.1369	-0.0805	-0.0317
	Mz+	0.0546	0.0536	0.0519	0.0494	0.0461	0.0544	0.0627	0.0703	0.0788
29/30		0.000 m	0.198 m	0.395 m	0.593 m	0.790 m	0.988 m	1.186 m	1.383 m	1.581 m
		Envolvente (Acero Conformado)								
	N-	-0.0041	-0.0019	0.0000	0.0020	0.0039	0.0059	0.0078	0.0098	0.0117
	N+	0.0687	0.0718	0.0751	0.0784	0.0816	0.0849	0.0882	0.0915	0.0948
	Ty-	-0.0573	-0.0573	-0.0573	-0.0573	-0.0573	-0.0573	-0.0573	-0.0573	-0.0573
	Ty+	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019
	Tz-	-0.0061	-0.0061	-0.0061	-0.0061	-0.0061	-0.0061	-0.0061	-0.0061	-0.0061
	Tz+	0.2076	0.2200	0.2325	0.2449	0.2574	0.2698	0.2823	0.2947	0.3072
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0423	-0.0870	-0.1342	-0.1838	-0.2359	-0.2904	-0.3475	-0.4069
	My+	0.0000	0.0012	0.0024	0.0036	0.0048	0.0060	0.0072	0.0084	0.0096
	Mz-	0.0000	-0.0004	-0.0008	-0.0011	-0.0015	-0.0019	-0.0023	-0.0026	-0.0030
	Mz+	0.0000	0.0113	0.0226	0.0340	0.0453	0.0566	0.0679	0.0793	0.0906
29/33		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-0.8039	-0.8039	-0.8039	-0.8039	-0.8039	-0.8039	-0.8039	-0.8039	-0.8039
	N+	0.1093	0.1093	0.1093	0.1093	0.1093	0.1093	0.1093	0.1093	0.1093
	Ty-	-0.0060	-0.0048	-0.0035	-0.0023	-0.0010	0.0002	0.0009	0.0017	0.0024
	Ty+	0.0377	0.0384	0.0392	0.0399	0.0407	0.0415	0.0428	0.0440	0.0453
	Tz-	-0.1164	-0.1164	-0.1164	-0.1164	-0.1164	-0.1164	-0.1164	-0.1164	-0.1164
	Tz+	0.0042	0.0042	0.0042	0.0042	0.0042	0.0042	0.0042	0.0042	0.0042
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0020	-0.0022	-0.0023	-0.0025	-0.0026	-0.0028	-0.0031	-0.0035	-0.0038
	My+	0.0520	0.0663	0.0806	0.0949	0.1092	0.1236	0.1381	0.1526	0.1671
	Mz-	-0.0150	-0.0198	-0.0246	-0.0295	-0.0345	-0.0397	-0.0449	-0.0502	-0.0556
	Mz+	0.0010	0.0016	0.0022	0.0025	0.0027	0.0027	0.0026	0.0023	0.0019
30/31		0.000 m	0.176 m	0.353 m	0.529 m	0.705 m	0.882 m	1.058 m	1.235 m	1.411 m
		Envolvente (Acero Conformado)								
	N-	-0.0678	-0.0660	-0.0643	-0.0626	-0.0608	-0.0591	-0.0574	-0.0556	-0.0539
	N+	0.2241	0.2270	0.2300	0.2329	0.2358	0.2388	0.2417	0.2446	0.2476
	Ty-	-0.0734	-0.0734	-0.0734	-0.0734	-0.0734	-0.0734	-0.0734	-0.0734	-0.0734
	Ty+	0.0793	0.0793	0.0793	0.0793	0.0793	0.0793	0.0793	0.0793	0.0793
	Tz-	-0.0341	-0.0230	-0.0119	-0.0055	-0.0055	-0.0055	-0.0055	-0.0055	-0.0055
	Tz+	0.0032	0.0032	0.0032	0.0040	0.0136	0.0247	0.0358	0.0469	0.0580
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0078	-0.0068	-0.0059	-0.0049	-0.0039	-0.0029	-0.0020	-0.0010	0.0000
	My+	0.0191	0.0236	0.0261	0.0266	0.0253	0.0218	0.0165	0.0092	0.0000
	Mz-	-0.1036	-0.0906	-0.0777	-0.0647	-0.0518	-0.0388	-0.0259	-0.0129	0.0000
	Mz+	0.1119	0.0979	0.0840	0.0700	0.0560	0.0420	0.0280	0.0140	0.0000
30/32		0.000 m	0.072 m	0.144 m	0.216 m	0.288 m	0.360 m	0.432 m	0.504 m	0.576 m
		Envolvente (Acero laminado)								
	N-	-0.3851	-0.3850	-0.3849	-0.3849	-0.3848	-0.3848	-0.3847	-0.3847	-0.3846
	N+	0.0017	0.0017	0.0018	0.0018	0.0018	0.0019	0.0019	0.0019	0.0020
	Ty-	-0.0186	-0.0186	-0.0186	-0.0186	-0.0186	-0.0186	-0.0186	-0.0186	-0.0186
	Ty+	0.0034	0.0034	0.0034	0.0034	0.0034	0.0034	0.0034	0.0034	0.0034
	Tz-	-0.2118	-0.2111	-0.2103	-0.2095	-0.2087	-0.2079	-0.2071	-0.2063	-0.2056
	Tz+	0.0677	0.0682	0.0687	0.0691	0.0696	0.0701	0.0705	0.0710	0.0715
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0798	-0.0645	-0.0494	-0.0342	-0.0192	-0.0101	-0.0130	-0.0181	-0.0232
	My+	0.0169	0.0120	0.0075	0.0039	0.0004	-0.0014	0.0107	0.0256	0.0405
	Mz-	-0.0050	-0.0037	-0.0023	-0.0010	-0.0001	-0.0003	-0.0005	-0.0008	-0.0010
	Mz+	0.0009	0.0007	0.0004	0.0002	0.0004	0.0017	0.0030	0.0044	0.0057
31/35		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-1.7235	-1.7235	-1.7235	-1.7235	-1.7235	-1.7235	-1.7235	-1.7235	-1.7235
	N+	1.0780	1.0780	1.0780	1.0780	1.0780	1.0780	1.0780	1.0780	1.0780
	Ty-	-0.2577	-0.2475	-0.2373	-0.2271	-0.2169	-0.2067	-0.1965	-0.1863	-0.1761
	Ty+	0.0192	0.0253	0.0313	0.0373	0.0434	0.0494	0.0555	0.0615	0.0676
	Tz-	-0.0055	-0.0055	-0.0055	-0.0055	-0.0055	-0.0055	-0.0055	-0.0055	-0.0055
	Tz+	0.0573	0.0573	0.0573	0.0573	0.0573	0.0573	0.0573	0.0573	0.0573
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0002	0.0000	-0.0033	-0.0105	-0.0176	-0.0248	-0.0319	-0.0391	-0.0463
	My+	0.0116	0.0111	0.0109	0.0107	0.0104	0.0102	0.0099	0.0097	0.0095
	Mz-	-0.0317	-0.0170	-0.0033	0.0096	0.0195	0.0162	0.0121	0.0072	0.0016
	Mz+	0.0788	0.0905	0.1015	0.1112	0.1256	0.1461	0.1709	0.1943	0.2165
32/34		0.000 m	0.053 m	0.107 m	0.160 m	0.213 m	0.267 m	0.320 m	0.373 m	0.426 m
		Envolvente (Acero laminado)								
	N-	-0.4404	-0.4403	-0.4403	-0.4403	-0.4402	-0.4402	-0.4401	-0.4401	-0.4401
	N+	0.0446	0.0446	0.0447	0.0447	0.0447	0.0447	0.0448	0.0448	0.0448
	Ty-	-0.0053	-0.0053	-0.0053	-0.0053	-0.0053	-0.0053	-0.0053	-0.0053	-0.0053
	Ty+	0.0292	0.0292	0.0292	0.0292	0.0292	0.0292	0.0292	0.0292	0.0292
	Tz-	-0.1289	-0.1286	-0.1282	-0.1279	-0.1275	-0.1272	-0.1269	-0.1265	-0.1262
	Tz+	0.0657	0.0663	0.0669	0.0674	0.0680	0.0686	0.0692	0.0698	0.0703
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0232	-0.0164	-0.0095	-0.0038	-0.0003	0.0031	0.0065	0.0056	0.0025
	My+	0.0405	0.0369	0.0334	0.0298	0.0262	0.0226	0.0255	0.0318	0.0383
	Mz-	-0.0010	-0.0008	-0.0005	-0.0002	-0.0005	-0.0021	-0.0036	-0.0052	-0.0067
	Mz+	0.0057	0.0042	0.0026	0.0011	0.0001	0.0004	0.0007	0.0009	0.0012
32/111		0.000 m	0.119 m	0.237 m	0.356 m	0.474 m	0.593 m	0.712 m	0.830 m	0.949 m
		Envolvente (Acero Conformado)								
	N-	-0.0086	-0.0086	-0.0086	-0.0086	-0.0086	-0.0086	-0.0086	-0.0086	-0.0086
	N+	0.0478	0.0478	0.0478	0.0478	0.0478	0.0478	0.0478	0.0478	0.0478
	Ty-	-0.0507	-0.0507	-0.0507	-0.0507	-0.0507	-0.0507	-0.0507	-0.0507	-0.0507
	Ty+	0.0746	0.0746	0.0746	0.0746	0.0746	0.0746	0.0746	0.0746	0.0746
	Tz-	-0.2667	-0.2540	-0.2414	-0.2287	-0.2160	-0.2034	-0.1907	-0.1780	-0.1654
	Tz+	0.1974	0.1864	0.1755	0.1646	0.1536	0.1427	0.1339	0.1371	0.1404
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0227	-0.0442	-0.0644	-0.0833	-0.1008	-0.1171	-0.1321	-0.1458
	My+	0.0000	0.0309	0.0603	0.0881	0.1145	0.1394	0.1628	0.1846	0.2050
	Mz-	0.0000	-0.0088	-0.0177	-0.0265	-0.0354	-0.0442	-0.0531	-0.0619	-0.0708
	Mz+	0.0000	0.0060	0.0120	0.0181	0.0241	0.0301	0.0361	0.0421	0.0481
33/34		0.000 m	0.206 m	0.413 m	0.619 m	0.825 m	1.032 m	1.238 m	1.444 m	1.651 m
		Envolvente (Acero Conformado)								
	N-	0.0042	0.0062	0.0083	0.0103	0.0123	0.0144	0.0164	0.0184	0.0205
	N+	0.0421	0.0455	0.0489	0.0524	0.0558	0.0592	0.0626	0.0661	0.0695
	Ty-	-0.0266	-0.0266	-0.0266	-0.0266	-0.0266	-0.0266	-0.0266	-0.0266	-0.0266
	Ty+	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012
	Tz-	-0.0047	-0.0047	-0.0047	-0.0047	-0.0047	-0.0047	-0.0047	-0.0047	-0.0047

## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

	Tz+	0.0927	0.1057	0.1187	0.1317	0.1447	0.1577	0.1707	0.1837	0.1967
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0205	-0.0436	-0.0695	-0.0980	-0.1292	-0.1631	-0.1997	-0.2389
	My+	0.0000	0.0010	0.0019	0.0029	0.0039	0.0048	0.0058	0.0068	0.0077
	Mz-	0.0000	-0.0002	-0.0005	-0.0007	-0.0010	-0.0012	-0.0015	-0.0017	-0.0020
	Mz+	0.0000	0.0055	0.0110	0.0165	0.0219	0.0274	0.0329	0.0384	0.0439
33/36		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-0.7773	-0.7773	-0.7773	-0.7773	-0.7773	-0.7773	-0.7773	-0.7773	-0.7773
	N+	0.1082	0.1082	0.1082	0.1082	0.1082	0.1082	0.1082	0.1082	0.1082
	Ty-	-0.0057	-0.0044	-0.0032	-0.0019	-0.0006	0.0002	0.0009	0.0016	0.0024
	Ty+	0.0055	0.0063	0.0070	0.0078	0.0085	0.0097	0.0110	0.0122	0.0135
	Tz-	-0.0238	-0.0238	-0.0238	-0.0238	-0.0238	-0.0238	-0.0238	-0.0238	-0.0238
	Tz+	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0038	-0.0037	-0.0036	-0.0036	-0.0035	-0.0034	-0.0033	-0.0032	-0.0031
	My+	0.1671	0.1700	0.1730	0.1759	0.1789	0.1819	0.1848	0.1878	0.1907
	Mz-	-0.0556	-0.0563	-0.0571	-0.0581	-0.0591	-0.0602	-0.0614	-0.0627	-0.0641
	Mz+	0.0019	0.0025	0.0030	0.0033	0.0034	0.0034	0.0032	0.0029	0.0024
34/35		0.000 m	0.168 m	0.335 m	0.503 m	0.670 m	0.838 m	1.006 m	1.173 m	1.341 m
		Envolvente (Acero Conformado)								
	N-	-0.0817	-0.0801	-0.0784	-0.0768	-0.0751	-0.0735	-0.0718	-0.0702	-0.0685
	N+	0.0951	0.0979	0.1007	0.1035	0.1062	0.1090	0.1118	0.1146	0.1174
	Ty-	-0.0843	-0.0843	-0.0843	-0.0843	-0.0843	-0.0843	-0.0843	-0.0843	-0.0843
	Ty+	0.0929	0.0929	0.0929	0.0929	0.0929	0.0929	0.0929	0.0929	0.0929
	Tz-	-0.0309	-0.0203	-0.0097	-0.0056	-0.0056	-0.0056	-0.0056	-0.0056	-0.0056
	Tz+	0.0031	0.0031	0.0031	0.0046	0.0146	0.0251	0.0357	0.0463	0.0568
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0075	-0.0065	-0.0056	-0.0047	-0.0037	-0.0028	-0.0019	-0.0009	0.0000
	My+	0.0195	0.0233	0.0253	0.0255	0.0239	0.0206	0.0155	0.0086	0.0000
	Mz-	-0.1131	-0.0989	-0.0848	-0.0707	-0.0565	-0.0424	-0.0283	-0.0141	0.0000
	Mz+	0.1246	0.1090	0.0935	0.0779	0.0623	0.0467	0.0312	0.0156	0.0000
34/37		0.000 m	0.125 m	0.251 m	0.376 m	0.501 m	0.627 m	0.752 m	0.877 m	1.002 m
		Envolvente (Acero laminado)								
	N-	-0.0317	-0.0316	-0.0315	-0.0314	-0.0313	-0.0312	-0.0311	-0.0310	-0.0309
	N+	0.0399	0.0400	0.0400	0.0401	0.0401	0.0402	0.0403	0.0403	0.0404
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.0131	-0.0117	-0.0104	-0.0090	-0.0076	-0.0063	-0.0049	-0.0035	-0.0025
	Tz+	0.0065	0.0074	0.0082	0.0090	0.0098	0.0106	0.0114	0.0122	0.0133
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0047	-0.0032	-0.0018	-0.0006	0.0003	-0.0010	-0.0024	-0.0039	-0.0054
	My+	0.0044	0.0035	0.0025	0.0014	0.0005	0.0013	0.0020	0.0026	0.0029
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
35/38		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-1.6313	-1.6313	-1.6313	-1.6313	-1.6313	-1.6313	-1.6313	-1.6313	-1.6313
	N+	0.9945	0.9945	0.9945	0.9945	0.9945	0.9945	0.9945	0.9945	0.9945
	Ty-	-0.0589	-0.0487	-0.0385	-0.0283	-0.0181	-0.0086	-0.0026	0.0035	0.0095



## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE** Adrián Freijomil Aradas

	Ty+	0.0142	0.0202	0.0263	0.0323	0.0384	0.0451	0.0553	0.0655	0.0757
	Tz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz+	0.0056	0.0056	0.0056	0.0056	0.0056	0.0056	0.0056	0.0056	0.0056
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0463	-0.0463	-0.0464	-0.0464	-0.0465	-0.0466	-0.0466	-0.0467	-0.0467
	My+	0.0095	0.0088	0.0081	0.0074	0.0067	0.0063	0.0058	0.0054	0.0053
	Mz-	0.0016	-0.0005	-0.0034	-0.0071	-0.0115	-0.0167	-0.0226	-0.0293	-0.0367
	Mz+	0.2165	0.2233	0.2287	0.2329	0.2358	0.2374	0.2378	0.2368	0.2346
36/37		0.000 m	0.215 m	0.430 m	0.645 m	0.860 m	1.076 m	1.291 m	1.506 m	1.721 m
		Envolvente (Acero Conformado)								
	N-	0.0045	0.0067	0.0088	0.0109	0.0130	0.0151	0.0172	0.0194	0.0215
	N+	0.0730	0.0766	0.0802	0.0837	0.0873	0.0909	0.0945	0.0980	0.1016
	Ty-	-0.0522	-0.0522	-0.0522	-0.0522	-0.0522	-0.0522	-0.0522	-0.0522	-0.0522
	Ty+	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	Tz-	-0.0021	-0.0021	-0.0021	-0.0021	-0.0021	-0.0021	-0.0021	-0.0021	-0.0021
	Tz+	0.1798	0.1933	0.2069	0.2204	0.2340	0.2475	0.2611	0.2746	0.2882
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0402	-0.0832	-0.1292	-0.1780	-0.2299	-0.2845	-0.3422	-0.4027
	My+	0.0000	0.0005	0.0009	0.0014	0.0018	0.0023	0.0027	0.0032	0.0037
	Mz-	0.0000	-0.0002	-0.0003	-0.0005	-0.0006	-0.0008	-0.0010	-0.0011	-0.0013
	Mz+	0.0000	0.0112	0.0224	0.0337	0.0449	0.0561	0.0673	0.0786	0.0898
36/40		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-0.7252	-0.7252	-0.7252	-0.7252	-0.7252	-0.7252	-0.7252	-0.7252	-0.7252
	N+	0.1078	0.1078	0.1078	0.1078	0.1078	0.1078	0.1078	0.1078	0.1078
	Ty-	-0.0595	-0.0583	-0.0570	-0.0557	-0.0549	-0.0541	-0.0534	-0.0526	-0.0519
	Ty+	-0.0020	-0.0012	-0.0005	0.0003	0.0014	0.0027	0.0039	0.0052	0.0064
	Tz-	-0.0027	-0.0027	-0.0027	-0.0027	-0.0027	-0.0027	-0.0027	-0.0027	-0.0027
	Tz+	0.1561	0.1561	0.1561	0.1561	0.1561	0.1561	0.1561	0.1561	0.1561
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0031	-0.0028	-0.0024	-0.0021	-0.0018	-0.0016	-0.0014	-0.0012	-0.0010
	My+	0.1907	0.1712	0.1517	0.1322	0.1128	0.0935	0.0741	0.0547	0.0353
	Mz-	-0.0641	-0.0569	-0.0498	-0.0428	-0.0359	-0.0291	-0.0224	-0.0157	-0.0092
	Mz+	0.0024	0.0027	0.0030	0.0030	0.0029	0.0027	0.0023	0.0017	0.0010
37/38		0.000 m	0.159 m	0.318 m	0.477 m	0.635 m	0.794 m	0.953 m	1.112 m	1.271 m
		Envolvente (Acero Conformado)								
	N-	-0.1521	-0.1505	-0.1490	-0.1474	-0.1458	-0.1443	-0.1427	-0.1411	-0.1396
	N+	0.1722	0.1748	0.1775	0.1801	0.1827	0.1854	0.1880	0.1907	0.1933
	Ty-	-0.1001	-0.1001	-0.1001	-0.1001	-0.1001	-0.1001	-0.1001	-0.1001	-0.1001
	Ty+	0.1103	0.1103	0.1103	0.1103	0.1103	0.1103	0.1103	0.1103	0.1103
	Tz-	-0.0196	-0.0106	-0.0096	-0.0096	-0.0096	-0.0096	-0.0096	-0.0096	-0.0096
	Tz+	0.0035	0.0035	0.0042	0.0142	0.0242	0.0342	0.0442	0.0542	0.0642
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0122	-0.0107	-0.0091	-0.0076	-0.0061	-0.0046	-0.0030	-0.0015	0.0000
	My+	0.0308	0.0325	0.0326	0.0311	0.0281	0.0234	0.0172	0.0094	0.0000
	Mz-	-0.1273	-0.1114	-0.0955	-0.0795	-0.0636	-0.0477	-0.0318	-0.0159	0.0000
	Mz+	0.1402	0.1227	0.1051	0.0876	0.0701	0.0526	0.0350	0.0175	0.0000
37/39		0.000 m	0.031 m	0.062 m	0.093 m	0.123 m	0.154 m	0.185 m	0.216 m	0.247 m
		Envolvente (Acero laminado)								
	N-	-0.0319	-0.0318	-0.0318	-0.0318	-0.0318	-0.0318	-0.0318	-0.0318	-0.0317

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE** Adrián Freijomil Aradas

	N+	0.4014	0.4014	0.4014	0.4015	0.4015	0.4015	0.4015	0.4016	0.4016
	Ty-	-0.0763	-0.0763	-0.0763	-0.0763	-0.0763	-0.0763	-0.0763	-0.0763	-0.0763
	Ty+	0.0227	0.0227	0.0227	0.0227	0.0227	0.0227	0.0227	0.0227	0.0227
	Tz-	-0.1676	-0.1673	-0.1670	-0.1666	-0.1663	-0.1659	-0.1656	-0.1653	-0.1649
	Tz+	0.1949	0.1951	0.1953	0.1955	0.1957	0.1959	0.1961	0.1963	0.1965
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0025	0.0018	0.0050	0.0067	0.0055	-0.0005	-0.0065	-0.0125	-0.0185
	My+	0.0422	0.0369	0.0316	0.0277	0.0261	0.0307	0.0358	0.0409	0.0460
	Mz-	-0.0126	-0.0102	-0.0079	-0.0055	-0.0032	-0.0008	-0.0005	-0.0012	-0.0019
	Mz+	0.0037	0.0030	0.0023	0.0016	0.0009	0.0002	0.0015	0.0039	0.0063
38/42		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-1.5219	-1.5219	-1.5219	-1.5219	-1.5219	-1.5219	-1.5219	-1.5219	-1.5219
	N+	0.8952	0.8952	0.8952	0.8952	0.8952	0.8952	0.8952	0.8952	0.8952
	Ty-	-0.0770	-0.0710	-0.0649	-0.0589	-0.0528	-0.0468	-0.0408	-0.0347	-0.0287
	Ty+	0.2160	0.2262	0.2364	0.2466	0.2568	0.2670	0.2772	0.2874	0.2976
	Tz-	-0.0638	-0.0638	-0.0638	-0.0638	-0.0638	-0.0638	-0.0638	-0.0638	-0.0638
	Tz+	0.0152	0.0152	0.0152	0.0152	0.0152	0.0152	0.0152	0.0152	0.0152
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0467	-0.0388	-0.0308	-0.0228	-0.0149	-0.0069	-0.0078	-0.0094	-0.0113
	My+	0.0053	0.0044	0.0036	0.0028	0.0019	0.0011	0.0014	0.0091	0.0170
	Mz-	-0.0367	-0.0275	-0.0190	-0.0113	-0.0043	0.0020	-0.0018	-0.0183	-0.0442
	Mz+	0.2346	0.2070	0.1781	0.1479	0.1164	0.0837	0.0497	0.0311	0.0228
39/41		0.000 m	0.094 m	0.189 m	0.283 m	0.378 m	0.472 m	0.567 m	0.661 m	0.756 m
		Envolvente (Acero laminado)								
	N-	-0.0139	-0.0139	-0.0138	-0.0138	-0.0137	-0.0137	-0.0136	-0.0136	-0.0136
	N+	0.3767	0.3768	0.3768	0.3769	0.3770	0.3770	0.3771	0.3772	0.3773
	Ty-	-0.0041	-0.0041	-0.0041	-0.0041	-0.0041	-0.0041	-0.0041	-0.0041	-0.0041
	Ty+	0.0138	0.0138	0.0138	0.0138	0.0138	0.0138	0.0138	0.0138	0.0138
	Tz-	-0.0459	-0.0453	-0.0447	-0.0440	-0.0434	-0.0428	-0.0422	-0.0416	-0.0410
	Tz+	0.1411	0.1422	0.1432	0.1442	0.1453	0.1463	0.1473	0.1483	0.1494
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0185	-0.0142	-0.0100	-0.0058	-0.0083	-0.0219	-0.0357	-0.0497	-0.0637
	My+	0.0460	0.0326	0.0192	0.0056	-0.0016	0.0024	0.0064	0.0104	0.0143
	Mz-	-0.0019	-0.0015	-0.0011	-0.0007	-0.0003	-0.0003	-0.0016	-0.0029	-0.0042
	Mz+	0.0063	0.0049	0.0036	0.0023	0.0010	0.0001	0.0005	0.0009	0.0012
39/124		0.000 m	0.244 m	0.488 m	0.732 m	0.976 m	1.220 m	1.464 m	1.708 m	1.952 m
		Envolvente (Acero Conformado)								
	N-	-0.0268	-0.0268	-0.0268	-0.0268	-0.0268	-0.0268	-0.0268	-0.0268	-0.0268
	N+	0.0901	0.0901	0.0901	0.0901	0.0901	0.0901	0.0901	0.0901	0.0901
	Ty-	-0.0346	-0.0346	-0.0346	-0.0346	-0.0346	-0.0346	-0.0346	-0.0346	-0.0346
	Ty+	0.0462	0.0462	0.0462	0.0462	0.0462	0.0462	0.0462	0.0462	0.0462
	Tz-	-0.3036	-0.2775	-0.2515	-0.2254	-0.1994	-0.1733	-0.1473	-0.1222	-0.1088
	Tz+	0.2390	0.2165	0.1939	0.1714	0.1489	0.1264	0.1039	0.0814	0.0589
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0555	-0.1056	-0.1501	-0.1893	-0.2228	-0.2510	-0.2735	-0.2907
	My+	0.0000	0.0708	0.1354	0.1935	0.2455	0.2908	0.3300	0.3627	0.3892
	Mz-	0.0000	-0.0113	-0.0225	-0.0338	-0.0451	-0.0564	-0.0676	-0.0789	-0.0902
	Mz+	0.0000	0.0084	0.0169	0.0253	0.0338	0.0422	0.0507	0.0591	0.0676
40/41		0.000 m	0.224 m	0.448 m	0.672 m	0.895 m	1.119 m	1.343 m	1.567 m	1.791 m

## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

		Envolvente (Acero Conformado)								
	N-	-0.0013	0.0009	0.0031	0.0054	0.0076	0.0098	0.0120	0.0142	0.0164
	N+	0.1334	0.1371	0.1408	0.1445	0.1483	0.1520	0.1557	0.1594	0.1631
	Ty-	-0.1202	-0.1202	-0.1202	-0.1202	-0.1202	-0.1202	-0.1202	-0.1202	-0.1202
	Ty+	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015
	Tz-	-0.0047	-0.0047	-0.0047	-0.0047	-0.0047	-0.0047	-0.0047	-0.0047	-0.0047
	Tz+	0.4189	0.4330	0.4471	0.4612	0.4753	0.4894	0.5035	0.5176	0.5317
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0954	-0.1938	-0.2956	-0.4003	-0.5083	-0.6194	-0.7337	-0.8511
	My+	0.0000	0.0011	0.0021	0.0032	0.0042	0.0053	0.0063	0.0074	0.0084
	Mz-	0.0000	-0.0003	-0.0007	-0.0010	-0.0014	-0.0017	-0.0020	-0.0024	-0.0027
	Mz+	0.0000	0.0269	0.0538	0.0807	0.1076	0.1345	0.1614	0.1883	0.2152
40/45		0.000 m	0.124 m	0.248 m	0.372 m	0.497 m	0.621 m	0.745 m	0.869 m	0.993 m
		Envolvente (Acero Conformado)								
	N-	-0.6070	-0.6070	-0.6070	-0.6070	-0.6070	-0.6070	-0.6070	-0.6070	-0.6070
	N+	0.1114	0.1114	0.1114	0.1114	0.1114	0.1114	0.1114	0.1114	0.1114
	Ty-	-0.1848	-0.1841	-0.1833	-0.1826	-0.1818	-0.1811	-0.1803	-0.1796	-0.1789
	Ty+	0.0072	0.0085	0.0097	0.0110	0.0122	0.0135	0.0147	0.0160	0.0172
	Tz-	-0.0064	-0.0064	-0.0064	-0.0064	-0.0064	-0.0064	-0.0064	-0.0064	-0.0064
	Tz+	0.5738	0.5738	0.5738	0.5738	0.5738	0.5738	0.5738	0.5738	0.5738
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0010	-0.0366	-0.1073	-0.1783	-0.2496	-0.3208	-0.3920	-0.4632	-0.5345
	My+	0.0353	0.0014	0.0008	0.0014	0.0022	0.0030	0.0038	0.0046	0.0054
	Mz-	-0.0092	-0.0004	-0.0011	-0.0024	-0.0039	-0.0055	-0.0072	-0.0091	-0.0112
	Mz+	0.0010	0.0137	0.0365	0.0592	0.0818	0.1043	0.1268	0.1491	0.1714
41/42		0.000 m	0.150 m	0.300 m	0.450 m	0.600 m	0.751 m	0.901 m	1.051 m	1.201 m
		Envolvente (Acero Conformado)								
	N-	-0.0344	-0.0329	-0.0315	-0.0300	-0.0285	-0.0270	-0.0256	-0.0241	-0.0226
	N+	0.1615	0.1639	0.1664	0.1689	0.1714	0.1739	0.1764	0.1789	0.1814
	Ty-	-0.1229	-0.1229	-0.1229	-0.1229	-0.1229	-0.1229	-0.1229	-0.1229	-0.1229
	Ty+	0.1323	0.1323	0.1323	0.1323	0.1323	0.1323	0.1323	0.1323	0.1323
	Tz-	-0.0184	-0.0184	-0.0184	-0.0184	-0.0184	-0.0184	-0.0184	-0.0184	-0.0184
	Tz+	0.0092	0.0186	0.0281	0.0375	0.0470	0.0564	0.0659	0.0754	0.0848
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0220	-0.0193	-0.0165	-0.0138	-0.0110	-0.0083	-0.0055	-0.0028	0.0000
	My+	0.0564	0.0543	0.0508	0.0459	0.0396	0.0318	0.0226	0.0120	0.0000
	Mz-	-0.1475	-0.1291	-0.1107	-0.0922	-0.0738	-0.0553	-0.0369	-0.0184	0.0000
	Mz+	0.1589	0.1390	0.1192	0.0993	0.0794	0.0596	0.0397	0.0199	0.0000
41/43		0.000 m	0.115 m	0.230 m	0.345 m	0.460 m	0.575 m	0.690 m	0.805 m	0.920 m
		Envolvente (Acero laminado)								
	N-	-0.0729	-0.0728	-0.0727	-0.0726	-0.0725	-0.0724	-0.0724	-0.0723	-0.0722
	N+	0.0458	0.0459	0.0459	0.0460	0.0461	0.0461	0.0462	0.0462	0.0463
	Ty-	-0.0236	-0.0236	-0.0236	-0.0236	-0.0236	-0.0236	-0.0236	-0.0236	-0.0236
	Ty+	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172
	Tz-	0.0115	0.0122	0.0129	0.0137	0.0144	0.0152	0.0159	0.0166	0.0174
	Tz+	0.0999	0.1012	0.1024	0.1037	0.1049	0.1062	0.1074	0.1087	0.1099
	Mt-	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0053	0.0039	0.0025	-0.0003	-0.0085	-0.0180	-0.0302	-0.0426	-0.0552
	My+	0.0414	0.0314	0.0218	0.0136	0.0054	-0.0017	-0.0041	-0.0060	-0.0080
	Mz-	-0.0101	-0.0074	-0.0047	-0.0043	-0.0055	-0.0075	-0.0095	-0.0115	-0.0135

## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

	Mz+	0.0026	0.0019	0.0012	0.0005	0.0008	0.0035	0.0062	0.0089	0.0116
42/47		0.000 m	0.124 m	0.248 m	0.372 m	0.497 m	0.621 m	0.745 m	0.869 m	0.993 m
		Envolvente (Acero laminado)								
	N-	-1.3908	-1.3908	-1.3908	-1.3908	-1.3908	-1.3908	-1.3908	-1.3908	-1.3908
	N+	0.7736	0.7736	0.7736	0.7736	0.7736	0.7736	0.7736	0.7736	0.7736
	Ty-	-0.0513	-0.0453	-0.0393	-0.0333	-0.0273	-0.0213	-0.0153	-0.0093	-0.0033
	Ty+	0.4594	0.4695	0.4796	0.4898	0.4999	0.5100	0.5201	0.5303	0.5404
	Tz-	-0.1486	-0.1486	-0.1486	-0.1486	-0.1486	-0.1486	-0.1486	-0.1486	-0.1486
	Tz+	0.0335	0.0335	0.0335	0.0335	0.0335	0.0335	0.0335	0.0335	0.0335
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0113	-0.0154	-0.0196	-0.0237	-0.0279	-0.0321	-0.0362	-0.0404	-0.0445
	My+	0.0170	0.0355	0.0539	0.0723	0.0908	0.1092	0.1277	0.1461	0.1646
	Mz-	-0.0442	-0.0915	-0.1463	-0.2024	-0.2603	-0.3230	-0.3869	-0.4521	-0.5185
	Mz+	0.0228	0.0221	0.0273	0.0318	0.0356	0.0386	0.0409	0.0424	0.0432
43/46		0.000 m	0.009 m	0.019 m	0.028 m	0.038 m	0.047 m	0.056 m	0.066 m	0.075 m
		Envolvente (Acero laminado)								
	N-	-0.0811	-0.0810	-0.0810	-0.0810	-0.0810	-0.0810	-0.0810	-0.0810	-0.0810
	N+	0.0544	0.0545	0.0545	0.0545	0.0545	0.0545	0.0545	0.0545	0.0545
	Ty-	-0.5485	-0.5485	-0.5485	-0.5485	-0.5485	-0.5485	-0.5485	-0.5485	-0.5485
	Ty+	0.1290	0.1290	0.1290	0.1290	0.1290	0.1290	0.1290	0.1290	0.1290
	Tz-	-0.2385	-0.2384	-0.2383	-0.2383	-0.2382	-0.2382	-0.2381	-0.2380	-0.2380
	Tz+	0.4321	0.4322	0.4323	0.4324	0.4325	0.4326	0.4327	0.4328	0.4329
	Mt-	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0552	-0.0587	-0.0623	-0.0658	-0.0694	-0.0730	-0.0765	-0.0801	-0.0836
	My+	-0.0080	-0.0057	-0.0035	-0.0013	0.0010	0.0032	0.0055	0.0077	0.0099
	Mz-	-0.0135	-0.0083	-0.0032	-0.0021	-0.0018	-0.0016	-0.0013	-0.0010	-0.0008
	Mz+	0.0116	0.0104	0.0092	0.0080	0.0096	0.0145	0.0193	0.0242	0.0290
43/133		0.000 m	0.369 m	0.739 m	1.108 m	1.478 m	1.847 m	2.216 m	2.586 m	2.955 m
		Envolvente (Acero Conformado)								
	N-	-0.5658	-0.5658	-0.5658	-0.5658	-0.5658	-0.5658	-0.5658	-0.5658	-0.5658
	N+	0.1526	0.1526	0.1526	0.1526	0.1526	0.1526	0.1526	0.1526	0.1526
	Ty-	-0.0260	-0.0260	-0.0260	-0.0260	-0.0260	-0.0260	-0.0260	-0.0260	-0.0260
	Ty+	0.0413	0.0413	0.0413	0.0413	0.0413	0.0413	0.0413	0.0413	0.0413
	Tz-	-0.3434	-0.3039	-0.2645	-0.2250	-0.1856	-0.1470	-0.1260	-0.1088	-0.1081
	Tz+	0.2547	0.2206	0.1865	0.1524	0.1183	0.0842	0.0502	0.0161	0.0094
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0875	-0.1629	-0.2253	-0.2755	-0.3127	-0.3378	-0.3497	-0.3496
	My+	0.0000	0.1193	0.2245	0.3146	0.3908	0.4517	0.4987	0.5306	0.5484
	Mz-	0.0000	-0.0152	-0.0305	-0.0457	-0.0610	-0.0762	-0.0914	-0.1067	-0.1219
	Mz+	0.0000	0.0096	0.0192	0.0288	0.0385	0.0481	0.0577	0.0673	0.0769
44/45		0.000 m	0.603 m	1.205 m	1.808 m	2.410 m	3.013 m	3.615 m	4.218 m	4.820 m
		Envolvente (Acero laminado)								
	N-	-1.9716	-1.9499	-1.9282	-1.9065	-1.8848	-1.8631	-1.8414	-1.8197	-1.7980
	N+	0.1332	0.1460	0.1589	0.1717	0.1846	0.1975	0.2103	0.2232	0.2361
	Ty-	-0.0152	-0.0152	-0.0152	-0.0152	-0.0152	-0.0152	-0.0152	-0.0152	-0.0152
	Ty+	0.0102	0.0102	0.0102	0.0102	0.0102	0.0102	0.0102	0.0102	0.0102
	Tz-	-1.7589	-1.3974	-1.0359	-0.6744	-0.3129	-0.0124	-0.0011	-0.0011	-0.0011
	Tz+	0.0035	0.0035	0.0035	0.0035	0.0035	0.0624	0.4106	0.7721	1.1336
	Mt-	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002
	Mt+	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
	My-	-1.7545	-0.8080	-0.0706	-0.0040	-0.0058	-0.0076	-0.0095	-0.0115	-0.2470

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE** Adrián Freijomil Aradas

	My+	0.0039	0.0018	0.0007	0.4419	0.7434	0.8184	0.6844	0.3241	0.0035
	Mz-	-0.0303	-0.0211	-0.0120	-0.0028	-0.0052	-0.0113	-0.0175	-0.0236	-0.0297
	Mz+	0.0194	0.0133	0.0071	0.0011	0.0063	0.0155	0.0246	0.0338	0.0429
45/46		0.000 m	0.233 m	0.465 m	0.698 m	0.930 m	1.163 m	1.395 m	1.628 m	1.860 m
		Envolvente (Acero laminado)								
	N-	-1.7626	-1.7543	-1.7459	-1.7375	-1.7291	-1.7207	-1.7124	-1.7040	-1.6956
	N+	0.2435	0.2485	0.2535	0.2584	0.2634	0.2684	0.2733	0.2783	0.2833
	Ty-	-0.0583	-0.0583	-0.0583	-0.0583	-0.0583	-0.0583	-0.0583	-0.0583	-0.0583
	Ty+	0.0590	0.0590	0.0590	0.0590	0.0590	0.0590	0.0590	0.0590	0.0590
	Tz-	-0.0508	-0.0508	-0.0508	-0.0508	-0.0508	-0.0508	-0.0508	-0.0508	-0.0508
	Tz+	0.0110	0.0156	0.0389	0.0623	0.0857	0.1091	0.1324	0.1558	0.1792
	Mt-	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002
	Mt+	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
	My-	-0.2470	-0.2469	-0.2532	-0.2650	-0.2821	-0.3049	-0.3329	-0.3665	-0.4053
	My+	0.0035	0.0043	0.0105	0.0223	0.0341	0.0460	0.0578	0.0696	0.0814
	Mz-	-0.0297	-0.0162	-0.0028	-0.0011	-0.0122	-0.0259	-0.0396	-0.0533	-0.0670
	Mz+	0.0429	0.0293	0.0156	0.0113	0.0247	0.0382	0.0518	0.0654	0.0789
45/48		0.000 m	0.126 m	0.252 m	0.378 m	0.503 m	0.629 m	0.755 m	0.881 m	1.007 m
		Envolvente (Acero Conformado)								
	N-	-0.6809	-0.6809	-0.6809	-0.6809	-0.6809	-0.6809	-0.6809	-0.6809	-0.6809
	N+	0.1123	0.1123	0.1123	0.1123	0.1123	0.1123	0.1123	0.1123	0.1123
	Ty-	-0.0181	-0.0168	-0.0155	-0.0143	-0.0130	-0.0117	-0.0105	-0.0092	-0.0079
	Ty+	0.1808	0.1816	0.1823	0.1831	0.1838	0.1846	0.1853	0.1861	0.1868
	Tz-	-0.5781	-0.5781	-0.5781	-0.5781	-0.5781	-0.5781	-0.5781	-0.5781	-0.5781
	Tz+	0.0052	0.0052	0.0052	0.0052	0.0052	0.0052	0.0052	0.0052	0.0052
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.5345	-0.4617	-0.3889	-0.3162	-0.2434	-0.1706	-0.0980	-0.0255	-0.0005
	My+	0.0054	0.0047	0.0041	0.0034	0.0027	0.0021	0.0015	0.0011	0.0476
	Mz-	-0.0112	-0.0090	-0.0069	-0.0051	-0.0033	-0.0018	-0.0005	-0.0006	-0.0138
	Mz+	0.1714	0.1486	0.1256	0.1027	0.0796	0.0564	0.0331	0.0102	0.0026
46/47		0.000 m	0.141 m	0.283 m	0.424 m	0.566 m	0.707 m	0.849 m	0.990 m	1.131 m
		Envolvente (Acero Conformado)								
	N-	-1.1347	-1.1323	-1.1300	-1.1276	-1.1253	-1.1229	-1.1206	-1.1182	-1.1159
	N+	0.0209	0.0223	0.0237	0.0251	0.0265	0.0278	0.0292	0.0306	0.0320
	Ty-	-0.0410	-0.0410	-0.0410	-0.0410	-0.0410	-0.0410	-0.0410	-0.0410	-0.0410
	Ty+	0.1245	0.1245	0.1245	0.1245	0.1245	0.1245	0.1245	0.1245	0.1245
	Tz-	-0.4149	-0.4006	-0.3864	-0.3722	-0.3580	-0.3438	-0.3296	-0.3154	-0.3012
	Tz+	0.0720	0.0720	0.0720	0.0720	0.0720	0.0720	0.0720	0.0720	0.0720
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.4050	-0.3474	-0.2917	-0.2381	-0.1864	-0.1369	-0.0892	-0.0436	0.0000
	My+	0.0814	0.0712	0.0611	0.0509	0.0407	0.0305	0.0204	0.0102	0.0000
	Mz-	-0.0464	-0.0406	-0.0348	-0.0290	-0.0232	-0.0174	-0.0116	-0.0058	0.0000
	Mz+	0.1408	0.1232	0.1056	0.0880	0.0704	0.0528	0.0352	0.0176	0.0000
46/49		0.000 m	0.126 m	0.252 m	0.379 m	0.505 m	0.631 m	0.757 m	0.883 m	1.009 m
		Envolvente (Acero laminado)								
	N-	-0.2612	-0.2611	-0.2610	-0.2609	-0.2608	-0.2607	-0.2606	-0.2605	-0.2604
	N+	0.0788	0.0788	0.0789	0.0789	0.0790	0.0790	0.0791	0.0791	0.0792
	Ty-	-0.0021	-0.0021	-0.0021	-0.0021	-0.0021	-0.0021	-0.0021	-0.0021	-0.0021
	Ty+	0.0487	0.0487	0.0487	0.0487	0.0487	0.0487	0.0487	0.0487	0.0487
	Tz-	-0.1369	-0.1355	-0.1341	-0.1328	-0.1314	-0.1300	-0.1286	-0.1273	-0.1259
	Tz+	0.0240	0.0248	0.0256	0.0264	0.0272	0.0281	0.0289	0.0297	0.0305
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

	Mt+	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
	My-	-0.0685	-0.0513	-0.0343	-0.0174	-0.0008	-0.0025	-0.0061	-0.0098	-0.0136
	My+	0.0139	0.0109	0.0106	0.0112	0.0117	0.0200	0.0320	0.0482	0.0642
	Mz-	-0.0008	-0.0005	-0.0003	-0.0005	-0.0012	-0.0020	-0.0081	-0.0142	-0.0204
	Mz+	0.0288	0.0227	0.0165	0.0104	0.0045	0.0005	0.0008	0.0011	0.0013
47/50		0.000 m	0.126 m	0.252 m	0.378 m	0.503 m	0.629 m	0.755 m	0.881 m	1.007 m
		Envolvente (Acero laminado)								
	N-	-1.2667	-1.2667	-1.2667	-1.2667	-1.2667	-1.2667	-1.2667	-1.2667	-1.2667
	N+	0.7330	0.7330	0.7330	0.7330	0.7330	0.7330	0.7330	0.7330	0.7330
	Ty-	-0.5791	-0.5688	-0.5585	-0.5483	-0.5380	-0.5277	-0.5175	-0.5072	-0.4969
	Ty+	0.0288	0.0349	0.0409	0.0470	0.0531	0.0592	0.0653	0.0714	0.0775
	Tz-	-0.0384	-0.0384	-0.0384	-0.0384	-0.0384	-0.0384	-0.0384	-0.0384	-0.0384
	Tz+	0.1526	0.1526	0.1526	0.1526	0.1526	0.1526	0.1526	0.1526	0.1526
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0445	-0.0397	-0.0349	-0.0300	-0.0252	-0.0203	-0.0155	-0.0107	-0.0058
	My+	0.1646	0.1454	0.1262	0.1069	0.0877	0.0685	0.0493	0.0301	0.0109
	Mz-	-0.5185	-0.4468	-0.3763	-0.3071	-0.2392	-0.1725	-0.1072	-0.0432	-0.0103
	Mz+	0.0432	0.0392	0.0344	0.0289	0.0226	0.0155	0.0077	0.0160	0.0521
48/49		0.000 m	0.241 m	0.483 m	0.724 m	0.965 m	1.207 m	1.448 m	1.689 m	1.931 m
		Envolvente (Acero Conformado)								
	N-	-0.0028	-0.0004	0.0020	0.0044	0.0067	0.0091	0.0115	0.0139	0.0162
	N+	0.1192	0.1232	0.1272	0.1312	0.1352	0.1392	0.1433	0.1473	0.1513
	Ty-	-0.1172	-0.1172	-0.1172	-0.1172	-0.1172	-0.1172	-0.1172	-0.1172	-0.1172
	Ty+	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013
	Tz-	-0.0038	-0.0038	-0.0038	-0.0038	-0.0038	-0.0038	-0.0038	-0.0038	-0.0038
	Tz+	0.3730	0.3973	0.4215	0.4458	0.4701	0.4943	0.5186	0.5428	0.5671
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0931	-0.1918	-0.2966	-0.4070	-0.5235	-0.6456	-0.7738	-0.9076
	My+	0.0000	0.0009	0.0018	0.0028	0.0037	0.0046	0.0055	0.0064	0.0073
	Mz-	0.0000	-0.0003	-0.0006	-0.0009	-0.0012	-0.0015	-0.0018	-0.0021	-0.0024
	Mz+	0.0000	0.0283	0.0566	0.0849	0.1132	0.1415	0.1698	0.1981	0.2264
48/52		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-0.5651	-0.5651	-0.5651	-0.5651	-0.5651	-0.5651	-0.5651	-0.5651	-0.5651
	N+	0.1164	0.1164	0.1164	0.1164	0.1164	0.1164	0.1164	0.1164	0.1164
	Ty-	-0.0053	-0.0040	-0.0028	-0.0015	-0.0003	0.0006	0.0013	0.0021	0.0028
	Ty+	0.0678	0.0686	0.0693	0.0701	0.0708	0.0720	0.0732	0.0745	0.0757
	Tz-	-0.2055	-0.2055	-0.2055	-0.2055	-0.2055	-0.2055	-0.2055	-0.2055	-0.2055
	Tz+	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0005	-0.0001	-0.0003	-0.0004	-0.0006	-0.0008	-0.0010	-0.0012	-0.0013
	My+	0.0476	0.0733	0.0989	0.1245	0.1502	0.1758	0.2014	0.2271	0.2527
	Mz-	-0.0138	-0.0223	-0.0309	-0.0396	-0.0484	-0.0573	-0.0663	-0.0753	-0.0845
	Mz+	0.0026	0.0029	0.0031	0.0032	0.0033	0.0033	0.0031	0.0027	0.0022
49/50		0.000 m	0.133 m	0.265 m	0.398 m	0.530 m	0.663 m	0.796 m	0.928 m	1.061 m
		Envolvente (Acero Conformado)								
	N-	-0.0624	-0.0611	-0.0598	-0.0585	-0.0572	-0.0559	-0.0546	-0.0533	-0.0520
	N+	0.2087	0.2109	0.2131	0.2153	0.2175	0.2197	0.2219	0.2241	0.2263
	Ty-	-0.1711	-0.1711	-0.1711	-0.1711	-0.1711	-0.1711	-0.1711	-0.1711	-0.1711
	Ty+	0.1898	0.1898	0.1898	0.1898	0.1898	0.1898	0.1898	0.1898	0.1898
	Tz-	-0.0231	-0.0231	-0.0231	-0.0231	-0.0231	-0.0231	-0.0231	-0.0231	-0.0231

## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

	Tz+	0.0047	0.0065	0.0189	0.0323	0.0456	0.0589	0.0722	0.0856	0.0989
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0245	-0.0214	-0.0184	-0.0153	-0.0122	-0.0092	-0.0061	-0.0031	0.0000
	My+	0.0484	0.0485	0.0469	0.0434	0.0383	0.0314	0.0227	0.0122	0.0000
	Mz-	-0.1815	-0.1588	-0.1361	-0.1134	-0.0907	-0.0681	-0.0454	-0.0227	0.0000
	Mz+	0.2014	0.1762	0.1510	0.1259	0.1007	0.0755	0.0503	0.0252	0.0000
49/51		0.000 m	0.074 m	0.148 m	0.222 m	0.296 m	0.370 m	0.443 m	0.517 m	0.591 m
		Envolvente (Acero laminado)								
	N-	-0.4666	-0.4666	-0.4665	-0.4665	-0.4664	-0.4663	-0.4663	-0.4662	-0.4662
	N+	0.0762	0.0762	0.0763	0.0763	0.0763	0.0764	0.0764	0.0764	0.0765
	Ty-	-0.0247	-0.0247	-0.0247	-0.0247	-0.0247	-0.0247	-0.0247	-0.0247	-0.0247
	Ty+	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006
	Tz-	-0.2613	-0.2605	-0.2597	-0.2589	-0.2581	-0.2572	-0.2564	-0.2556	-0.2548
	Tz+	0.1175	0.1180	0.1184	0.1189	0.1194	0.1199	0.1203	0.1208	0.1213
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0976	-0.0783	-0.0591	-0.0399	-0.0208	-0.0116	-0.0163	-0.0244	-0.0333
	My+	0.0373	0.0286	0.0198	0.0111	0.0023	-0.0002	0.0172	0.0361	0.0550
	Mz-	-0.0067	-0.0049	-0.0031	-0.0012	0.0000	-0.0001	-0.0001	-0.0001	-0.0002
	Mz+	0.0002	0.0001	0.0001	0.0000	0.0006	0.0024	0.0042	0.0061	0.0079
50/54		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-1.0778	-1.0778	-1.0778	-1.0778	-1.0778	-1.0778	-1.0778	-1.0778	-1.0778
	N+	0.5628	0.5628	0.5628	0.5628	0.5628	0.5628	0.5628	0.5628	0.5628
	Ty-	-0.2862	-0.2760	-0.2658	-0.2556	-0.2454	-0.2352	-0.2250	-0.2148	-0.2046
	Ty+	0.0255	0.0315	0.0376	0.0436	0.0497	0.0557	0.0617	0.0678	0.0738
	Tz-	-0.0154	-0.0154	-0.0154	-0.0154	-0.0154	-0.0154	-0.0154	-0.0154	-0.0154
	Tz+	0.0537	0.0537	0.0537	0.0537	0.0537	0.0537	0.0537	0.0537	0.0537
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0058	-0.0039	-0.0025	-0.0092	-0.0159	-0.0226	-0.0293	-0.0361	-0.0428
	My+	0.0109	0.0042	0.0003	0.0010	0.0020	0.0038	0.0057	0.0076	0.0095
	Mz-	-0.0103	-0.0139	-0.0182	-0.0233	-0.0291	-0.0357	-0.0430	-0.0511	-0.0599
	Mz+	0.0521	0.0809	0.1084	0.1359	0.1653	0.1934	0.2202	0.2457	0.2700
51/53		0.000 m	0.051 m	0.103 m	0.154 m	0.206 m	0.257 m	0.308 m	0.360 m	0.411 m
		Envolvente (Acero laminado)								
	N-	-0.4925	-0.4925	-0.4924	-0.4924	-0.4923	-0.4923	-0.4923	-0.4922	-0.4922
	N+	0.0946	0.0946	0.0946	0.0947	0.0947	0.0947	0.0947	0.0948	0.0948
	Ty-	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010
	Ty+	0.0425	0.0425	0.0425	0.0425	0.0425	0.0425	0.0425	0.0425	0.0425
	Tz-	-0.1687	-0.1683	-0.1680	-0.1677	-0.1673	-0.1670	-0.1667	-0.1663	-0.1660
	Tz+	0.1195	0.1201	0.1206	0.1212	0.1218	0.1223	0.1229	0.1234	0.1240
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0333	-0.0257	-0.0182	-0.0106	-0.0031	0.0044	0.0104	0.0049	-0.0007
	My+	0.0550	0.0489	0.0427	0.0364	0.0302	0.0256	0.0300	0.0377	0.0455
	Mz-	-0.0002	-0.0001	-0.0001	0.0000	-0.0009	-0.0030	-0.0052	-0.0074	-0.0096
	Mz+	0.0079	0.0057	0.0035	0.0013	0.0000	0.0001	0.0001	0.0002	0.0002
51/129		0.000 m	0.255 m	0.510 m	0.766 m	1.021 m	1.276 m	1.531 m	1.787 m	2.042 m
		Envolvente (Acero Conformado)								
	N-	-0.0015	-0.0015	-0.0015	-0.0015	-0.0015	-0.0015	-0.0015	-0.0015	-0.0015
	N+	0.0672	0.0672	0.0672	0.0672	0.0672	0.0672	0.0672	0.0672	0.0672
	Ty-	-0.0369	-0.0369	-0.0369	-0.0369	-0.0369	-0.0369	-0.0369	-0.0369	-0.0369

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE** Adrián Freijomil Aradas

	Ty+	0.0524	0.0524	0.0524	0.0524	0.0524	0.0524	0.0524	0.0524	0.0524
	Tz-	-0.3716	-0.3443	-0.3171	-0.2898	-0.2626	-0.2353	-0.2081	-0.1808	-0.1555
	Tz+	0.2670	0.2435	0.2199	0.1964	0.1728	0.1493	0.1257	0.1022	0.0786
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0650	-0.1243	-0.1773	-0.2245	-0.2655	-0.3007	-0.3297	-0.3529
	My+	0.0000	0.0912	0.1758	0.2531	0.3237	0.3871	0.4439	0.4933	0.5362
	Mz-	0.0000	-0.0134	-0.0267	-0.0401	-0.0535	-0.0669	-0.0802	-0.0936	-0.1070
	Mz+	0.0000	0.0094	0.0188	0.0282	0.0376	0.0471	0.0565	0.0659	0.0753
52/53		0.000 m	0.250 m	0.500 m	0.750 m	1.000 m	1.251 m	1.501 m	1.751 m	2.001 m
		Envolvente (Acero Conformado)								
	N-	0.0058	0.0083	0.0107	0.0132	0.0157	0.0181	0.0206	0.0231	0.0255
	N+	0.0847	0.0888	0.0930	0.0971	0.1013	0.1054	0.1096	0.1138	0.1179
	Ty-	-0.0750	-0.0750	-0.0750	-0.0750	-0.0750	-0.0750	-0.0750	-0.0750	-0.0750
	Ty+	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006
	Tz-	-0.0016	-0.0016	-0.0016	-0.0016	-0.0016	-0.0016	-0.0016	-0.0016	-0.0016
	Tz+	0.2172	0.2424	0.2675	0.2927	0.3178	0.3429	0.3681	0.3932	0.4183
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0576	-0.1212	-0.1914	-0.2676	-0.3504	-0.4392	-0.5345	-0.6358
	My+	0.0000	0.0004	0.0008	0.0012	0.0016	0.0020	0.0024	0.0029	0.0033
	Mz-	0.0000	-0.0001	-0.0003	-0.0004	-0.0006	-0.0007	-0.0009	-0.0010	-0.0012
	Mz+	0.0000	0.0188	0.0375	0.0563	0.0750	0.0938	0.1126	0.1313	0.1501
52/55		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-0.4903	-0.4903	-0.4903	-0.4903	-0.4903	-0.4903	-0.4903	-0.4903	-0.4903
	N+	0.1192	0.1192	0.1192	0.1192	0.1192	0.1192	0.1192	0.1192	0.1192
	Ty-	-0.0090	-0.0077	-0.0064	-0.0052	-0.0039	-0.0031	-0.0024	-0.0017	-0.0009
	Ty+	-0.0028	-0.0020	-0.0013	-0.0005	0.0002	0.0015	0.0027	0.0040	0.0052
	Tz-	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005
	Tz+	0.0118	0.0118	0.0118	0.0118	0.0118	0.0118	0.0118	0.0118	0.0118
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0013	-0.0014	-0.0014	-0.0015	-0.0015	-0.0015	-0.0016	-0.0016	-0.0017
	My+	0.2527	0.2512	0.2498	0.2483	0.2468	0.2454	0.2439	0.2424	0.2410
	Mz-	-0.0845	-0.0837	-0.0830	-0.0824	-0.0818	-0.0814	-0.0810	-0.0808	-0.0806
	Mz+	0.0022	0.0027	0.0032	0.0034	0.0035	0.0034	0.0032	0.0028	0.0023
53/54		0.000 m	0.124 m	0.248 m	0.372 m	0.495 m	0.619 m	0.743 m	0.867 m	0.991 m
		Envolvente (Acero Conformado)								
	N-	-0.1046	-0.1034	-0.1021	-0.1009	-0.0997	-0.0985	-0.0973	-0.0960	-0.0948
	N+	0.1399	0.1420	0.1440	0.1461	0.1481	0.1502	0.1523	0.1543	0.1564
	Ty-	-0.1947	-0.1947	-0.1947	-0.1947	-0.1947	-0.1947	-0.1947	-0.1947	-0.1947
	Ty+	0.2284	0.2284	0.2284	0.2284	0.2284	0.2284	0.2284	0.2284	0.2284
	Tz-	-0.0462	-0.0338	-0.0213	-0.0144	-0.0144	-0.0144	-0.0144	-0.0144	-0.0144
	Tz+	0.0028	0.0028	0.0028	0.0028	0.0068	0.0192	0.0317	0.0441	0.0566
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0143	-0.0125	-0.0107	-0.0089	-0.0071	-0.0053	-0.0036	-0.0018	0.0000
	My+	0.0067	0.0113	0.0143	0.0157	0.0157	0.0141	0.0109	0.0062	0.0000
	Mz-	-0.1929	-0.1688	-0.1447	-0.1206	-0.0965	-0.0724	-0.0482	-0.0241	0.0000
	Mz+	0.2263	0.1980	0.1698	0.1415	0.1132	0.0849	0.0566	0.0283	0.0000
53/56		0.000 m	0.125 m	0.251 m	0.376 m	0.501 m	0.627 m	0.752 m	0.877 m	1.002 m
		Envolvente (Acero laminado)								
	N-	-0.0191	-0.0190	-0.0189	-0.0188	-0.0187	-0.0186	-0.0185	-0.0184	-0.0183



## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE** Adrián Freijomil Aradas

	N+	0.0253	0.0253	0.0254	0.0254	0.0255	0.0255	0.0256	0.0257	0.0257
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.0100	-0.0087	-0.0073	-0.0059	-0.0046	-0.0036	-0.0028	-0.0020	-0.0012
	Tz+	0.0030	0.0038	0.0046	0.0054	0.0062	0.0074	0.0088	0.0101	0.0115
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0032	-0.0020	-0.0010	-0.0003	0.0003	-0.0006	-0.0015	-0.0026	-0.0039
	My+	0.0026	0.0021	0.0016	0.0011	0.0005	0.0009	0.0013	0.0015	0.0017
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
54/57		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-0.8500	-0.8500	-0.8500	-0.8500	-0.8500	-0.8500	-0.8500	-0.8500	-0.8500
	N+	0.3687	0.3687	0.3687	0.3687	0.3687	0.3687	0.3687	0.3687	0.3687
	Ty-	-0.0482	-0.0380	-0.0278	-0.0176	-0.0074	-0.0002	0.0059	0.0119	0.0179
	Ty+	-0.0111	-0.0050	0.0010	0.0071	0.0131	0.0221	0.0323	0.0425	0.0527
	Tz-	-0.0030	-0.0030	-0.0030	-0.0030	-0.0030	-0.0030	-0.0030	-0.0030	-0.0030
	Tz+	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0428	-0.0424	-0.0420	-0.0417	-0.0413	-0.0410	-0.0406	-0.0402	-0.0399
	My+	0.0095	0.0097	0.0098	0.0099	0.0100	0.0102	0.0103	0.0104	0.0105
	Mz-	-0.0599	-0.0577	-0.0562	-0.0555	-0.0555	-0.0563	-0.0578	-0.0601	-0.0631
	Mz+	0.2700	0.2742	0.2772	0.2790	0.2794	0.2792	0.2782	0.2759	0.2724
55/56		0.000 m	0.259 m	0.518 m	0.777 m	1.035 m	1.294 m	1.553 m	1.812 m	2.071 m
		Envolvente (Acero Conformado)								
	N-	0.0055	0.0080	0.0106	0.0131	0.0157	0.0182	0.0208	0.0233	0.0259
	N+	0.0921	0.0964	0.1007	0.1050	0.1093	0.1136	0.1179	0.1222	0.1265
	Ty-	-0.0821	-0.0821	-0.0821	-0.0821	-0.0821	-0.0821	-0.0821	-0.0821	-0.0821
	Ty+	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006
	Tz-	-0.0016	-0.0016	-0.0016	-0.0016	-0.0016	-0.0016	-0.0016	-0.0016	-0.0016
	Tz+	0.2380	0.2640	0.2900	0.3160	0.3420	0.3681	0.3941	0.4201	0.4461
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0651	-0.1367	-0.2153	-0.3003	-0.3923	-0.4908	-0.5963	-0.7083
	My+	0.0000	0.0004	0.0008	0.0013	0.0017	0.0021	0.0025	0.0030	0.0034
	Mz-	0.0000	-0.0002	-0.0003	-0.0005	-0.0006	-0.0008	-0.0009	-0.0011	-0.0012
	Mz+	0.0000	0.0213	0.0425	0.0638	0.0850	0.1063	0.1275	0.1488	0.1700
55/59		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-0.4085	-0.4085	-0.4085	-0.4085	-0.4085	-0.4085	-0.4085	-0.4085	-0.4085
	N+	0.1219	0.1219	0.1219	0.1219	0.1219	0.1219	0.1219	0.1219	0.1219
	Ty-	-0.0909	-0.0897	-0.0884	-0.0872	-0.0861	-0.0853	-0.0846	-0.0838	-0.0831
	Ty+	-0.0026	-0.0019	-0.0011	-0.0004	0.0006	0.0018	0.0031	0.0043	0.0056
	Tz-	-0.0014	-0.0014	-0.0014	-0.0014	-0.0014	-0.0014	-0.0014	-0.0014	-0.0014
	Tz+	0.2497	0.2497	0.2497	0.2497	0.2497	0.2497	0.2497	0.2497	0.2497
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0017	-0.0015	-0.0014	-0.0013	-0.0011	-0.0010	-0.0008	-0.0007	-0.00092
	My+	0.2410	0.2098	0.1786	0.1474	0.1162	0.0850	0.0539	0.0227	0.0027
	Mz-	-0.0806	-0.0696	-0.0586	-0.0477	-0.0369	-0.0262	-0.0155	-0.0050	-0.0001
	Mz+	0.0023	0.0028	0.0031	0.0033	0.0033	0.0031	0.0028	0.0024	0.0063
56/57		0.000 m	0.115 m	0.230 m	0.345 m	0.460 m	0.576 m	0.691 m	0.806 m	0.921 m

## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

		Envolvente (Acero Conformado)								
	N-	-0.1529	-0.1518	-0.1507	-0.1495	-0.1484	-0.1473	-0.1461	-0.1450	-0.1439
	N+	0.2237	0.2256	0.2275	0.2294	0.2313	0.2332	0.2351	0.2371	0.2390
	Ty-	-0.2298	-0.2298	-0.2298	-0.2298	-0.2298	-0.2298	-0.2298	-0.2298	-0.2298
	Ty+	0.2803	0.2803	0.2803	0.2803	0.2803	0.2803	0.2803	0.2803	0.2803
	Tz-	-0.0790	-0.0674	-0.0559	-0.0443	-0.0327	-0.0212	-0.0096	-0.0055	-0.0055
	Tz+	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0032	0.0147
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0301	-0.0217	-0.0146	-0.0089	-0.0044	-0.0019	-0.0013	-0.0006	0.0000
	My+	0.0009	0.0008	0.0007	0.0006	0.0005	0.0004	0.0007	0.0010	0.0000
	Mz-	-0.2117	-0.1852	-0.1587	-0.1323	-0.1058	-0.0794	-0.0529	-0.0265	0.0000
	Mz+	0.2582	0.2259	0.1936	0.1613	0.1291	0.0968	0.0645	0.0323	0.0000
56/58		0.000 m	0.033 m	0.066 m	0.098 m	0.131 m	0.164 m	0.197 m	0.229 m	0.262 m
		Envolvente (Acero laminado)								
	N-	-0.1434	-0.1434	-0.1434	-0.1434	-0.1433	-0.1433	-0.1433	-0.1433	-0.1433
	N+	0.5139	0.5139	0.5139	0.5140	0.5140	0.5140	0.5140	0.5141	0.5141
	Ty-	-0.0663	-0.0663	-0.0663	-0.0663	-0.0663	-0.0663	-0.0663	-0.0663	-0.0663
	Ty+	0.0087	0.0087	0.0087	0.0087	0.0087	0.0087	0.0087	0.0087	0.0087
	Tz-	-0.2106	-0.2103	-0.2099	-0.2096	-0.2092	-0.2089	-0.2085	-0.2081	-0.2078
	Tz+	0.2161	0.2163	0.2165	0.2168	0.2170	0.2172	0.2174	0.2176	0.2178
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0022	0.0037	0.0090	0.0037	-0.0025	-0.0088	-0.0150	-0.0213	-0.0275
	My+	0.0428	0.0368	0.0307	0.0268	0.0316	0.0383	0.0450	0.0517	0.0584
	Mz-	-0.0114	-0.0092	-0.0070	-0.0049	-0.0027	-0.0005	-0.0002	-0.0005	-0.0008
	Mz+	0.0015	0.0012	0.0009	0.0006	0.0004	0.0001	0.0016	0.0038	0.0060
57/61		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-0.5697	-0.5697	-0.5697	-0.5697	-0.5697	-0.5697	-0.5697	-0.5697	-0.5697
	N+	0.1389	0.1389	0.1389	0.1389	0.1389	0.1389	0.1389	0.1389	0.1389
	Ty-	-0.1165	-0.1105	-0.1044	-0.0984	-0.0923	-0.0863	-0.0802	-0.0742	-0.0681
	Ty+	0.2813	0.2915	0.3017	0.3119	0.3221	0.3323	0.3425	0.3527	0.3629
	Tz-	-0.0176	-0.0176	-0.0176	-0.0176	-0.0176	-0.0176	-0.0176	-0.0176	-0.0176
	Tz+	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0399	-0.0377	-0.0355	-0.0332	-0.0310	-0.0288	-0.0266	-0.0244	-0.0222
	My+	0.0105	0.0099	0.0094	0.0088	0.0082	0.0077	0.0071	0.0065	0.0059
	Mz-	-0.0631	-0.0489	-0.0355	-0.0228	-0.0109	0.0002	0.0046	-0.0203	-0.0560
	Mz+	0.2724	0.2379	0.2022	0.1651	0.1268	0.0887	0.0672	0.0561	0.0536
58/60		0.000 m	0.093 m	0.185 m	0.278 m	0.370 m	0.463 m	0.555 m	0.648 m	0.740 m
		Envolvente (Acero laminado)								
	N-	-0.1035	-0.1034	-0.1034	-0.1033	-0.1033	-0.1033	-0.1032	-0.1032	-0.1031
	N+	0.4677	0.4677	0.4678	0.4679	0.4680	0.4680	0.4681	0.4682	0.4682
	Ty-	-0.0018	-0.0018	-0.0018	-0.0018	-0.0018	-0.0018	-0.0018	-0.0018	-0.0018
	Ty+	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136
	Tz-	-0.0784	-0.0778	-0.0772	-0.0766	-0.0760	-0.0754	-0.0748	-0.0742	-0.0736
	Tz+	0.1853	0.1863	0.1873	0.1883	0.1893	0.1904	0.1914	0.1924	0.1934
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0275	-0.0203	-0.0131	-0.0071	-0.0109	-0.0285	-0.0462	-0.0639	-0.0818
	My+	0.0584	0.0412	0.0239	0.0067	0.0010	0.0081	0.0150	0.0219	0.0287
	Mz-	-0.0008	-0.0006	-0.0005	-0.0003	-0.0001	-0.0003	-0.0016	-0.0028	-0.0041

## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

	Mz+	0.0060	0.0047	0.0035	0.0022	0.0010	0.0000	0.0002	0.0004	0.0005	
58/118		0.000 m	0.130 m	0.260 m	0.390 m	0.519 m	0.649 m	0.779 m	0.909 m	1.039 m	
		Envolvente (Acero Conformado)									
	N-	-0.0105	-0.0105	-0.0105	-0.0105	-0.0105	-0.0105	-0.0105	-0.0105	-0.0105	-0.0105
	N+	0.0799	0.0799	0.0799	0.0799	0.0799	0.0799	0.0799	0.0799	0.0799	0.0799
	Ty-	-0.0600	-0.0600	-0.0600	-0.0600	-0.0600	-0.0600	-0.0600	-0.0600	-0.0600	-0.0600
	Ty+	0.0763	0.0763	0.0763	0.0763	0.0763	0.0763	0.0763	0.0763	0.0763	0.0763
	Tz-	-0.3869	-0.3731	-0.3592	-0.3453	-0.3315	-0.3176	-0.3037	-0.2899	-0.2760	-0.2621
	Tz+	0.2659	0.2540	0.2420	0.2300	0.2180	0.2060	0.1940	0.1821	0.1701	0.1581
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0337	-0.0660	-0.0966	-0.1257	-0.1532	-0.1792	-0.2036	-0.2265	-0.2484
	My+	0.0000	0.0493	0.0969	0.1426	0.1866	0.2287	0.2691	0.3076	0.3444	0.3797
	Mz-	0.0000	-0.0099	-0.0198	-0.0297	-0.0396	-0.0495	-0.0594	-0.0693	-0.0792	-0.0891
Mz+	0.0000	0.0078	0.0156	0.0234	0.0312	0.0390	0.0468	0.0546	0.0624	0.0702	
59/60		0.000 m	0.268 m	0.535 m	0.803 m	1.070 m	1.338 m	1.606 m	1.873 m	2.141 m	
		Envolvente (Acero Conformado)									
	N-	-0.0033	-0.0007	0.0020	0.0046	0.0072	0.0099	0.0125	0.0151	0.0178	
	N+	0.1213	0.1257	0.1301	0.1346	0.1390	0.1435	0.1479	0.1524	0.1568	
	Ty-	-0.1233	-0.1233	-0.1233	-0.1233	-0.1233	-0.1233	-0.1233	-0.1233	-0.1233	
	Ty+	0.0014	0.0014	0.0014	0.0014	0.0014	0.0014	0.0014	0.0014	0.0014	
	Tz-	-0.0042	-0.0042	-0.0042	-0.0042	-0.0042	-0.0042	-0.0042	-0.0042	-0.0042	
	Tz+	0.3808	0.4077	0.4346	0.4615	0.4884	0.5153	0.5422	0.5690	0.5959	
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
	My-	0.0000	-0.1056	-0.2182	-0.3382	-0.4652	-0.5996	-0.7409	-0.8898	-1.0455	
	My+	0.0000	0.0011	0.0022	0.0033	0.0045	0.0056	0.0067	0.0078	0.0089	
	Mz-	0.0000	-0.0004	-0.0007	-0.0011	-0.0014	-0.0018	-0.0022	-0.0025	-0.0029	
Mz+	0.0000	0.0330	0.0660	0.0989	0.1319	0.1649	0.1979	0.2309	0.2639		
59/64		0.000 m	0.124 m	0.248 m	0.372 m	0.497 m	0.621 m	0.745 m	0.869 m	0.993 m	
		Envolvente (Acero Conformado)									
	N-	-0.2870	-0.2870	-0.2870	-0.2870	-0.2870	-0.2870	-0.2870	-0.2870	-0.2870	
	N+	0.1273	0.1273	0.1273	0.1273	0.1273	0.1273	0.1273	0.1273	0.1273	
	Ty-	-0.2042	-0.2035	-0.2027	-0.2020	-0.2013	-0.2005	-0.1998	-0.1990	-0.1983	
	Ty+	0.0088	0.0100	0.0113	0.0125	0.0138	0.0150	0.0163	0.0176	0.0188	
	Tz-	-0.0053	-0.0053	-0.0053	-0.0053	-0.0053	-0.0053	-0.0053	-0.0053	-0.0053	
	Tz+	0.6303	0.6303	0.6303	0.6303	0.6303	0.6303	0.6303	0.6303	0.6303	
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
	My-	-0.0092	-0.0868	-0.1650	-0.2432	-0.3215	-0.3997	-0.4779	-0.5562	-0.6344	
	My+	0.0027	0.0008	0.0008	0.0014	0.0021	0.0027	0.0034	0.0040	0.0047	
	Mz-	-0.0001	-0.0003	-0.0009	-0.0022	-0.0038	-0.0056	-0.0076	-0.0097	-0.0119	
Mz+	0.0063	0.0310	0.0559	0.0810	0.1061	0.1310	0.1559	0.1806	0.2053		
60/61		0.000 m	0.106 m	0.213 m	0.319 m	0.425 m	0.532 m	0.638 m	0.745 m	0.851 m	
		Envolvente (Acero Conformado)									
	N-	-0.0232	-0.0222	-0.0211	-0.0201	-0.0190	-0.0180	-0.0169	-0.0159	-0.0148	
	N+	0.1558	0.1575	0.1593	0.1611	0.1628	0.1646	0.1664	0.1681	0.1699	
	Ty-	-0.2834	-0.2834	-0.2834	-0.2834	-0.2834	-0.2834	-0.2834	-0.2834	-0.2834	
	Ty+	0.3524	0.3524	0.3524	0.3524	0.3524	0.3524	0.3524	0.3524	0.3524	
	Tz-	-0.1064	-0.0957	-0.0850	-0.0743	-0.0636	-0.0529	-0.0422	-0.0315	-0.0208	
	Tz+	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
	My-	-0.0541	-0.0434	-0.0338	-0.0253	-0.0180	-0.0118	-0.0067	-0.0028	0.0000	

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	My+	0.0011	0.0009	0.0008	0.0007	0.0005	0.0004	0.0003	0.0001	0.0000
	Mz-	-0.2412	-0.2110	-0.1809	-0.1507	-0.1206	-0.0904	-0.0603	-0.0301	0.0000
	Mz+	0.2998	0.2624	0.2249	0.1874	0.1499	0.1124	0.0750	0.0375	0.0000
60/62		0.000 m	0.117 m	0.234 m	0.351 m	0.468 m	0.585 m	0.702 m	0.819 m	0.935 m
		Envolvente (Acero laminado)								
	N-	-0.6946	-0.6946	-0.6945	-0.6944	-0.6944	-0.6943	-0.6943	-0.6942	-0.6942
	N+	1.4469	1.4470	1.4470	1.4471	1.4472	1.4473	1.4474	1.4475	1.4476
	Ty-	-0.0235	-0.0235	-0.0235	-0.0235	-0.0235	-0.0235	-0.0235	-0.0235	-0.0235
	Ty+	0.0223	0.0223	0.0223	0.0223	0.0223	0.0223	0.0223	0.0223	0.0223
	Tz-	-0.0185	-0.0178	-0.0170	-0.0163	-0.0155	-0.0148	-0.0140	-0.0133	-0.0125
	Tz+	0.0965	0.0978	0.0990	0.1003	0.1016	0.1028	0.1041	0.1054	0.1067
	Mt-	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004
	Mt+	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
	My-	-0.0078	-0.0057	-0.0037	-0.0017	-0.0031	-0.0133	-0.0251	-0.0371	-0.0491
	My+	0.0466	0.0354	0.0248	0.0140	0.0043	0.0019	0.0036	0.0052	0.0067
	Mz-	-0.0176	-0.0149	-0.0124	-0.0098	-0.0072	-0.0053	-0.0064	-0.0083	-0.0108
	Mz+	0.0110	0.0084	0.0058	0.0032	0.0011	-0.0003	0.0007	0.0027	0.0049
61/66		0.000 m	0.124 m	0.248 m	0.372 m	0.497 m	0.621 m	0.745 m	0.869 m	0.993 m
		Envolvente (Acero laminado)								
	N-	-0.2173	-0.2173	-0.2173	-0.2173	-0.2173	-0.2173	-0.2173	-0.2173	-0.2173
	N+	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020
	Ty-	-0.0830	-0.0770	-0.0710	-0.0650	-0.0590	-0.0530	-0.0470	-0.0410	-0.0350
	Ty+	0.4751	0.4852	0.4954	0.5055	0.5156	0.5257	0.5359	0.5460	0.5561
	Tz-	-0.0008	-0.0008	-0.0008	-0.0008	-0.0008	-0.0008	-0.0008	-0.0008	-0.0008
	Tz+	0.0041	0.0041	0.0041	0.0041	0.0041	0.0041	0.0041	0.0041	0.0041
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0222	-0.0226	-0.0230	-0.0234	-0.0238	-0.0242	-0.0246	-0.0250	-0.0254
	My+	0.0059	0.0055	0.0051	0.0047	0.0043	0.0039	0.0035	0.0031	0.0027
	Mz-	-0.0560	-0.1125	-0.1726	-0.2340	-0.2967	-0.3606	-0.4258	-0.4923	-0.5600
	Mz+	0.0536	0.0422	0.0483	0.0567	0.0644	0.0714	0.0776	0.0830	0.0877
62/65		0.000 m	0.007 m	0.015 m	0.022 m	0.030 m	0.037 m	0.045 m	0.052 m	0.060 m
		Envolvente (Acero laminado)								
	N-	-1.1557	-1.1557	-1.1557	-1.1557	-1.1557	-1.1557	-1.1557	-1.1557	-1.1557
	N+	0.6857	0.6857	0.6857	0.6857	0.6857	0.6857	0.6858	0.6858	0.6858
	Ty-	-1.4617	-1.4617	-1.4617	-1.4617	-1.4617	-1.4617	-1.4617	-1.4617	-1.4617
	Ty+	0.4456	0.4456	0.4456	0.4456	0.4456	0.4456	0.4456	0.4456	0.4456
	Tz-	-0.0066	-0.0066	-0.0065	-0.0065	-0.0064	-0.0064	-0.0063	-0.0063	-0.0062
	Tz+	0.5218	0.5219	0.5219	0.5220	0.5221	0.5222	0.5223	0.5223	0.5224
	Mt-	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004
	Mt+	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
	My-	-0.0491	-0.0518	-0.0551	-0.0585	-0.0619	-0.0653	-0.0687	-0.0720	-0.0754
	My+	0.0067	0.0067	0.0068	0.0068	0.0069	0.0069	0.0070	0.0070	0.0071
	Mz-	-0.0108	-0.0132	-0.0165	-0.0198	-0.0232	-0.0265	-0.0299	-0.0332	-0.0365
	Mz+	0.0049	0.0139	0.0249	0.0359	0.0468	0.0578	0.0687	0.0797	0.0906
62/106		0.000 m	0.004 m	0.009 m	0.013 m	0.018 m	0.022 m	0.027 m	0.031 m	0.036 m
		Envolvente (Acero Conformado)								
	N-	-1.4398	-1.4398	-1.4398	-1.4398	-1.4398	-1.4398	-1.4398	-1.4398	-1.4398
	N+	0.4234	0.4234	0.4234	0.4234	0.4234	0.4234	0.4234	0.4234	0.4234
	Ty-	0.2050	0.2050	0.2050	0.2050	0.2050	0.2050	0.2050	0.2050	0.2050
	Ty+	0.9263	0.9263	0.9263	0.9263	0.9263	0.9263	0.9263	0.9263	0.9263
	Tz-	-0.3696	-0.3691	-0.3686	-0.3681	-0.3676	-0.3672	-0.3667	-0.3662	-0.3657
	Tz+	0.0201	0.0202	0.0203	0.0205	0.0206	0.0207	0.0208	0.0210	0.0211
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

## Metal 3D

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	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0001	-0.0002	-0.0003	-0.0004	-0.0005	-0.0006	-0.0006	-0.0007
	My+	0.0000	0.0017	0.0033	0.0050	0.0066	0.0083	0.0099	0.0116	0.0132
	Mz-	0.0000	-0.0042	-0.0083	-0.0125	-0.0166	-0.0208	-0.0249	-0.0291	-0.0332
	Mz+	0.0000	-0.0009	-0.0018	-0.0028	-0.0037	-0.0046	-0.0055	-0.0064	-0.0074
63/64		0.000 m	0.603 m	1.205 m	1.808 m	2.410 m	3.013 m	3.615 m	4.218 m	4.820 m
		Envolvente (Acero laminado)								
	N-	-2.9140	-2.8923	-2.8706	-2.8489	-2.8272	-2.8055	-2.7838	-2.7621	-2.7404
	N+	0.1222	0.1351	0.1480	0.1608	0.1737	0.1866	0.1994	0.2123	0.2251
	Ty-	-0.0143	-0.0143	-0.0143	-0.0143	-0.0143	-0.0143	-0.0143	-0.0143	-0.0143
	Ty+	0.0069	0.0069	0.0069	0.0069	0.0069	0.0069	0.0069	0.0069	0.0069
	Tz-	-1.8075	-1.4460	-1.0845	-0.7230	-0.3615	-0.0385	-0.0047	-0.0047	-0.0047
	Tz+	0.0137	0.0137	0.0137	0.0137	0.0137	0.0457	0.3668	0.7283	1.0898
	Mt-	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-1.8701	-0.8943	-0.1280	-0.0065	-0.0142	-0.0221	-0.0304	-0.0386	-0.1471
	My+	0.0192	0.0109	0.0030	0.4125	0.7436	0.8481	0.7436	0.4125	0.0164
	Mz-	-0.0296	-0.0210	-0.0124	-0.0037	-0.0023	-0.0065	-0.0106	-0.0148	-0.0189
	Mz+	0.0142	0.0101	0.0059	0.0018	0.0049	0.0136	0.0222	0.0309	0.0395
64/65		0.000 m	0.276 m	0.553 m	0.829 m	1.105 m	1.381 m	1.658 m	1.934 m	2.210 m
		Envolvente (Acero laminado)								
	N-	-2.7033	-2.6933	-2.6834	-2.6734	-2.6635	-2.6535	-2.6436	-2.6336	-2.6236
	N+	0.2142	0.2201	0.2260	0.2319	0.2378	0.2437	0.2496	0.2555	0.2614
	Ty-	-0.0209	-0.0209	-0.0209	-0.0209	-0.0209	-0.0209	-0.0209	-0.0209	-0.0209
	Ty+	0.0417	0.0417	0.0417	0.0417	0.0417	0.0417	0.0417	0.0417	0.0417
	Tz-	-0.1760	-0.1482	-0.1205	-0.0927	-0.0649	-0.0372	-0.0162	-0.0162	-0.0162
	Tz+	0.0051	0.0051	0.0051	0.0051	0.0051	0.0051	0.0051	0.0242	0.0520
	Mt-	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.1471	-0.1025	-0.0652	-0.0368	-0.0290	-0.0248	-0.0207	-0.0166	-0.0125
	My+	0.0164	0.0150	0.0136	0.0122	0.0107	0.0114	0.0164	0.0134	0.0051
	Mz-	-0.0189	-0.0131	-0.0074	-0.0019	-0.0066	-0.0181	-0.0297	-0.0412	-0.0527
	Mz+	0.0395	0.0280	0.0165	0.0053	0.0042	0.0100	0.0157	0.0215	0.0273
64/68		0.000 m	0.126 m	0.252 m	0.378 m	0.503 m	0.629 m	0.755 m	0.881 m	1.007 m
		Envolvente (Acero Conformado)								
	N-	-0.3430	-0.3430	-0.3430	-0.3430	-0.3430	-0.3430	-0.3430	-0.3430	-0.3430
	N+	0.1468	0.1468	0.1468	0.1468	0.1468	0.1468	0.1468	0.1468	0.1468
	Ty-	-0.0203	-0.0190	-0.0177	-0.0165	-0.0152	-0.0139	-0.0127	-0.0114	-0.0101
	Ty+	0.2013	0.2021	0.2028	0.2036	0.2044	0.2051	0.2059	0.2066	0.2074
	Tz-	-0.6355	-0.6355	-0.6355	-0.6355	-0.6355	-0.6355	-0.6355	-0.6355	-0.6355
	Tz+	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.6344	-0.5544	-0.4744	-0.3944	-0.3144	-0.2344	-0.1544	-0.0744	-0.0003
	My+	0.0047	0.0041	0.0035	0.0030	0.0024	0.0018	0.0012	0.0007	0.0058
	Mz-	-0.0119	-0.0095	-0.0072	-0.0050	-0.0030	-0.0012	0.0000	-0.0003	-0.0007
	Mz+	0.2053	0.1799	0.1544	0.1288	0.1031	0.0774	0.0518	0.0266	0.0036
65/66		0.000 m	0.098 m	0.195 m	0.293 m	0.391 m	0.488 m	0.586 m	0.684 m	0.781 m
		Envolvente (Acero Conformado)								
	N-	-1.1950	-1.1933	-1.1917	-1.1901	-1.1885	-1.1869	-1.1852	-1.1836	-1.1820
	N+	0.0883	0.0893	0.0902	0.0912	0.0922	0.0931	0.0941	0.0950	0.0960
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.0393	-0.0294	-0.0196	-0.0098	0.0000	0.0000	0.0000	0.0000	0.0000

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	Tz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0098	0.0196	0.0294	0.0393
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My+	0.0000	0.0033	0.0058	0.0072	0.0077	0.0072	0.0058	0.0033	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
67/65		0.000 m	0.007 m	0.015 m	0.022 m	0.030 m	0.037 m	0.045 m	0.052 m	0.060 m
		Envolvente (Acero laminado)								
	N-	-0.0379	-0.0379	-0.0379	-0.0379	-0.0379	-0.0379	-0.0379	-0.0379	-0.0379
	N+	1.5701	1.5701	1.5701	1.5701	1.5701	1.5701	1.5701	1.5701	1.5701
	Ty-	-0.5739	-0.5739	-0.5739	-0.5739	-0.5739	-0.5739	-0.5739	-0.5739	-0.5739
	Ty+	0.9533	0.9533	0.9533	0.9533	0.9533	0.9533	0.9533	0.9533	0.9533
	Tz-	-0.0275	-0.0274	-0.0274	-0.0273	-0.0273	-0.0272	-0.0272	-0.0271	-0.0271
	Tz+	0.5528	0.5529	0.5530	0.5531	0.5531	0.5532	0.5533	0.5534	0.5535
	Mt-	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001
	Mt+	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004
	My-	-0.0535	-0.0574	-0.0616	-0.0657	-0.0698	-0.0740	-0.0781	-0.0823	-0.0864
	My+	0.0188	0.0190	0.0192	0.0194	0.0197	0.0199	0.0201	0.0203	0.0205
	Mz-	-0.0335	-0.0406	-0.0478	-0.0549	-0.0620	-0.0691	-0.0762	-0.0833	-0.0905
	Mz+	0.0022	0.0065	0.0108	0.0151	0.0194	0.0237	0.0280	0.0323	0.0366
106/65		0.000 m	0.009 m	0.017 m	0.026 m	0.035 m	0.044 m	0.052 m	0.061 m	0.070 m
		Envolvente (Acero laminado)								
	N-	-0.5535	-0.5535	-0.5535	-0.5535	-0.5535	-0.5535	-0.5535	-0.5535	-0.5535
	N+	3.0491	3.0491	3.0491	3.0491	3.0491	3.0491	3.0491	3.0491	3.0491
	Ty-	-0.0146	-0.0145	-0.0145	-0.0145	-0.0145	-0.0144	-0.0144	-0.0144	-0.0143
	Ty+	-0.0055	-0.0055	-0.0055	-0.0055	-0.0055	-0.0055	-0.0054	-0.0054	-0.0054
	Tz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz+	0.0050	0.0050	0.0050	0.0050	0.0050	0.0050	0.0050	0.0050	0.0050
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My+	0.0003	0.0003	0.0003	0.0002	0.0002	0.0001	0.0001	0.0000	0.0000
	Mz-	-0.0010	-0.0009	-0.0008	-0.0006	-0.0005	-0.0004	-0.0003	-0.0001	0.0000
	Mz+	-0.0004	-0.0003	-0.0003	-0.0002	-0.0002	-0.0001	-0.0001	0.0000	0.0000
107/65		0.000 m	0.009 m	0.017 m	0.026 m	0.035 m	0.044 m	0.052 m	0.061 m	0.070 m
		Envolvente (Acero laminado)								
	N-	-2.0271	-2.0271	-2.0271	-2.0271	-2.0271	-2.0271	-2.0271	-2.0271	-2.0271
	N+	1.9813	1.9813	1.9813	1.9813	1.9813	1.9814	1.9814	1.9814	1.9814
	Ty-	-0.0130	-0.0129	-0.0129	-0.0129	-0.0128	-0.0128	-0.0128	-0.0128	-0.0127
	Ty+	-0.0034	-0.0034	-0.0034	-0.0033	-0.0033	-0.0033	-0.0033	-0.0033	-0.0033
	Tz-	0.0014	0.0014	0.0014	0.0014	0.0014	0.0014	0.0014	0.0014	0.0014
	Tz+	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0001	0.0001	0.0001	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000
	My+	0.0004	0.0004	0.0003	0.0003	0.0002	0.0002	0.0001	0.0001	0.0000
	Mz-	-0.0009	-0.0008	-0.0007	-0.0006	-0.0004	-0.0003	-0.0002	-0.0001	0.0000
	Mz+	-0.0002	-0.0002	-0.0002	-0.0001	-0.0001	-0.0001	-0.0001	0.0000	0.0000
66/70		0.000 m	0.126 m	0.252 m	0.378 m	0.503 m	0.629 m	0.755 m	0.881 m	1.007 m
		Envolvente (Acero laminado)								
	N-	-0.2173	-0.2173	-0.2173	-0.2173	-0.2173	-0.2173	-0.2173	-0.2173	-0.2173
	N+	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020
	Ty-	-0.6315	-0.6212	-0.6110	-0.6007	-0.5904	-0.5802	-0.5699	-0.5596	-0.5494

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE** Adrián Freijomil Aradas

	Ty+	0.0610	0.0671	0.0732	0.0793	0.0854	0.0915	0.0976	0.1036	0.1097
	Tz-	-0.0361	-0.0361	-0.0361	-0.0361	-0.0361	-0.0361	-0.0361	-0.0361	-0.0361
	Tz+	0.0033	0.0033	0.0033	0.0033	0.0033	0.0033	0.0033	0.0033	0.0033
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0254	-0.0209	-0.0163	-0.0118	-0.0073	-0.0027	-0.0002	-0.0003	-0.0007
	My+	0.0027	0.0023	0.0018	0.0014	0.0010	0.0006	0.0020	0.0064	0.0109
	Mz-	-0.5600	-0.4811	-0.4036	-0.3273	-0.2537	-0.1825	-0.1127	-0.0441	0.0018
	Mz+	0.0877	0.0797	0.0708	0.0613	0.0509	0.0398	0.0279	0.0152	0.0391
69/67		0.000 m	0.119 m	0.237 m	0.356 m	0.475 m	0.593 m	0.712 m	0.831 m	0.949 m
		Envolvente (Acero laminado)								
	N-	-0.6824	-0.6823	-0.6823	-0.6822	-0.6822	-0.6821	-0.6821	-0.6820	-0.6820
	N+	0.8203	0.8204	0.8205	0.8206	0.8207	0.8208	0.8209	0.8210	0.8211
	Ty-	-0.0093	-0.0093	-0.0093	-0.0093	-0.0093	-0.0093	-0.0093	-0.0093	-0.0093
	Ty+	0.0708	0.0708	0.0708	0.0708	0.0708	0.0708	0.0708	0.0708	0.0708
	Tz-	-0.0354	-0.0347	-0.0339	-0.0331	-0.0324	-0.0316	-0.0308	-0.0301	-0.0293
	Tz+	0.1142	0.1155	0.1168	0.1181	0.1194	0.1207	0.1220	0.1233	0.1245
	Mt-	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001
	Mt+	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004
	My-	-0.0120	-0.0090	-0.0062	-0.0034	-0.0007	-0.0105	-0.0246	-0.0390	-0.0535
	My+	0.0601	0.0464	0.0327	0.0187	0.0070	0.0080	0.0117	0.0153	0.0188
	Mz-	-0.0067	-0.0056	-0.0045	-0.0033	-0.0029	-0.0083	-0.0167	-0.0251	-0.0335
	Mz+	0.0337	0.0253	0.0169	0.0085	0.0002	-0.0011	0.0000	0.0011	0.0022
67/107		0.000 m	0.004 m	0.009 m	0.013 m	0.018 m	0.022 m	0.027 m	0.031 m	0.036 m
		Envolvente (Acero Conformado)								
	N-	-0.8916	-0.8916	-0.8916	-0.8916	-0.8916	-0.8916	-0.8916	-0.8916	-0.8916
	N+	0.5646	0.5646	0.5646	0.5646	0.5646	0.5646	0.5646	0.5646	0.5646
	Ty-	0.0627	0.0627	0.0627	0.0627	0.0627	0.0627	0.0627	0.0627	0.0627
	Ty+	1.4003	1.4003	1.4003	1.4003	1.4003	1.4003	1.4003	1.4003	1.4003
	Tz-	-0.5269	-0.5264	-0.5260	-0.5255	-0.5250	-0.5245	-0.5241	-0.5236	-0.5231
	Tz+	-0.0070	-0.0069	-0.0068	-0.0067	-0.0065	-0.0064	-0.0063	-0.0062	-0.0060
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	0.0000	0.0001	0.0001	0.0001	0.0002	0.0002	0.0002	0.0002
	My+	0.0000	0.0024	0.0047	0.0071	0.0094	0.0118	0.0141	0.0165	0.0188
	Mz-	0.0000	-0.0063	-0.0126	-0.0188	-0.0251	-0.0314	-0.0377	-0.0440	-0.0503
	Mz+	0.0000	-0.0003	-0.0006	-0.0008	-0.0011	-0.0014	-0.0017	-0.0020	-0.0022
68/69		0.000 m	0.268 m	0.535 m	0.803 m	1.070 m	1.338 m	1.606 m	1.873 m	2.141 m
		Envolvente (Acero Conformado)								
	N-	-0.0056	-0.0027	0.0000	0.0026	0.0052	0.0079	0.0105	0.0131	0.0158
	N+	0.1226	0.1267	0.1312	0.1356	0.1401	0.1445	0.1490	0.1534	0.1578
	Ty-	-0.1226	-0.1226	-0.1226	-0.1226	-0.1226	-0.1226	-0.1226	-0.1226	-0.1226
	Ty+	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012
	Tz-	-0.0035	-0.0035	-0.0035	-0.0035	-0.0035	-0.0035	-0.0035	-0.0035	-0.0035
	Tz+	0.3790	0.4059	0.4327	0.4596	0.4865	0.5134	0.5403	0.5672	0.5941
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.1052	-0.2172	-0.3368	-0.4632	-0.5972	-0.7380	-0.8863	-1.0416
	My+	0.0000	0.0009	0.0019	0.0028	0.0038	0.0047	0.0057	0.0066	0.0076
	Mz-	0.0000	-0.0003	-0.0006	-0.0010	-0.0013	-0.0016	-0.0019	-0.0023	-0.0026
	Mz+	0.0000	0.0328	0.0656	0.0984	0.1312	0.1641	0.1969	0.2297	0.2625
68/72		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-0.2220	-0.2220	-0.2220	-0.2220	-0.2220	-0.2220	-0.2220	-0.2220	-0.2220

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE** Adrián Freijomil Aradas

	N+	0.1528	0.1528	0.1528	0.1528	0.1528	0.1528	0.1528	0.1528	0.1528
	Ty-	-0.0049	-0.0037	-0.0024	-0.0012	0.0001	0.0008	0.0016	0.0023	0.0030
	Ty+	0.0850	0.0858	0.0865	0.0873	0.0881	0.0893	0.0906	0.0918	0.0931
	Tz-	-0.2568	-0.2568	-0.2568	-0.2568	-0.2568	-0.2568	-0.2568	-0.2568	-0.2568
	Tz+	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0003	-0.0003	-0.0003	-0.0004	-0.0005	-0.0006	-0.0008	-0.0010	-0.0011
	My+	0.0058	0.0378	0.0698	0.1019	0.1339	0.1660	0.1981	0.2302	0.2623
	Mz-	-0.0007	-0.0112	-0.0219	-0.0327	-0.0437	-0.0547	-0.0658	-0.0770	-0.0883
	Mz+	0.0036	0.0040	0.0043	0.0044	0.0044	0.0042	0.0040	0.0035	0.0029
69/70		0.000 m	0.106 m	0.213 m	0.319 m	0.425 m	0.532 m	0.638 m	0.745 m	0.851 m
		Envolvente (Acero Conformado)								
	N-	-0.0731	-0.0721	-0.0710	-0.0700	-0.0689	-0.0679	-0.0668	-0.0658	-0.0647
	N+	0.2331	0.2349	0.2367	0.2384	0.2402	0.2420	0.2437	0.2455	0.2473
	Ty-	-0.2824	-0.2824	-0.2824	-0.2824	-0.2824	-0.2824	-0.2824	-0.2824	-0.2824
	Ty+	0.3518	0.3518	0.3518	0.3518	0.3518	0.3518	0.3518	0.3518	0.3518
	Tz-	-0.1111	-0.1004	-0.0897	-0.0790	-0.0683	-0.0576	-0.0469	-0.0362	-0.0255
	Tz+	0.0029	0.0029	0.0029	0.0029	0.0029	0.0029	0.0029	0.0029	0.0029
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0581	-0.0469	-0.0368	-0.0278	-0.0200	-0.0133	-0.0077	-0.0033	0.0000
	My+	0.0025	0.0022	0.0019	0.0016	0.0013	0.0009	0.0006	0.0003	0.0000
	Mz-	-0.2403	-0.2102	-0.1802	-0.1502	-0.1201	-0.0901	-0.0601	-0.0300	0.0000
	Mz+	0.2994	0.2619	0.2245	0.1871	0.1497	0.1123	0.0748	0.0374	0.0000
71/69		0.000 m	0.078 m	0.156 m	0.234 m	0.312 m	0.390 m	0.468 m	0.545 m	0.623 m
		Envolvente (Acero laminado)								
	N-	-0.1497	-0.1496	-0.1496	-0.1496	-0.1495	-0.1495	-0.1495	-0.1494	-0.1494
	N+	0.5374	0.5374	0.5375	0.5375	0.5376	0.5377	0.5377	0.5378	0.5378
	Ty-	-0.0267	-0.0267	-0.0267	-0.0267	-0.0267	-0.0267	-0.0267	-0.0267	-0.0267
	Ty+	0.0094	0.0094	0.0094	0.0094	0.0094	0.0094	0.0094	0.0094	0.0094
	Tz-	-0.1163	-0.1158	-0.1153	-0.1148	-0.1143	-0.1138	-0.1133	-0.1128	-0.1123
	Tz+	0.2454	0.2462	0.2471	0.2479	0.2488	0.2496	0.2505	0.2513	0.2522
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0332	-0.0242	-0.0164	-0.0094	-0.0181	-0.0375	-0.0570	-0.0765	-0.0961
	My+	0.0589	0.0398	0.0206	0.0020	0.0027	0.0116	0.0205	0.0293	0.0380
	Mz-	-0.0092	-0.0071	-0.0051	-0.0030	-0.0009	-0.0004	-0.0011	-0.0019	-0.0026
	Mz+	0.0032	0.0025	0.0018	0.0010	0.0003	0.0012	0.0033	0.0053	0.0074
70/74		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-0.4274	-0.4274	-0.4274	-0.4274	-0.4274	-0.4274	-0.4274	-0.4274	-0.4274
	N+	0.1350	0.1350	0.1350	0.1350	0.1350	0.1350	0.1350	0.1350	0.1350
	Ty-	-0.3037	-0.2935	-0.2833	-0.2731	-0.2629	-0.2527	-0.2425	-0.2323	-0.2221
	Ty+	0.0450	0.0510	0.0571	0.0631	0.0692	0.0752	0.0813	0.0873	0.0934
	Tz-	-0.0105	-0.0105	-0.0105	-0.0105	-0.0105	-0.0105	-0.0105	-0.0105	-0.0105
	Tz+	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0007	-0.0007	-0.0007	-0.0008	-0.0008	-0.0009	-0.0009	-0.0010	-0.0010
	My+	0.0109	0.0122	0.0135	0.0148	0.0162	0.0175	0.0188	0.0201	0.0214
	Mz-	0.0018	-0.0042	-0.0110	-0.0185	-0.0268	-0.0358	-0.0456	-0.0561	-0.0674
	Mz+	0.0391	0.0726	0.1076	0.1421	0.1754	0.2075	0.2382	0.2677	0.2959
73/71		0.000 m	0.047 m	0.095 m	0.142 m	0.190 m	0.237 m	0.284 m	0.332 m	0.379 m



## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

		Envolvente (Acero laminado)								
	N-	-0.0594	-0.0594	-0.0594	-0.0594	-0.0594	-0.0593	-0.0593	-0.0593	-0.0593
	N+	0.4011	0.4011	0.4011	0.4012	0.4012	0.4012	0.4013	0.4013	0.4013
	Ty-	-0.0198	-0.0198	-0.0198	-0.0198	-0.0198	-0.0198	-0.0198	-0.0198	-0.0198
	Ty+	0.0563	0.0563	0.0563	0.0563	0.0563	0.0563	0.0563	0.0563	0.0563
	Tz-	-0.1555	-0.1550	-0.1545	-0.1540	-0.1535	-0.1529	-0.1524	-0.1519	-0.1514
	Tz+	0.1772	0.1775	0.1778	0.1781	0.1784	0.1787	0.1790	0.1793	0.1796
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0038	0.0024	0.0086	0.0029	-0.0043	-0.0115	-0.0187	-0.0260	-0.0332
	My+	0.0400	0.0326	0.0252	0.0228	0.0301	0.0373	0.0445	0.0518	0.0589
	Mz-	-0.0043	-0.0033	-0.0024	-0.0015	-0.0005	-0.0012	-0.0039	-0.0065	-0.0092
	Mz+	0.0121	0.0095	0.0068	0.0041	0.0015	0.0004	0.0014	0.0023	0.0032
71/112		0.000 m	0.122 m	0.244 m	0.366 m	0.489 m	0.611 m	0.733 m	0.855 m	0.977 m
		Envolvente (Acero Conformado)								
	N-	-0.0291	-0.0291	-0.0291	-0.0291	-0.0291	-0.0291	-0.0291	-0.0291	-0.0291
	N+	0.0830	0.0830	0.0830	0.0830	0.0830	0.0830	0.0830	0.0830	0.0830
	Ty-	-0.0715	-0.0715	-0.0715	-0.0715	-0.0715	-0.0715	-0.0715	-0.0715	-0.0715
	Ty+	0.1079	0.1079	0.1079	0.1079	0.1079	0.1079	0.1079	0.1079	0.1079
	Tz-	-0.4072	-0.3941	-0.3811	-0.3680	-0.3550	-0.3419	-0.3289	-0.3159	-0.3028
	Tz+	0.2850	0.2738	0.2625	0.2512	0.2400	0.2287	0.2174	0.2061	0.1949
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0341	-0.0669	-0.0982	-0.1283	-0.1569	-0.1841	-0.2100	-0.2345
	My+	0.0000	0.0489	0.0963	0.1420	0.1862	0.2287	0.2697	0.3091	0.3469
	Mz-	0.0000	-0.0132	-0.0263	-0.0395	-0.0527	-0.0659	-0.0790	-0.0922	-0.1054
	Mz+	0.0000	0.0087	0.0175	0.0262	0.0350	0.0437	0.0524	0.0612	0.0699
72/73		0.000 m	0.259 m	0.518 m	0.777 m	1.035 m	1.294 m	1.553 m	1.812 m	2.071 m
		Envolvente (Acero Conformado)								
	N-	0.0059	0.0084	0.0110	0.0135	0.0161	0.0186	0.0212	0.0237	0.0263
	N+	0.0934	0.0977	0.1020	0.1063	0.1106	0.1149	0.1192	0.1235	0.1278
	Ty-	-0.0833	-0.0833	-0.0833	-0.0833	-0.0833	-0.0833	-0.0833	-0.0833	-0.0833
	Ty+	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005
	Tz-	-0.0014	-0.0014	-0.0014	-0.0014	-0.0014	-0.0014	-0.0014	-0.0014	-0.0014
	Tz+	0.2434	0.2694	0.2954	0.3214	0.3474	0.3735	0.3995	0.4255	0.4515
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0665	-0.1395	-0.2194	-0.3059	-0.3993	-0.4992	-0.6061	-0.7195
	My+	0.0000	0.0004	0.0007	0.0011	0.0014	0.0018	0.0022	0.0025	0.0029
	Mz-	0.0000	-0.0001	-0.0002	-0.0004	-0.0005	-0.0006	-0.0007	-0.0008	-0.0010
	Mz+	0.0000	0.0216	0.0431	0.0647	0.0862	0.1078	0.1293	0.1509	0.1724
72/75		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-0.1388	-0.1388	-0.1388	-0.1388	-0.1388	-0.1388	-0.1388	-0.1388	-0.1388
	N+	0.1562	0.1562	0.1562	0.1562	0.1562	0.1562	0.1562	0.1562	0.1562
	Ty-	-0.0050	-0.0037	-0.0024	-0.0012	0.0000	0.0007	0.0015	0.0022	0.0030
	Ty+	0.0017	0.0025	0.0032	0.0040	0.0048	0.0061	0.0073	0.0086	0.0099
	Tz-	-0.0138	-0.0138	-0.0138	-0.0138	-0.0138	-0.0138	-0.0138	-0.0138	-0.0138
	Tz+	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0011	-0.0011	-0.0011	-0.0012	-0.0012	-0.0012	-0.0013	-0.0014	-0.0014
	My+	0.2623	0.2640	0.2656	0.2673	0.2690	0.2707	0.2724	0.2742	0.2759
	Mz-	-0.0883	-0.0885	-0.0889	-0.0894	-0.0899	-0.0905	-0.0913	-0.0921	-0.0930

## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

	Mz+	0.0029	0.0034	0.0038	0.0040	0.0041	0.0040	0.0037	0.0033	0.0027
73/74		0.000 m	0.115 m	0.230 m	0.345 m	0.460 m	0.576 m	0.691 m	0.806 m	0.921 m
		Envolvente (Acero Conformado)								
	N-	-0.1171	-0.1159	-0.1148	-0.1137	-0.1125	-0.1114	-0.1103	-0.1091	-0.1080
	N+	0.1637	0.1656	0.1675	0.1694	0.1713	0.1733	0.1752	0.1771	0.1790
	Ty-	-0.2235	-0.2235	-0.2235	-0.2235	-0.2235	-0.2235	-0.2235	-0.2235	-0.2235
	Ty+	0.2787	0.2787	0.2787	0.2787	0.2787	0.2787	0.2787	0.2787	0.2787
	Tz-	-0.1031	-0.0915	-0.0800	-0.0684	-0.0568	-0.0453	-0.0337	-0.0221	-0.0105
	Tz+	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0523	-0.0412	-0.0313	-0.0227	-0.0155	-0.0097	-0.0051	-0.0019	0.0000
	My+	0.0007	0.0006	0.0005	0.0004	0.0003	0.0003	0.0002	0.0001	0.0000
	Mz-	-0.2058	-0.1801	-0.1544	-0.1286	-0.1029	-0.0772	-0.0515	-0.0257	0.0000
Mz+	0.2566	0.2246	0.1925	0.1604	0.1283	0.0962	0.0642	0.0321	0.0000	
76/73		0.000 m	0.125 m	0.251 m	0.376 m	0.501 m	0.627 m	0.752 m	0.877 m	1.002 m
		Envolvente (Acero laminado)								
	N-	-0.0494	-0.0493	-0.0492	-0.0491	-0.0490	-0.0489	-0.0488	-0.0487	-0.0486
	N+	-0.0011	-0.0011	-0.0010	-0.0010	-0.0009	-0.0009	-0.0008	-0.0007	-0.0007
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.0174	-0.0160	-0.0147	-0.0133	-0.0119	-0.0106	-0.0092	-0.0078	-0.0065
	Tz+	-0.0035	-0.0026	-0.0018	-0.0010	-0.0002	0.0006	0.0014	0.0022	0.0030
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0069	-0.0048	-0.0029	-0.0011	0.0003	0.0002	0.0001	-0.0001	-0.0004
	My+	-0.0007	-0.0003	0.0000	0.0002	0.0005	0.0019	0.0031	0.0042	0.0051
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
74/77		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-0.6504	-0.6504	-0.6504	-0.6504	-0.6504	-0.6504	-0.6504	-0.6504	-0.6504
	N+	0.4133	0.4133	0.4133	0.4133	0.4133	0.4133	0.4133	0.4133	0.4133
	Ty-	-0.0435	-0.0333	-0.0231	-0.0129	-0.0034	0.0026	0.0087	0.0147	0.0208
	Ty+	-0.0125	-0.0065	-0.0004	0.0056	0.0125	0.0227	0.0329	0.0431	0.0533
	Tz-	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003
	Tz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0010	-0.0010	-0.0009	-0.0009	-0.0009	-0.0008	-0.0008	-0.0008	-0.0008
	My+	0.0214	0.0214	0.0214	0.0214	0.0214	0.0214	0.0214	0.0214	0.0214
	Mz-	-0.0674	-0.0660	-0.0653	-0.0653	-0.0661	-0.0677	-0.0700	-0.0731	-0.0770
Mz+	0.2959	0.3004	0.3037	0.3057	0.3064	0.3059	0.3040	0.3009	0.2966	
75/76		0.000 m	0.250 m	0.500 m	0.750 m	1.000 m	1.251 m	1.501 m	1.751 m	2.001 m
		Envolvente (Acero Conformado)								
	N-	0.0041	0.0065	0.0090	0.0114	0.0139	0.0164	0.0188	0.0213	0.0238
	N+	0.0949	0.0990	0.1032	0.1073	0.1115	0.1156	0.1198	0.1240	0.1281
	Ty-	-0.0824	-0.0824	-0.0824	-0.0824	-0.0824	-0.0824	-0.0824	-0.0824	-0.0824
	Ty+	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005
	Tz-	-0.0037	-0.0037	-0.0037	-0.0037	-0.0037	-0.0037	-0.0037	-0.0037	-0.0037
	Tz+	0.2459	0.2710	0.2962	0.3213	0.3464	0.3716	0.3967	0.4219	0.4470
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0648	-0.1356	-0.2129	-0.2963	-0.3862	-0.4822	-0.5847	-0.6932

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas**

	My+	0.0000	0.0009	0.0018	0.0028	0.0037	0.0046	0.0055	0.0064	0.0074
	Mz-	0.0000	-0.0001	-0.0003	-0.0004	-0.0005	-0.0007	-0.0008	-0.0010	-0.0011
	Mz+	0.0000	0.0206	0.0412	0.0618	0.0824	0.1030	0.1236	0.1442	0.1648
75/79		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-0.0580	-0.0580	-0.0580	-0.0580	-0.0580	-0.0580	-0.0580	-0.0580	-0.0580
	N+	0.1596	0.1596	0.1596	0.1596	0.1596	0.1596	0.1596	0.1596	0.1596
	Ty-	-0.0850	-0.0838	-0.0825	-0.0813	-0.0806	-0.0798	-0.0791	-0.0783	-0.0776
	Ty+	-0.0010	-0.0003	0.0005	0.0013	0.0026	0.0038	0.0051	0.0063	0.0076
	Tz-	-0.0049	-0.0049	-0.0049	-0.0049	-0.0049	-0.0049	-0.0049	-0.0049	-0.0049
	Tz+	0.2328	0.2328	0.2328	0.2328	0.2328	0.2328	0.2328	0.2328	0.2328
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0014	-0.0015	-0.0016	-0.0017	-0.0018	-0.0020	-0.0021	-0.0022	-0.0023
	My+	0.2759	0.2471	0.2183	0.1895	0.1607	0.1319	0.1031	0.0743	0.0455
	Mz-	-0.0930	-0.0826	-0.0723	-0.0621	-0.0520	-0.0420	-0.0320	-0.0222	-0.0124
	Mz+	0.0027	0.0030	0.0030	0.0030	0.0027	0.0023	0.0018	0.0011	0.0003
76/77		0.000 m	0.124 m	0.248 m	0.372 m	0.495 m	0.619 m	0.743 m	0.867 m	0.991 m
		Envolvente (Acero Conformado)								
	N-	-0.1748	-0.1736	-0.1724	-0.1712	-0.1699	-0.1687	-0.1675	-0.1663	-0.1651
	N+	0.2437	0.2458	0.2479	0.2499	0.2520	0.2540	0.2561	0.2581	0.2602
	Ty-	-0.1776	-0.1776	-0.1776	-0.1776	-0.1776	-0.1776	-0.1776	-0.1776	-0.1776
	Ty+	0.2246	0.2246	0.2246	0.2246	0.2246	0.2246	0.2246	0.2246	0.2246
	Tz-	-0.1072	-0.0947	-0.0823	-0.0698	-0.0574	-0.0449	-0.0325	-0.0201	-0.0076
	Tz+	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0569	-0.0444	-0.0334	-0.0240	-0.0161	-0.0098	-0.0050	-0.0017	0.0000
	My+	0.0008	0.0007	0.0006	0.0005	0.0004	0.0003	0.0002	0.0001	0.0000
	Mz-	-0.1760	-0.1540	-0.1320	-0.1100	-0.0880	-0.0660	-0.0440	-0.0220	0.0000
	Mz+	0.2225	0.1947	0.1669	0.1391	0.1113	0.0835	0.0556	0.0278	0.0000
78/76		0.000 m	0.024 m	0.048 m	0.072 m	0.096 m	0.120 m	0.143 m	0.167 m	0.191 m
		Envolvente (Acero laminado)								
	N-	-0.4791	-0.4791	-0.4791	-0.4790	-0.4790	-0.4790	-0.4790	-0.4790	-0.4789
	N+	0.0652	0.0653	0.0653	0.0653	0.0653	0.0653	0.0653	0.0653	0.0653
	Ty-	-0.1337	-0.1337	-0.1337	-0.1337	-0.1337	-0.1337	-0.1337	-0.1337	-0.1337
	Ty+	0.0339	0.0339	0.0339	0.0339	0.0339	0.0339	0.0339	0.0339	0.0339
	Tz-	-0.2446	-0.2445	-0.2443	-0.2442	-0.2440	-0.2439	-0.2437	-0.2436	-0.2434
	Tz+	0.2158	0.2161	0.2163	0.2166	0.2169	0.2171	0.2174	0.2176	0.2179
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0232	-0.0182	-0.0131	-0.0081	-0.0030	0.0021	0.0071	0.0121	0.0120
	My+	0.0629	0.0578	0.0526	0.0474	0.0423	0.0371	0.0323	0.0343	0.0372
	Mz-	-0.0071	-0.0039	-0.0007	-0.0006	-0.0014	-0.0022	-0.0031	-0.0039	-0.0047
	Mz+	0.0018	0.0010	0.0002	0.0025	0.0057	0.0089	0.0121	0.0153	0.0185
77/81		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-0.8280	-0.8280	-0.8280	-0.8280	-0.8280	-0.8280	-0.8280	-0.8280	-0.8280
	N+	0.6378	0.6378	0.6378	0.6378	0.6378	0.6378	0.6378	0.6378	0.6378
	Ty-	-0.1313	-0.1253	-0.1193	-0.1132	-0.1072	-0.1011	-0.0951	-0.0890	-0.0830
	Ty+	0.3003	0.3105	0.3207	0.3309	0.3411	0.3513	0.3615	0.3717	0.3819
	Tz-	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010
	Tz+	0.0076	0.0076	0.0076	0.0076	0.0076	0.0076	0.0076	0.0076	0.0076
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas**

	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0008	-0.0007	-0.0008	-0.0008	-0.0008	-0.0009	-0.0009	-0.0010	-0.0011
	My+	0.0214	0.0204	0.0195	0.0185	0.0176	0.0166	0.0157	0.0148	0.0139
	Mz-	-0.0770	-0.0609	-0.0456	-0.0311	-0.0173	-0.0043	0.0080	0.0005	-0.0446
	Mz+	0.2966	0.2584	0.2189	0.1782	0.1362	0.0929	0.0484	0.0262	0.0302
80/78		0.000 m	0.101 m	0.203 m	0.304 m	0.406 m	0.507 m	0.608 m	0.710 m	0.811 m
		Envolvente (Acero laminado)								
	N-	-0.5732	-0.5731	-0.5731	-0.5730	-0.5729	-0.5728	-0.5728	-0.5727	-0.5726
	N+	0.1269	0.1270	0.1270	0.1271	0.1271	0.1271	0.1272	0.1272	0.1273
	Ty-	-0.0036	-0.0036	-0.0036	-0.0036	-0.0036	-0.0036	-0.0036	-0.0036	-0.0036
	Ty+	0.0142	0.0142	0.0142	0.0142	0.0142	0.0142	0.0142	0.0142	0.0142
	Tz-	-0.1856	-0.1845	-0.1834	-0.1823	-0.1812	-0.1801	-0.1790	-0.1779	-0.1768
	Tz+	0.0556	0.0562	0.0569	0.0575	0.0582	0.0588	0.0595	0.0602	0.0608
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0841	-0.0653	-0.0466	-0.0281	-0.0097	-0.0052	-0.0110	-0.0171	-0.0232
	My+	0.0240	0.0183	0.0126	0.0068	0.0009	0.0087	0.0269	0.0450	0.0629
	Mz-	-0.0011	-0.0008	-0.0004	0.0000	-0.0013	-0.0028	-0.0042	-0.0057	-0.0071
	Mz+	0.0044	0.0030	0.0016	0.0001	0.0003	0.0007	0.0011	0.0014	0.0018
78/123		0.000 m	0.240 m	0.480 m	0.719 m	0.959 m	1.199 m	1.439 m	1.679 m	1.919 m
		Envolvente (Acero Conformado)								
	N-	-0.0375	-0.0375	-0.0375	-0.0375	-0.0375	-0.0375	-0.0375	-0.0375	-0.0375
	N+	0.1480	0.1480	0.1480	0.1480	0.1480	0.1480	0.1480	0.1480	0.1480
	Ty-	-0.0425	-0.0425	-0.0425	-0.0425	-0.0425	-0.0425	-0.0425	-0.0425	-0.0425
	Ty+	0.0652	0.0652	0.0652	0.0652	0.0652	0.0652	0.0652	0.0652	0.0652
	Tz-	-0.3950	-0.3694	-0.3438	-0.3181	-0.2925	-0.2669	-0.2413	-0.2157	-0.1901
	Tz+	0.2909	0.2688	0.2466	0.2245	0.2024	0.1802	0.1581	0.1360	0.1139
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0670	-0.1289	-0.1853	-0.2366	-0.2824	-0.3230	-0.3582	-0.3883
	My+	0.0000	0.0915	0.1772	0.2564	0.3298	0.3967	0.4578	0.5125	0.5612
	Mz-	0.0000	-0.0156	-0.0313	-0.0469	-0.0625	-0.0782	-0.0938	-0.1095	-0.1251
	Mz+	0.0000	0.0102	0.0204	0.0306	0.0408	0.0510	0.0612	0.0714	0.0816
79/80		0.000 m	0.241 m	0.483 m	0.724 m	0.965 m	1.207 m	1.448 m	1.689 m	1.931 m
		Envolvente (Acero Conformado)								
	N-	-0.0066	-0.0034	-0.0011	0.0013	0.0037	0.0061	0.0084	0.0108	0.0132
	N+	0.1448	0.1481	0.1521	0.1561	0.1601	0.1641	0.1681	0.1721	0.1761
	Ty-	-0.1359	-0.1359	-0.1359	-0.1359	-0.1359	-0.1359	-0.1359	-0.1359	-0.1359
	Ty+	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010
	Tz-	-0.0023	-0.0023	-0.0023	-0.0023	-0.0023	-0.0023	-0.0023	-0.0023	-0.0023
	Tz+	0.4424	0.4666	0.4909	0.5151	0.5394	0.5636	0.5879	0.6121	0.6364
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.1098	-0.2252	-0.3467	-0.4739	-0.6071	-0.7460	-0.8909	-1.0414
	My+	0.0000	0.0006	0.0011	0.0017	0.0022	0.0028	0.0034	0.0039	0.0045
	Mz-	0.0000	-0.0002	-0.0005	-0.0007	-0.0010	-0.0012	-0.0015	-0.0017	-0.0019
	Mz+	0.0000	0.0328	0.0656	0.0984	0.1312	0.1640	0.1968	0.2296	0.2624
79/84		0.000 m	0.124 m	0.248 m	0.372 m	0.497 m	0.621 m	0.745 m	0.869 m	0.993 m
		Envolvente (Acero Conformado)								
	N-	-0.0590	-0.0590	-0.0590	-0.0590	-0.0590	-0.0590	-0.0590	-0.0590	-0.0590
	N+	0.1665	0.1665	0.1665	0.1665	0.1665	0.1665	0.1665	0.1665	0.1665
	Ty-	-0.2224	-0.2217	-0.2209	-0.2202	-0.2194	-0.2187	-0.2180	-0.2172	-0.2165
	Ty+	0.0142	0.0154	0.0167	0.0179	0.0192	0.0204	0.0217	0.0229	0.0242
	Tz-	-0.0016	-0.0016	-0.0016	-0.0016	-0.0016	-0.0016	-0.0016	-0.0016	-0.0016

## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

	Tz+	0.6728	0.6728	0.6728	0.6728	0.6728	0.6728	0.6728	0.6728	0.6728
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0023	-0.0410	-0.1244	-0.2079	-0.2913	-0.3748	-0.4582	-0.5417	-0.6251
	My+	0.0455	0.0059	0.0059	0.0058	0.0057	0.0057	0.0056	0.0055	0.0055
	Mz-	-0.0124	-0.0017	-0.0037	-0.0058	-0.0081	-0.0106	-0.0132	-0.0160	-0.0189
	Mz+	0.0003	0.0151	0.0426	0.0700	0.0972	0.1244	0.1515	0.1785	0.2055
80/81		0.000 m	0.133 m	0.265 m	0.398 m	0.530 m	0.663 m	0.796 m	0.928 m	1.061 m
		Envolvente (Acero Conformado)								
	N-	-0.0738	-0.0725	-0.0712	-0.0699	-0.0686	-0.0673	-0.0660	-0.0647	-0.0634
	N+	0.2263	0.2285	0.2307	0.2329	0.2351	0.2373	0.2395	0.2417	0.2439
	Ty-	-0.1411	-0.1411	-0.1411	-0.1411	-0.1411	-0.1411	-0.1411	-0.1411	-0.1411
	Ty+	0.1837	0.1837	0.1837	0.1837	0.1837	0.1837	0.1837	0.1837	0.1837
	Tz-	-0.1179	-0.1045	-0.0912	-0.0779	-0.0646	-0.0512	-0.0379	-0.0246	-0.0112
	Tz+	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0685	-0.0538	-0.0408	-0.0296	-0.0201	-0.0125	-0.0065	-0.0024	0.0000
	My+	0.0012	0.0011	0.0009	0.0008	0.0006	0.0005	0.0003	0.0002	0.0000
	Mz-	-0.1497	-0.1310	-0.1123	-0.0936	-0.0749	-0.0561	-0.0374	-0.0187	0.0000
	Mz+	0.1949	0.1705	0.1462	0.1218	0.0974	0.0731	0.0487	0.0244	0.0000
82/80		0.000 m	0.095 m	0.190 m	0.286 m	0.381 m	0.476 m	0.571 m	0.666 m	0.762 m
		Envolvente (Acero laminado)								
	N-	-0.0933	-0.0932	-0.0932	-0.0931	-0.0931	-0.0930	-0.0930	-0.0929	-0.0929
	N+	0.1386	0.1387	0.1388	0.1389	0.1389	0.1390	0.1391	0.1391	0.1392
	Ty-	-0.0322	-0.0322	-0.0322	-0.0322	-0.0322	-0.0322	-0.0322	-0.0322	-0.0322
	Ty+	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065
	Tz-	-0.1294	-0.1284	-0.1273	-0.1263	-0.1252	-0.1242	-0.1232	-0.1221	-0.1211
	Tz+	-0.0137	-0.0131	-0.0125	-0.0119	-0.0113	-0.0106	-0.0100	-0.0094	-0.0088
	Mt-	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0501	-0.0380	-0.0265	-0.0164	-0.0063	-0.0015	0.0015	0.0044	0.0073
	My+	0.0093	0.0107	0.0126	0.0164	0.0200	0.0236	0.0287	0.0388	0.0504
	Mz-	-0.0109	-0.0078	-0.0048	-0.0017	-0.0003	-0.0009	-0.0015	-0.0022	-0.0028
	Mz+	0.0032	0.0027	0.0022	0.0017	0.0016	0.0044	0.0075	0.0106	0.0136
81/86		0.000 m	0.124 m	0.248 m	0.372 m	0.497 m	0.621 m	0.745 m	0.869 m	0.993 m
		Envolvente (Acero laminado)								
	N-	-0.9691	-0.9691	-0.9691	-0.9691	-0.9691	-0.9691	-0.9691	-0.9691	-0.9691
	N+	0.8215	0.8215	0.8215	0.8215	0.8215	0.8215	0.8215	0.8215	0.8215
	Ty-	-0.1464	-0.1404	-0.1344	-0.1284	-0.1224	-0.1164	-0.1104	-0.1044	-0.0984
	Ty+	0.6258	0.6360	0.6461	0.6562	0.6663	0.6765	0.6866	0.6967	0.7069
	Tz-	-0.0021	-0.0021	-0.0021	-0.0021	-0.0021	-0.0021	-0.0021	-0.0021	-0.0021
	Tz+	0.0189	0.0189	0.0189	0.0189	0.0189	0.0189	0.0189	0.0189	0.0189
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0011	-0.0014	-0.0018	-0.0021	-0.0024	-0.0027	-0.0030	-0.0034	-0.0050
	My+	0.0139	0.0117	0.0095	0.0073	0.0051	0.0029	0.0018	0.0021	0.0024
	Mz-	-0.0446	-0.1229	-0.2024	-0.2833	-0.3653	-0.4487	-0.5333	-0.6191	-0.7062
	Mz+	0.0302	0.0480	0.0651	0.0814	0.0969	0.1118	0.1258	0.1392	0.1517
85/82		0.000 m	0.029 m	0.058 m	0.088 m	0.117 m	0.146 m	0.175 m	0.205 m	0.234 m
		Envolvente (Acero laminado)								
	N-	-0.0603	-0.0603	-0.0603	-0.0603	-0.0603	-0.0603	-0.0602	-0.0602	-0.0602
	N+	0.0906	0.0906	0.0907	0.0907	0.0907	0.0907	0.0907	0.0908	0.0908
	Ty-	-0.0345	-0.0345	-0.0345	-0.0345	-0.0345	-0.0345	-0.0345	-0.0345	-0.0345

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas**

	Ty+	0.0224	0.0224	0.0224	0.0224	0.0224	0.0224	0.0224	0.0224	0.0224
	Tz-	-0.4129	-0.4126	-0.4123	-0.4119	-0.4116	-0.4113	-0.4110	-0.4107	-0.4103
	Tz+	0.2160	0.2162	0.2164	0.2166	0.2168	0.2170	0.2171	0.2173	0.2175
	Mt-	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0962	-0.0842	-0.0723	-0.0603	-0.0534	-0.0504	-0.0486	-0.0480	-0.0501
	My+	0.0333	0.0270	0.0206	0.0143	0.0080	0.0016	-0.0035	0.0015	0.0093
	Mz-	-0.0065	-0.0063	-0.0070	-0.0076	-0.0083	-0.0089	-0.0096	-0.0102	-0.0109
	Mz+	0.0013	0.0014	0.0015	0.0016	0.0017	0.0018	0.0019	0.0022	0.0032
82/132		0.000 m	0.357 m	0.715 m	1.072 m	1.430 m	1.787 m	2.145 m	2.502 m	2.860 m
		Envolvente (Acero Conformado)								
	N-	-0.0399	-0.0399	-0.0399	-0.0399	-0.0399	-0.0399	-0.0399	-0.0399	-0.0399
	N+	0.0546	0.0546	0.0546	0.0546	0.0546	0.0546	0.0546	0.0546	0.0546
	Ty-	-0.0259	-0.0259	-0.0259	-0.0259	-0.0259	-0.0259	-0.0259	-0.0259	-0.0259
	Ty+	0.0418	0.0418	0.0418	0.0418	0.0418	0.0418	0.0418	0.0418	0.0418
	Tz-	-0.3722	-0.3340	-0.2959	-0.2577	-0.2195	-0.1813	-0.1549	-0.1382	-0.1214
	Tz+	0.2726	0.2396	0.2066	0.1737	0.1407	0.1077	0.0747	0.0417	0.0087
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0913	-0.1713	-0.2391	-0.2955	-0.3396	-0.3725	-0.3931	-0.4023
	My+	0.0000	0.1260	0.2388	0.3375	0.4231	0.4944	0.5527	0.5968	0.6278
	Mz-	0.0000	-0.0149	-0.0299	-0.0448	-0.0597	-0.0747	-0.0896	-0.1046	-0.1195
	Mz+	0.0000	0.0093	0.0185	0.0278	0.0370	0.0463	0.0555	0.0648	0.0740
83/84		0.000 m	0.603 m	1.205 m	1.808 m	2.410 m	3.013 m	3.615 m	4.218 m	4.820 m
		Envolvente (Acero laminado)								
	N-	-2.3572	-2.3355	-2.3137	-2.2920	-2.2703	-2.2486	-2.2269	-2.2052	-2.1835
	N+	0.4035	0.4163	0.4292	0.4421	0.4549	0.4678	0.4806	0.4935	0.5064
	Ty-	-0.0165	-0.0165	-0.0165	-0.0165	-0.0165	-0.0165	-0.0165	-0.0165	-0.0165
	Ty+	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080
	Tz-	-1.7783	-1.4168	-1.0553	-0.6938	-0.3323	-0.0223	-0.0015	-0.0015	-0.0015
	Tz+	0.0056	0.0056	0.0056	0.0056	0.0056	0.0539	0.3914	0.7529	1.1144
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-1.8017	-0.8435	-0.0944	-0.0028	-0.0055	-0.0085	-0.0119	-0.0152	-0.2011
	My+	0.0087	0.0054	0.0021	0.4293	0.7425	0.8292	0.7070	0.3584	0.0029
	Mz-	-0.0333	-0.0234	-0.0134	-0.0035	-0.0031	-0.0080	-0.0128	-0.0176	-0.0224
	Mz+	0.0163	0.0114	0.0066	0.0018	0.0066	0.0165	0.0264	0.0364	0.0463
84/85		0.000 m	0.233 m	0.465 m	0.698 m	0.930 m	1.163 m	1.395 m	1.628 m	1.860 m
		Envolvente (Acero laminado)								
	N-	-2.1351	-2.1267	-2.1184	-2.1100	-2.1016	-2.0932	-2.0848	-2.0765	-2.0681
	N+	0.4458	0.4508	0.4558	0.4607	0.4657	0.4707	0.4756	0.4806	0.4856
	Ty-	-0.0284	-0.0284	-0.0284	-0.0284	-0.0284	-0.0284	-0.0284	-0.0284	-0.0284
	Ty+	0.0576	0.0576	0.0576	0.0576	0.0576	0.0576	0.0576	0.0576	0.0576
	Tz-	-0.2012	-0.1778	-0.1545	-0.1311	-0.1077	-0.0844	-0.0610	-0.0376	-0.0142
	Tz+	0.0016	0.0016	0.0016	0.0016	0.0016	0.0016	0.0016	0.0016	0.0016
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.2011	-0.1571	-0.1184	-0.0853	-0.0574	-0.0352	-0.0182	-0.0068	-0.0007
	My+	0.0029	0.0026	0.0022	0.0018	0.0015	0.0011	0.0007	0.0004	0.0001
	Mz-	-0.0224	-0.0162	-0.0101	-0.0041	-0.0073	-0.0206	-0.0340	-0.0474	-0.0608
	Mz+	0.0463	0.0334	0.0205	0.0076	0.0041	0.0107	0.0173	0.0239	0.0305
84/87		0.000 m	0.126 m	0.252 m	0.378 m	0.503 m	0.629 m	0.755 m	0.881 m	1.007 m
		Envolvente (Acero Conformado)								
	N-	-0.0592	-0.0592	-0.0592	-0.0592	-0.0592	-0.0592	-0.0592	-0.0592	-0.0592

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE** Adrián Freijomil Aradas

	N+	0.2008	0.2008	0.2008	0.2008	0.2008	0.2008	0.2008	0.2008	0.2008
	Ty-	-0.0262	-0.0249	-0.0237	-0.0224	-0.0211	-0.0199	-0.0186	-0.0173	-0.0161
	Ty+	0.2065	0.2073	0.2080	0.2088	0.2095	0.2103	0.2110	0.2118	0.2125
	Tz-	-0.6430	-0.6430	-0.6430	-0.6430	-0.6430	-0.6430	-0.6430	-0.6430	-0.6430
	Tz+	0.0032	0.0032	0.0032	0.0032	0.0032	0.0032	0.0032	0.0032	0.0032
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.6251	-0.5442	-0.4633	-0.3823	-0.3014	-0.2205	-0.1395	-0.0586	-0.0006
	My+	0.0055	0.0051	0.0047	0.0043	0.0039	0.0035	0.0031	0.0027	0.0235
	Mz-	-0.0189	-0.0157	-0.0126	-0.0097	-0.0070	-0.0044	-0.0020	-0.0002	-0.0055
	Mz+	0.2055	0.1794	0.1533	0.1270	0.1007	0.0743	0.0478	0.0213	0.0024
85/86		0.000 m	0.141 m	0.283 m	0.424 m	0.566 m	0.707 m	0.849 m	0.990 m	1.131 m
		Envolvente (Acero Conformado)								
	N-	-1.4524	-1.4500	-1.4477	-1.4453	-1.4430	-1.4406	-1.4383	-1.4359	-1.4336
	N+	0.2122	0.2136	0.2150	0.2164	0.2178	0.2191	0.2205	0.2219	0.2233
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.0569	-0.0426	-0.0284	-0.0142	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0142	0.0284	0.0426	0.0569
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My+	0.0000	0.0070	0.0121	0.0150	0.0161	0.0150	0.0121	0.0070	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
88/85		0.000 m	0.126 m	0.252 m	0.379 m	0.505 m	0.631 m	0.757 m	0.883 m	1.009 m
		Envolvente (Acero laminado)								
	N-	-0.0733	-0.0733	-0.0732	-0.0732	-0.0731	-0.0730	-0.0730	-0.0729	-0.0729
	N+	0.0977	0.0978	0.0979	0.0980	0.0981	0.0982	0.0983	0.0984	0.0985
	Ty-	-0.0029	-0.0029	-0.0029	-0.0029	-0.0029	-0.0029	-0.0029	-0.0029	-0.0029
	Ty+	0.0131	0.0131	0.0131	0.0131	0.0131	0.0131	0.0131	0.0131	0.0131
	Tz-	-0.0761	-0.0753	-0.0745	-0.0737	-0.0729	-0.0721	-0.0713	-0.0704	-0.0696
	Tz+	0.1915	0.1928	0.1942	0.1956	0.1970	0.1983	0.1997	0.2011	0.2025
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
	My-	-0.0291	-0.0212	-0.0133	-0.0056	-0.0054	-0.0296	-0.0545	-0.0797	-0.1052
	My+	0.0936	0.0694	0.0450	0.0204	0.0118	0.0208	0.0299	0.0388	0.0476
	Mz-	-0.0016	-0.0013	-0.0009	-0.0005	-0.0007	-0.0020	-0.0036	-0.0051	-0.0066
	Mz+	0.0075	0.0058	0.0042	0.0025	0.0009	0.0002	0.0006	0.0009	0.0013
86/89		0.000 m	0.126 m	0.252 m	0.378 m	0.503 m	0.629 m	0.755 m	0.881 m	1.007 m
		Envolvente (Acero laminado)								
	N-	-0.9691	-0.9691	-0.9691	-0.9691	-0.9691	-0.9691	-0.9691	-0.9691	-0.9691
	N+	0.8215	0.8215	0.8215	0.8215	0.8215	0.8215	0.8215	0.8215	0.8215
	Ty-	-0.7267	-0.7164	-0.7062	-0.6959	-0.6856	-0.6753	-0.6651	-0.6548	-0.6445
	Ty+	0.1250	0.1310	0.1371	0.1432	0.1493	0.1554	0.1615	0.1676	0.1737
	Tz-	-0.0391	-0.0391	-0.0391	-0.0391	-0.0391	-0.0391	-0.0391	-0.0391	-0.0391
	Tz+	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0050	-0.0040	-0.0043	-0.0046	-0.0050	-0.0053	-0.0056	-0.0059	-0.0063
	My+	0.0024	0.0026	0.0061	0.0111	0.0160	0.0209	0.0258	0.0308	0.0357
	Mz-	-0.7062	-0.6154	-0.5259	-0.4376	-0.3507	-0.2650	-0.1807	-0.0976	-0.0195
	Mz+	0.1517	0.1356	0.1187	0.1011	0.0827	0.0635	0.0436	0.0450	0.0461
87/88		0.000 m	0.224 m	0.448 m	0.672 m	0.895 m	1.119 m	1.343 m	1.567 m	1.791 m

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		Envolvente (Acero Conformado)								
	N-	-0.0076	-0.0045	-0.0023	-0.0001	0.0021	0.0043	0.0065	0.0087	0.0110
	N+	0.1594	0.1623	0.1660	0.1697	0.1734	0.1771	0.1809	0.1846	0.1883
	Ty-	-0.1451	-0.1451	-0.1451	-0.1451	-0.1451	-0.1451	-0.1451	-0.1451	-0.1451
	Ty+	0.0016	0.0016	0.0016	0.0016	0.0016	0.0016	0.0016	0.0016	0.0016
	Tz-	-0.0039	-0.0039	-0.0039	-0.0039	-0.0039	-0.0039	-0.0039	-0.0039	-0.0039
	Tz+	0.4876	0.5101	0.5326	0.5551	0.5776	0.6001	0.6226	0.6451	0.6675
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.1118	-0.2284	-0.3502	-0.4769	-0.6088	-0.7455	-0.8875	-1.0343
	My+	0.0000	0.0009	0.0017	0.0026	0.0035	0.0044	0.0052	0.0061	0.0070
	Mz-	0.0000	-0.0004	-0.0007	-0.0011	-0.0014	-0.0018	-0.0021	-0.0025	-0.0028
	Mz+	0.0000	0.0325	0.0650	0.0975	0.1299	0.1624	0.1949	0.2274	0.2599
87/91		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-0.0608	-0.0608	-0.0608	-0.0608	-0.0608	-0.0608	-0.0608	-0.0608	-0.0608
	N+	0.2174	0.2174	0.2174	0.2174	0.2174	0.2174	0.2174	0.2174	0.2174
	Ty-	-0.0085	-0.0072	-0.0060	-0.0047	-0.0035	-0.0022	-0.0010	-0.0002	0.0005
	Ty+	0.0531	0.0539	0.0546	0.0554	0.0561	0.0568	0.0576	0.0589	0.0601
	Tz-	-0.1611	-0.1611	-0.1611	-0.1611	-0.1611	-0.1611	-0.1611	-0.1611	-0.1611
	Tz+	0.0140	0.0140	0.0140	0.0140	0.0140	0.0140	0.0140	0.0140	0.0140
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0006	-0.0001	-0.0012	-0.0030	-0.0047	-0.0065	-0.0082	-0.0100	-0.0118
	My+	0.0235	0.0428	0.0626	0.0827	0.1029	0.1230	0.1431	0.1633	0.1834
	Mz-	-0.0055	-0.0122	-0.0190	-0.0259	-0.0328	-0.0399	-0.0470	-0.0543	-0.0616
	Mz+	0.0024	0.0034	0.0042	0.0049	0.0054	0.0057	0.0059	0.0060	0.0058
88/89		0.000 m	0.150 m	0.300 m	0.450 m	0.600 m	0.751 m	0.901 m	1.051 m	1.201 m
		Envolvente (Acero Conformado)								
	N-	-0.1576	-0.1561	-0.1546	-0.1531	-0.1517	-0.1502	-0.1487	-0.1472	-0.1457
	N+	0.3083	0.3108	0.3133	0.3158	0.3182	0.3207	0.3232	0.3257	0.3282
	Ty-	-0.0903	-0.0903	-0.0903	-0.0903	-0.0903	-0.0903	-0.0903	-0.0903	-0.0903
	Ty+	0.1272	0.1272	0.1272	0.1272	0.1272	0.1272	0.1272	0.1272	0.1272
	Tz-	-0.1379	-0.1229	-0.1078	-0.0927	-0.0776	-0.0625	-0.0474	-0.0323	-0.0173
	Tz+	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0932	-0.0737	-0.0563	-0.0413	-0.0285	-0.0180	-0.0097	-0.0038	0.0000
	My+	0.0007	0.0006	0.0005	0.0004	0.0004	0.0003	0.0002	0.0001	0.0000
	Mz-	-0.1084	-0.0949	-0.0813	-0.0678	-0.0542	-0.0407	-0.0271	-0.0136	0.0000
	Mz+	0.1527	0.1336	0.1145	0.0954	0.0763	0.0573	0.0382	0.0191	0.0000
90/88		0.000 m	0.041 m	0.082 m	0.124 m	0.165 m	0.206 m	0.247 m	0.288 m	0.329 m
		Envolvente (Acero laminado)								
	N-	-0.2617	-0.2617	-0.2617	-0.2617	-0.2616	-0.2616	-0.2616	-0.2616	-0.2616
	N+	0.7904	0.7904	0.7905	0.7905	0.7905	0.7906	0.7906	0.7906	0.7907
	Ty-	-0.0717	-0.0717	-0.0717	-0.0717	-0.0717	-0.0717	-0.0717	-0.0717	-0.0717
	Ty+	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	Tz-	-0.2364	-0.2361	-0.2358	-0.2356	-0.2353	-0.2350	-0.2348	-0.2345	-0.2342
	Tz+	0.4231	0.4236	0.4240	0.4245	0.4249	0.4254	0.4258	0.4263	0.4267
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0225	-0.0175	-0.0329	-0.0504	-0.0679	-0.0854	-0.1029	-0.1205	-0.1380
	My+	0.0050	-0.0047	0.0042	0.0140	0.0236	0.0333	0.0430	0.0527	0.0623
	Mz-	-0.0094	-0.0064	-0.0035	-0.0005	-0.0002	-0.0003	-0.0005	-0.0007	-0.0009



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	Mz+	0.0006	0.0004	0.0002	0.0000	0.0024	0.0054	0.0083	0.0113	0.0142	
89/93		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m	
		Envolvente (Acero laminado)									
	N-	-1.0594	-1.0594	-1.0594	-1.0594	-1.0594	-1.0594	-1.0594	-1.0594	-1.0594	-1.0594
	N+	0.9487	0.9487	0.9487	0.9487	0.9487	0.9487	0.9487	0.9487	0.9487	0.9487
	Ty-	-0.3163	-0.3061	-0.2959	-0.2857	-0.2755	-0.2653	-0.2551	-0.2449	-0.2347	-0.2347
	Ty+	0.0279	0.0340	0.0400	0.0460	0.0521	0.0581	0.0642	0.0702	0.0763	0.0763
	Tz-	-0.0222	-0.0222	-0.0222	-0.0222	-0.0222	-0.0222	-0.0222	-0.0222	-0.0222	-0.0222
	Tz+	0.0035	0.0035	0.0035	0.0035	0.0035	0.0035	0.0035	0.0035	0.0035	0.0035
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0063	-0.0067	-0.0072	-0.0076	-0.0080	-0.0085	-0.0089	-0.0094	-0.0098	-0.0098
	My+	0.0357	0.0385	0.0412	0.0440	0.0468	0.0496	0.0523	0.0551	0.0579	0.0579
	Mz-	-0.0195	-0.0025	-0.0071	-0.0125	-0.0186	-0.0255	-0.0332	-0.0416	-0.0507	-0.0507
Mz+	0.0461	0.0566	0.0708	0.0996	0.1328	0.1659	0.1984	0.2297	0.2597	0.2597	
92/90		0.000 m	0.084 m	0.168 m	0.252 m	0.337 m	0.421 m	0.505 m	0.589 m	0.673 m	
		Envolvente (Acero laminado)									
	N-	-0.2096	-0.2095	-0.2095	-0.2095	-0.2094	-0.2094	-0.2093	-0.2093	-0.2093	-0.2093
	N+	0.7170	0.7171	0.7171	0.7172	0.7173	0.7173	0.7174	0.7175	0.7175	0.7175
	Ty-	-0.0015	-0.0015	-0.0015	-0.0015	-0.0015	-0.0015	-0.0015	-0.0015	-0.0015	-0.0015
	Ty+	0.0244	0.0244	0.0244	0.0244	0.0244	0.0244	0.0244	0.0244	0.0244	0.0244
	Tz-	0.0079	0.0085	0.0090	0.0095	0.0101	0.0106	0.0112	0.0117	0.0123	0.0123
	Tz+	0.0916	0.0925	0.0934	0.0944	0.0953	0.0962	0.0971	0.0980	0.0989	0.0989
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0084	-0.0091	-0.0098	-0.0106	-0.0114	-0.0123	-0.0133	-0.0143	-0.0152	-0.0162
	My+	0.0637	0.0563	0.0487	0.0411	0.0335	0.0257	0.0179	0.0100	0.0050	0.0050
	Mz-	-0.0004	-0.0003	-0.0002	-0.0001	-0.0012	-0.0032	-0.0053	-0.0073	-0.0094	-0.0094
Mz+	0.0070	0.0050	0.0029	0.0009	0.0001	0.0002	0.0003	0.0005	0.0006	0.0006	
90/130		0.000 m	0.275 m	0.550 m	0.825 m	1.099 m	1.374 m	1.649 m	1.924 m	2.199 m	
		Envolvente (Acero Conformado)									
	N-	-0.0061	-0.0061	-0.0061	-0.0061	-0.0061	-0.0061	-0.0061	-0.0061	-0.0061	-0.0061
	N+	0.0961	0.0961	0.0961	0.0961	0.0961	0.0961	0.0961	0.0961	0.0961	0.0961
	Ty-	-0.0398	-0.0398	-0.0398	-0.0398	-0.0398	-0.0398	-0.0398	-0.0398	-0.0398	-0.0398
	Ty+	0.0482	0.0482	0.0482	0.0482	0.0482	0.0482	0.0482	0.0482	0.0482	0.0482
	Tz-	-0.3352	-0.3059	-0.2765	-0.2472	-0.2178	-0.1885	-0.1591	-0.1372	-0.1244	-0.1244
	Tz+	0.2703	0.2450	0.2196	0.1943	0.1689	0.1435	0.1182	0.0928	0.0675	0.0675
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0707	-0.1347	-0.1914	-0.2414	-0.2842	-0.3203	-0.3492	-0.3714	-0.3714
	My+	0.0000	0.0879	0.1681	0.2399	0.3040	0.3597	0.4076	0.4472	0.4790	0.4790
	Mz-	0.0000	-0.0132	-0.0265	-0.0397	-0.0530	-0.0662	-0.0795	-0.0927	-0.1060	-0.1060
Mz+	0.0000	0.0109	0.0219	0.0328	0.0438	0.0547	0.0657	0.0766	0.0876	0.0876	
91/92		0.000 m	0.215 m	0.430 m	0.645 m	0.860 m	1.076 m	1.291 m	1.506 m	1.721 m	
		Envolvente (Acero Conformado)									
	N-	0.0036	0.0057	0.0078	0.0099	0.0121	0.0142	0.0163	0.0184	0.0205	
	N+	0.0823	0.0859	0.0895	0.0930	0.0966	0.1002	0.1038	0.1073	0.1109	
	Ty-	-0.0649	-0.0649	-0.0649	-0.0649	-0.0649	-0.0649	-0.0649	-0.0649	-0.0649	
	Ty+	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	
	Tz-	-0.0014	-0.0014	-0.0014	-0.0014	-0.0014	-0.0014	-0.0014	-0.0014	-0.0014	
	Tz+	0.2071	0.2287	0.2503	0.2719	0.2935	0.3152	0.3368	0.3584	0.3800	
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
	My-	0.0000	-0.0470	-0.0984	-0.1546	-0.2154	-0.2809	-0.3510	-0.4258	-0.5051	

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	My+	0.0000	0.0003	0.0006	0.0009	0.0012	0.0015	0.0018	0.0020	0.0023
	Mz-	0.0000	-0.0002	-0.0004	-0.0006	-0.0008	-0.0010	-0.0012	-0.0014	-0.0016
	Mz+	0.0000	0.0140	0.0279	0.0419	0.0558	0.0698	0.0838	0.0977	0.1117
91/95		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-0.0617	-0.0617	-0.0617	-0.0617	-0.0617	-0.0617	-0.0617	-0.0617	-0.0617
	N+	0.2823	0.2823	0.2823	0.2823	0.2823	0.2823	0.2823	0.2823	0.2823
	Ty-	-0.0229	-0.0216	-0.0204	-0.0191	-0.0178	-0.0166	-0.0153	-0.0141	-0.0129
	Ty+	0.0003	0.0010	0.0018	0.0025	0.0033	0.0040	0.0048	0.0055	0.0063
	Tz-	-0.0052	-0.0052	-0.0052	-0.0052	-0.0052	-0.0052	-0.0052	-0.0052	-0.0052
	Tz+	0.0529	0.0529	0.0529	0.0529	0.0529	0.0529	0.0529	0.0529	0.0529
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0118	-0.0136	-0.0154	-0.0172	-0.0190	-0.0208	-0.0226	-0.0244	-0.0262
	My+	0.1834	0.1777	0.1721	0.1664	0.1607	0.1551	0.1494	0.1437	0.1381
	Mz-	-0.0616	-0.0596	-0.0577	-0.0558	-0.0541	-0.0525	-0.0509	-0.0494	-0.0481
	Mz+	0.0058	0.0074	0.0088	0.0101	0.0112	0.0121	0.0129	0.0136	0.0140
92/93		0.000 m	0.159 m	0.318 m	0.477 m	0.635 m	0.794 m	0.953 m	1.112 m	1.271 m
		Envolvente (Acero Conformado)								
	N-	-0.0242	-0.0215	-0.0189	-0.0162	-0.0140	-0.0125	-0.0109	-0.0094	-0.0078
	N+	0.0267	0.0283	0.0298	0.0314	0.0334	0.0360	0.0387	0.0413	0.0440
	Ty-	-0.0710	-0.0710	-0.0710	-0.0710	-0.0710	-0.0710	-0.0710	-0.0710	-0.0710
	Ty+	0.1070	0.1070	0.1070	0.1070	0.1070	0.1070	0.1070	0.1070	0.1070
	Tz-	-0.1517	-0.1357	-0.1197	-0.1038	-0.0878	-0.0718	-0.0559	-0.0399	-0.0239
	Tz+	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.1116	-0.0888	-0.0685	-0.0508	-0.0355	-0.0229	-0.0127	-0.0051	0.0000
	My+	0.0014	0.0012	0.0010	0.0009	0.0007	0.0005	0.0003	0.0002	0.0000
	Mz-	-0.0902	-0.0790	-0.0677	-0.0564	-0.0451	-0.0338	-0.0226	-0.0113	0.0000
	Mz+	0.1360	0.1190	0.1020	0.0850	0.0680	0.0510	0.0340	0.0170	0.0000
94/92		0.000 m	0.112 m	0.225 m	0.337 m	0.450 m	0.562 m	0.675 m	0.787 m	0.900 m
		Envolvente (Acero laminado)								
	N-	-0.1625	-0.1624	-0.1624	-0.1623	-0.1623	-0.1622	-0.1622	-0.1621	-0.1621
	N+	0.2702	0.2703	0.2704	0.2705	0.2706	0.2707	0.2708	0.2709	0.2709
	Ty-	-0.0028	-0.0028	-0.0028	-0.0028	-0.0028	-0.0028	-0.0028	-0.0028	-0.0028
	Ty+	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
	Tz-	-0.0488	-0.0481	-0.0473	-0.0466	-0.0459	-0.0452	-0.0444	-0.0437	-0.0430
	Tz+	0.0695	0.0708	0.0720	0.0732	0.0744	0.0757	0.0769	0.0781	0.0793
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0199	-0.0145	-0.0091	-0.0038	-0.0019	-0.0103	-0.0189	-0.0276	-0.0364
	My+	0.0305	0.0226	0.0146	0.0065	0.0014	0.0065	0.0115	0.0165	0.0214
	Mz-	-0.0016	-0.0013	-0.0010	-0.0007	-0.0003	0.0000	0.0000	-0.0001	-0.0001
	Mz+	0.0001	0.0001	0.0001	0.0001	0.0000	0.0000	0.0003	0.0006	0.0009
93/97		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-1.1304	-1.1304	-1.1304	-1.1304	-1.1304	-1.1304	-1.1304	-1.1304	-1.1304
	N+	1.0557	1.0557	1.0557	1.0557	1.0557	1.0557	1.0557	1.0557	1.0557
	Ty-	-0.2088	-0.1986	-0.1884	-0.1782	-0.1680	-0.1578	-0.1476	-0.1374	-0.1272
	Ty+	0.0943	0.1004	0.1064	0.1125	0.1185	0.1245	0.1306	0.1366	0.1427
	Tz-	-0.0018	-0.0018	-0.0018	-0.0018	-0.0018	-0.0018	-0.0018	-0.0018	-0.0018
	Tz+	0.0028	0.0028	0.0028	0.0028	0.0028	0.0028	0.0028	0.0028	0.0028
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0098	-0.0101	-0.0104	-0.0107	-0.0110	-0.0114	-0.0117	-0.0120	-0.0123
	My+	0.0579	0.0577	0.0574	0.0572	0.0570	0.0568	0.0566	0.0563	0.0561
	Mz-	-0.0507	-0.0596	-0.0693	-0.0798	-0.0910	-0.1030	-0.1157	-0.1291	-0.1434
	Mz+	0.2597	0.2851	0.3093	0.3322	0.3539	0.3742	0.3933	0.4111	0.4276
96/94		0.000 m	0.013 m	0.026 m	0.039 m	0.051 m	0.064 m	0.077 m	0.090 m	0.103 m
		Envolvente (Acero laminado)								
	N-	-0.0910	-0.0910	-0.0910	-0.0910	-0.0910	-0.0910	-0.0910	-0.0910	-0.0910
	N+	0.1936	0.1936	0.1936	0.1936	0.1936	0.1936	0.1936	0.1937	0.1937
	Ty-	-0.0082	-0.0082	-0.0082	-0.0082	-0.0082	-0.0082	-0.0082	-0.0082	-0.0082
	Ty+	0.0903	0.0903	0.0903	0.0903	0.0903	0.0903	0.0903	0.0903	0.0903
	Tz-	-0.2199	-0.2197	-0.2196	-0.2195	-0.2193	-0.2192	-0.2190	-0.2189	-0.2188
	Tz+	0.1875	0.1876	0.1877	0.1878	0.1879	0.1879	0.1880	0.1881	0.1882
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0020	-0.0033	-0.0054	-0.0078	-0.0102	-0.0127	-0.0151	-0.0175	-0.0199
	My+	0.0123	0.0135	0.0155	0.0178	0.0201	0.0223	0.0250	0.0278	0.0305
	Mz-	-0.0007	-0.0006	-0.0005	-0.0004	-0.0003	-0.0002	-0.0001	-0.0004	-0.0016
	Mz+	0.0077	0.0065	0.0054	0.0042	0.0030	0.0019	0.0007	0.0000	0.0001
94/119		0.000 m	0.157 m	0.314 m	0.472 m	0.629 m	0.786 m	0.943 m	1.100 m	1.257 m
		Envolvente (Acero Conformado)								
	N-	-0.0085	-0.0085	-0.0085	-0.0085	-0.0085	-0.0085	-0.0085	-0.0085	-0.0085
	N+	0.0931	0.0931	0.0931	0.0931	0.0931	0.0931	0.0931	0.0931	0.0931
	Ty-	-0.0565	-0.0565	-0.0565	-0.0565	-0.0565	-0.0565	-0.0565	-0.0565	-0.0565
	Ty+	0.0644	0.0644	0.0644	0.0644	0.0644	0.0644	0.0644	0.0644	0.0644
	Tz-	-0.2936	-0.2768	-0.2600	-0.2433	-0.2265	-0.2097	-0.1929	-0.1761	-0.1593
	Tz+	0.2425	0.2280	0.2135	0.1990	0.1845	0.1700	0.1555	0.1410	0.1265
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0369	-0.0717	-0.1041	-0.1342	-0.1621	-0.1877	-0.2110	-0.2320
	My+	0.0000	0.0448	0.0870	0.1265	0.1635	0.1977	0.2294	0.2583	0.2848
	Mz-	0.0000	-0.0101	-0.0203	-0.0304	-0.0405	-0.0506	-0.0608	-0.0709	-0.0810
	Mz+	0.0000	0.0089	0.0178	0.0266	0.0355	0.0444	0.0533	0.0621	0.0710
95/96		0.000 m	0.206 m	0.413 m	0.619 m	0.825 m	1.032 m	1.238 m	1.444 m	1.651 m
		Envolvente (Acero Conformado)								
	N-	0.0011	0.0031	0.0052	0.0072	0.0092	0.0113	0.0133	0.0153	0.0174
	N+	0.0152	0.0187	0.0221	0.0255	0.0290	0.0324	0.0358	0.0392	0.0427
	Ty-	-0.0187	-0.0187	-0.0187	-0.0187	-0.0187	-0.0187	-0.0187	-0.0187	-0.0187
	Ty+	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020
	Tz-	-0.0115	-0.0115	-0.0115	-0.0115	-0.0115	-0.0115	-0.0115	-0.0115	-0.0115
	Tz+	0.0203	0.0512	0.0822	0.1131	0.1441	0.1750	0.2060	0.2369	0.2679
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0075	-0.0211	-0.0414	-0.0678	-0.1009	-0.1401	-0.1859	-0.2378
	My+	0.0000	0.0024	0.0047	0.0071	0.0095	0.0119	0.0142	0.0166	0.0190
	Mz-	0.0000	-0.0004	-0.0008	-0.0012	-0.0017	-0.0021	-0.0025	-0.0029	-0.0033
	Mz+	0.0000	0.0039	0.0077	0.0116	0.0155	0.0193	0.0232	0.0271	0.0309
95/98		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-0.0613	-0.0613	-0.0613	-0.0613	-0.0613	-0.0613	-0.0613	-0.0613	-0.0613
	N+	0.3000	0.3000	0.3000	0.3000	0.3000	0.3000	0.3000	0.3000	0.3000
	Ty-	-0.0262	-0.0249	-0.0237	-0.0224	-0.0212	-0.0200	-0.0192	-0.0185	-0.0177
	Ty+	-0.0008	0.0000	0.0007	0.0015	0.0022	0.0030	0.0043	0.0055	0.0068
	Tz-	-0.0027	-0.0027	-0.0027	-0.0027	-0.0027	-0.0027	-0.0027	-0.0027	-0.0027

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE** Adrián Freijomil Aradas

	Tz+	0.0674	0.0674	0.0674	0.0674	0.0674	0.0674	0.0674	0.0674	0.0674
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0262	-0.0266	-0.0270	-0.0274	-0.0277	-0.0281	-0.0285	-0.0289	-0.0292
	My+	0.1381	0.1299	0.1217	0.1135	0.1053	0.0971	0.0889	0.0807	0.0725
	Mz-	-0.0481	-0.0452	-0.0425	-0.0398	-0.0372	-0.0347	-0.0323	-0.0301	-0.0278
	Mz+	0.0140	0.0148	0.0154	0.0159	0.0162	0.0163	0.0163	0.0162	0.0158
96/97		0.000 m	0.168 m	0.335 m	0.503 m	0.670 m	0.838 m	1.006 m	1.173 m	1.341 m
		Envolvente (Acero Conformado)								
	N-	-0.1344	-0.1327	-0.1311	-0.1294	-0.1277	-0.1261	-0.1244	-0.1228	-0.1211
	N+	0.0782	0.0810	0.0837	0.0865	0.0893	0.0921	0.0949	0.0977	0.1004
	Ty-	-0.0536	-0.0536	-0.0536	-0.0536	-0.0536	-0.0536	-0.0536	-0.0536	-0.0536
	Ty+	0.0907	0.0907	0.0907	0.0907	0.0907	0.0907	0.0907	0.0907	0.0907
	Tz-	-0.2135	-0.1883	-0.1632	-0.1380	-0.1129	-0.0878	-0.0626	-0.0375	-0.0123
	Tz+	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.1514	-0.1178	-0.0882	-0.0631	-0.0420	-0.0252	-0.0126	-0.0043	0.0000
	My+	0.0058	0.0051	0.0044	0.0036	0.0029	0.0022	0.0015	0.0007	0.0000
	Mz-	-0.0719	-0.0629	-0.0539	-0.0449	-0.0359	-0.0270	-0.0180	-0.0090	0.0000
	Mz+	0.1216	0.1064	0.0912	0.0760	0.0608	0.0456	0.0304	0.0152	0.0000
99/96		0.000 m	0.125 m	0.251 m	0.376 m	0.501 m	0.627 m	0.752 m	0.877 m	1.002 m
		Envolvente (Acero laminado)								
	N-	-0.5514	-0.5513	-0.5512	-0.5511	-0.5510	-0.5509	-0.5508	-0.5507	-0.5506
	N+	0.1269	0.1269	0.1270	0.1271	0.1271	0.1272	0.1272	0.1273	0.1273
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.1397	-0.1383	-0.1370	-0.1356	-0.1342	-0.1329	-0.1315	-0.1302	-0.1288
	Tz+	0.0277	0.0285	0.0294	0.0302	0.0310	0.0318	0.0326	0.0334	0.0342
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0682	-0.0508	-0.0335	-0.0165	0.0003	-0.0037	-0.0077	-0.0118	-0.0161
	My+	0.0150	0.0115	0.0078	0.0041	0.0005	0.0172	0.0338	0.0502	0.0664
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
97/100		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-1.1836	-1.1836	-1.1836	-1.1836	-1.1836	-1.1836	-1.1836	-1.1836	-1.1836
	N+	1.1460	1.1460	1.1460	1.1460	1.1460	1.1460	1.1460	1.1460	1.1460
	Ty-	-0.0589	-0.0487	-0.0386	-0.0326	-0.0265	-0.0205	-0.0144	-0.0084	-0.0023
	Ty+	0.0337	0.0397	0.0459	0.0561	0.0663	0.0765	0.0867	0.0969	0.1071
	Tz-	-0.0019	-0.0019	-0.0019	-0.0019	-0.0019	-0.0019	-0.0019	-0.0019	-0.0019
	Tz+	0.0141	0.0141	0.0141	0.0141	0.0141	0.0141	0.0141	0.0141	0.0141
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0123	-0.0120	-0.0118	-0.0116	-0.0113	-0.0111	-0.0109	-0.0106	-0.0104
	My+	0.0561	0.0543	0.0526	0.0508	0.0491	0.0473	0.0455	0.0438	0.0420
	Mz-	-0.1434	-0.1471	-0.1516	-0.1569	-0.1629	-0.1697	-0.1773	-0.1856	-0.1946
	Mz+	0.4276	0.4312	0.4336	0.4346	0.4344	0.4329	0.4301	0.4261	0.4207
98/99		0.000 m	0.198 m	0.395 m	0.593 m	0.790 m	0.988 m	1.186 m	1.383 m	1.581 m
		Envolvente (Acero Conformado)								
	N-	-0.0077	-0.0053	-0.0034	-0.0014	0.0005	0.0025	0.0044	0.0064	0.0083
	N+	0.0157	0.0186	0.0219	0.0251	0.0284	0.0317	0.0350	0.0383	0.0416
	Ty-	-0.0124	-0.0124	-0.0124	-0.0124	-0.0124	-0.0124	-0.0124	-0.0124	-0.0124

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas**

	Ty+	0.0076	0.0076	0.0076	0.0076	0.0076	0.0076	0.0076	0.0076	0.0076
	Tz-	-0.0325	-0.0325	-0.0325	-0.0325	-0.0325	-0.0325	-0.0325	-0.0325	-0.0325
	Tz+	0.0118	0.0370	0.0667	0.0963	0.1260	0.1556	0.1852	0.2149	0.2445
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0045	-0.0146	-0.0309	-0.0527	-0.0806	-0.1142	-0.1538	-0.1991
	My+	0.0000	0.0064	0.0128	0.0192	0.0257	0.0321	0.0385	0.0449	0.0513
	Mz-	0.0000	-0.0015	-0.0030	-0.0045	-0.0060	-0.0075	-0.0090	-0.0105	-0.0120
	Mz+	0.0000	0.0025	0.0049	0.0074	0.0098	0.0123	0.0147	0.0172	0.0196
98/103		0.000 m	0.124 m	0.248 m	0.372 m	0.497 m	0.621 m	0.745 m	0.869 m	0.993 m
		Envolvente (Acero Conformado)								
	N-	-0.0589	-0.0589	-0.0589	-0.0589	-0.0589	-0.0589	-0.0589	-0.0589	-0.0589
	N+	0.3084	0.3084	0.3084	0.3084	0.3084	0.3084	0.3084	0.3084	0.3084
	Ty-	-0.0310	-0.0303	-0.0295	-0.0288	-0.0280	-0.0273	-0.0266	-0.0258	-0.0251
	Ty+	0.0109	0.0122	0.0134	0.0147	0.0159	0.0172	0.0184	0.0197	0.0209
	Tz-	-0.0295	-0.0295	-0.0295	-0.0295	-0.0295	-0.0295	-0.0295	-0.0295	-0.0295
	Tz+	0.0730	0.0730	0.0730	0.0730	0.0730	0.0730	0.0730	0.0730	0.0730
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0292	-0.0256	-0.0219	-0.0183	-0.0146	-0.0110	-0.0073	-0.0037	0.0000
	My+	0.0725	0.0634	0.0544	0.0453	0.0362	0.0272	0.0181	0.0091	0.0000
	Mz-	-0.0278	-0.0240	-0.0203	-0.0167	-0.0132	-0.0098	-0.0064	-0.0032	0.0000
	Mz+	0.0158	0.0144	0.0128	0.0111	0.0092	0.0071	0.0049	0.0025	0.0000
99/100		0.000 m	0.176 m	0.353 m	0.529 m	0.705 m	0.882 m	1.058 m	1.235 m	1.411 m
		Envolvente (Acero Conformado)								
	N-	-0.3093	-0.3076	-0.3058	-0.3041	-0.3023	-0.3006	-0.2989	-0.2971	-0.2954
	N+	0.3241	0.3271	0.3300	0.3329	0.3359	0.3388	0.3417	0.3447	0.3476
	Ty-	-0.0377	-0.0377	-0.0377	-0.0377	-0.0377	-0.0377	-0.0377	-0.0377	-0.0377
	Ty+	0.0772	0.0772	0.0772	0.0772	0.0772	0.0772	0.0772	0.0772	0.0772
	Tz-	-0.2399	-0.2134	-0.1869	-0.1605	-0.1340	-0.1076	-0.0811	-0.0547	-0.0282
	Tz+	0.0086	0.0086	0.0086	0.0086	0.0086	0.0086	0.0086	0.0086	0.0086
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.1891	-0.1492	-0.1138	-0.0833	-0.0572	-0.0360	-0.0193	-0.0074	0.0000
	My+	0.0121	0.0106	0.0091	0.0076	0.0061	0.0046	0.0030	0.0015	0.0000
	Mz-	-0.0532	-0.0466	-0.0399	-0.0333	-0.0266	-0.0200	-0.0133	-0.0067	0.0000
	Mz+	0.1090	0.0953	0.0817	0.0681	0.0545	0.0409	0.0272	0.0136	0.0000
101/99		0.000 m	0.058 m	0.117 m	0.175 m	0.234 m	0.292 m	0.351 m	0.409 m	0.468 m
		Envolvente (Acero laminado)								
	N-	-2.2189	-2.2189	-2.2189	-2.2189	-2.2188	-2.2188	-2.2188	-2.2188	-2.2187
	N+	3.0465	3.0465	3.0465	3.0466	3.0466	3.0467	3.0467	3.0468	3.0468
	Ty-	-0.2090	-0.2090	-0.2090	-0.2090	-0.2090	-0.2090	-0.2090	-0.2090	-0.2090
	Ty+	0.0714	0.0714	0.0714	0.0714	0.0714	0.0714	0.0714	0.0714	0.0714
	Tz-	-0.2947	-0.2940	-0.2934	-0.2928	-0.2921	-0.2915	-0.2909	-0.2902	-0.2896
	Tz+	-0.0302	-0.0298	-0.0294	-0.0290	-0.0286	-0.0283	-0.0279	-0.0275	-0.0271
	Mt-	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002
	Mt+	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
	My-	-0.0839	-0.0701	-0.0563	-0.0426	-0.0288	-0.0151	-0.0014	0.0090	0.0164
	My+	0.0626	0.0689	0.0752	0.0814	0.0876	0.0938	0.0999	0.1060	0.1132
	Mz-	-0.0507	-0.0389	-0.0273	-0.0156	-0.0058	-0.0014	-0.0056	-0.0098	-0.0140
	Mz+	0.0194	0.0153	0.0111	0.0085	0.0066	0.0104	0.0226	0.0348	0.0470
100/105		0.000 m	0.124 m	0.248 m	0.372 m	0.497 m	0.621 m	0.745 m	0.869 m	0.993 m
		Envolvente (Acero laminado)								
	N-	-1.2207	-1.2207	-1.2207	-1.2207	-1.2207	-1.2207	-1.2207	-1.2207	-1.2207

## Metal 3D

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	N+	1.2225	1.2225	1.2225	1.2225	1.2225	1.2225	1.2225	1.2225	1.2225
	Ty-	-0.2200	-0.2140	-0.2080	-0.2020	-0.1960	-0.1900	-0.1840	-0.1780	-0.1720
	Ty+	0.3832	0.3933	0.4034	0.4136	0.4237	0.4338	0.4439	0.4541	0.4642
	Tz-	-0.0105	-0.0105	-0.0105	-0.0105	-0.0105	-0.0105	-0.0105	-0.0105	-0.0105
	Tz+	0.0423	0.0423	0.0423	0.0423	0.0423	0.0423	0.0423	0.0423	0.0423
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0104	-0.0091	-0.0078	-0.0065	-0.0052	-0.0039	-0.0026	-0.0013	0.0000
	My+	0.0420	0.0368	0.0315	0.0263	0.0210	0.0158	0.0105	0.0053	0.0000
	Mz-	-0.1946	-0.1677	-0.1415	-0.1160	-0.0913	-0.0674	-0.0442	-0.0217	0.0000
	Mz+	0.4207	0.3725	0.3231	0.2724	0.2204	0.1672	0.1127	0.0570	0.0000
104/101		0.000 m	0.066 m	0.132 m	0.198 m	0.264 m	0.330 m	0.396 m	0.462 m	0.528 m
	Envolvente (Acero laminado)									
	N-	-1.5312	-1.5311	-1.5311	-1.5311	-1.5310	-1.5310	-1.5310	-1.5309	-1.5309
	N+	1.9729	1.9730	1.9730	1.9731	1.9731	1.9732	1.9732	1.9733	1.9733
	Ty-	-0.0427	-0.0427	-0.0427	-0.0427	-0.0427	-0.0427	-0.0427	-0.0427	-0.0427
	Ty+	0.0982	0.0982	0.0982	0.0982	0.0982	0.0982	0.0982	0.0982	0.0982
	Tz-	-0.4816	-0.4809	-0.4801	-0.4794	-0.4787	-0.4780	-0.4773	-0.4765	-0.4758
	Tz+	0.4016	0.4020	0.4024	0.4029	0.4033	0.4037	0.4041	0.4046	0.4050
	Mt-	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.1986	-0.1669	-0.1352	-0.1035	-0.0773	-0.0594	-0.0447	-0.0572	-0.0839
	My+	0.1290	0.1025	0.0759	0.0493	0.0227	0.0001	0.0113	0.0348	0.0626
	Mz-	-0.0074	-0.0100	-0.0153	-0.0212	-0.0271	-0.0330	-0.0389	-0.0448	-0.0507
	Mz+	0.0130	0.0103	0.0104	0.0110	0.0117	0.0124	0.0138	0.0166	0.0194
101/109		0.000 m	0.039 m	0.079 m	0.118 m	0.158 m	0.197 m	0.237 m	0.276 m	0.316 m
	Envolvente (Acero laminado)									
	N-	-0.1142	-0.1142	-0.1142	-0.1142	-0.1142	-0.1142	-0.1142	-0.1142	-0.1142
	N+	0.2986	0.2986	0.2986	0.2986	0.2986	0.2986	0.2986	0.2986	0.2986
	Ty-	-0.6752	-0.6752	-0.6752	-0.6752	-0.6752	-0.6752	-0.6752	-0.6752	-0.6752
	Ty+	1.0582	1.0582	1.0582	1.0582	1.0582	1.0582	1.0582	1.0582	1.0582
	Tz-	-0.4401	-0.4344	-0.4287	-0.4230	-0.4173	-0.4116	-0.4059	-0.4002	-0.3946
	Tz+	0.6716	0.6612	0.6507	0.6402	0.6297	0.6193	0.6088	0.5983	0.5878
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0263	-0.0522	-0.0777	-0.1028	-0.1275	-0.1517	-0.1756	-0.1990
	My+	0.0000	0.0173	0.0343	0.0511	0.0677	0.0841	0.1002	0.1162	0.1319
	Mz-	0.0000	-0.0418	-0.0836	-0.1254	-0.1672	-0.2090	-0.2508	-0.2926	-0.3344
	Mz+	0.0000	0.0267	0.0533	0.0800	0.1067	0.1334	0.1600	0.1867	0.2134
102/103		0.000 m	0.603 m	1.205 m	1.808 m	2.410 m	3.013 m	3.615 m	4.218 m	4.820 m
	Envolvente (Acero laminado)									
	N-	-2.4681	-2.4004	-2.3327	-2.2651	-2.1974	-2.1297	-2.0620	-1.9943	-1.9266
	N+	0.3065	0.3466	0.3867	0.4268	0.4669	0.5070	0.5471	0.5872	0.6273
	Ty-	-0.0388	-0.0388	-0.0388	-0.0388	-0.0388	-0.1059	-0.3770	-0.6481	-0.9192
	Ty+	1.2863	1.0152	0.7441	0.4730	0.2018	0.0769	0.0769	0.0769	0.0769
	Tz-	-1.2491	-1.0684	-0.8876	-0.7069	-0.5261	-0.3454	-0.1646	-0.0771	-0.1901
	Tz+	0.7184	0.6055	0.4925	0.3795	0.2666	0.1536	0.0406	0.0336	0.2017
	Mt-	-0.0076	-0.0076	-0.0076	-0.0076	-0.0076	-0.0076	-0.0076	-0.0076	-0.0076
	Mt+	0.0090	0.0090	0.0090	0.0090	0.0090	0.0090	0.0090	0.0090	0.0090
	My-	-1.6248	-0.9288	-0.3373	-0.0968	-0.2899	-0.4122	-0.4696	-0.4577	-0.3805
	My+	0.9058	0.5083	0.1762	0.1525	0.5232	0.7807	0.9340	0.9756	0.9126
	Mz-	-0.0535	-0.0301	-0.0091	-0.3210	-0.5275	-0.5642	-0.4440	-0.2293	-0.2680
	Mz+	1.2657	0.5756	0.0447	0.0166	0.0400	0.0634	0.0868	0.1101	0.4245
102/140		0.000 m	0.545 m	1.090 m	1.635 m	2.180 m	2.726 m	3.271 m	3.816 m	4.361 m

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		Envolvente (Acero laminado)								
	N-	-0.6500	-0.6487	-0.6474	-0.6461	-0.6448	-0.6434	-0.6421	-0.6408	-0.6395
	N+	0.6407	0.6415	0.6423	0.6430	0.6438	0.6446	0.6454	0.6462	0.6469
	Ty-	-0.0040	-0.0028	-0.0015	-0.0003	0.0006	0.0013	0.0020	0.0028	0.0035
	Ty+	-0.0024	-0.0016	-0.0009	-0.0002	0.0010	0.0022	0.0035	0.0047	0.0060
	Tz-	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003
	Tz+	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0002	-0.0003	-0.0005	-0.0006	-0.0008	-0.0009	-0.0011	-0.0013
	My+	0.0000	0.0002	0.0003	0.0005	0.0006	0.0008	0.0009	0.0011	0.0012
	Mz-	0.0000	0.0011	0.0018	0.0021	0.0020	0.0014	0.0005	-0.0013	-0.0042
	Mz+	0.0000	0.0019	0.0030	0.0035	0.0034	0.0025	0.0010	-0.0007	-0.0024
103/104		0.000 m	0.189 m	0.378 m	0.566 m	0.755 m	0.944 m	1.133 m	1.322 m	1.510 m
		Envolvente (Acero laminado)								
	N-	-1.8606	-1.8394	-1.8182	-1.7970	-1.7758	-1.7546	-1.7334	-1.7122	-1.6909
	N+	0.6169	0.6294	0.6420	0.6546	0.6671	0.6797	0.6923	0.7048	0.7174
	Ty-	-0.1994	-0.1994	-0.1994	-0.1994	-0.1994	-0.1994	-0.1994	-0.1994	-0.1994
	Ty+	0.3229	0.3087	0.2946	0.2804	0.2663	0.2521	0.2379	0.2238	0.2096
	Tz-	-0.1889	-0.1946	-0.2002	-0.2059	-0.2116	-0.2172	-0.2229	-0.2286	-0.2342
	Tz+	0.6674	0.6730	0.6787	0.6844	0.6900	0.6957	0.7014	0.7070	0.7127
	Mt-	-0.0074	-0.0074	-0.0074	-0.0074	-0.0074	-0.0074	-0.0074	-0.0074	-0.0074
	Mt+	0.0129	0.0129	0.0129	0.0129	0.0129	0.0129	0.0129	0.0129	0.0129
	My-	-0.3805	-0.3550	-0.3299	-0.3037	-0.2765	-0.2482	-0.2188	-0.1933	-0.1986
	My+	0.9126	0.7968	0.6814	0.5649	0.4474	0.3287	0.2090	0.1162	0.1290
	Mz-	-0.3011	-0.2634	-0.2258	-0.1881	-0.1505	-0.1128	-0.0752	-0.0375	-0.0005
	Mz+	0.4028	0.3432	0.2862	0.2320	0.1803	0.1314	0.0851	0.0416	0.0009
103/115		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-1.1691	-1.1691	-1.1691	-1.1691	-1.1691	-1.1691	-1.1691	-1.1691	-1.1691
	N+	0.2539	0.2539	0.2539	0.2539	0.2539	0.2539	0.2539	0.2539	0.2539
	Ty-	-0.1228	-0.1215	-0.1203	-0.1190	-0.1177	-0.1165	-0.1152	-0.1140	-0.1127
	Ty+	0.0094	0.0102	0.0109	0.0117	0.0124	0.0132	0.0139	0.0147	0.0154
	Tz-	-0.1635	-0.1635	-0.1635	-0.1635	-0.1635	-0.1635	-0.1635	-0.1635	-0.1635
	Tz+	0.1611	0.1611	0.1611	0.1611	0.1611	0.1611	0.1611	0.1611	0.1611
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0142	-0.0035	-0.0237	-0.0438	-0.0640	-0.0841	-0.1042	-0.1244	-0.1445
	My+	0.0183	0.0080	0.0284	0.0488	0.0693	0.0897	0.1102	0.1306	0.1510
	Mz-	-0.0379	-0.0274	-0.0245	-0.0218	-0.0199	-0.0212	-0.0229	-0.0247	-0.0265
	Mz+	0.0045	0.0037	0.0028	0.0111	0.0226	0.0368	0.0513	0.0657	0.0798
104/105		0.000 m	0.185 m	0.370 m	0.556 m	0.741 m	0.926 m	1.111 m	1.296 m	1.481 m
		Envolvente (Acero Conformado)								
	N-	-0.3329	-0.3319	-0.3309	-0.3299	-0.3289	-0.3279	-0.3269	-0.3259	-0.3249
	N+	0.1201	0.1207	0.1213	0.1219	0.1225	0.1231	0.1237	0.1243	0.1249
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0139	-0.0278	-0.0417	-0.0556
	Ty+	0.0556	0.0417	0.0278	0.0139	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.0222	-0.0167	-0.0111	-0.0056	0.0000	-0.0056	-0.0111	-0.0167	-0.0222
	Tz+	0.0222	0.0167	0.0111	0.0056	0.0000	0.0056	0.0111	0.0167	0.0222
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0036	-0.0062	-0.0077	-0.0082	-0.0077	-0.0062	-0.0036	0.0000
	My+	0.0000	0.0036	0.0062	0.0077	0.0082	0.0077	0.0062	0.0036	0.0000
	Mz-	0.0000	-0.0089	-0.0154	-0.0192	-0.0206	-0.0192	-0.0154	-0.0089	0.0000

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	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
104/109		0.000 m	0.077 m	0.154 m	0.231 m	0.308 m	0.385 m	0.461 m	0.538 m	0.615 m
		Envolvente (Acero laminado)								
	N-	-2.2180	-2.2180	-2.2180	-2.2180	-2.2179	-2.2179	-2.2179	-2.2179	-2.2179
	N+	0.9978	0.9978	0.9978	0.9978	0.9978	0.9978	0.9978	0.9978	0.9979
	Ty-	-0.0002	0.0000	0.0001	0.0003	0.0004	0.0006	0.0007	0.0009	0.0010
	Ty+	0.0005	0.0008	0.0010	0.0013	0.0015	0.0018	0.0021	0.0023	0.0026
	Tz-	-0.0013	-0.0013	-0.0013	-0.0013	-0.0013	-0.0013	-0.0013	-0.0013	-0.0013
	Tz+	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0001	-0.0001	-0.0002	-0.0002	-0.0003	-0.0003	-0.0004	-0.0004
	My+	0.0000	0.0001	0.0002	0.0003	0.0004	0.0005	0.0006	0.0007	0.0008
	Mz-	0.0000	-0.0001	-0.0001	-0.0002	-0.0003	-0.0004	-0.0006	-0.0008	-0.0010
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0001	-0.0001	-0.0002	-0.0003
116/104		0.000 m	0.182 m	0.363 m	0.545 m	0.727 m	0.909 m	1.090 m	1.272 m	1.454 m
		Envolvente (Acero laminado)								
	N-	-0.5064	-0.5061	-0.5059	-0.5056	-0.5053	-0.5051	-0.5048	-0.5046	-0.5043
	N+	1.2197	1.2202	1.2206	1.2210	1.2215	1.2219	1.2224	1.2228	1.2232
	Ty-	-0.0020	-0.0016	-0.0012	-0.0008	-0.0003	0.0000	0.0002	0.0005	0.0007
	Ty+	-0.0011	-0.0008	-0.0006	-0.0003	-0.0001	0.0002	0.0006	0.0011	0.0015
	Tz-	-0.0038	-0.0038	-0.0038	-0.0038	-0.0038	-0.0038	-0.0038	-0.0038	-0.0038
	Tz+	0.0039	0.0039	0.0039	0.0039	0.0039	0.0039	0.0039	0.0039	0.0039
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0055	-0.0048	-0.0041	-0.0034	-0.0027	-0.0020	-0.0014	-0.0007	0.0000
	My+	0.0056	0.0049	0.0042	0.0035	0.0028	0.0021	0.0014	0.0007	0.0000
	Mz-	-0.0005	-0.0002	0.0000	0.0001	0.0002	0.0002	0.0002	0.0001	0.0000
	Mz+	-0.0001	0.0000	0.0002	0.0004	0.0005	0.0005	0.0004	0.0002	0.0000
105/117		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-0.0175	-0.0175	-0.0175	-0.0175	-0.0175	-0.0175	-0.0175	-0.0175	-0.0175
	N+	0.0077	0.0077	0.0077	0.0077	0.0077	0.0077	0.0077	0.0077	0.0077
	Ty-	-0.1311	-0.1250	-0.1190	-0.1129	-0.1069	-0.1009	-0.0948	-0.0888	-0.0827
	Ty+	0.1400	0.1502	0.1604	0.1706	0.1808	0.1910	0.2012	0.2114	0.2216
	Tz-	-1.2003	-1.2003	-1.2003	-1.2003	-1.2003	-1.2003	-1.2003	-1.2003	-1.2003
	Tz+	1.1984	1.1984	1.1984	1.1984	1.1984	1.1984	1.1984	1.1984	1.1984
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.1498	-0.2996	-0.4494	-0.5992	-0.7490	-0.8988	-1.0486	-1.1984
	My+	0.0000	0.1500	0.3001	0.4501	0.6002	0.7502	0.9002	1.0503	1.2003
	Mz-	0.0000	-0.0181	-0.0376	-0.0583	-0.0802	-0.1035	-0.1280	-0.1538	-0.1808
	Mz+	0.0000	0.0160	0.0313	0.0458	0.0595	0.0725	0.0847	0.0962	0.1069
118/106		0.000 m	0.244 m	0.488 m	0.732 m	0.977 m	1.221 m	1.465 m	1.709 m	1.953 m
		Envolvente (Acero laminado)								
	N-	-1.0046	-1.0046	-1.0046	-1.0045	-1.0045	-1.0045	-1.0044	-1.0044	-1.0044
	N+	2.1317	2.1318	2.1318	2.1319	2.1319	2.1320	2.1320	2.1321	2.1321
	Ty-	-0.0034	-0.0026	-0.0018	-0.0010	-0.0002	0.0003	0.0008	0.0012	0.0017
	Ty+	-0.0018	-0.0013	-0.0009	-0.0004	0.0001	0.0009	0.0017	0.0025	0.0034
	Tz-	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002
	Tz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000



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	My+	0.0000	0.0000	0.0001	0.0001	0.0002	0.0002	0.0003	0.0003	0.0003
	Mz-	-0.0012	-0.0004	0.0000	0.0002	0.0003	0.0003	0.0001	-0.0003	-0.0010
	Mz+	-0.0004	0.0000	0.0004	0.0007	0.0007	0.0006	0.0003	0.0000	-0.0004
106/169		0.000 m	0.741 m	1.482 m	2.223 m	2.964 m	3.705 m	4.446 m	5.187 m	5.928 m
		Envolvente (Acero Conformado)								
	N-	-0.9398	-0.9398	-0.9398	-0.9398	-0.9398	-0.9398	-0.9398	-0.9398	-0.9398
	N+	0.6540	0.6540	0.6540	0.6540	0.6540	0.6540	0.6540	0.6540	0.6540
	Ty-	-0.0158	-0.0158	-0.0158	-0.0158	-0.0158	-0.0158	-0.0158	-0.0158	-0.0158
	Ty+	0.0234	0.0234	0.0234	0.0234	0.0234	0.0234	0.0234	0.0234	0.0234
	Tz-	-0.4116	-0.3258	-0.2400	-0.1633	-0.1250	-0.0034	0.0191	0.0396	0.0602
	Tz+	0.0032	0.0237	0.0443	0.0648	0.0854	0.1504	0.1831	0.2437	0.3096
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0007	-0.0109	-0.0358	-0.0766	-0.1319	-0.2031	-0.2889	-0.3905	-0.5068
	My+	0.0132	0.2852	0.4961	0.6409	0.7247	0.7423	0.6989	0.5900	0.4360
	Mz-	-0.0332	-0.0502	-0.0671	-0.0840	-0.1009	-0.1178	-0.1347	-0.1516	-0.1685
	Mz+	-0.0074	-0.0010	0.0102	0.0217	0.0334	0.0450	0.0567	0.0684	0.0801
112/107		0.000 m	0.229 m	0.458 m	0.687 m	0.916 m	1.146 m	1.375 m	1.604 m	1.833 m
		Envolvente (Acero laminado)								
	N-	-1.9415	-1.9414	-1.9414	-1.9414	-1.9414	-1.9413	-1.9413	-1.9413	-1.9412
	N+	3.5783	3.5784	3.5784	3.5784	3.5785	3.5785	3.5786	3.5786	3.5787
	Ty-	-0.0033	-0.0025	-0.0017	-0.0010	-0.0002	0.0002	0.0007	0.0011	0.0016
	Ty+	-0.0017	-0.0013	-0.0008	-0.0004	0.0001	0.0009	0.0016	0.0024	0.0032
	Tz-	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003
	Tz+	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0002	-0.0001	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0001
	My+	0.0000	0.0000	0.0000	0.0001	0.0001	0.0002	0.0003	0.0003	0.0004
	Mz-	-0.0010	-0.0004	0.0000	0.0002	0.0003	0.0003	0.0001	-0.0003	-0.0009
	Mz+	-0.0003	0.0000	0.0003	0.0006	0.0006	0.0006	0.0004	0.0001	-0.0002
107/170		0.000 m	0.741 m	1.482 m	2.223 m	2.964 m	3.705 m	4.446 m	5.187 m	5.928 m
		Envolvente (Acero Conformado)								
	N-	-1.7017	-1.7017	-1.7017	-1.7017	-1.7017	-1.7017	-1.7017	-1.7017	-1.7017
	N+	0.4631	0.4631	0.4631	0.4631	0.4631	0.4631	0.4631	0.4631	0.4631
	Ty-	-0.0131	-0.0131	-0.0131	-0.0131	-0.0131	-0.0131	-0.0131	-0.0131	-0.0131
	Ty+	0.0174	0.0174	0.0174	0.0174	0.0174	0.0174	0.0174	0.0174	0.0174
	Tz-	-0.4109	-0.3251	-0.2393	-0.1628	-0.1241	-0.0030	0.0193	0.0399	0.0604
	Tz+	0.0043	0.0248	0.0454	0.0659	0.0865	0.1519	0.1847	0.2454	0.3112
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0002	-0.0109	-0.0366	-0.0781	-0.1343	-0.2063	-0.2929	-0.3953	-0.5124
	My+	0.0188	0.2902	0.5006	0.6448	0.7280	0.7451	0.7011	0.5910	0.4344
	Mz-	-0.0503	-0.0624	-0.0745	-0.0867	-0.0988	-0.1109	-0.1230	-0.1353	-0.1481
	Mz+	-0.0022	0.0067	0.0156	0.0246	0.0335	0.0426	0.0523	0.0620	0.0717
121/108		0.000 m	0.238 m	0.476 m	0.715 m	0.953 m	1.191 m	1.429 m	1.667 m	1.906 m
		Envolvente (Acero laminado)								
	N-	-0.9925	-0.9924	-0.9924	-0.9924	-0.9924	-0.9924	-0.9923	-0.9923	-0.9923
	N+	2.2048	2.2049	2.2049	2.2050	2.2050	2.2050	2.2051	2.2051	2.2052
	Ty-	-0.0033	-0.0025	-0.0017	-0.0010	-0.0002	0.0003	0.0008	0.0013	0.0018
	Ty+	-0.0017	-0.0012	-0.0008	-0.0003	0.0002	0.0009	0.0017	0.0025	0.0033
	Tz-	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001
	Tz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001
	My+	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
	Mz-	-0.0012	-0.0005	0.0000	0.0002	0.0003	0.0002	0.0000	-0.0004	-0.0011
	Mz+	-0.0004	0.0000	0.0002	0.0005	0.0006	0.0005	0.0003	-0.0001	-0.0004
108/168		0.000 m	0.727 m	1.455 m	2.182 m	2.910 m	3.637 m	4.365 m	5.092 m	5.820 m
		Envolvente (Acero Conformado)								
	N-	-0.4354	-0.4354	-0.4354	-0.4354	-0.4354	-0.4354	-0.4354	-0.4354	-0.4354
	N+	0.2272	0.2272	0.2272	0.2272	0.2272	0.2272	0.2272	0.2272	0.2272
	Ty-	-0.0139	-0.0139	-0.0139	-0.0139	-0.0139	-0.0139	-0.0139	-0.0139	-0.0139
	Ty+	0.0141	0.0141	0.0141	0.0141	0.0141	0.0141	0.0141	0.0141	0.0141
	Tz-	-0.2323	-0.1546	-0.0809	-0.0567	-0.1105	-0.1445	-0.2116	-0.2787	-0.3459
	Tz+	0.2011	0.1340	0.0668	0.0192	0.0854	0.1782	0.2408	0.3185	0.3962
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0143	-0.1352	-0.2093	-0.2325	-0.2088	-0.1344	-0.0539	-0.2204	-0.4792
	My+	0.0188	0.1584	0.2437	0.2703	0.2473	0.1561	0.0405	0.2112	0.4374
	Mz-	-0.0496	-0.0402	-0.0315	-0.0228	-0.0140	-0.0066	-0.0122	-0.0224	-0.0327
	Mz+	0.0491	0.0389	0.0287	0.0198	0.0123	0.0089	0.0154	0.0249	0.0345
109/119		0.000 m	0.229 m	0.458 m	0.687 m	0.916 m	1.146 m	1.375 m	1.604 m	1.833 m
		Envolvente (Acero laminado)								
	N-	-3.5955	-3.5955	-3.5954	-3.5954	-3.5954	-3.5953	-3.5953	-3.5952	-3.5952
	N+	1.8802	1.8802	1.8802	1.8803	1.8803	1.8803	1.8803	1.8804	1.8804
	Ty-	-0.0030	-0.0023	-0.0015	-0.0007	0.0000	0.0004	0.0009	0.0013	0.0018
	Ty+	-0.0017	-0.0012	-0.0008	-0.0003	0.0002	0.0010	0.0017	0.0025	0.0033
	Tz-	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003
	Tz+	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0004	-0.0003	-0.0003	-0.0002	-0.0001	-0.0001	0.0000	-0.0001	-0.0003
	My+	0.0008	0.0007	0.0005	0.0004	0.0003	0.0001	0.0000	0.0001	0.0001
	Mz-	-0.0010	-0.0004	-0.0001	0.0001	0.0001	0.0000	-0.0002	-0.0006	-0.0013
	Mz+	-0.0003	0.0001	0.0004	0.0006	0.0007	0.0006	0.0003	0.0000	-0.0004
109/167		0.000 m	0.671 m	1.342 m	2.013 m	2.684 m	3.355 m	4.026 m	4.697 m	5.368 m
		Envolvente (Acero laminado)								
	N-	-0.4980	-0.4980	-0.4980	-0.4980	-0.4980	-0.4980	-0.4980	-0.4980	-0.4980
	N+	1.0058	1.0058	1.0058	1.0058	1.0058	1.0058	1.0058	1.0058	1.0058
	Ty-	-0.1216	-0.1216	-0.1216	-0.1216	-0.1216	-0.1216	-0.1216	-0.1216	-0.1216
	Ty+	0.0796	0.0796	0.0796	0.0796	0.0796	0.0796	0.0796	0.0796	0.0796
	Tz-	-0.3066	-0.2100	-0.1208	-0.0667	-0.1869	-0.3282	-0.5062	-0.6842	-0.8621
	Tz+	0.5616	0.3836	0.2056	0.0438	0.0915	0.2099	0.2848	0.3814	0.4781
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.1990	-0.5137	-0.7138	-0.7897	-0.7509	-0.5880	-0.3104	-0.1373	-0.3679
	My+	0.1319	0.3039	0.4137	0.4560	0.4361	0.3488	0.2142	0.1341	0.6077
	Mz-	-0.3344	-0.2540	-0.1736	-0.0932	-0.0189	-0.0538	-0.1072	-0.1607	-0.2141
	Mz+	0.2134	0.1599	0.1065	0.0531	0.0121	0.0768	0.1583	0.2399	0.3215
110/122		0.000 m	0.238 m	0.476 m	0.715 m	0.953 m	1.191 m	1.429 m	1.667 m	1.906 m
		Envolvente (Acero laminado)								
	N-	-1.6265	-1.6265	-1.6265	-1.6264	-1.6264	-1.6263	-1.6263	-1.6263	-1.6262
	N+	0.7580	0.7580	0.7581	0.7581	0.7581	0.7581	0.7582	0.7582	0.7582
	Ty-	-0.0033	-0.0025	-0.0017	-0.0009	-0.0002	0.0003	0.0008	0.0013	0.0017
	Ty+	-0.0016	-0.0012	-0.0007	-0.0002	0.0003	0.0010	0.0018	0.0026	0.0034
	Tz-	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002

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	Tz+	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0004	-0.0004	-0.0004	-0.0004	-0.0003	-0.0003	-0.0003	-0.0002	-0.0002
	My+	0.0002	0.0002	0.0002	0.0002	0.0002	0.0001	0.0001	0.0001	0.0001
	Mz-	-0.0011	-0.0004	0.0000	0.0002	0.0003	0.0003	0.0001	-0.0004	-0.0011
	Mz+	-0.0002	0.0001	0.0004	0.0006	0.0007	0.0005	0.0003	-0.0001	-0.0004
110/166		0.000 m	0.618 m	1.237 m	1.855 m	2.473 m	3.092 m	3.710 m	4.328 m	4.947 m
		Envolvente (Acero laminado)								
	N-	-0.6048	-0.6048	-0.6048	-0.6048	-0.6048	-0.6048	-0.6048	-0.6048	-0.6048
	N+	1.2183	1.2183	1.2183	1.2183	1.2183	1.2183	1.2183	1.2183	1.2183
	Ty-	-0.0624	-0.0624	-0.0624	-0.0624	-0.0624	-0.0624	-0.0624	-0.0624	-0.0624
	Ty+	0.1335	0.1335	0.1335	0.1335	0.1335	0.1335	0.1335	0.1335	0.1335
	Tz-	-0.2825	-0.1934	-0.1136	-0.0666	-0.1808	-0.3055	-0.4695	-0.6335	-0.7975
	Tz+	0.5144	0.3504	0.1864	0.0470	0.0994	0.2126	0.2722	0.3612	0.4503
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.3129	-0.5782	-0.7463	-0.8088	-0.7740	-0.6338	-0.3962	-0.1696	-0.3580
	My+	0.1970	0.3430	0.4362	0.4721	0.4551	0.3809	0.2538	0.0794	0.3873
	Mz-	-0.1629	-0.1243	-0.0857	-0.0471	-0.0120	-0.0706	-0.1532	-0.2357	-0.3183
	Mz+	0.3422	0.2596	0.1771	0.0945	0.0223	0.0330	0.0687	0.1074	0.1460
111/124		0.000 m	0.244 m	0.488 m	0.732 m	0.977 m	1.221 m	1.465 m	1.709 m	1.953 m
		Envolvente (Acero laminado)								
	N-	-2.5826	-2.5825	-2.5825	-2.5825	-2.5824	-2.5824	-2.5823	-2.5823	-2.5822
	N+	1.1781	1.1781	1.1781	1.1781	1.1782	1.1782	1.1782	1.1783	1.1783
	Ty-	-0.0034	-0.0026	-0.0017	-0.0009	-0.0001	0.0004	0.0009	0.0014	0.0018
	Ty+	-0.0020	-0.0015	-0.0010	-0.0005	0.0000	0.0007	0.0015	0.0024	0.0032
	Tz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001
	Mz-	-0.0016	-0.0009	-0.0003	-0.0001	0.0000	-0.0001	-0.0003	-0.0007	-0.0014
	Mz+	-0.0005	-0.0001	0.0002	0.0004	0.0006	0.0005	0.0003	0.0000	-0.0004
111/165		0.000 m	0.513 m	1.026 m	1.538 m	2.051 m	2.564 m	3.077 m	3.589 m	4.102 m
		Envolvente (Acero Conformado)								
	N-	-0.0365	-0.0365	-0.0365	-0.0365	-0.0365	-0.0365	-0.0365	-0.0365	-0.0365
	N+	0.0477	0.0477	0.0477	0.0477	0.0477	0.0477	0.0477	0.0477	0.0477
	Ty-	-0.0182	-0.0182	-0.0182	-0.0182	-0.0182	-0.0182	-0.0182	-0.0182	-0.0182
	Ty+	0.0137	0.0137	0.0137	0.0137	0.0137	0.0137	0.0137	0.0137	0.0137
	Tz-	-0.1644	-0.1097	-0.0783	-0.0690	-0.1084	-0.1182	-0.1655	-0.2128	-0.2601
	Tz+	0.1488	0.1015	0.0542	0.0237	0.0671	0.1562	0.1802	0.2314	0.2862
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.1458	-0.1939	-0.2249	-0.2401	-0.2320	-0.1987	-0.1420	-0.0751	-0.1343
	My+	0.2050	0.2747	0.3175	0.3310	0.3176	0.2750	0.2054	0.1128	0.1449
	Mz-	-0.0708	-0.0628	-0.0548	-0.0468	-0.0388	-0.0308	-0.0228	-0.0148	-0.0127
	Mz+	0.0481	0.0425	0.0369	0.0313	0.0257	0.0201	0.0145	0.0137	0.0180
123/112		0.000 m	0.229 m	0.458 m	0.687 m	0.916 m	1.146 m	1.375 m	1.604 m	1.833 m
		Envolvente (Acero laminado)								
	N-	-2.0253	-2.0253	-2.0253	-2.0252	-2.0252	-2.0252	-2.0252	-2.0251	-2.0251
	N+	3.6994	3.6995	3.6995	3.6996	3.6996	3.6997	3.6997	3.6998	3.6998
	Ty-	-0.0031	-0.0023	-0.0015	-0.0008	0.0000	0.0004	0.0009	0.0013	0.0018

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE** Adrián Freijomil Aradas

	Ty+	-0.0017	-0.0013	-0.0008	-0.0004	0.0001	0.0009	0.0016	0.0024	0.0032
	Tz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz+	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0002	-0.0002	-0.0002
	My+	0.0001	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz-	-0.0010	-0.0004	-0.0001	0.0000	0.0001	0.0001	-0.0001	-0.0004	-0.0010
	Mz+	-0.0002	0.0002	0.0005	0.0008	0.0008	0.0007	0.0004	0.0000	-0.0003
112/164		0.000 m	0.506 m	1.011 m	1.517 m	2.023 m	2.528 m	3.034 m	3.540 m	4.046 m
		Envolvente (Acero Conformado)								
	N-	0.0051	0.0051	0.0051	0.0051	0.0051	0.0051	0.0051	0.0051	0.0051
	N+	0.0394	0.0394	0.0394	0.0394	0.0394	0.0394	0.0394	0.0394	0.0394
	Ty-	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012
	Ty+	0.0071	0.0071	0.0071	0.0071	0.0071	0.0071	0.0071	0.0071	0.0071
	Tz-	-0.2894	-0.2354	-0.1814	-0.1519	-0.1282	-0.0559	-0.0958	-0.1425	-0.1892
	Tz+	0.1937	0.1470	0.1004	0.0537	0.0070	0.0577	0.0772	0.1018	0.1507
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.2345	-0.3202	-0.3832	-0.4217	-0.4375	-0.4288	-0.3974	-0.3415	-0.2629
	My+	0.3469	0.4791	0.5850	0.6626	0.7139	0.7368	0.7335	0.7018	0.6439
	Mz-	-0.1054	-0.1076	-0.1098	-0.1120	-0.1142	-0.1165	-0.1187	-0.1209	-0.1231
	Mz+	0.0699	0.0679	0.0671	0.0663	0.0655	0.0646	0.0638	0.0630	0.0622
113/114		0.000 m	0.374 m	0.748 m	1.122 m	1.496 m	1.870 m	2.244 m	2.618 m	2.992 m
		Envolvente (Acero Conformado)								
	N-	-0.1801	-0.1781	-0.1761	-0.1740	-0.1720	-0.1700	-0.1680	-0.1659	-0.1639
	N+	0.0114	0.0126	0.0138	0.0150	0.0162	0.0174	0.0186	0.0198	0.0211
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.0942	-0.0707	-0.0471	-0.0236	0.0000	-0.0393	-0.0785	-0.1178	-0.1571
	Tz+	0.1571	0.1178	0.0785	0.0393	0.0000	0.0236	0.0471	0.0707	0.0942
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0511	-0.0881	-0.1098	-0.1175	-0.1098	-0.0881	-0.0511	0.0000
	My+	0.0000	0.0307	0.0529	0.0659	0.0705	0.0659	0.0529	0.0307	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
113/125		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-0.4663	-0.4663	-0.4663	-0.4663	-0.4663	-0.4663	-0.4663	-0.4663	-0.4663
	N+	0.4892	0.4892	0.4892	0.4892	0.4892	0.4892	0.4892	0.4892	0.4892
	Ty-	-0.0075	-0.0068	-0.0060	-0.0053	-0.0045	-0.0038	-0.0030	-0.0023	-0.0015
	Ty+	0.0697	0.0709	0.0722	0.0735	0.0747	0.0760	0.0772	0.0785	0.0798
	Tz-	-0.1317	-0.1317	-0.1317	-0.1317	-0.1317	-0.1317	-0.1317	-0.1317	-0.1317
	Tz+	0.0719	0.0719	0.0719	0.0719	0.0719	0.0719	0.0719	0.0719	0.0719
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.1614	-0.1704	-0.1794	-0.1884	-0.1974	-0.2064	-0.2154	-0.2244	-0.2333
	My+	0.2800	0.2965	0.3130	0.3294	0.3459	0.3624	0.3788	0.3953	0.4118
	Mz-	-0.0721	-0.0800	-0.0880	-0.0960	-0.1042	-0.1124	-0.1207	-0.1291	-0.1379
	Mz+	0.0788	0.0788	0.0786	0.0782	0.0777	0.0771	0.0762	0.0753	0.0744
114/126		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE** Adrián Freijomil Aradas

	N+	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257
	Ty-	-0.2376	-0.2274	-0.2172	-0.2070	-0.1968	-0.1866	-0.1764	-0.1662	-0.1560
	Ty+	-0.0774	-0.0714	-0.0653	-0.0593	-0.0533	-0.0472	-0.0412	-0.0351	-0.0291
	Tz-	-1.9460	-1.9460	-1.9460	-1.9460	-1.9460	-1.9460	-1.9460	-1.9460	-1.9460
	Tz+	1.2035	1.2035	1.2035	1.2035	1.2035	1.2035	1.2035	1.2035	1.2035
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-1.2977	-1.4482	-1.5986	-1.7491	-1.8995	-2.0499	-2.2004	-2.3508	-2.5012
	My+	2.1030	2.3463	2.5895	2.8328	3.0760	3.3193	3.5625	3.8057	4.0490
	Mz-	-0.0282	-0.0169	-0.0064	0.0033	0.0123	0.0205	0.0280	0.0347	0.0406
	Mz+	0.1995	0.2276	0.2545	0.2800	0.3043	0.3273	0.3491	0.3696	0.3887
115/116		0.000 m	0.057 m	0.114 m	0.171 m	0.228 m	0.285 m	0.341 m	0.398 m	0.455 m
		Envolvente (Acero Conformado)								
	N-	-0.3260	-0.3257	-0.3254	-0.3251	-0.3247	-0.3244	-0.3241	-0.3238	-0.3235
	N+	0.0637	0.0638	0.0640	0.0642	0.0644	0.0646	0.0648	0.0649	0.0651
	Ty-	-0.0789	-0.0789	-0.0789	-0.0789	-0.0789	-0.0789	-0.0789	-0.0789	-0.0789
	Ty+	0.0665	0.0665	0.0665	0.0665	0.0665	0.0665	0.0665	0.0665	0.0665
	Tz-	-0.0829	-0.0795	-0.0761	-0.0726	-0.0692	-0.0658	-0.0624	-0.0590	-0.0556
	Tz+	0.0831	0.0797	0.0763	0.0729	0.0695	0.0660	0.0626	0.0592	0.0558
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0046	-0.0091	-0.0133	-0.0174	-0.0212	-0.0249	-0.0283	-0.0316
	My+	0.0000	0.0046	0.0090	0.0133	0.0173	0.0212	0.0248	0.0283	0.0315
	Mz-	0.0000	-0.0038	-0.0076	-0.0114	-0.0151	-0.0189	-0.0227	-0.0265	-0.0303
	Mz+	0.0000	0.0045	0.0090	0.0135	0.0180	0.0225	0.0269	0.0314	0.0359
115/120		0.000 m	0.054 m	0.108 m	0.162 m	0.216 m	0.270 m	0.324 m	0.378 m	0.432 m
		Envolvente (Acero Conformado)								
	N-	-1.2356	-1.2356	-1.2356	-1.2356	-1.2356	-1.2356	-1.2356	-1.2356	-1.2356
	N+	0.3299	0.3299	0.3299	0.3299	0.3299	0.3299	0.3299	0.3299	0.3299
	Ty-	-0.0518	-0.0515	-0.0512	-0.0509	-0.0506	-0.0502	-0.0499	-0.0496	-0.0493
	Ty+	0.2980	0.2985	0.2990	0.2996	0.3001	0.3007	0.3012	0.3018	0.3023
	Tz-	-0.0804	-0.0804	-0.0804	-0.0804	-0.0804	-0.0804	-0.0804	-0.0804	-0.0804
	Tz+	0.0782	0.0782	0.0782	0.0782	0.0782	0.0782	0.0782	0.0782	0.0782
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.1445	-0.1487	-0.1529	-0.1572	-0.1614	-0.1656	-0.1698	-0.1740	-0.1783
	My+	0.1510	0.1554	0.1597	0.1641	0.1684	0.1727	0.1771	0.1814	0.1857
	Mz-	-0.0265	-0.0361	-0.0457	-0.0590	-0.0751	-0.0913	-0.1076	-0.1238	-0.1401
	Mz+	0.0798	0.0695	0.0591	0.0524	0.0485	0.0446	0.0407	0.0368	0.0329
116/117		0.000 m	0.317 m	0.634 m	0.951 m	1.268 m	1.585 m	1.902 m	2.219 m	2.536 m
		Envolvente (Acero Conformado)								
	N-	-0.4034	-0.4017	-0.4000	-0.3983	-0.3965	-0.3948	-0.3931	-0.3914	-0.3897
	N+	0.0745	0.0755	0.0765	0.0775	0.0786	0.0796	0.0806	0.0816	0.0826
	Ty-	-0.0119	-0.0119	-0.0119	-0.0119	-0.0119	-0.0119	-0.0119	-0.0119	-0.0119
	Ty+	0.0142	0.0142	0.0142	0.0142	0.0142	0.0142	0.0142	0.0142	0.0142
	Tz-	-0.0637	-0.0447	-0.0257	-0.0066	-0.0125	-0.0315	-0.0505	-0.0695	-0.0886
	Tz+	0.0637	0.0447	0.0256	0.0066	0.0124	0.0314	0.0505	0.0695	0.0885
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0316	-0.0487	-0.0599	-0.0649	-0.0641	-0.0570	-0.0441	-0.0249	0.0000
	My+	0.0315	0.0486	0.0598	0.0648	0.0640	0.0569	0.0441	0.0249	0.0000
	Mz-	-0.0303	-0.0265	-0.0227	-0.0189	-0.0151	-0.0114	-0.0076	-0.0038	0.0000
	Mz+	0.0359	0.0314	0.0269	0.0225	0.0180	0.0135	0.0090	0.0045	0.0000
120/116		0.000 m	0.078 m	0.157 m	0.235 m	0.314 m	0.392 m	0.470 m	0.549 m	0.627 m

## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

		Envolvente (Acero laminado)								
	N-	-0.3910	-0.3908	-0.3907	-0.3906	-0.3905	-0.3904	-0.3903	-0.3902	-0.3901
	N+	1.1304	1.1306	1.1308	1.1310	1.1312	1.1314	1.1316	1.1317	1.1319
	Ty-	-0.0001	0.0000	0.0001	0.0002	0.0003	0.0004	0.0005	0.0006	0.0007
	Ty+	0.0009	0.0011	0.0013	0.0015	0.0017	0.0018	0.0020	0.0022	0.0024
	Tz-	-0.0046	-0.0046	-0.0046	-0.0046	-0.0046	-0.0046	-0.0046	-0.0046	-0.0046
	Tz+	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0027	-0.0030	-0.0034	-0.0037	-0.0041	-0.0044	-0.0048	-0.0051	-0.0055
	My+	0.0027	0.0031	0.0035	0.0038	0.0042	0.0045	0.0049	0.0052	0.0056
	Mz-	0.0001	0.0001	0.0001	0.0001	0.0000	0.0000	-0.0002	-0.0003	-0.0005
	Mz+	0.0005	0.0005	0.0004	0.0003	0.0001	0.0000	0.0000	-0.0001	-0.0001
117/128		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-0.0294	-0.0294	-0.0294	-0.0294	-0.0294	-0.0294	-0.0294	-0.0294	-0.0294
	N+	0.0099	0.0099	0.0099	0.0099	0.0099	0.0099	0.0099	0.0099	0.0099
	Ty-	-0.1680	-0.1578	-0.1476	-0.1374	-0.1272	-0.1170	-0.1068	-0.0966	-0.0864
	Ty+	-0.0001	0.0060	0.0120	0.0181	0.0241	0.0301	0.0362	0.0422	0.0483
	Tz-	-1.1117	-1.1117	-1.1117	-1.1117	-1.1117	-1.1117	-1.1117	-1.1117	-1.1117
	Tz+	1.1099	1.1099	1.1099	1.1099	1.1099	1.1099	1.1099	1.1099	1.1099
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-1.1984	-1.3372	-1.4759	-1.6147	-1.7534	-1.8921	-2.0309	-2.1696	-2.3084
	My+	1.2003	1.3393	1.4782	1.6172	1.7562	1.8951	2.0341	2.1731	2.3121
	Mz-	-0.1808	-0.1620	-0.1451	-0.1295	-0.1155	-0.1057	-0.0968	-0.0886	-0.0869
	Mz+	0.1069	0.1065	0.1054	0.1035	0.1012	0.1011	0.0998	0.0971	0.0932
129/118		0.000 m	0.244 m	0.488 m	0.732 m	0.977 m	1.221 m	1.465 m	1.709 m	1.953 m
		Envolvente (Acero laminado)								
	N-	-0.9353	-0.9353	-0.9353	-0.9352	-0.9352	-0.9352	-0.9352	-0.9351	-0.9351
	N+	2.0606	2.0606	2.0607	2.0607	2.0607	2.0608	2.0608	2.0609	2.0609
	Ty-	-0.0033	-0.0024	-0.0016	-0.0008	0.0000	0.0004	0.0009	0.0014	0.0019
	Ty+	-0.0018	-0.0014	-0.0009	-0.0004	0.0001	0.0009	0.0017	0.0025	0.0034
	Tz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz+	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0001	-0.0001
	My+	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz-	-0.0012	-0.0005	-0.0001	0.0001	0.0001	0.0001	-0.0001	-0.0005	-0.0012
	Mz+	-0.0002	0.0002	0.0006	0.0009	0.0009	0.0008	0.0005	0.0000	-0.0004
118/158		0.000 m	0.490 m	0.981 m	1.471 m	1.961 m	2.451 m	2.942 m	3.432 m	3.922 m
		Envolvente (Acero Conformado)								
	N-	-0.0460	-0.0460	-0.0460	-0.0460	-0.0460	-0.0460	-0.0460	-0.0460	-0.0460
	N+	0.1064	0.1064	0.1064	0.1064	0.1064	0.1064	0.1064	0.1064	0.1064
	Ty-	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008
	Ty+	0.0166	0.0166	0.0166	0.0166	0.0166	0.0166	0.0166	0.0166	0.0166
	Tz-	-0.2738	-0.2214	-0.1690	-0.1422	-0.1193	-0.0607	-0.0991	-0.1443	-0.1895
	Tz+	0.1783	0.1330	0.0878	0.0425	-0.0027	0.0598	0.0786	0.1015	0.1471
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.2265	-0.3024	-0.3569	-0.3884	-0.3987	-0.3858	-0.3517	-0.2944	-0.2159
	My+	0.3444	0.4652	0.5615	0.6310	0.6759	0.6941	0.6876	0.6545	0.5967
	Mz-	-0.0792	-0.0868	-0.0944	-0.1019	-0.1095	-0.1171	-0.1253	-0.1334	-0.1416

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	Mz+	0.0624	0.0609	0.0600	0.0596	0.0592	0.0588	0.0584	0.0580	0.0576
119/130		0.000 m	0.229 m	0.458 m	0.687 m	0.916 m	1.146 m	1.375 m	1.604 m	1.833 m
		Envolvente (Acero laminado)								
	N-	-3.6873	-3.6872	-3.6872	-3.6871	-3.6871	-3.6870	-3.6870	-3.6869	-3.6869
	N+	1.9637	1.9637	1.9638	1.9638	1.9638	1.9638	1.9639	1.9639	1.9639
	Ty-	-0.0031	-0.0023	-0.0015	-0.0008	0.0000	0.0004	0.0009	0.0013	0.0018
	Ty+	-0.0017	-0.0013	-0.0008	-0.0004	0.0001	0.0008	0.0016	0.0024	0.0031
	Tz-	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002
	Tz+	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0003	-0.0002	-0.0002	-0.0001	0.0000	-0.0001	-0.0001	-0.0001	-0.0002
	My+	0.0001	0.0001	0.0001	0.0000	0.0000	0.0000	0.0001	0.0001	0.0002
	Mz-	-0.0013	-0.0007	-0.0003	-0.0001	0.0000	-0.0001	-0.0003	-0.0007	-0.0013
Mz+	-0.0004	0.0000	0.0002	0.0005	0.0005	0.0004	0.0002	0.0000	-0.0004	
119/157		0.000 m	0.436 m	0.871 m	1.307 m	1.743 m	2.178 m	2.614 m	3.050 m	3.485 m
		Envolvente (Acero Conformado)								
	N-	-0.0510	-0.0510	-0.0510	-0.0510	-0.0510	-0.0510	-0.0510	-0.0510	-0.0510
	N+	0.1310	0.1310	0.1310	0.1310	0.1310	0.1310	0.1310	0.1310	0.1310
	Ty-	-0.0163	-0.0163	-0.0163	-0.0163	-0.0163	-0.0163	-0.0163	-0.0163	-0.0163
	Ty+	0.0159	0.0159	0.0159	0.0159	0.0159	0.0159	0.0159	0.0159	0.0159
	Tz-	-0.1476	-0.1057	-0.0847	-0.0690	-0.0945	-0.0949	-0.1351	-0.1753	-0.2155
	Tz+	0.1252	0.0850	0.0448	0.0099	0.0444	0.1324	0.1527	0.1840	0.2305
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.2320	-0.2775	-0.3061	-0.3165	-0.3101	-0.2855	-0.2441	-0.1845	-0.1080
	My+	0.2848	0.3385	0.3728	0.3860	0.3798	0.3524	0.3056	0.2378	0.1506
	Mz-	-0.0810	-0.0747	-0.0684	-0.0621	-0.0558	-0.0495	-0.0432	-0.0368	-0.0315
Mz+	0.0710	0.0644	0.0577	0.0511	0.0444	0.0378	0.0311	0.0245	0.0178	
120/127		0.000 m	0.071 m	0.142 m	0.213 m	0.284 m	0.355 m	0.426 m	0.497 m	0.568 m
		Envolvente (Acero Conformado)								
	N-	-1.0799	-1.0799	-1.0799	-1.0799	-1.0799	-1.0799	-1.0799	-1.0799	-1.0799
	N+	0.7743	0.7743	0.7743	0.7743	0.7743	0.7743	0.7743	0.7743	0.7743
	Ty-	-0.1787	-0.1780	-0.1773	-0.1766	-0.1759	-0.1751	-0.1744	-0.1737	-0.1730
	Ty+	0.0194	0.0198	0.0202	0.0206	0.0211	0.0215	0.0219	0.0223	0.0228
	Tz-	-0.0788	-0.0788	-0.0788	-0.0788	-0.0788	-0.0788	-0.0788	-0.0788	-0.0788
	Tz+	0.0765	0.0765	0.0765	0.0765	0.0765	0.0765	0.0765	0.0765	0.0765
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.1783	-0.1837	-0.1891	-0.1946	-0.2000	-0.2054	-0.2109	-0.2163	-0.2217
	My+	0.1857	0.1913	0.1969	0.2025	0.2081	0.2137	0.2193	0.2249	0.2305
	Mz-	-0.1401	-0.1284	-0.1167	-0.1050	-0.0935	-0.0819	-0.0705	-0.0625	-0.0568
Mz+	0.0329	0.0393	0.0457	0.0521	0.0585	0.0648	0.0711	0.0808	0.0927	
140/120		0.000 m	0.285 m	0.570 m	0.855 m	1.140 m	1.425 m	1.710 m	1.995 m	2.280 m
		Envolvente (Acero laminado)								
	N-	-0.6204	-0.6200	-0.6196	-0.6192	-0.6187	-0.6183	-0.6179	-0.6175	-0.6171
	N+	0.4915	0.4922	0.4929	0.4935	0.4942	0.4949	0.4956	0.4963	0.4970
	Ty-	-0.0047	-0.0040	-0.0034	-0.0027	-0.0021	-0.0014	-0.0008	-0.0001	0.0003
	Ty+	-0.0026	-0.0022	-0.0019	-0.0015	-0.0011	-0.0007	-0.0003	0.0001	0.0007
	Tz-	-0.0027	-0.0027	-0.0027	-0.0027	-0.0027	-0.0027	-0.0027	-0.0027	-0.0027
	Tz+	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0034	-0.0027	-0.0019	-0.0011	-0.0004	-0.0005	-0.0012	-0.0019	-0.0027

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	My+	0.0033	0.0026	0.0018	0.0011	0.0003	0.0005	0.0012	0.0020	0.0027
	Mz-	-0.0042	-0.0029	-0.0019	-0.0011	-0.0005	0.0000	0.0001	0.0001	0.0001
	Mz+	-0.0024	-0.0017	-0.0011	-0.0006	-0.0002	0.0002	0.0005	0.0006	0.0005
131/121		0.000 m	0.238 m	0.476 m	0.715 m	0.953 m	1.191 m	1.429 m	1.667 m	1.906 m
		Envolvente (Acero laminado)								
	N-	-0.9114	-0.9113	-0.9113	-0.9113	-0.9113	-0.9113	-0.9112	-0.9112	-0.9112
	N+	2.1052	2.1052	2.1053	2.1053	2.1053	2.1054	2.1054	2.1055	2.1055
	Ty-	-0.0034	-0.0026	-0.0018	-0.0010	-0.0002	0.0003	0.0007	0.0012	0.0017
	Ty+	-0.0018	-0.0013	-0.0009	-0.0004	0.0001	0.0009	0.0017	0.0025	0.0033
	Tz-	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004
	Tz+	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0006	-0.0005	-0.0004	-0.0003	-0.0002	-0.0001	-0.0001	0.0000	-0.0001
	My+	0.0003	0.0003	0.0002	0.0002	0.0001	0.0001	0.0000	0.0000	0.0001
	Mz-	-0.0012	-0.0005	0.0000	0.0002	0.0002	0.0002	0.0000	-0.0005	-0.0012
	Mz+	-0.0005	-0.0001	0.0002	0.0005	0.0005	0.0005	0.0002	-0.0001	-0.0004
121/155		0.000 m	0.391 m	0.782 m	1.173 m	1.564 m	1.955 m	2.346 m	2.737 m	3.128 m
		Envolvente (Acero Conformado)								
	N-	-0.0212	-0.0212	-0.0212	-0.0212	-0.0212	-0.0212	-0.0212	-0.0212	-0.0212
	N+	0.0937	0.0937	0.0937	0.0937	0.0937	0.0937	0.0937	0.0937	0.0937
	Ty-	-0.0211	-0.0211	-0.0211	-0.0211	-0.0211	-0.0211	-0.0211	-0.0211	-0.0211
	Ty+	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172
	Tz-	-0.1006	-0.0763	-0.0580	-0.0607	-0.0925	-0.0929	-0.1290	-0.1651	-0.2012
	Tz+	0.1081	0.0720	0.0360	0.0331	0.0737	0.1542	0.1725	0.1990	0.2408
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.2101	-0.2370	-0.2503	-0.2489	-0.2341	-0.2045	-0.1614	-0.1036	-0.0428
	My+	0.2569	0.2878	0.3029	0.3011	0.2836	0.2491	0.1990	0.1319	0.0490
	Mz-	-0.0711	-0.0629	-0.0546	-0.0463	-0.0381	-0.0298	-0.0215	-0.0133	-0.0050
	Mz+	0.0578	0.0511	0.0444	0.0377	0.0310	0.0242	0.0175	0.0108	0.0041
122/136		0.000 m	0.200 m	0.399 m	0.599 m	0.798 m	0.998 m	1.197 m	1.397 m	1.597 m
		Envolvente (Acero laminado)								
	N-	-1.5951	-1.5950	-1.5950	-1.5950	-1.5949	-1.5949	-1.5949	-1.5948	-1.5948
	N+	0.7128	0.7128	0.7128	0.7128	0.7128	0.7129	0.7129	0.7129	0.7129
	Ty-	-0.0033	-0.0026	-0.0019	-0.0013	-0.0006	0.0000	0.0004	0.0008	0.0012
	Ty+	-0.0018	-0.0014	-0.0010	-0.0006	-0.0002	0.0003	0.0009	0.0016	0.0023
	Tz-	-0.0007	-0.0007	-0.0007	-0.0007	-0.0007	-0.0007	-0.0007	-0.0007	-0.0007
	Tz+	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0002	-0.0001	0.0000	-0.0001	-0.0002	-0.0003	-0.0003	-0.0004	-0.0005
	My+	0.0001	0.0001	0.0001	0.0002	0.0004	0.0005	0.0006	0.0008	0.0009
	Mz-	-0.0011	-0.0005	-0.0001	0.0000	0.0001	0.0001	0.0000	-0.0001	-0.0004
	Mz+	-0.0004	-0.0001	0.0002	0.0005	0.0006	0.0007	0.0006	0.0003	0.0000
122/154		0.000 m	0.282 m	0.564 m	0.846 m	1.128 m	1.409 m	1.691 m	1.973 m	2.255 m
		Envolvente (Acero Conformado)								
	N-	-0.0695	-0.0695	-0.0695	-0.0695	-0.0695	-0.0695	-0.0695	-0.0695	-0.0695
	N+	0.0226	0.0226	0.0226	0.0226	0.0226	0.0226	0.0226	0.0226	0.0226
	Ty-	-0.0155	-0.0155	-0.0155	-0.0155	-0.0155	-0.0155	-0.0155	-0.0155	-0.0155
	Ty+	0.0112	0.0112	0.0112	0.0112	0.0112	0.0112	0.0112	0.0112	0.0112
	Tz-	-0.0908	-0.0776	-0.0644	-0.0707	-0.0912	-0.0775	-0.1035	-0.1295	-0.1555
	Tz+	0.0621	0.0361	0.0246	0.0406	0.0656	0.1426	0.1558	0.1690	0.1822
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000



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	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.2665	-0.2802	-0.2869	-0.2859	-0.2779	-0.2622	-0.2396	-0.2093	-0.1719
	My+	0.3389	0.3560	0.3650	0.3652	0.3572	0.3403	0.3154	0.2816	0.2396
	Mz-	-0.0530	-0.0530	-0.0544	-0.0558	-0.0572	-0.0586	-0.0600	-0.0614	-0.0628
	Mz+	0.0498	0.0482	0.0467	0.0451	0.0435	0.0419	0.0404	0.0388	0.0372
132/123		0.000 m	0.229 m	0.458 m	0.687 m	0.916 m	1.146 m	1.375 m	1.604 m	1.833 m
		Envolvente (Acero laminado)								
	N-	-2.0785	-2.0785	-2.0784	-2.0784	-2.0784	-2.0783	-2.0783	-2.0783	-2.0783
	N+	3.7809	3.7810	3.7810	3.7811	3.7811	3.7811	3.7812	3.7812	3.7813
	Ty-	-0.0031	-0.0023	-0.0016	-0.0008	0.0000	0.0004	0.0009	0.0013	0.0018
	Ty+	-0.0018	-0.0013	-0.0009	-0.0004	0.0000	0.0008	0.0015	0.0023	0.0031
	Tz-	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002
	Tz+	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0003	-0.0003	-0.0002	-0.0002	-0.0001	-0.0001	0.0000	0.0000	-0.0001
	My+	0.0004	0.0003	0.0003	0.0002	0.0002	0.0001	0.0001	0.0000	0.0001
	Mz-	-0.0011	-0.0005	-0.0002	0.0000	0.0000	0.0000	-0.0001	-0.0004	-0.0010
	Mz+	-0.0001	0.0002	0.0006	0.0009	0.0010	0.0009	0.0006	0.0002	-0.0002
123/153		0.000 m	0.270 m	0.541 m	0.811 m	1.081 m	1.352 m	1.622 m	1.892 m	2.163 m
		Envolvente (Acero Conformado)								
	N-	-0.0055	-0.0055	-0.0055	-0.0055	-0.0055	-0.0055	-0.0055	-0.0055	-0.0055
	N+	0.1124	0.1124	0.1124	0.1124	0.1124	0.1124	0.1124	0.1124	0.1124
	Ty-	-0.0065	-0.0065	-0.0065	-0.0065	-0.0065	-0.0065	-0.0065	-0.0065	-0.0065
	Ty+	0.0110	0.0110	0.0110	0.0110	0.0110	0.0110	0.0110	0.0110	0.0110
	Tz-	-0.1792	-0.1595	-0.1469	-0.1342	-0.1216	-0.0421	-0.0519	-0.0757	-0.1007
	Tz+	0.1143	0.0893	0.0644	0.0394	0.0145	0.0599	0.0659	0.0775	0.0901
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.3883	-0.4156	-0.4366	-0.4505	-0.4579	-0.4583	-0.4522	-0.4391	-0.4196
	My+	0.5612	0.6056	0.6425	0.6713	0.6926	0.7058	0.7114	0.7090	0.6990
	Mz-	-0.1251	-0.1239	-0.1227	-0.1215	-0.1203	-0.1191	-0.1179	-0.1167	-0.1155
	Mz+	0.0816	0.0808	0.0800	0.0792	0.0785	0.0777	0.0769	0.0762	0.0754
124/133		0.000 m	0.244 m	0.488 m	0.732 m	0.977 m	1.221 m	1.465 m	1.709 m	1.953 m
		Envolvente (Acero laminado)								
	N-	-2.5068	-2.5068	-2.5067	-2.5067	-2.5066	-2.5066	-2.5065	-2.5065	-2.5064
	N+	1.1179	1.1180	1.1180	1.1180	1.1180	1.1181	1.1181	1.1181	1.1182
	Ty-	-0.0032	-0.0024	-0.0016	-0.0008	0.0000	0.0005	0.0009	0.0014	0.0019
	Ty+	-0.0019	-0.0014	-0.0009	-0.0004	0.0001	0.0009	0.0017	0.0025	0.0033
	Tz-	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001
	Tz+	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0001	-0.0001	-0.0001	-0.0001
	My+	0.0001	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0001	0.0001
	Mz-	-0.0014	-0.0007	-0.0002	0.0000	0.0000	0.0000	-0.0002	-0.0007	-0.0014
	Mz+	-0.0004	0.0000	0.0003	0.0005	0.0006	0.0005	0.0002	-0.0001	-0.0005
124/152		0.000 m	0.262 m	0.524 m	0.786 m	1.048 m	1.310 m	1.572 m	1.834 m	2.096 m
		Envolvente (Acero Conformado)								
	N-	0.0042	0.0042	0.0042	0.0042	0.0042	0.0042	0.0042	0.0042	0.0042
	N+	0.0845	0.0845	0.0845	0.0845	0.0845	0.0845	0.0845	0.0845	0.0845
	Ty-	-0.0209	-0.0209	-0.0209	-0.0209	-0.0209	-0.0209	-0.0209	-0.0209	-0.0209
	Ty+	0.0168	0.0168	0.0168	0.0168	0.0168	0.0168	0.0168	0.0168	0.0168
	Tz-	-0.1061	-0.0938	-0.0815	-0.0850	-0.0982	-0.0782	-0.1024	-0.1266	-0.1507

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE** Adrián Freijomil Aradas

	Tz+	0.0662	0.0420	0.0179	0.0208	0.0393	0.1199	0.1321	0.1444	0.1567
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.2907	-0.3047	-0.3127	-0.3141	-0.3094	-0.2981	-0.2807	-0.2568	-0.2267
	My+	0.3892	0.4098	0.4234	0.4293	0.4283	0.4196	0.4038	0.3805	0.3501
	Mz-	-0.0902	-0.0853	-0.0804	-0.0756	-0.0707	-0.0658	-0.0609	-0.0561	-0.0512
	Mz+	0.0676	0.0632	0.0588	0.0544	0.0500	0.0456	0.0412	0.0368	0.0324
125/126		0.000 m	0.374 m	0.748 m	1.122 m	1.496 m	1.870 m	2.244 m	2.618 m	2.992 m
		Envolvente (Acero Conformado)								
	N-	-0.0021	-0.0009	0.0003	0.0015	0.0027	0.0039	0.0051	0.0063	0.0075
	N+	0.1009	0.1029	0.1049	0.1070	0.1090	0.1110	0.1130	0.1151	0.1171
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.0942	-0.0707	-0.0471	-0.0236	0.0000	-0.0393	-0.0785	-0.1178	-0.1571
	Tz+	0.1571	0.1178	0.0785	0.0393	0.0000	0.0236	0.0471	0.0707	0.0942
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0511	-0.0881	-0.1098	-0.1175	-0.1098	-0.0881	-0.0511	0.0000
	My+	0.0000	0.0307	0.0529	0.0659	0.0705	0.0659	0.0529	0.0307	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
125/134		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-0.4663	-0.4663	-0.4663	-0.4663	-0.4663	-0.4663	-0.4663	-0.4663	-0.4663
	N+	0.4892	0.4892	0.4892	0.4892	0.4892	0.4892	0.4892	0.4892	0.4892
	Ty-	-0.0211	-0.0199	-0.0186	-0.0173	-0.0161	-0.0148	-0.0136	-0.0125	-0.0117
	Ty+	0.0006	0.0013	0.0020	0.0028	0.0035	0.0043	0.0050	0.0059	0.0072
	Tz-	-0.0232	-0.0232	-0.0232	-0.0232	-0.0232	-0.0232	-0.0232	-0.0232	-0.0232
	Tz+	0.0262	0.0262	0.0262	0.0262	0.0262	0.0262	0.0262	0.0262	0.0262
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.2333	-0.2306	-0.2278	-0.2250	-0.2222	-0.2194	-0.2166	-0.2138	-0.2110
	My+	0.4118	0.4086	0.4055	0.4023	0.3991	0.3960	0.3928	0.3896	0.3865
	Mz-	-0.1379	-0.1358	-0.1337	-0.1319	-0.1301	-0.1285	-0.1269	-0.1255	-0.1241
	Mz+	0.0744	0.0748	0.0750	0.0750	0.0749	0.0747	0.0743	0.0738	0.0731
126/135		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456
	N+	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257
	Ty-	-0.0458	-0.0356	-0.0254	-0.0152	-0.0077	-0.0017	0.0044	0.0104	0.0165
	Ty+	-0.0153	-0.0093	-0.0033	0.0028	0.0115	0.0217	0.0319	0.0421	0.0523
	Tz-	-1.7889	-1.7889	-1.7889	-1.7889	-1.7889	-1.7889	-1.7889	-1.7889	-1.7889
	Tz+	1.1093	1.1093	1.1093	1.1093	1.1093	1.1093	1.1093	1.1093	1.1093
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-2.5012	-2.6399	-2.7786	-2.9172	-3.0559	-3.1945	-3.3332	-3.4719	-3.6105
	My+	4.0490	4.2726	4.4962	4.7198	4.9434	5.1671	5.3907	5.6143	5.8379
	Mz-	0.0406	0.0442	0.0471	0.0492	0.0505	0.0511	0.0509	0.0500	0.0483
	Mz+	0.3887	0.3927	0.3953	0.3967	0.3968	0.3957	0.3932	0.3895	0.3845
127/128		0.000 m	0.374 m	0.748 m	1.122 m	1.496 m	1.870 m	2.244 m	2.618 m	2.992 m
		Envolvente (Acero Conformado)								
	N-	-0.2000	-0.1980	-0.1959	-0.1939	-0.1919	-0.1898	-0.1878	-0.1858	-0.1838
	N+	-0.0301	-0.0289	-0.0277	-0.0265	-0.0253	-0.0241	-0.0229	-0.0217	-0.0205
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas**

	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.0898	-0.0673	-0.0449	-0.0224	0.0000	-0.0224	-0.0449	-0.0673	-0.0898
	Tz+	0.0898	0.0673	0.0449	0.0224	0.0000	0.0224	0.0449	0.0673	0.0898
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0292	-0.0503	-0.0628	-0.0671	-0.0628	-0.0503	-0.0292	0.0000
	My+	0.0000	0.0292	0.0503	0.0628	0.0671	0.0628	0.0503	0.0292	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
127/141		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-1.0799	-1.0799	-1.0799	-1.0799	-1.0799	-1.0799	-1.0799	-1.0799	-1.0799
	N+	0.7743	0.7743	0.7743	0.7743	0.7743	0.7743	0.7743	0.7743	0.7743
	Ty-	0.0100	0.0108	0.0115	0.0097	-0.0041	-0.0184	-0.0326	-0.0469	-0.0612
	Ty+	0.0655	0.0518	0.0380	0.0308	0.0320	0.0333	0.0346	0.0358	0.0371
	Tz-	-0.0169	-0.0169	-0.0169	-0.0169	-0.0169	-0.0169	-0.0169	-0.0169	-0.0169
	Tz+	0.0146	0.0146	0.0146	0.0146	0.0146	0.0146	0.0146	0.0146	0.0146
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.2217	-0.2201	-0.2184	-0.2168	-0.2151	-0.2134	-0.2118	-0.2101	-0.2085
	My+	0.2305	0.2292	0.2278	0.2264	0.2250	0.2237	0.2223	0.2209	0.2195
	Mz-	-0.0568	-0.0581	-0.0595	-0.0610	-0.0627	-0.0651	-0.0675	-0.0713	-0.0753
	Mz+	0.0927	0.0894	0.0860	0.0824	0.0787	0.0755	0.0721	0.0697	0.0674
128/142		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-0.0294	-0.0294	-0.0294	-0.0294	-0.0294	-0.0294	-0.0294	-0.0294	-0.0294
	N+	0.0099	0.0099	0.0099	0.0099	0.0099	0.0099	0.0099	0.0099	0.0099
	Ty-	-0.2528	-0.2426	-0.2324	-0.2222	-0.2120	-0.2018	-0.1916	-0.1814	-0.1712
	Ty+	0.0278	0.0338	0.0399	0.0459	0.0520	0.0580	0.0640	0.0701	0.0761
	Tz-	-1.0220	-1.0220	-1.0220	-1.0220	-1.0220	-1.0220	-1.0220	-1.0220	-1.0220
	Tz+	1.0202	1.0202	1.0202	1.0202	1.0202	1.0202	1.0202	1.0202	1.0202
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-2.3084	-2.4359	-2.5634	-2.6909	-2.8184	-2.9460	-3.0735	-3.2010	-3.3285
	My+	2.3121	2.4398	2.5675	2.6953	2.8230	2.9508	3.0785	3.2063	3.3340
	Mz-	-0.0869	-0.0700	-0.0538	-0.0384	-0.0244	-0.0139	-0.0042	0.0047	0.0129
	Mz+	0.0932	0.0962	0.0979	0.0984	0.0979	0.1179	0.1366	0.1540	0.1702
138/129		0.000 m	0.233 m	0.466 m	0.700 m	0.933 m	1.166 m	1.399 m	1.632 m	1.865 m
		Envolvente (Acero laminado)								
	N-	-0.8823	-0.8823	-0.8822	-0.8822	-0.8822	-0.8821	-0.8821	-0.8821	-0.8821
	N+	2.0049	2.0049	2.0050	2.0050	2.0051	2.0051	2.0052	2.0052	2.0053
	Ty-	-0.0030	-0.0022	-0.0015	-0.0007	0.0000	0.0005	0.0010	0.0014	0.0019
	Ty+	-0.0018	-0.0013	-0.0008	-0.0004	0.0001	0.0009	0.0017	0.0024	0.0032
	Tz-	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001
	Tz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0002	-0.0002	-0.0001	-0.0001	-0.0001	0.0000	0.0000	0.0000	0.0000
	My+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001
	Mz-	-0.0010	-0.0004	-0.0001	0.0000	0.0001	0.0000	-0.0002	-0.0005	-0.0012
	Mz+	-0.0001	0.0003	0.0007	0.0009	0.0010	0.0009	0.0006	0.0002	-0.0002
129/147		0.000 m	0.240 m	0.479 m	0.719 m	0.958 m	1.198 m	1.437 m	1.677 m	1.916 m
		Envolvente (Acero Conformado)								
	N-	-0.0289	-0.0289	-0.0289	-0.0289	-0.0289	-0.0289	-0.0289	-0.0289	-0.0289

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE** Adrián Freijomil Aradas

	N+	0.0647	0.0647	0.0647	0.0647	0.0647	0.0647	0.0647	0.0647	0.0647
	Ty-	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010
	Ty+	0.0140	0.0140	0.0140	0.0140	0.0140	0.0140	0.0140	0.0140	0.0140
	Tz-	-0.1519	-0.1406	-0.1294	-0.1182	-0.1078	-0.0503	-0.0621	-0.0828	-0.1049
	Tz+	0.0856	0.0635	0.0414	0.0193	-0.0020	0.0680	0.0746	0.0845	0.0957
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.3529	-0.3707	-0.3833	-0.3905	-0.3926	-0.3892	-0.3807	-0.3667	-0.3476
	My+	0.5362	0.5690	0.5960	0.6166	0.6313	0.6397	0.6422	0.6383	0.6285
	Mz-	-0.1070	-0.1081	-0.1093	-0.1104	-0.1115	-0.1126	-0.1138	-0.1149	-0.1160
	Mz+	0.0753	0.0733	0.0712	0.0692	0.0672	0.0652	0.0631	0.0611	0.0591
130/139		0.000 m	0.195 m	0.390 m	0.585 m	0.780 m	0.975 m	1.170 m	1.365 m	1.560 m
		Envolvente (Acero laminado)								
	N-	-3.7654	-3.7654	-3.7653	-3.7653	-3.7653	-3.7652	-3.7652	-3.7652	-3.7651
	N+	2.0366	2.0366	2.0367	2.0367	2.0367	2.0367	2.0368	2.0368	2.0368
	Ty-	-0.0032	-0.0025	-0.0019	-0.0012	-0.0006	0.0000	0.0004	0.0008	0.0012
	Ty+	-0.0017	-0.0013	-0.0010	-0.0006	-0.0002	0.0003	0.0009	0.0015	0.0022
	Tz-	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004
	Tz+	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0002	-0.0001	0.0000	0.0000	-0.0001	-0.0002	-0.0002	-0.0003	-0.0004
	My+	0.0002	0.0001	0.0000	0.0001	0.0001	0.0002	0.0003	0.0003	0.0004
	Mz-	-0.0013	-0.0008	-0.0004	-0.0001	0.0000	0.0000	0.0000	-0.0001	-0.0005
	Mz+	-0.0004	-0.0001	0.0001	0.0003	0.0005	0.0005	0.0004	0.0001	-0.0001
130/146		0.000 m	0.200 m	0.401 m	0.601 m	0.801 m	1.002 m	1.202 m	1.402 m	1.603 m
		Envolvente (Acero Conformado)								
	N-	-0.0396	-0.0396	-0.0396	-0.0396	-0.0396	-0.0396	-0.0396	-0.0396	-0.0396
	N+	0.1284	0.1284	0.1284	0.1284	0.1284	0.1284	0.1284	0.1284	0.1284
	Ty-	-0.0235	-0.0235	-0.0235	-0.0235	-0.0235	-0.0235	-0.0235	-0.0235	-0.0235
	Ty+	0.0223	0.0223	0.0223	0.0223	0.0223	0.0223	0.0223	0.0223	0.0223
	Tz-	-0.1146	-0.1052	-0.0958	-0.0864	-0.0807	-0.0428	-0.0613	-0.0798	-0.0983
	Tz+	0.0666	0.0482	0.0297	0.0112	0.0075	0.0938	0.1032	0.1125	0.1219
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.3714	-0.3828	-0.3907	-0.3947	-0.3952	-0.3918	-0.3848	-0.3740	-0.3597
	My+	0.4790	0.4947	0.5063	0.5134	0.5164	0.5150	0.5094	0.4994	0.4853
	Mz-	-0.1060	-0.1023	-0.0986	-0.0949	-0.0912	-0.0876	-0.0839	-0.0802	-0.0765
	Mz+	0.0876	0.0831	0.0787	0.0742	0.0697	0.0653	0.0608	0.0563	0.0519
136/131		0.000 m	0.039 m	0.077 m	0.116 m	0.155 m	0.193 m	0.232 m	0.270 m	0.309 m
		Envolvente (Acero laminado)								
	N-	-0.7311	-0.7310	-0.7310	-0.7310	-0.7310	-0.7310	-0.7310	-0.7310	-0.7310
	N+	1.6579	1.6579	1.6579	1.6579	1.6579	1.6579	1.6579	1.6579	1.6579
	Ty-	0.0007	0.0008	0.0009	0.0010	0.0010	0.0011	0.0012	0.0013	0.0013
	Ty+	0.0030	0.0032	0.0033	0.0034	0.0035	0.0037	0.0038	0.0039	0.0041
	Tz-	-0.0026	-0.0026	-0.0026	-0.0026	-0.0026	-0.0026	-0.0026	-0.0026	-0.0026
	Tz+	0.0049	0.0049	0.0049	0.0049	0.0049	0.0049	0.0049	0.0049	0.0049
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0005	-0.0004	-0.0003	-0.0002	-0.0001	-0.0001	-0.0003	-0.0004	-0.0006
	My+	0.0009	0.0007	0.0005	0.0003	0.0001	0.0000	0.0001	0.0002	0.0003
	Mz-	-0.0005	-0.0006	-0.0006	-0.0007	-0.0008	-0.0009	-0.0010	-0.0011	-0.0012
	Mz+	0.0001	0.0001	0.0000	-0.0001	-0.0002	-0.0003	-0.0004	-0.0004	-0.0005
131/145		0.000 m	0.055 m	0.109 m	0.164 m	0.218 m	0.273 m	0.327 m	0.382 m	0.437 m

## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

		Envolvente (Acero Conformado)								
	N-	-0.0869	-0.0869	-0.0869	-0.0869	-0.0869	-0.0869	-0.0869	-0.0869	-0.0869
	N+	0.0862	0.0862	0.0862	0.0862	0.0862	0.0862	0.0862	0.0862	0.0862
	Ty-	-0.2673	-0.2673	-0.2673	-0.2673	-0.2673	-0.2673	-0.2673	-0.2673	-0.2673
	Ty+	0.1432	0.1432	0.1432	0.1432	0.1432	0.1432	0.1432	0.1432	0.1432
	Tz-	-0.0713	-0.0737	-0.0761	-0.0785	-0.0809	-0.0428	-0.0478	-0.0528	-0.0579
	Tz+	0.0344	0.0393	0.0441	0.0490	0.0538	0.1215	0.1240	0.1266	0.1291
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.4000	-0.4014	-0.4025	-0.4033	-0.4039	-0.4042	-0.4042	-0.4039	-0.4034
	My+	0.3604	0.3600	0.3593	0.3583	0.3570	0.3553	0.3534	0.3511	0.3485
	Mz-	-0.1252	-0.1106	-0.0960	-0.0815	-0.0669	-0.0528	-0.0426	-0.0355	-0.0336
	Mz+	0.1107	0.1060	0.1014	0.0967	0.0921	0.0874	0.0827	0.0781	0.0734
139/132		0.000 m	0.034 m	0.068 m	0.102 m	0.136 m	0.170 m	0.205 m	0.239 m	0.273 m
		Envolvente (Acero laminado)								
	N-	-2.0406	-2.0406	-2.0406	-2.0405	-2.0405	-2.0405	-2.0405	-2.0405	-2.0405
	N+	3.7920	3.7921	3.7921	3.7921	3.7921	3.7921	3.7921	3.7921	3.7921
	Ty-	0.0011	0.0011	0.0012	0.0013	0.0013	0.0014	0.0015	0.0015	0.0016
	Ty+	0.0024	0.0025	0.0026	0.0027	0.0028	0.0029	0.0030	0.0032	0.0033
	Tz-	-0.0028	-0.0028	-0.0028	-0.0028	-0.0028	-0.0028	-0.0028	-0.0028	-0.0028
	Tz+	0.0027	0.0027	0.0027	0.0027	0.0027	0.0027	0.0027	0.0027	0.0027
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0004	-0.0003	-0.0002	-0.0001	0.0000	0.0000	-0.0001	-0.0002	-0.0003
	My+	0.0004	0.0003	0.0002	0.0001	0.0001	0.0001	0.0002	0.0003	0.0004
	Mz-	-0.0003	-0.0004	-0.0005	-0.0006	-0.0007	-0.0008	-0.0009	-0.0010	-0.0011
	Mz+	0.0002	0.0002	0.0002	0.0001	0.0001	0.0000	0.0000	-0.0001	-0.0001
132/144		0.000 m	0.035 m	0.070 m	0.105 m	0.140 m	0.175 m	0.210 m	0.245 m	0.280 m
		Envolvente (Acero Conformado)								
	N-	-0.0714	-0.0714	-0.0714	-0.0714	-0.0714	-0.0714	-0.0714	-0.0714	-0.0714
	N+	0.0880	0.0880	0.0880	0.0880	0.0880	0.0880	0.0880	0.0880	0.0880
	Ty-	-0.0696	-0.0696	-0.0696	-0.0696	-0.0696	-0.0696	-0.0696	-0.0696	-0.0696
	Ty+	0.0834	0.0834	0.0834	0.0834	0.0834	0.0834	0.0834	0.0834	0.0834
	Tz-	-0.1154	-0.1138	-0.1121	-0.1105	-0.1089	-0.0494	-0.0463	-0.0432	-0.0400
	Tz+	0.0149	0.0158	0.0168	0.0178	0.0188	0.0826	0.0836	0.0846	0.0855
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.4023	-0.4028	-0.4034	-0.4040	-0.4047	-0.4053	-0.4060	-0.4068	-0.4076
	My+	0.6278	0.6298	0.6317	0.6335	0.6351	0.6367	0.6381	0.6393	0.6404
	Mz-	-0.1195	-0.1206	-0.1217	-0.1228	-0.1238	-0.1249	-0.1260	-0.1271	-0.1282
	Mz+	0.0740	0.0760	0.0780	0.0800	0.0819	0.0839	0.0859	0.0879	0.0899
133/138		0.000 m	0.011 m	0.022 m	0.033 m	0.044 m	0.055 m	0.066 m	0.077 m	0.088 m
		Envolvente (Acero laminado)								
	N-	-2.1081	-2.1081	-2.1081	-2.1081	-2.1081	-2.1081	-2.1081	-2.1081	-2.1081
	N+	0.9154	0.9154	0.9154	0.9154	0.9154	0.9154	0.9154	0.9154	0.9154
	Ty-	-0.0042	-0.0041	-0.0041	-0.0041	-0.0040	-0.0040	-0.0040	-0.0039	-0.0039
	Ty+	-0.0018	-0.0018	-0.0017	-0.0017	-0.0017	-0.0017	-0.0017	-0.0016	-0.0016
	Tz-	-0.0020	-0.0020	-0.0020	-0.0020	-0.0020	-0.0020	-0.0020	-0.0020	-0.0020
	Tz+	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0002
	My+	0.0001	0.0001	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz-	-0.0014	-0.0014	-0.0013	-0.0013	-0.0012	-0.0012	-0.0011	-0.0011	-0.0011

## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

	Mz+	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005	-0.0004	-0.0004	-0.0004	-0.0004
133/143		0.000 m	0.011 m	0.022 m	0.034 m	0.045 m	0.056 m	0.067 m	0.079 m	0.090 m
		Envolvente (Acero Conformado)								
	N-	-0.4570	-0.4570	-0.4570	-0.4570	-0.4570	-0.4570	-0.4570	-0.4570	-0.4570
	N+	0.0672	0.0672	0.0672	0.0672	0.0672	0.0672	0.0672	0.0672	0.0672
	Ty-	-0.3102	-0.3102	-0.3102	-0.3102	-0.3102	-0.3102	-0.3102	-0.3102	-0.3102
	Ty+	0.2776	0.2776	0.2776	0.2776	0.2776	0.2776	0.2776	0.2776	0.2776
	Tz-	-0.1021	-0.1018	-0.1016	-0.1014	-0.1012	-0.0399	-0.0390	-0.0381	-0.0372
	Tz+	0.0059	0.0061	0.0062	0.0063	0.0065	0.0701	0.0703	0.0704	0.0705
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.3496	-0.3496	-0.3496	-0.3496	-0.3496	-0.3496	-0.3495	-0.3495	-0.3495
	My+	0.5484	0.5489	0.5494	0.5499	0.5503	0.5508	0.5512	0.5517	0.5521
	Mz-	-0.1219	-0.1186	-0.1152	-0.1118	-0.1084	-0.1050	-0.1017	-0.0983	-0.0949
	Mz+	0.0769	0.0753	0.0736	0.0719	0.0702	0.0686	0.0669	0.0652	0.0636
134/135		0.000 m	0.374 m	0.748 m	1.122 m	1.496 m	1.870 m	2.244 m	2.618 m	2.992 m
		Envolvente (Acero Conformado)								
	N-	-0.0319	-0.0307	-0.0295	-0.0283	-0.0271	-0.0259	-0.0247	-0.0235	-0.0223
	N+	0.0508	0.0529	0.0549	0.0569	0.0589	0.0610	0.0630	0.0650	0.0671
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.0942	-0.0707	-0.0471	-0.0236	0.0000	-0.0393	-0.0785	-0.1178	-0.1571
	Tz+	0.1571	0.1178	0.0785	0.0393	0.0000	0.0236	0.0471	0.0707	0.0942
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0511	-0.0881	-0.1098	-0.1175	-0.1098	-0.0881	-0.0511	0.0000
	My+	0.0000	0.0307	0.0529	0.0659	0.0705	0.0659	0.0529	0.0307	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
134/148		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-0.4663	-0.4663	-0.4663	-0.4663	-0.4663	-0.4663	-0.4663	-0.4663	-0.4663
	N+	0.4892	0.4892	0.4892	0.4892	0.4892	0.4892	0.4892	0.4892	0.4892
	Ty-	-0.0608	-0.0596	-0.0585	-0.0578	-0.0570	-0.0563	-0.0556	-0.0548	-0.0541
	Ty+	0.0373	0.0381	0.0391	0.0403	0.0416	0.0428	0.0441	0.0454	0.0466
	Tz-	-0.1174	-0.1174	-0.1174	-0.1174	-0.1174	-0.1174	-0.1174	-0.1174	-0.1174
	Tz+	0.1832	0.1832	0.1832	0.1832	0.1832	0.1832	0.1832	0.1832	0.1832
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.2110	-0.1964	-0.1819	-0.1673	-0.1527	-0.1381	-0.1236	-0.1090	-0.0944
	My+	0.3865	0.3637	0.3409	0.3181	0.2953	0.2725	0.2497	0.2269	0.2041
	Mz-	-0.1241	-0.1166	-0.1093	-0.1020	-0.0949	-0.0878	-0.0808	-0.0739	-0.0671
	Mz+	0.0731	0.0684	0.0636	0.0587	0.0536	0.0483	0.0429	0.0373	0.0315
135/149		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456
	N+	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257
	Ty-	-0.0059	0.0002	0.0062	0.0123	0.0183	0.0244	0.0304	0.0365	0.0425
	Ty+	0.1121	0.1223	0.1325	0.1427	0.1529	0.1631	0.1733	0.1835	0.1937
	Tz-	-1.6318	-1.6318	-1.6318	-1.6318	-1.6318	-1.6318	-1.6318	-1.6318	-1.6318
	Tz+	1.0150	1.0150	1.0150	1.0150	1.0150	1.0150	1.0150	1.0150	1.0150
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-3.6105	-3.7374	-3.8643	-3.9912	-4.1180	-4.2449	-4.3718	-4.4987	-4.6255

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas**

	My+	5.8379	6.0419	6.2459	6.4498	6.6538	6.8578	7.0618	7.2657	7.4697
	Mz-	0.0483	0.0487	0.0483	0.0471	0.0452	0.0425	0.0391	0.0349	0.0300
	Mz+	0.3845	0.3699	0.3539	0.3367	0.3183	0.2985	0.2775	0.2552	0.2316
136/145		0.000 m	0.039 m	0.077 m	0.116 m	0.155 m	0.193 m	0.232 m	0.270 m	0.309 m
		Envolvente (Acero laminado)								
	N-	-1.6005	-1.6005	-1.6005	-1.6005	-1.6005	-1.6005	-1.6005	-1.6005	-1.6005
	N+	0.7160	0.7160	0.7160	0.7160	0.7160	0.7160	0.7160	0.7160	0.7160
	Ty-	0.0005	0.0006	0.0007	0.0008	0.0008	0.0009	0.0010	0.0011	0.0011
	Ty+	0.0027	0.0029	0.0030	0.0031	0.0033	0.0034	0.0035	0.0036	0.0038
	Tz-	-0.0026	-0.0026	-0.0026	-0.0026	-0.0026	-0.0026	-0.0026	-0.0026	-0.0026
	Tz+	0.0051	0.0051	0.0051	0.0051	0.0051	0.0051	0.0051	0.0051	0.0051
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0005	-0.0004	-0.0003	-0.0002	-0.0001	-0.0001	-0.0002	-0.0004	-0.0006
	My+	0.0009	0.0007	0.0005	0.0003	0.0001	0.0000	0.0001	0.0002	0.0003
	Mz-	-0.0004	-0.0005	-0.0006	-0.0007	-0.0009	-0.0010	-0.0011	-0.0013	-0.0014
	Mz+	0.0000	0.0000	0.0000	-0.0001	-0.0001	-0.0001	-0.0002	-0.0002	-0.0002
154/136		0.000 m	0.200 m	0.399 m	0.599 m	0.798 m	0.998 m	1.197 m	1.397 m	1.597 m
		Envolvente (Acero laminado)								
	N-	-0.7282	-0.7282	-0.7282	-0.7282	-0.7281	-0.7281	-0.7281	-0.7281	-0.7281
	N+	1.6518	1.6518	1.6519	1.6519	1.6519	1.6520	1.6520	1.6520	1.6521
	Ty-	-0.0032	-0.0026	-0.0019	-0.0013	-0.0006	0.0000	0.0004	0.0008	0.0012
	Ty+	-0.0017	-0.0013	-0.0009	-0.0005	-0.0001	0.0003	0.0010	0.0016	0.0023
	Tz-	-0.0007	-0.0007	-0.0007	-0.0007	-0.0007	-0.0007	-0.0007	-0.0007	-0.0007
	Tz+	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0002	-0.0001	0.0000	-0.0001	-0.0002	-0.0002	-0.0003	-0.0004	-0.0005
	My+	0.0002	0.0001	0.0001	0.0002	0.0003	0.0005	0.0006	0.0007	0.0009
	Mz-	-0.0012	-0.0006	-0.0002	0.0000	0.0001	0.0000	-0.0001	-0.0002	-0.0005
	Mz+	-0.0004	-0.0001	0.0002	0.0006	0.0007	0.0008	0.0007	0.0005	0.0001
180/137		0.000 m	0.545 m	1.090 m	1.635 m	2.180 m	2.726 m	3.271 m	3.816 m	4.361 m
		Envolvente (Acero laminado)								
	N-	-0.2528	-0.2515	-0.2502	-0.2489	-0.2476	-0.2462	-0.2449	-0.2436	-0.2423
	N+	0.0351	0.0359	0.0366	0.0374	0.0382	0.0390	0.0398	0.0405	0.0413
	Ty-	-0.0037	-0.0025	-0.0012	0.0000	0.0007	0.0015	0.0022	0.0030	0.0037
	Ty+	-0.0022	-0.0015	-0.0007	0.0000	0.0012	0.0025	0.0037	0.0050	0.0062
	Tz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0001	-0.0001	-0.0001	-0.0001
	My+	0.0000	0.0000	0.0000	0.0001	0.0001	0.0001	0.0001	0.0002	0.0002
	Mz-	0.0000	0.0010	0.0016	0.0018	0.0016	0.0010	0.0000	-0.0024	-0.0054
	Mz+	0.0000	0.0017	0.0027	0.0031	0.0027	0.0017	0.0000	-0.0014	-0.0032
137/181		0.000 m	0.545 m	1.090 m	1.635 m	2.180 m	2.726 m	3.271 m	3.816 m	4.361 m
		Envolvente (Acero laminado)								
	N-	-0.0403	-0.0390	-0.0377	-0.0364	-0.0350	-0.0337	-0.0324	-0.0311	-0.0298
	N+	0.1824	0.1832	0.1840	0.1848	0.1856	0.1864	0.1871	0.1879	0.1887
	Ty-	-0.0054	-0.0041	-0.0029	-0.0016	-0.0004	0.0005	0.0013	0.0020	0.0027
	Ty+	-0.0032	-0.0024	-0.0017	-0.0009	-0.0002	0.0009	0.0021	0.0034	0.0046
	Tz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz+	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0001	-0.0001	-0.0002	-0.0002	-0.0003	-0.0003	-0.0004	-0.0004
	My+	0.0000	0.0000	0.0001	0.0001	0.0001	0.0001	0.0001	0.0002	0.0002
	Mz-	-0.0047	-0.0021	-0.0002	0.0006	0.0009	0.0008	0.0003	-0.0009	-0.0031
	Mz+	-0.0028	-0.0012	-0.0001	0.0010	0.0016	0.0014	0.0006	-0.0005	-0.0018
143/138		0.000 m	0.011 m	0.022 m	0.033 m	0.044 m	0.055 m	0.066 m	0.077 m	0.088 m
		Envolvente (Acero laminado)								
	N-	-0.8780	-0.8780	-0.8780	-0.8780	-0.8780	-0.8780	-0.8780	-0.8780	-0.8780
	N+	2.0048	2.0048	2.0048	2.0048	2.0048	2.0048	2.0048	2.0048	2.0048
	Ty-	-0.0031	-0.0031	-0.0031	-0.0030	-0.0030	-0.0030	-0.0029	-0.0029	-0.0029
	Ty+	-0.0014	-0.0013	-0.0013	-0.0013	-0.0013	-0.0013	-0.0012	-0.0012	-0.0012
	Tz-	-0.0018	-0.0018	-0.0018	-0.0018	-0.0018	-0.0018	-0.0018	-0.0018	-0.0018
	Tz+	0.0027	0.0027	0.0027	0.0027	0.0027	0.0027	0.0027	0.0027	0.0027
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0002	-0.0002
	My+	0.0001	0.0001	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz-	-0.0012	-0.0012	-0.0012	-0.0011	-0.0011	-0.0011	-0.0010	-0.0010	-0.0010
	Mz+	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0001	-0.0001	-0.0001
138/147		0.000 m	0.233 m	0.466 m	0.700 m	0.933 m	1.166 m	1.399 m	1.632 m	1.865 m
		Envolvente (Acero laminado)								
	N-	-2.1080	-2.1080	-2.1079	-2.1079	-2.1079	-2.1078	-2.1078	-2.1077	-2.1077
	N+	0.9198	0.9198	0.9198	0.9198	0.9199	0.9199	0.9199	0.9199	0.9200
	Ty-	-0.0031	-0.0023	-0.0016	-0.0008	0.0000	0.0004	0.0009	0.0013	0.0018
	Ty+	-0.0017	-0.0012	-0.0008	-0.0003	0.0002	0.0010	0.0017	0.0025	0.0033
	Tz-	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001
	Tz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0002	-0.0001	-0.0001	-0.0001	-0.0001	0.0000	0.0000	0.0000	0.0000
	My+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz-	-0.0011	-0.0004	0.0000	0.0002	0.0002	0.0002	0.0000	-0.0004	-0.0011
	Mz+	-0.0004	-0.0001	0.0002	0.0005	0.0005	0.0004	0.0001	-0.0002	-0.0006
139/144		0.000 m	0.034 m	0.068 m	0.102 m	0.136 m	0.170 m	0.205 m	0.239 m	0.273 m
		Envolvente (Acero laminado)								
	N-	-3.7703	-3.7703	-3.7703	-3.7703	-3.7703	-3.7703	-3.7703	-3.7703	-3.7703
	N+	2.0419	2.0419	2.0419	2.0420	2.0420	2.0420	2.0420	2.0420	2.0420
	Ty-	0.0011	0.0011	0.0012	0.0013	0.0013	0.0014	0.0015	0.0015	0.0016
	Ty+	0.0022	0.0023	0.0024	0.0026	0.0027	0.0028	0.0029	0.0030	0.0031
	Tz-	-0.0030	-0.0030	-0.0030	-0.0030	-0.0030	-0.0030	-0.0030	-0.0030	-0.0030
	Tz+	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0004	-0.0003	-0.0002	-0.0001	0.0000	0.0000	-0.0001	-0.0002	-0.0003
	My+	0.0004	0.0003	0.0002	0.0002	0.0001	0.0001	0.0002	0.0003	0.0004
	Mz-	-0.0005	-0.0005	-0.0006	-0.0007	-0.0008	-0.0009	-0.0010	-0.0011	-0.0012
	Mz+	-0.0001	-0.0001	-0.0002	-0.0002	-0.0002	-0.0003	-0.0003	-0.0004	-0.0005
146/139		0.000 m	0.195 m	0.390 m	0.585 m	0.780 m	0.975 m	1.170 m	1.365 m	1.560 m
		Envolvente (Acero laminado)								
	N-	-2.0357	-2.0356	-2.0356	-2.0356	-2.0356	-2.0356	-2.0355	-2.0355	-2.0355
	N+	3.7864	3.7864	3.7865	3.7865	3.7866	3.7866	3.7866	3.7867	3.7867
	Ty-	-0.0031	-0.0025	-0.0018	-0.0012	-0.0005	0.0000	0.0004	0.0008	0.0012
	Ty+	-0.0018	-0.0014	-0.0010	-0.0006	-0.0003	0.0002	0.0008	0.0015	0.0021
	Tz-	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004



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	Tz+	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0002	-0.0001	0.0000	0.0000	-0.0001	-0.0002	-0.0002	-0.0003	-0.0004
	My+	0.0002	0.0001	0.0000	0.0000	0.0001	0.0002	0.0003	0.0004	0.0004
	Mz-	-0.0011	-0.0006	-0.0003	-0.0001	0.0000	0.0000	0.0000	-0.0001	-0.0003
	Mz+	-0.0002	0.0001	0.0004	0.0007	0.0009	0.0009	0.0008	0.0006	0.0002
140/156		0.000 m	0.285 m	0.570 m	0.855 m	1.140 m	1.425 m	1.710 m	1.995 m	2.280 m
		Envolvente (Acero laminado)								
	N-	-0.6296	-0.6289	-0.6282	-0.6276	-0.6269	-0.6262	-0.6255	-0.6248	-0.6241
	N+	0.6528	0.6532	0.6536	0.6541	0.6545	0.6549	0.6553	0.6557	0.6561
	Ty-	-0.0048	-0.0041	-0.0035	-0.0028	-0.0022	-0.0015	-0.0009	-0.0002	0.0002
	Ty+	-0.0027	-0.0023	-0.0019	-0.0016	-0.0012	-0.0008	-0.0004	0.0000	0.0006
	Tz-	-0.0038	-0.0038	-0.0038	-0.0038	-0.0038	-0.0038	-0.0038	-0.0038	-0.0038
	Tz+	0.0037	0.0037	0.0037	0.0037	0.0037	0.0037	0.0037	0.0037	0.0037
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0013	-0.0023	-0.0033	-0.0044	-0.0054	-0.0065	-0.0075	-0.0086	-0.0096
	My+	0.0012	0.0023	0.0034	0.0045	0.0055	0.0066	0.0077	0.0088	0.0098
	Mz-	-0.0042	-0.0030	-0.0019	-0.0010	-0.0004	0.0000	0.0002	0.0003	0.0002
	Mz+	-0.0024	-0.0017	-0.0011	-0.0006	-0.0001	0.0003	0.0006	0.0008	0.0007
196/140		0.000 m	0.545 m	1.090 m	1.635 m	2.180 m	2.726 m	3.271 m	3.816 m	4.361 m
		Envolvente (Acero laminado)								
	N-	-0.6326	-0.6318	-0.6310	-0.6303	-0.6295	-0.6287	-0.6279	-0.6271	-0.6264
	N+	0.4708	0.4721	0.4734	0.4747	0.4760	0.4773	0.4787	0.4800	0.4813
	Ty-	-0.0041	-0.0028	-0.0016	-0.0003	0.0006	0.0013	0.0020	0.0028	0.0035
	Ty+	-0.0024	-0.0016	-0.0009	-0.0002	0.0010	0.0022	0.0035	0.0047	0.0060
	Tz-	-0.0008	-0.0008	-0.0008	-0.0008	-0.0008	-0.0008	-0.0008	-0.0008	-0.0008
	Tz+	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0004	-0.0009	-0.0013	-0.0017	-0.0022	-0.0026	-0.0030	-0.0034
	My+	0.0000	0.0004	0.0008	0.0012	0.0017	0.0021	0.0025	0.0029	0.0033
	Mz-	0.0000	0.0011	0.0018	0.0021	0.0020	0.0015	0.0005	-0.0013	-0.0042
	Mz+	0.0000	0.0019	0.0031	0.0036	0.0034	0.0025	0.0010	-0.0007	-0.0024
141/142		0.000 m	0.374 m	0.748 m	1.122 m	1.496 m	1.870 m	2.244 m	2.618 m	2.992 m
		Envolvente (Acero Conformado)								
	N-	-0.0560	-0.0548	-0.0536	-0.0524	-0.0512	-0.0500	-0.0488	-0.0476	-0.0464
	N+	0.0644	0.0664	0.0685	0.0705	0.0725	0.0746	0.0766	0.0786	0.0806
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.0898	-0.0673	-0.0449	-0.0224	0.0000	-0.0224	-0.0449	-0.0673	-0.0898
	Tz+	0.0898	0.0673	0.0449	0.0224	0.0000	0.0224	0.0449	0.0673	0.0898
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0292	-0.0503	-0.0628	-0.0671	-0.0628	-0.0503	-0.0292	0.0000
	My+	0.0000	0.0292	0.0503	0.0628	0.0671	0.0628	0.0503	0.0292	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
141/150		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-1.0799	-1.0799	-1.0799	-1.0799	-1.0799	-1.0799	-1.0799	-1.0799	-1.0799
	N+	0.7743	0.7743	0.7743	0.7743	0.7743	0.7743	0.7743	0.7743	0.7743
	Ty-	-0.0373	-0.0360	-0.0348	-0.0335	-0.0322	-0.0310	-0.0298	-0.0290	-0.0283

## Metal 3D

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	Ty+	0.0348	0.0355	0.0363	0.0370	0.0378	0.0385	0.0393	0.0406	0.0418
	Tz-	-0.1067	-0.1067	-0.1067	-0.1067	-0.1067	-0.1067	-0.1067	-0.1067	-0.1067
	Tz+	0.1044	0.1044	0.1044	0.1044	0.1044	0.1044	0.1044	0.1044	0.1044
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.2085	-0.1956	-0.1827	-0.1698	-0.1569	-0.1441	-0.1312	-0.1183	-0.1054
	My+	0.2195	0.2070	0.1944	0.1818	0.1692	0.1566	0.1440	0.1314	0.1188
	Mz-	-0.0753	-0.0714	-0.0677	-0.0641	-0.0607	-0.0574	-0.0544	-0.0514	-0.0486
	Mz+	0.0674	0.0637	0.0599	0.0560	0.0521	0.0480	0.0438	0.0396	0.0352
142/151		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-0.0294	-0.0294	-0.0294	-0.0294	-0.0294	-0.0294	-0.0294	-0.0294	-0.0294
	N+	0.0099	0.0099	0.0099	0.0099	0.0099	0.0099	0.0099	0.0099	0.0099
	Ty-	-0.0959	-0.0870	-0.0809	-0.0749	-0.0688	-0.0628	-0.0568	-0.0507	-0.0447
	Ty+	0.0297	0.0371	0.0473	0.0575	0.0677	0.0779	0.0881	0.0983	0.1085
	Tz-	-0.9322	-0.9322	-0.9322	-0.9322	-0.9322	-0.9322	-0.9322	-0.9322	-0.9322
	Tz+	0.9304	0.9304	0.9304	0.9304	0.9304	0.9304	0.9304	0.9304	0.9304
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-3.3285	-3.4448	-3.5611	-3.6774	-3.7937	-3.9100	-4.0263	-4.1427	-4.2590
	My+	3.3340	3.4506	3.5671	3.6836	3.8002	3.9167	4.0332	4.1498	4.2663
	Mz-	0.0129	0.0204	0.0217	0.0163	0.0099	0.0028	-0.0050	-0.0137	-0.0230
	Mz+	0.1702	0.1750	0.1789	0.1865	0.1934	0.1990	0.2033	0.2063	0.2080
152/143		0.000 m	0.244 m	0.488 m	0.732 m	0.977 m	1.221 m	1.465 m	1.709 m	1.953 m
		Envolvente (Acero laminado)								
	N-	-1.0437	-1.0437	-1.0436	-1.0436	-1.0436	-1.0436	-1.0435	-1.0435	-1.0435
	N+	2.3556	2.3556	2.3557	2.3557	2.3558	2.3558	2.3559	2.3559	2.3560
	Ty-	-0.0034	-0.0026	-0.0018	-0.0010	-0.0002	0.0004	0.0008	0.0013	0.0018
	Ty+	-0.0019	-0.0014	-0.0009	-0.0004	0.0001	0.0008	0.0017	0.0025	0.0033
	Tz-	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001
	Tz+	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0001	-0.0001	-0.0001	-0.0001
	My+	0.0001	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0001	0.0001
	Mz-	-0.0012	-0.0005	-0.0001	0.0001	0.0001	0.0000	-0.0002	-0.0005	-0.0012
	Mz+	-0.0005	0.0000	0.0004	0.0007	0.0009	0.0008	0.0005	0.0001	-0.0002
143/184		0.000 m	0.369 m	0.739 m	1.108 m	1.478 m	1.847 m	2.216 m	2.586 m	2.955 m
		Envolvente (Acero Conformado)								
	N-	-0.3977	-0.3977	-0.3977	-0.3977	-0.3977	-0.3977	-0.3977	-0.3977	-0.3977
	N+	0.1500	0.1500	0.1500	0.1500	0.1500	0.1500	0.1500	0.1500	0.1500
	Ty-	-0.0141	-0.0141	-0.0141	-0.0141	-0.0141	-0.0141	-0.0141	-0.0141	-0.0141
	Ty+	0.0144	0.0144	0.0144	0.0144	0.0144	0.0144	0.0144	0.0144	0.0144
	Tz-	-0.0331	-0.0615	-0.0956	-0.1297	-0.1637	-0.1978	-0.2319	-0.2660	-0.3001
	Tz+	0.0852	0.1002	0.1175	0.1348	0.1594	0.1988	0.2383	0.2777	0.3172
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.3495	-0.3404	-0.3192	-0.2849	-0.2385	-0.1790	-0.1074	-0.0455	-0.0864
	My+	0.5521	0.5484	0.5307	0.4978	0.4510	0.3890	0.3130	0.2357	0.2571
	Mz-	-0.0949	-0.0950	-0.0950	-0.0950	-0.0951	-0.0951	-0.0952	-0.0952	-0.0953
	Mz+	0.0636	0.0615	0.0595	0.0575	0.0555	0.0535	0.0515	0.0495	0.0474
144/153		0.000 m	0.229 m	0.458 m	0.687 m	0.916 m	1.146 m	1.375 m	1.604 m	1.833 m
		Envolvente (Acero laminado)								
	N-	-3.8161	-3.8160	-3.8160	-3.8159	-3.8159	-3.8159	-3.8158	-3.8158	-3.8157

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE** Adrián Freijomil Aradas

	N+	2.1222	2.1222	2.1222	2.1222	2.1223	2.1223	2.1223	2.1224	2.1224
	Ty-	-0.0032	-0.0025	-0.0017	-0.0010	-0.0002	0.0003	0.0008	0.0012	0.0017
	Ty+	-0.0017	-0.0012	-0.0008	-0.0003	0.0001	0.0008	0.0016	0.0024	0.0031
	Tz-	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002
	Tz+	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0003	-0.0003	-0.0002	-0.0002	-0.0001	-0.0001	0.0000	-0.0001	-0.0001
	My+	0.0004	0.0004	0.0003	0.0002	0.0001	0.0001	0.0000	0.0000	0.0001
	Mz-	-0.0012	-0.0005	-0.0001	0.0001	0.0002	0.0002	0.0000	-0.0004	-0.0010
	Mz+	-0.0005	-0.0001	0.0001	0.0004	0.0004	0.0004	0.0001	-0.0001	-0.0005
144/192		0.000 m	0.357 m	0.715 m	1.072 m	1.430 m	1.787 m	2.145 m	2.502 m	2.860 m
		Envolvente (Acero Conformado)								
	N-	-0.1206	-0.1206	-0.1206	-0.1206	-0.1206	-0.1206	-0.1206	-0.1206	-0.1206
	N+	0.1460	0.1460	0.1460	0.1460	0.1460	0.1460	0.1460	0.1460	0.1460
	Ty-	-0.0117	-0.0117	-0.0117	-0.0117	-0.0117	-0.0117	-0.0117	-0.0117	-0.0117
	Ty+	0.0107	0.0107	0.0107	0.0107	0.0107	0.0107	0.0107	0.0107	0.0107
	Tz-	-0.0280	-0.0289	-0.0619	-0.0949	-0.1278	-0.1608	-0.1938	-0.2268	-0.2598
	Tz+	0.0853	0.0855	0.1023	0.1190	0.1434	0.1815	0.2197	0.2579	0.2961
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.4076	-0.4090	-0.3991	-0.3769	-0.3434	-0.2977	-0.2406	-0.1713	-0.0906
	My+	0.6404	0.6410	0.6284	0.6016	0.5617	0.5076	0.4404	0.3648	0.2899
	Mz-	-0.1282	-0.1259	-0.1237	-0.1215	-0.1192	-0.1170	-0.1147	-0.1125	-0.1103
	Mz+	0.0899	0.0861	0.0822	0.0784	0.0746	0.0708	0.0669	0.0631	0.0593
145/155		0.000 m	0.238 m	0.476 m	0.715 m	0.953 m	1.191 m	1.429 m	1.667 m	1.906 m
		Envolvente (Acero laminado)								
	N-	-1.9951	-1.9951	-1.9951	-1.9950	-1.9950	-1.9949	-1.9949	-1.9949	-1.9948
	N+	0.7993	0.7993	0.7993	0.7994	0.7994	0.7994	0.7994	0.7995	0.7995
	Ty-	-0.0034	-0.0027	-0.0019	-0.0011	-0.0003	0.0001	0.0006	0.0011	0.0015
	Ty+	-0.0017	-0.0012	-0.0007	-0.0003	0.0003	0.0011	0.0018	0.0026	0.0034
	Tz-	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004
	Tz+	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0006	-0.0005	-0.0004	-0.0003	-0.0002	-0.0001	0.0000	0.0000	-0.0001
	My+	0.0003	0.0003	0.0002	0.0002	0.0001	0.0001	0.0000	0.0001	0.0002
	Mz-	-0.0014	-0.0007	-0.0002	0.0000	0.0001	0.0001	0.0000	-0.0004	-0.0011
	Mz+	-0.0002	0.0001	0.0004	0.0007	0.0007	0.0005	0.0002	-0.0001	-0.0004
145/177		0.000 m	0.348 m	0.695 m	1.043 m	1.391 m	1.739 m	2.086 m	2.434 m	2.782 m
		Envolvente (Acero Conformado)								
	N-	-0.0776	-0.0776	-0.0776	-0.0776	-0.0776	-0.0776	-0.0776	-0.0776	-0.0776
	N+	0.1956	0.1956	0.1956	0.1956	0.1956	0.1956	0.1956	0.1956	0.1956
	Ty-	-0.0257	-0.0257	-0.0257	-0.0257	-0.0257	-0.0257	-0.0257	-0.0257	-0.0257
	Ty+	0.0324	0.0324	0.0324	0.0324	0.0324	0.0324	0.0324	0.0324	0.0324
	Tz-	-0.0630	-0.0951	-0.1272	-0.1593	-0.1914	-0.2235	-0.2555	-0.2876	-0.3197
	Tz+	0.1416	0.1578	0.1741	0.1986	0.2357	0.2728	0.3100	0.3471	0.3842
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.4034	-0.3935	-0.3729	-0.3407	-0.2979	-0.2534	-0.2167	-0.2448	-0.3541
	My+	0.3485	0.3156	0.2703	0.2116	0.1405	0.0574	0.0849	0.1795	0.2849
	Mz-	-0.0336	-0.0252	-0.0171	-0.0162	-0.0188	-0.0213	-0.0239	-0.0264	-0.0290
	Mz+	0.0734	0.0635	0.0537	0.0438	0.0339	0.0240	0.0251	0.0336	0.0421
157/146		0.000 m	0.229 m	0.458 m	0.687 m	0.916 m	1.146 m	1.375 m	1.604 m	1.833 m

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		Envolvente (Acero laminado)								
	N-	-2.0145	-2.0144	-2.0144	-2.0144	-2.0143	-2.0143	-2.0143	-2.0143	-2.0142
	N+	3.7667	3.7668	3.7668	3.7669	3.7669	3.7670	3.7670	3.7670	3.7671
	Ty-	-0.0033	-0.0025	-0.0017	-0.0010	-0.0002	0.0003	0.0007	0.0012	0.0016
	Ty+	-0.0017	-0.0012	-0.0008	-0.0003	0.0002	0.0009	0.0016	0.0024	0.0031
	Tz-	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003
	Tz+	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0003	-0.0002	-0.0002	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0002
	My+	0.0001	0.0001	0.0001	0.0000	0.0000	0.0000	0.0001	0.0001	0.0002
	Mz-	-0.0010	-0.0004	-0.0001	0.0001	0.0001	0.0000	-0.0002	-0.0005	-0.0011
	Mz+	-0.0005	-0.0002	0.0002	0.0005	0.0006	0.0006	0.0004	0.0001	-0.0002
146/193		0.000 m	0.275 m	0.550 m	0.825 m	1.099 m	1.374 m	1.649 m	1.924 m	2.199 m
		Envolvente (Acero Conformado)								
	N-	-0.0522	-0.0522	-0.0522	-0.0522	-0.0522	-0.0522	-0.0522	-0.0522	-0.0522
	N+	0.1320	0.1320	0.1320	0.1320	0.1320	0.1320	0.1320	0.1320	0.1320
	Ty-	-0.0093	-0.0093	-0.0093	-0.0093	-0.0093	-0.0093	-0.0093	-0.0093	-0.0093
	Ty+	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065
	Tz-	-0.0930	-0.1184	-0.1438	-0.1691	-0.1945	-0.2198	-0.2452	-0.2706	-0.2959
	Tz+	0.1266	0.1394	0.1558	0.1852	0.2145	0.2439	0.2732	0.3026	0.3319
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.3597	-0.3351	-0.3039	-0.2654	-0.2202	-0.1677	-0.1098	-0.0594	-0.0458
	My+	0.4853	0.4574	0.4217	0.3776	0.3258	0.2741	0.2200	0.1590	0.1352
	Mz-	-0.0765	-0.0760	-0.0755	-0.0750	-0.0745	-0.0740	-0.0735	-0.0730	-0.0728
	Mz+	0.0519	0.0506	0.0494	0.0482	0.0470	0.0458	0.0445	0.0433	0.0421
147/158		0.000 m	0.244 m	0.488 m	0.732 m	0.977 m	1.221 m	1.465 m	1.709 m	1.953 m
		Envolvente (Acero laminado)								
	N-	-2.1089	-2.1089	-2.1088	-2.1088	-2.1087	-2.1087	-2.1086	-2.1086	-2.1085
	N+	0.9297	0.9298	0.9298	0.9298	0.9298	0.9299	0.9299	0.9299	0.9300
	Ty-	-0.0034	-0.0025	-0.0017	-0.0009	-0.0001	0.0004	0.0009	0.0013	0.0018
	Ty+	-0.0019	-0.0014	-0.0009	-0.0004	0.0000	0.0008	0.0016	0.0025	0.0033
	Tz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My+	0.0000	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
	Mz-	-0.0011	-0.0004	0.0000	0.0002	0.0002	0.0001	0.0000	-0.0004	-0.0011
	Mz+	-0.0006	-0.0002	0.0002	0.0005	0.0007	0.0006	0.0003	0.0000	-0.0004
147/185		0.000 m	0.255 m	0.510 m	0.766 m	1.021 m	1.276 m	1.531 m	1.787 m	2.042 m
		Envolvente (Acero Conformado)								
	N-	-0.0341	-0.0341	-0.0341	-0.0341	-0.0341	-0.0341	-0.0341	-0.0341	-0.0341
	N+	0.0558	0.0558	0.0558	0.0558	0.0558	0.0558	0.0558	0.0558	0.0558
	Ty-	-0.0167	-0.0167	-0.0167	-0.0167	-0.0167	-0.0167	-0.0167	-0.0167	-0.0167
	Ty+	0.0150	0.0150	0.0150	0.0150	0.0150	0.0150	0.0150	0.0150	0.0150
	Tz-	-0.1010	-0.1246	-0.1482	-0.1717	-0.1953	-0.2188	-0.2424	-0.2659	-0.2895
	Tz+	0.1012	0.1131	0.1251	0.1494	0.1767	0.2039	0.2312	0.2584	0.2857
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.3476	-0.3221	-0.2907	-0.2532	-0.2098	-0.1602	-0.1049	-0.0433	0.0146
	My+	0.6285	0.6094	0.5836	0.5506	0.5109	0.4640	0.4104	0.3496	0.2919
	Mz-	-0.1160	-0.1174	-0.1188	-0.1202	-0.1216	-0.1230	-0.1244	-0.1258	-0.1272

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	Mz+	0.0591	0.0591	0.0591	0.0591	0.0591	0.0591	0.0592	0.0592	0.0592
148/149		0.000 m	0.374 m	0.748 m	1.122 m	1.496 m	1.870 m	2.244 m	2.618 m	2.992 m
		Envolvente (Acero Conformado)								
	N-	-0.0252	-0.0240	-0.0228	-0.0216	-0.0204	-0.0192	-0.0180	-0.0168	-0.0156
	N+	0.0719	0.0739	0.0759	0.0780	0.0800	0.0820	0.0840	0.0861	0.0881
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.0942	-0.0707	-0.0471	-0.0236	0.0000	-0.0393	-0.0785	-0.1178	-0.1571
	Tz+	0.1571	0.1178	0.0785	0.0393	0.0000	0.0236	0.0471	0.0707	0.0942
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0511	-0.0881	-0.1098	-0.1175	-0.1098	-0.0881	-0.0511	0.0000
	My+	0.0000	0.0307	0.0529	0.0659	0.0705	0.0659	0.0529	0.0307	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
148/159		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-0.4663	-0.4663	-0.4663	-0.4663	-0.4663	-0.4663	-0.4663	-0.4663	-0.4663
	N+	0.4892	0.4892	0.4892	0.4892	0.4892	0.4892	0.4892	0.4892	0.4892
	Ty-	-0.1225	-0.1213	-0.1200	-0.1188	-0.1175	-0.1162	-0.1151	-0.1144	-0.1136
	Ty+	0.0685	0.0693	0.0700	0.0708	0.0715	0.0723	0.0732	0.0744	0.0757
	Tz-	-0.2117	-0.2117	-0.2117	-0.2117	-0.2117	-0.2117	-0.2117	-0.2117	-0.2117
	Tz+	0.3403	0.3403	0.3403	0.3403	0.3403	0.3403	0.3403	0.3403	0.3403
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0944	-0.0681	-0.0417	-0.0154	-0.0085	-0.0130	-0.0555	-0.0981	-0.1406
	My+	0.2041	0.1616	0.1192	0.0768	0.0344	0.0422	0.0687	0.0952	0.1216
	Mz-	-0.0671	-0.0523	-0.0375	-0.0229	-0.0083	-0.0141	-0.0232	-0.0323	-0.0416
Mz+	0.0315	0.0233	0.0149	0.0064	0.0058	0.0091	0.0236	0.0379	0.0520	
149/160		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456
	N+	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257
	Ty-	0.0274	0.0334	0.0395	0.0455	0.0516	0.0576	0.0637	0.0697	0.0758
	Ty+	0.2813	0.2915	0.3017	0.3119	0.3221	0.3323	0.3425	0.3527	0.3629
	Tz-	-1.4748	-1.4748	-1.4748	-1.4748	-1.4748	-1.4748	-1.4748	-1.4748	-1.4748
	Tz+	0.9208	0.9208	0.9208	0.9208	0.9208	0.9208	0.9208	0.9208	0.9208
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-4.6255	-4.7406	-4.8557	-4.9708	-5.0859	-5.2010	-5.3161	-5.4312	-5.5463
	My+	7.4697	7.6541	7.8384	8.0228	8.2071	8.3915	8.5758	8.7602	8.9445
	Mz-	0.0300	0.0262	0.0216	0.0163	0.0103	0.0032	-0.0056	-0.0457	-0.0905
Mz+	0.2316	0.1958	0.1588	0.1204	0.0808	0.0401	-0.0004	-0.0125	-0.0216	
150/151		0.000 m	0.374 m	0.748 m	1.122 m	1.496 m	1.870 m	2.244 m	2.618 m	2.992 m
		Envolvente (Acero Conformado)								
	N-	-0.0436	-0.0424	-0.0412	-0.0400	-0.0388	-0.0376	-0.0364	-0.0352	-0.0340
	N+	0.1196	0.1216	0.1237	0.1257	0.1277	0.1298	0.1318	0.1338	0.1358
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.0898	-0.0673	-0.0449	-0.0224	0.0000	-0.0224	-0.0449	-0.0673	-0.0898
	Tz+	0.0898	0.0673	0.0449	0.0224	0.0000	0.0224	0.0449	0.0673	0.0898
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0292	-0.0503	-0.0628	-0.0671	-0.0628	-0.0503	-0.0292	0.0000

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	My+	0.0000	0.0292	0.0503	0.0628	0.0671	0.0628	0.0503	0.0292	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
150/156		0.000 m	0.071 m	0.142 m	0.213 m	0.284 m	0.355 m	0.426 m	0.497 m	0.568 m
		Envolvente (Acero Conformado)								
	N-	-1.0799	-1.0799	-1.0799	-1.0799	-1.0799	-1.0799	-1.0799	-1.0799	-1.0799
	N+	0.7743	0.7743	0.7743	0.7743	0.7743	0.7743	0.7743	0.7743	0.7743
	Ty-	-0.1412	-0.1405	-0.1398	-0.1391	-0.1384	-0.1380	-0.1375	-0.1371	-0.1367
	Ty+	0.0616	0.0621	0.0625	0.0629	0.0634	0.0641	0.0648	0.0655	0.0662
	Tz-	-0.1964	-0.1964	-0.1964	-0.1964	-0.1964	-0.1964	-0.1964	-0.1964	-0.1964
	Tz+	0.1941	0.1941	0.1941	0.1941	0.1941	0.1941	0.1941	0.1941	0.1941
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.1054	-0.0917	-0.0780	-0.0643	-0.0506	-0.0369	-0.0232	-0.0191	-0.0193
	My+	0.1188	0.1053	0.0918	0.0782	0.0647	0.0511	0.0385	0.0327	0.0332
	Mz-	-0.0486	-0.0386	-0.0287	-0.0188	-0.0101	-0.0058	-0.0092	-0.0126	-0.0161
	Mz+	0.0352	0.0308	0.0264	0.0219	0.0186	0.0166	0.0145	0.0218	0.0316
151/163		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-0.0294	-0.0294	-0.0294	-0.0294	-0.0294	-0.0294	-0.0294	-0.0294	-0.0294
	N+	0.0099	0.0099	0.0099	0.0099	0.0099	0.0099	0.0099	0.0099	0.0099
	Ty-	0.0086	0.0146	0.0207	0.0267	0.0328	0.0388	0.0448	0.0509	0.0569
	Ty+	0.1338	0.1440	0.1542	0.1644	0.1746	0.1848	0.1950	0.2052	0.2154
	Tz-	-0.8425	-0.8425	-0.8425	-0.8425	-0.8425	-0.8425	-0.8425	-0.8425	-0.8425
	Tz+	0.8407	0.8407	0.8407	0.8407	0.8407	0.8407	0.8407	0.8407	0.8407
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-4.2590	-4.3640	-4.4691	-4.5742	-4.6793	-4.7844	-4.8895	-4.9945	-5.0996
	My+	4.2663	4.3716	4.4769	4.5822	4.6875	4.7928	4.8982	5.0035	5.1088
	Mz-	-0.0230	-0.0289	-0.0356	-0.0430	-0.0511	-0.0600	-0.0717	-0.0904	-0.1103
	Mz+	0.2080	0.1915	0.1738	0.1547	0.1344	0.1128	0.0919	0.0760	0.0594
165/152		0.000 m	0.244 m	0.488 m	0.732 m	0.977 m	1.221 m	1.465 m	1.709 m	1.953 m
		Envolvente (Acero laminado)								
	N-	-1.0612	-1.0611	-1.0611	-1.0611	-1.0610	-1.0610	-1.0610	-1.0610	-1.0609
	N+	2.3786	2.3787	2.3787	2.3788	2.3788	2.3789	2.3789	2.3790	2.3790
	Ty-	-0.0033	-0.0025	-0.0017	-0.0009	-0.0001	0.0004	0.0009	0.0014	0.0018
	Ty+	-0.0018	-0.0013	-0.0008	-0.0004	0.0001	0.0009	0.0017	0.0025	0.0033
	Tz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001
	Mz-	-0.0011	-0.0004	0.0001	0.0002	0.0003	0.0002	0.0000	-0.0005	-0.0012
	Mz+	-0.0005	-0.0002	0.0002	0.0005	0.0006	0.0005	0.0003	-0.0001	-0.0005
152/183		0.000 m	0.244 m	0.488 m	0.732 m	0.976 m	1.220 m	1.464 m	1.708 m	1.952 m
		Envolvente (Acero Conformado)								
	N-	0.0030	0.0030	0.0030	0.0030	0.0030	0.0030	0.0030	0.0030	0.0030
	N+	0.0737	0.0737	0.0737	0.0737	0.0737	0.0737	0.0737	0.0737	0.0737
	Ty-	-0.0183	-0.0183	-0.0183	-0.0183	-0.0183	-0.0183	-0.0183	-0.0183	-0.0183
	Ty+	0.0219	0.0219	0.0219	0.0219	0.0219	0.0219	0.0219	0.0219	0.0219
	Tz-	-0.1463	-0.1688	-0.1913	-0.2139	-0.2364	-0.2589	-0.2814	-0.3039	-0.3264
	Tz+	0.1636	0.1787	0.2047	0.2308	0.2568	0.2829	0.3090	0.3350	0.3611
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.2267	-0.1936	-0.1551	-0.1109	-0.0711	-0.1009	-0.1396	-0.1827	-0.2439
	My+	0.3501	0.3130	0.2698	0.2199	0.1659	0.1685	0.1952	0.2518	0.3284
	Mz-	-0.0512	-0.0514	-0.0517	-0.0520	-0.0522	-0.0525	-0.0527	-0.0530	-0.0548
	Mz+	0.0324	0.0319	0.0314	0.0310	0.0305	0.0300	0.0296	0.0299	0.0338
153/164		0.000 m	0.229 m	0.458 m	0.687 m	0.916 m	1.146 m	1.375 m	1.604 m	1.833 m
		Envolvente (Acero laminado)								
	N-	-3.7950	-3.7949	-3.7949	-3.7948	-3.7948	-3.7948	-3.7947	-3.7947	-3.7946
	N+	2.1260	2.1261	2.1261	2.1261	2.1261	2.1262	2.1262	2.1262	2.1263
	Ty-	-0.0031	-0.0024	-0.0016	-0.0009	-0.0001	0.0004	0.0008	0.0013	0.0017
	Ty+	-0.0018	-0.0014	-0.0009	-0.0004	0.0000	0.0007	0.0015	0.0023	0.0030
	Tz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz+	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001
	My+	0.0001	0.0001	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz-	-0.0010	-0.0004	-0.0001	0.0001	0.0001	0.0001	-0.0001	-0.0004	-0.0010
	Mz+	-0.0005	-0.0001	0.0003	0.0006	0.0007	0.0006	0.0004	0.0000	-0.0003
153/191		0.000 m	0.240 m	0.480 m	0.719 m	0.959 m	1.199 m	1.439 m	1.679 m	1.919 m
		Envolvente (Acero Conformado)								
	N-	0.0040	0.0040	0.0040	0.0040	0.0040	0.0040	0.0040	0.0040	0.0040
	N+	0.1065	0.1065	0.1065	0.1065	0.1065	0.1065	0.1065	0.1065	0.1065
	Ty-	-0.0052	-0.0052	-0.0052	-0.0052	-0.0052	-0.0052	-0.0052	-0.0052	-0.0052
	Ty+	0.0191	0.0191	0.0191	0.0191	0.0191	0.0191	0.0191	0.0191	0.0191
	Tz-	-0.0958	-0.1179	-0.1401	-0.1622	-0.1843	-0.2064	-0.2286	-0.2507	-0.2728
	Tz+	0.0949	0.1062	0.1183	0.1439	0.1696	0.1952	0.2208	0.2464	0.2720
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.4196	-0.3972	-0.3698	-0.3368	-0.2987	-0.2551	-0.2064	-0.1522	-0.0928
	My+	0.6990	0.6823	0.6596	0.6306	0.5957	0.5544	0.5071	0.4535	0.3940
	Mz-	-0.1155	-0.1187	-0.1219	-0.1251	-0.1284	-0.1316	-0.1348	-0.1380	-0.1416
	Mz+	0.0754	0.0739	0.0724	0.0709	0.0694	0.0679	0.0663	0.0653	0.0665
166/154		0.000 m	0.238 m	0.476 m	0.715 m	0.953 m	1.191 m	1.429 m	1.667 m	1.906 m
		Envolvente (Acero laminado)								
	N-	-0.7175	-0.7175	-0.7175	-0.7175	-0.7174	-0.7174	-0.7174	-0.7174	-0.7174
	N+	1.6108	1.6109	1.6109	1.6109	1.6110	1.6110	1.6111	1.6111	1.6111
	Ty-	-0.0033	-0.0025	-0.0017	-0.0009	-0.0002	0.0003	0.0008	0.0013	0.0017
	Ty+	-0.0017	-0.0012	-0.0007	-0.0003	0.0002	0.0010	0.0018	0.0026	0.0034
	Tz-	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002
	Tz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0002
	My+	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0002	0.0002
	Mz-	-0.0012	-0.0005	-0.0002	0.0000	0.0001	0.0001	-0.0001	-0.0005	-0.0012
	Mz+	-0.0004	0.0000	0.0004	0.0007	0.0008	0.0007	0.0004	0.0000	-0.0004
154/176		0.000 m	0.234 m	0.468 m	0.702 m	0.936 m	1.170 m	1.404 m	1.638 m	1.872 m
		Envolvente (Acero Conformado)								
	N-	-0.0682	-0.0682	-0.0682	-0.0682	-0.0682	-0.0682	-0.0682	-0.0682	-0.0682
	N+	0.0424	0.0424	0.0424	0.0424	0.0424	0.0424	0.0424	0.0424	0.0424
	Ty-	-0.0290	-0.0290	-0.0290	-0.0290	-0.0290	-0.0290	-0.0290	-0.0290	-0.0290
	Ty+	0.0241	0.0241	0.0241	0.0241	0.0241	0.0241	0.0241	0.0241	0.0241
	Tz-	-0.1505	-0.1721	-0.1937	-0.2153	-0.2369	-0.2585	-0.2801	-0.3017	-0.3233

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NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

	Tz+	0.1874	0.2116	0.2366	0.2616	0.2866	0.3116	0.3366	0.3616	0.3866
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.1719	-0.1361	-0.0954	-0.1163	-0.1535	-0.1962	-0.2503	-0.3193	-0.3957
	My+	0.2396	0.1971	0.1489	0.0946	0.0670	0.1073	0.1702	0.2384	0.3114
	Mz-	-0.0628	-0.0573	-0.0518	-0.0463	-0.0408	-0.0353	-0.0298	-0.0262	-0.0262
	Mz+	0.0372	0.0342	0.0312	0.0287	0.0315	0.0353	0.0390	0.0428	0.0465
155/168		0.000 m	0.238 m	0.476 m	0.715 m	0.953 m	1.191 m	1.429 m	1.667 m	1.906 m
		Envolvente (Acero laminado)								
	N-	-2.0207	-2.0206	-2.0206	-2.0206	-2.0205	-2.0205	-2.0205	-2.0204	-2.0204
	N+	0.8201	0.8201	0.8201	0.8202	0.8202	0.8202	0.8202	0.8203	0.8203
	Ty-	-0.0034	-0.0026	-0.0019	-0.0011	-0.0003	0.0001	0.0006	0.0011	0.0015
	Ty+	-0.0015	-0.0011	-0.0006	-0.0001	0.0004	0.0012	0.0020	0.0028	0.0036
	Tz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz+	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0001	-0.0001	-0.0001	0.0000	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001
	My+	0.0002	0.0001	0.0001	0.0001	0.0001	0.0000	0.0000	0.0000	0.0000
	Mz-	-0.0011	-0.0005	-0.0001	0.0000	-0.0001	-0.0002	-0.0005	-0.0011	-0.0019
	Mz+	-0.0004	0.0000	0.0003	0.0006	0.0007	0.0007	0.0006	0.0004	0.0001
155/178		0.000 m	0.179 m	0.359 m	0.538 m	0.718 m	0.897 m	1.077 m	1.256 m	1.436 m
		Envolvente (Acero Conformado)								
	N-	-0.0358	-0.0358	-0.0358	-0.0358	-0.0358	-0.0358	-0.0358	-0.0358	-0.0358
	N+	0.0800	0.0800	0.0800	0.0800	0.0800	0.0800	0.0800	0.0800	0.0800
	Ty-	-0.0294	-0.0294	-0.0294	-0.0294	-0.0294	-0.0294	-0.0294	-0.0294	-0.0294
	Ty+	0.0120	0.0120	0.0120	0.0120	0.0120	0.0120	0.0120	0.0120	0.0120
	Tz-	-0.1986	-0.2152	-0.2317	-0.2483	-0.2648	-0.2814	-0.2980	-0.3145	-0.3311
	Tz+	0.2470	0.2662	0.2853	0.3045	0.3237	0.3428	0.3620	0.3812	0.4003
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0428	-0.0693	-0.1037	-0.1415	-0.1884	-0.2483	-0.3115	-0.3783	-0.4484
	My+	0.0490	0.0324	0.0651	0.1043	0.1463	0.1915	0.2395	0.2907	0.3480
	Mz-	-0.0050	-0.0056	-0.0073	-0.0092	-0.0111	-0.0130	-0.0149	-0.0168	-0.0186
	Mz+	0.0041	0.0045	0.0091	0.0139	0.0187	0.0237	0.0289	0.0341	0.0392
156/161		0.000 m	0.054 m	0.108 m	0.162 m	0.216 m	0.270 m	0.324 m	0.378 m	0.432 m
		Envolvente (Acero Conformado)								
	N-	-1.0589	-1.0589	-1.0589	-1.0589	-1.0589	-1.0589	-1.0589	-1.0589	-1.0589
	N+	0.9143	0.9143	0.9143	0.9143	0.9143	0.9143	0.9143	0.9143	0.9143
	Ty-	-0.0710	-0.0705	-0.0699	-0.0694	-0.0691	-0.0688	-0.0685	-0.0681	-0.0678
	Ty+	0.1347	0.1350	0.1353	0.1357	0.1362	0.1368	0.1373	0.1379	0.1384
	Tz-	-0.2572	-0.2572	-0.2572	-0.2572	-0.2572	-0.2572	-0.2572	-0.2572	-0.2572
	Tz+	0.2542	0.2542	0.2542	0.2542	0.2542	0.2542	0.2542	0.2542	0.2542
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0193	-0.0217	-0.0354	-0.0491	-0.0628	-0.0765	-0.0903	-0.1040	-0.1177
	My+	0.0332	0.0385	0.0504	0.0643	0.0782	0.0920	0.1059	0.1198	0.1337
	Mz-	-0.0161	-0.0122	-0.0117	-0.0164	-0.0212	-0.0279	-0.0353	-0.0427	-0.0502
	Mz+	0.0316	0.0309	0.0303	0.0297	0.0290	0.0303	0.0321	0.0340	0.0359
156/162		0.000 m	0.078 m	0.157 m	0.235 m	0.314 m	0.392 m	0.470 m	0.549 m	0.627 m
		Envolvente (Acero laminado)								
	N-	-0.8374	-0.8372	-0.8370	-0.8368	-0.8366	-0.8364	-0.8362	-0.8360	-0.8358
	N+	0.6258	0.6259	0.6261	0.6262	0.6263	0.6264	0.6265	0.6266	0.6267
	Ty-	0.0003	0.0004	0.0005	0.0006	0.0007	0.0008	0.0009	0.0011	0.0012



## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas**

	Ty+	0.0015	0.0017	0.0019	0.0020	0.0022	0.0024	0.0026	0.0028	0.0029
	Tz-	-0.0564	-0.0564	-0.0564	-0.0564	-0.0564	-0.0564	-0.0564	-0.0564	-0.0564
	Tz+	0.0570	0.0570	0.0570	0.0570	0.0570	0.0570	0.0570	0.0570	0.0570
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0096	-0.0052	-0.0008	-0.0037	-0.0081	-0.0125	-0.0170	-0.0214	-0.0259
	My+	0.0098	0.0054	0.0009	0.0037	0.0081	0.0125	0.0169	0.0213	0.0257
	Mz-	0.0002	0.0002	0.0001	0.0001	0.0000	0.0000	-0.0002	-0.0004	-0.0006
	Mz+	0.0007	0.0006	0.0005	0.0003	0.0002	0.0000	-0.0001	-0.0002	-0.0003
167/157		0.000 m	0.229 m	0.458 m	0.687 m	0.916 m	1.146 m	1.375 m	1.604 m	1.833 m
		Envolvente (Acero laminado)								
	N-	-2.0023	-2.0023	-2.0022	-2.0022	-2.0022	-2.0022	-2.0021	-2.0021	-2.0021
	N+	3.7535	3.7535	3.7536	3.7536	3.7537	3.7537	3.7538	3.7538	3.7539
	Ty-	-0.0030	-0.0023	-0.0015	-0.0007	0.0000	0.0004	0.0009	0.0013	0.0018
	Ty+	-0.0016	-0.0012	-0.0007	-0.0003	0.0002	0.0010	0.0017	0.0025	0.0033
	Tz-	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003
	Tz+	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0005	-0.0004	-0.0003	-0.0002	-0.0002	-0.0001	0.0000	-0.0002	-0.0003
	My+	0.0008	0.0007	0.0005	0.0004	0.0002	0.0001	0.0000	0.0001	0.0001
	Mz-	-0.0009	-0.0003	0.0000	0.0002	0.0002	0.0002	0.0000	-0.0004	-0.0010
	Mz+	-0.0003	0.0000	0.0003	0.0005	0.0006	0.0004	0.0002	-0.0002	-0.0005
157/194		0.000 m	0.157 m	0.314 m	0.472 m	0.629 m	0.786 m	0.943 m	1.100 m	1.257 m
		Envolvente (Acero Conformado)								
	N-	-0.0568	-0.0568	-0.0568	-0.0568	-0.0568	-0.0568	-0.0568	-0.0568	-0.0568
	N+	0.1292	0.1292	0.1292	0.1292	0.1292	0.1292	0.1292	0.1292	0.1292
	Ty-	-0.0167	-0.0167	-0.0167	-0.0167	-0.0167	-0.0167	-0.0167	-0.0167	-0.0167
	Ty+	0.0100	0.0100	0.0100	0.0100	0.0100	0.0100	0.0100	0.0100	0.0100
	Tz-	-0.2098	-0.2078	-0.2209	-0.2355	-0.2500	-0.2645	-0.2790	-0.2935	-0.3080
	Tz+	0.2351	0.2519	0.2687	0.2855	0.3022	0.3190	0.3358	0.3526	0.3694
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.1080	-0.0798	-0.0565	-0.0364	-0.0623	-0.0987	-0.1464	-0.2006	-0.2573
	My+	0.1506	0.1199	0.0871	0.0817	0.1096	0.1395	0.1687	0.1972	0.2250
	Mz-	-0.0315	-0.0301	-0.0297	-0.0292	-0.0292	-0.0305	-0.0319	-0.0333	-0.0346
	Mz+	0.0178	0.0171	0.0164	0.0157	0.0152	0.0178	0.0203	0.0228	0.0253
158/169		0.000 m	0.244 m	0.488 m	0.732 m	0.977 m	1.221 m	1.465 m	1.709 m	1.953 m
		Envolvente (Acero laminado)								
	N-	-2.1016	-2.1015	-2.1015	-2.1014	-2.1014	-2.1013	-2.1013	-2.1012	-2.1012
	N+	0.9371	0.9371	0.9371	0.9371	0.9372	0.9372	0.9372	0.9373	0.9373
	Ty-	-0.0034	-0.0026	-0.0018	-0.0009	-0.0001	0.0004	0.0009	0.0013	0.0018
	Ty+	-0.0020	-0.0015	-0.0010	-0.0005	0.0000	0.0007	0.0015	0.0024	0.0032
	Tz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My+	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
	Mz-	-0.0011	-0.0004	0.0000	0.0002	0.0002	0.0002	0.0000	-0.0003	-0.0010
	Mz+	-0.0004	0.0000	0.0004	0.0008	0.0009	0.0008	0.0006	0.0002	-0.0002
158/186		0.000 m	0.130 m	0.260 m	0.390 m	0.519 m	0.649 m	0.779 m	0.909 m	1.039 m
		Envolvente (Acero Conformado)								
	N-	-0.0497	-0.0497	-0.0497	-0.0497	-0.0497	-0.0497	-0.0497	-0.0497	-0.0497

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE** Adrián Freijomil Aradas

	N+	0.0869	0.0869	0.0869	0.0869	0.0869	0.0869	0.0869	0.0869	0.0869
	Ty-	-0.0287	-0.0287	-0.0287	-0.0287	-0.0287	-0.0287	-0.0287	-0.0287	-0.0287
	Ty+	0.0185	0.0185	0.0185	0.0185	0.0185	0.0185	0.0185	0.0185	0.0185
	Tz-	-0.1849	-0.1969	-0.2089	-0.2208	-0.2328	-0.2448	-0.2568	-0.2688	-0.2808
	Tz+	0.1518	0.1656	0.1795	0.1934	0.2073	0.2211	0.2350	0.2489	0.2627
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.2159	-0.1917	-0.1660	-0.1387	-0.1099	-0.0795	-0.0476	-0.0140	0.0210
	My+	0.5967	0.5761	0.5538	0.5297	0.5038	0.4760	0.4465	0.4151	0.3820
	Mz-	-0.1416	-0.1409	-0.1421	-0.1433	-0.1445	-0.1456	-0.1468	-0.1480	-0.1492
	Mz+	0.0576	0.0583	0.0590	0.0597	0.0604	0.0611	0.0618	0.0625	0.0633
159/160		0.000 m	0.374 m	0.748 m	1.122 m	1.496 m	1.870 m	2.244 m	2.618 m	2.992 m
		Envolvente (Acero Conformado)								
	N-	-0.0289	-0.0269	-0.0248	-0.0228	-0.0209	-0.0197	-0.0185	-0.0173	-0.0161
	N+	0.0362	0.0374	0.0386	0.0398	0.0412	0.0432	0.0452	0.0473	0.0493
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.0942	-0.0707	-0.0471	-0.0236	0.0000	-0.0393	-0.0785	-0.1178	-0.1571
	Tz+	0.1571	0.1178	0.0785	0.0393	0.0000	0.0236	0.0471	0.0707	0.0942
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0511	-0.0881	-0.1098	-0.1175	-0.1098	-0.0881	-0.0511	0.0000
	My+	0.0000	0.0307	0.0529	0.0659	0.0705	0.0659	0.0529	0.0307	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
159/172		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-0.4663	-0.4663	-0.4663	-0.4663	-0.4663	-0.4663	-0.4663	-0.4663	-0.4663
	N+	0.4892	0.4892	0.4892	0.4892	0.4892	0.4892	0.4892	0.4892	0.4892
	Ty-	-0.1494	-0.1486	-0.1479	-0.1471	-0.1464	-0.1456	-0.1449	-0.1441	-0.1434
	Ty+	0.1041	0.1053	0.1066	0.1078	0.1091	0.1104	0.1116	0.1129	0.1141
	Tz-	-0.3059	-0.3059	-0.3059	-0.3059	-0.3059	-0.3059	-0.3059	-0.3059	-0.3059
	Tz+	0.4974	0.4974	0.4974	0.4974	0.4974	0.4974	0.4974	0.4974	0.4974
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.1406	-0.2028	-0.2649	-0.3271	-0.3893	-0.4515	-0.5136	-0.5758	-0.6380
	My+	0.1216	0.1599	0.1981	0.2363	0.2746	0.3128	0.3511	0.3893	0.4275
	Mz-	-0.0416	-0.0541	-0.0666	-0.0796	-0.0931	-0.1068	-0.1206	-0.1346	-0.1488
	Mz+	0.0520	0.0700	0.0879	0.1059	0.1242	0.1424	0.1605	0.1786	0.1965
160/174		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456
	N+	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257
	Ty-	0.0596	0.0657	0.0717	0.0778	0.0838	0.0899	0.0959	0.1020	0.1080
	Ty+	0.4122	0.4224	0.4326	0.4428	0.4530	0.4632	0.4734	0.4836	0.4938
	Tz-	-1.3177	-1.3177	-1.3177	-1.3177	-1.3177	-1.3177	-1.3177	-1.3177	-1.3177
	Tz+	0.8266	0.8266	0.8266	0.8266	0.8266	0.8266	0.8266	0.8266	0.8266
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-5.5463	-5.6497	-5.7530	-5.8563	-5.9596	-6.0629	-6.1662	-6.2696	-6.3729
	My+	8.9445	9.1092	9.2739	9.4386	9.6034	9.7681	9.9328	10.0975	10.2622
	Mz-	-0.0905	-0.1426	-0.1961	-0.2508	-0.3067	-0.3640	-0.4225	-0.4824	-0.5434
	Mz+	-0.0216	-0.0294	-0.0380	-0.0474	-0.0575	-0.0683	-0.0799	-0.0923	-0.1054
161/162		0.000 m	0.057 m	0.114 m	0.171 m	0.228 m	0.285 m	0.341 m	0.398 m	0.455 m

## Metal 3D

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		Envolvente (Acero Conformado)								
	N-	-0.0793	-0.0790	-0.0787	-0.0784	-0.0781	-0.0777	-0.0774	-0.0771	-0.0768
	N+	0.1099	0.1101	0.1103	0.1104	0.1106	0.1108	0.1110	0.1112	0.1114
	Ty-	-0.0519	-0.0519	-0.0519	-0.0519	-0.0519	-0.0519	-0.0519	-0.0519	-0.0519
	Ty+	0.0404	0.0404	0.0404	0.0404	0.0404	0.0404	0.0404	0.0404	0.0404
	Tz-	-0.0018	-0.0018	-0.0018	-0.0018	-0.0018	-0.0018	-0.0018	-0.0018	-0.0018
	Tz+	0.0276	0.0242	0.0208	0.0174	0.0140	0.0106	0.0072	0.0037	0.0013
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0015	-0.0028	-0.0038	-0.0047	-0.0054	-0.0059	-0.0062	-0.0064
	My+	0.0000	0.0001	0.0002	0.0003	0.0004	0.0005	0.0006	0.0007	0.0008
	Mz-	0.0000	-0.0023	-0.0046	-0.0069	-0.0092	-0.0115	-0.0138	-0.0161	-0.0184
	Mz+	0.0000	0.0030	0.0059	0.0089	0.0118	0.0148	0.0177	0.0207	0.0236
161/197		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-1.0993	-1.0993	-1.0993	-1.0993	-1.0993	-1.0993	-1.0993	-1.0993	-1.0993
	N+	0.9662	0.9662	0.9662	0.9662	0.9662	0.9662	0.9662	0.9662	0.9662
	Ty-	-0.0960	-0.0953	-0.0945	-0.0938	-0.0930	-0.0923	-0.0915	-0.0908	-0.0901
	Ty+	0.0856	0.0868	0.0881	0.0894	0.0906	0.0919	0.0931	0.0944	0.0957
	Tz-	-0.2583	-0.2583	-0.2583	-0.2583	-0.2583	-0.2583	-0.2583	-0.2583	-0.2583
	Tz+	0.2811	0.2811	0.2811	0.2811	0.2811	0.2811	0.2811	0.2811	0.2811
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.1177	-0.1528	-0.1880	-0.2231	-0.2583	-0.2934	-0.3285	-0.3637	-0.3988
	My+	0.1337	0.1659	0.1982	0.2305	0.2628	0.2951	0.3274	0.3597	0.3919
	Mz-	-0.0502	-0.0603	-0.0706	-0.0811	-0.0917	-0.1025	-0.1135	-0.1246	-0.1358
	Mz+	0.0359	0.0472	0.0584	0.0696	0.0806	0.0916	0.1025	0.1132	0.1239
162/163		0.000 m	0.317 m	0.634 m	0.951 m	1.268 m	1.585 m	1.902 m	2.219 m	2.536 m
		Envolvente (Acero Conformado)								
	N-	-0.0770	-0.0760	-0.0750	-0.0740	-0.0729	-0.0719	-0.0709	-0.0699	-0.0689
	N+	0.1821	0.1838	0.1855	0.1872	0.1890	0.1907	0.1924	0.1941	0.1958
	Ty-	-0.0073	-0.0073	-0.0073	-0.0073	-0.0073	-0.0073	-0.0073	-0.0073	-0.0073
	Ty+	0.0093	0.0093	0.0093	0.0093	0.0093	0.0093	0.0093	0.0093	0.0093
	Tz-	-0.0759	-0.0569	-0.0379	-0.0188	-0.0025	-0.0215	-0.0406	-0.0596	-0.0786
	Tz+	0.0737	0.0547	0.0357	0.0166	0.0003	0.0193	0.0384	0.0574	0.0764
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0064	-0.0266	-0.0410	-0.0491	-0.0514	-0.0475	-0.0378	-0.0218	0.0000
	My+	0.0008	0.0217	0.0368	0.0456	0.0487	0.0454	0.0364	0.0211	0.0000
	Mz-	-0.0184	-0.0161	-0.0138	-0.0115	-0.0092	-0.0069	-0.0046	-0.0023	0.0000
	Mz+	0.0236	0.0207	0.0177	0.0148	0.0118	0.0089	0.0059	0.0030	0.0000
162/198		0.000 m	0.182 m	0.363 m	0.545 m	0.727 m	0.909 m	1.090 m	1.272 m	1.454 m
		Envolvente (Acero laminado)								
	N-	-0.9017	-0.9013	-0.9009	-0.9004	-0.9000	-0.8996	-0.8991	-0.8987	-0.8982
	N+	0.6932	0.6935	0.6937	0.6940	0.6943	0.6945	0.6948	0.6950	0.6953
	Ty-	-0.0021	-0.0017	-0.0013	-0.0009	-0.0004	0.0000	0.0002	0.0004	0.0007
	Ty+	-0.0012	-0.0009	-0.0007	-0.0004	-0.0002	0.0001	0.0005	0.0009	0.0013
	Tz-	-0.0178	-0.0178	-0.0178	-0.0178	-0.0178	-0.0178	-0.0178	-0.0178	-0.0178
	Tz+	0.0177	0.0177	0.0177	0.0177	0.0177	0.0177	0.0177	0.0177	0.0177
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0259	-0.0227	-0.0194	-0.0162	-0.0130	-0.0097	-0.0065	-0.0032	0.0000
	My+	0.0257	0.0225	0.0193	0.0161	0.0129	0.0096	0.0064	0.0032	0.0000
	Mz-	-0.0006	-0.0003	-0.0001	0.0001	0.0001	0.0002	0.0002	0.0001	0.0000

## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

	Mz+	-0.0003	-0.0001	0.0001	0.0003	0.0004	0.0004	0.0003	0.0002	0.0000	
163/199		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m	
		Envolvente (Acero laminado)									
	N-	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367
	N+	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172
	Ty-	0.0236	0.0296	0.0357	0.0417	0.0477	0.0538	0.0598	0.0659	0.0719	0.0719
	Ty+	0.4044	0.4146	0.4248	0.4350	0.4452	0.4554	0.4656	0.4758	0.4860	0.4860
	Tz-	-0.7639	-0.7639	-0.7639	-0.7639	-0.7639	-0.7639	-0.7639	-0.7639	-0.7639	-0.7639
	Tz+	0.7643	0.7643	0.7643	0.7643	0.7643	0.7643	0.7643	0.7643	0.7643	0.7643
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-5.0996	-5.1952	-5.2907	-5.3862	-5.4818	-5.5773	-5.6728	-5.7683	-5.8639	-5.8639
	My+	5.1088	5.2043	5.2998	5.3952	5.4907	5.5862	5.6817	5.7772	5.8727	5.8727
	Mz-	-0.1103	-0.1241	-0.1391	-0.1555	-0.1886	-0.2386	-0.2899	-0.3447	-0.4049	-0.4049
Mz+	0.0594	0.0234	-0.0016	-0.0162	-0.0295	-0.0434	-0.0581	-0.0713	-0.0812	-0.0812	
164/170		0.000 m	0.229 m	0.458 m	0.687 m	0.916 m	1.146 m	1.375 m	1.604 m	1.833 m	
		Envolvente (Acero laminado)									
	N-	-3.7572	-3.7571	-3.7571	-3.7570	-3.7570	-3.7570	-3.7569	-3.7569	-3.7568	-3.7568
	N+	2.1288	2.1288	2.1288	2.1289	2.1289	2.1289	2.1289	2.1290	2.1290	2.1290
	Ty-	-0.0032	-0.0024	-0.0016	-0.0009	-0.0001	0.0004	0.0008	0.0013	0.0017	0.0017
	Ty+	-0.0018	-0.0014	-0.0009	-0.0005	0.0000	0.0007	0.0015	0.0022	0.0030	0.0030
	Tz-	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001
	Tz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	0.0000	0.0000	0.0000	0.0000
	My+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0001	0.0001	0.0001
	Mz-	-0.0010	-0.0004	0.0000	0.0001	0.0002	0.0002	0.0000	-0.0003	-0.0009	-0.0009
Mz+	-0.0003	0.0001	0.0005	0.0008	0.0009	0.0008	0.0006	0.0002	-0.0002	-0.0002	
164/190		0.000 m	0.122 m	0.244 m	0.366 m	0.489 m	0.611 m	0.733 m	0.855 m	0.977 m	
		Envolvente (Acero Conformado)									
	N-	-0.0155	-0.0155	-0.0155	-0.0155	-0.0155	-0.0155	-0.0155	-0.0155	-0.0155	-0.0155
	N+	0.0330	0.0330	0.0330	0.0330	0.0330	0.0330	0.0330	0.0330	0.0330	0.0330
	Ty-	-0.0214	-0.0214	-0.0214	-0.0214	-0.0214	-0.0214	-0.0214	-0.0214	-0.0214	-0.0214
	Ty+	0.0480	0.0480	0.0480	0.0480	0.0480	0.0480	0.0480	0.0480	0.0480	0.0480
	Tz-	-0.1836	-0.1949	-0.2062	-0.2174	-0.2287	-0.2400	-0.2513	-0.2625	-0.2738	-0.2738
	Tz+	0.1537	0.1667	0.1798	0.1928	0.2059	0.2189	0.2320	0.2450	0.2581	0.2581
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.2629	-0.2407	-0.2172	-0.1922	-0.1659	-0.1382	-0.1091	-0.0786	-0.0468	-0.0468
	My+	0.6439	0.6252	0.6049	0.5830	0.5596	0.5345	0.5079	0.4796	0.4498	0.4498
	Mz-	-0.1231	-0.1276	-0.1321	-0.1365	-0.1410	-0.1461	-0.1519	-0.1578	-0.1636	-0.1636
Mz+	0.0622	0.0617	0.0613	0.0608	0.0603	0.0622	0.0648	0.0674	0.0700	0.0700	
181/165		0.000 m	0.231 m	0.462 m	0.693 m	0.924 m	1.155 m	1.386 m	1.617 m	1.848 m	
		Envolvente (Acero laminado)									
	N-	-1.0858	-1.0858	-1.0857	-1.0857	-1.0857	-1.0857	-1.0856	-1.0856	-1.0856	-1.0856
	N+	2.4128	2.4128	2.4129	2.4129	2.4130	2.4130	2.4131	2.4131	2.4132	2.4132
	Ty-	-0.0031	-0.0024	-0.0016	-0.0008	-0.0001	0.0004	0.0008	0.0013	0.0018	0.0018
	Ty+	-0.0017	-0.0013	-0.0008	-0.0004	0.0001	0.0009	0.0016	0.0024	0.0032	0.0032
	Tz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

	My+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz-	-0.0012	-0.0006	-0.0001	0.0001	0.0001	0.0001	-0.0001	-0.0005	-0.0011
	Mz+	-0.0004	0.0000	0.0002	0.0005	0.0005	0.0004	0.0001	-0.0002	-0.0005
165/182		0.000 m	0.119 m	0.237 m	0.356 m	0.474 m	0.593 m	0.712 m	0.830 m	0.949 m
		Envolvente (Acero Conformado)								
	N-	-0.0540	-0.0540	-0.0540	-0.0540	-0.0540	-0.0540	-0.0540	-0.0540	-0.0540
	N+	0.0410	0.0410	0.0410	0.0410	0.0410	0.0410	0.0410	0.0410	0.0410
	Ty-	-0.0250	-0.0250	-0.0250	-0.0250	-0.0250	-0.0250	-0.0250	-0.0250	-0.0250
	Ty+	0.0342	0.0342	0.0342	0.0342	0.0342	0.0342	0.0342	0.0342	0.0342
	Tz-	-0.2555	-0.2664	-0.2774	-0.2883	-0.2993	-0.3102	-0.3212	-0.3321	-0.3431
	Tz+	0.2936	0.3062	0.3189	0.3316	0.3442	0.3569	0.3696	0.3822	0.3949
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.1343	-0.1600	-0.1863	-0.2156	-0.2501	-0.2860	-0.3230	-0.3629	-0.4089
	My+	0.1449	0.1758	0.2081	0.2416	0.2765	0.3126	0.3501	0.3888	0.4289
	Mz-	-0.0127	-0.0168	-0.0208	-0.0249	-0.0290	-0.0330	-0.0371	-0.0411	-0.0452
	Mz+	0.0180	0.0209	0.0239	0.0269	0.0298	0.0328	0.0358	0.0387	0.0417
173/166		0.000 m	0.093 m	0.186 m	0.280 m	0.373 m	0.466 m	0.559 m	0.652 m	0.746 m
		Envolvente (Acero laminado)								
	N-	-0.1331	-0.1331	-0.1331	-0.1330	-0.1330	-0.1330	-0.1330	-0.1330	-0.1330
	N+	0.3141	0.3141	0.3141	0.3142	0.3142	0.3142	0.3142	0.3142	0.3142
	Ty-	-0.0003	0.0000	0.0002	0.0004	0.0005	0.0007	0.0009	0.0011	0.0013
	Ty+	0.0005	0.0007	0.0010	0.0013	0.0016	0.0019	0.0022	0.0025	0.0028
	Tz-	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002
	Tz+	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	0.0000	-0.0001	-0.0001	-0.0002	-0.0002	-0.0002	-0.0003	-0.0003
	My+	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0001	0.0001	0.0001
	Mz-	0.0000	-0.0001	-0.0001	-0.0002	-0.0004	-0.0005	-0.0007	-0.0009	-0.0012
	Mz+	0.0000	0.0000	0.0000	0.0000	-0.0001	-0.0001	-0.0002	-0.0003	-0.0004
166/175		0.000 m	0.066 m	0.132 m	0.197 m	0.263 m	0.329 m	0.395 m	0.461 m	0.527 m
		Envolvente (Acero laminado)								
	N-	-1.0177	-1.0177	-1.0177	-1.0177	-1.0177	-1.0177	-1.0177	-1.0177	-1.0177
	N+	2.1449	2.1449	2.1449	2.1449	2.1449	2.1449	2.1449	2.1449	2.1449
	Ty-	-0.7925	-0.7925	-0.7925	-0.7925	-0.7925	-0.7925	-0.7925	-0.7925	-0.7925
	Ty+	0.3502	0.3502	0.3502	0.3502	0.3502	0.3502	0.3502	0.3502	0.3502
	Tz-	-0.7701	-0.7886	-0.8071	-0.8256	-0.8441	-0.8626	-0.8811	-0.8996	-0.9181
	Tz+	0.3997	0.4074	0.4151	0.4228	0.4305	0.4382	0.4459	0.4536	0.4613
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.3580	-0.3800	-0.4022	-0.4278	-0.4541	-0.4808	-0.5079	-0.5355	-0.5635
	My+	0.3873	0.4386	0.4911	0.5449	0.5998	0.6560	0.7134	0.7720	0.8318
	Mz-	-0.3183	-0.2661	-0.2140	-0.1618	-0.1244	-0.1103	-0.1032	-0.1222	-0.1441
	Mz+	0.1460	0.1229	0.0999	0.0974	0.1036	0.1099	0.1162	0.1486	0.1839
167/195		0.000 m	0.039 m	0.079 m	0.118 m	0.158 m	0.197 m	0.237 m	0.276 m	0.316 m
		Envolvente (Acero laminado)								
	N-	-0.8881	-0.8881	-0.8881	-0.8881	-0.8881	-0.8881	-0.8881	-0.8881	-0.8881
	N+	1.8110	1.8110	1.8110	1.8110	1.8110	1.8110	1.8110	1.8110	1.8110
	Ty-	-0.5685	-0.5685	-0.5685	-0.5685	-0.5685	-0.5685	-0.5685	-0.5685	-0.5685
	Ty+	1.2188	1.2188	1.2188	1.2188	1.2188	1.2188	1.2188	1.2188	1.2188
	Tz-	-0.8215	-0.8320	-0.8425	-0.8529	-0.8634	-0.8739	-0.8844	-0.8948	-0.9053
	Tz+	0.3919	0.3976	0.4032	0.4089	0.4146	0.4203	0.4260	0.4317	0.4374
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas**

	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.3679	-0.3835	-0.3993	-0.4153	-0.4316	-0.4481	-0.4648	-0.4817	-0.4989
	My+	0.6077	0.6404	0.6735	0.7069	0.7408	0.7752	0.8099	0.8450	0.8806
	Mz-	-0.2141	-0.1916	-0.1692	-0.1467	-0.1243	-0.1054	-0.1079	-0.1162	-0.1485
	Mz+	0.3215	0.2804	0.2394	0.1984	0.1574	0.1199	0.1038	0.0894	0.0749
198/167		0.000 m	0.077 m	0.154 m	0.231 m	0.308 m	0.385 m	0.461 m	0.538 m	0.615 m
		Envolvente (Acero laminado)								
	N-	-1.2444	-1.2444	-1.2444	-1.2444	-1.2444	-1.2444	-1.2443	-1.2443	-1.2443
	N+	2.2361	2.2361	2.2361	2.2361	2.2361	2.2362	2.2362	2.2362	2.2362
	Ty-	-0.0001	0.0000	0.0002	0.0003	0.0005	0.0007	0.0008	0.0010	0.0011
	Ty+	0.0005	0.0007	0.0010	0.0013	0.0015	0.0018	0.0020	0.0023	0.0025
	Tz-	-0.0013	-0.0013	-0.0013	-0.0013	-0.0013	-0.0013	-0.0013	-0.0013	-0.0013
	Tz+	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0001	-0.0001	-0.0002	-0.0002	-0.0003	-0.0003	-0.0004	-0.0005
	My+	0.0000	0.0001	0.0002	0.0003	0.0004	0.0005	0.0006	0.0007	0.0008
	Mz-	0.0000	0.0000	-0.0001	-0.0002	-0.0003	-0.0004	-0.0006	-0.0007	-0.0009
	Mz+	0.0000	0.0000	0.0000	0.0000	-0.0001	-0.0001	-0.0002	-0.0002	-0.0003
168/179		0.000 m	0.011 m	0.023 m	0.034 m	0.045 m	0.056 m	0.068 m	0.079 m	0.090 m
		Envolvente (Acero Conformado)								
	N-	-0.3625	-0.3625	-0.3625	-0.3625	-0.3625	-0.3625	-0.3625	-0.3625	-0.3625
	N+	0.1580	0.1580	0.1580	0.1580	0.1580	0.1580	0.1580	0.1580	0.1580
	Ty-	-0.2011	-0.2011	-0.2011	-0.2011	-0.2011	-0.2011	-0.2011	-0.2011	-0.2011
	Ty+	0.2426	0.2426	0.2426	0.2426	0.2426	0.2426	0.2426	0.2426	0.2426
	Tz-	-0.3347	-0.3344	-0.3341	-0.3338	-0.3335	-0.3332	-0.3328	-0.3325	-0.3322
	Tz+	0.4091	0.4103	0.4115	0.4127	0.4139	0.4151	0.4163	0.4175	0.4187
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.4792	-0.4838	-0.4885	-0.4931	-0.4978	-0.5024	-0.5071	-0.5118	-0.5165
	My+	0.4374	0.4412	0.4449	0.4487	0.4525	0.4562	0.4600	0.4637	0.4675
	Mz-	-0.0327	-0.0330	-0.0333	-0.0336	-0.0339	-0.0342	-0.0345	-0.0348	-0.0356
	Mz+	0.0345	0.0348	0.0351	0.0355	0.0358	0.0362	0.0365	0.0371	0.0382
168/181		0.000 m	0.016 m	0.032 m	0.048 m	0.064 m	0.080 m	0.096 m	0.112 m	0.128 m
		Envolvente (Acero laminado)								
	N-	-2.3666	-2.3666	-2.3666	-2.3666	-2.3666	-2.3666	-2.3666	-2.3666	-2.3666
	N+	1.1114	1.1114	1.1114	1.1114	1.1114	1.1114	1.1114	1.1114	1.1115
	Ty-	-0.0174	-0.0173	-0.0173	-0.0172	-0.0172	-0.0171	-0.0171	-0.0170	-0.0170
	Ty+	0.0034	0.0034	0.0035	0.0035	0.0035	0.0036	0.0036	0.0036	0.0036
	Tz-	-0.0073	-0.0073	-0.0073	-0.0073	-0.0073	-0.0073	-0.0073	-0.0073	-0.0073
	Tz+	0.0144	0.0144	0.0144	0.0144	0.0144	0.0144	0.0144	0.0144	0.0144
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0001	-0.0003	-0.0005	-0.0007	-0.0010	-0.0012	-0.0014	-0.0016	-0.0019
	My+	0.0000	0.0001	0.0002	0.0004	0.0005	0.0006	0.0007	0.0008	0.0009
	Mz-	-0.0019	-0.0019	-0.0019	-0.0019	-0.0019	-0.0020	-0.0020	-0.0020	-0.0020
	Mz+	0.0001	0.0002	0.0004	0.0006	0.0008	0.0011	0.0013	0.0016	0.0018
169/187		0.000 m	0.004 m	0.009 m	0.013 m	0.018 m	0.022 m	0.027 m	0.031 m	0.036 m
		Envolvente (Acero Conformado)								
	N-	-1.1343	-1.1343	-1.1343	-1.1343	-1.1343	-1.1343	-1.1343	-1.1343	-1.1343
	N+	0.9565	0.9565	0.9565	0.9565	0.9565	0.9565	0.9565	0.9565	0.9565
	Ty-	-0.5801	-0.5801	-0.5801	-0.5801	-0.5801	-0.5801	-0.5801	-0.5801	-0.5801
	Ty+	0.6265	0.6265	0.6265	0.6265	0.6265	0.6265	0.6265	0.6265	0.6265
	Tz-	0.0671	0.0672	0.0673	0.0675	0.0676	0.0677	0.0678	0.0680	0.0681

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas**

	Tz+	0.3667	0.3671	0.3675	0.3679	0.3683	0.3687	0.3691	0.3695	0.3699
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.5068	-0.5078	-0.5088	-0.5098	-0.5108	-0.5118	-0.5128	-0.5138	-0.5148
	My+	0.4360	0.4349	0.4337	0.4326	0.4315	0.4303	0.4292	0.4280	0.4269
	Mz-	-0.1685	-0.1678	-0.1676	-0.1675	-0.1674	-0.1672	-0.1671	-0.1670	-0.1668
	Mz+	0.0801	0.0792	0.0784	0.0776	0.0767	0.0759	0.0751	0.0743	0.0734
169/188		0.000 m	0.009 m	0.017 m	0.026 m	0.035 m	0.044 m	0.052 m	0.061 m	0.070 m
	Envolvente (Acero laminado)									
	N-	-2.0385	-2.0385	-2.0385	-2.0385	-2.0385	-2.0385	-2.0385	-2.0385	-2.0385
	N+	0.7804	0.7804	0.7804	0.7804	0.7804	0.7804	0.7804	0.7804	0.7804
	Ty-	-0.0144	-0.0144	-0.0143	-0.0143	-0.0143	-0.0142	-0.0142	-0.0142	-0.0142
	Ty+	-0.0032	-0.0031	-0.0031	-0.0031	-0.0031	-0.0031	-0.0030	-0.0030	-0.0030
	Tz-	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002
	Tz+	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My+	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0000	0.0000	0.0000
	Mz-	-0.0010	-0.0009	-0.0007	-0.0006	-0.0005	-0.0004	-0.0002	-0.0001	0.0000
	Mz+	-0.0002	-0.0002	-0.0002	-0.0001	-0.0001	-0.0001	-0.0001	0.0000	0.0000
170/188		0.000 m	0.009 m	0.017 m	0.026 m	0.035 m	0.044 m	0.052 m	0.061 m	0.070 m
	Envolvente (Acero laminado)									
	N-	-3.3264	-3.3264	-3.3264	-3.3264	-3.3264	-3.3264	-3.3264	-3.3264	-3.3264
	N+	2.4696	2.4696	2.4696	2.4696	2.4696	2.4696	2.4696	2.4696	2.4696
	Ty-	-0.0123	-0.0123	-0.0123	-0.0122	-0.0122	-0.0122	-0.0121	-0.0121	-0.0121
	Ty+	-0.0023	-0.0023	-0.0023	-0.0023	-0.0022	-0.0022	-0.0022	-0.0022	-0.0022
	Tz-	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006
	Tz+	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My+	0.0001	0.0001	0.0001	0.0001	0.0001	0.0000	0.0000	0.0000	0.0000
	Mz-	-0.0009	-0.0007	-0.0006	-0.0005	-0.0004	-0.0003	-0.0002	-0.0001	0.0000
	Mz+	-0.0002	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	0.0000	0.0000	0.0000
170/189		0.000 m	0.004 m	0.009 m	0.013 m	0.018 m	0.022 m	0.027 m	0.031 m	0.036 m
	Envolvente (Acero Conformado)									
	N-	-2.1285	-2.1285	-2.1285	-2.1285	-2.1285	-2.1285	-2.1285	-2.1285	-2.1285
	N+	0.5607	0.5607	0.5607	0.5607	0.5607	0.5607	0.5607	0.5607	0.5607
	Ty-	-0.1793	-0.1793	-0.1793	-0.1793	-0.1793	-0.1793	-0.1793	-0.1793	-0.1793
	Ty+	0.8765	0.8765	0.8765	0.8765	0.8765	0.8765	0.8765	0.8765	0.8765
	Tz-	0.0514	0.0516	0.0517	0.0518	0.0519	0.0521	0.0522	0.0523	0.0524
	Tz+	0.3007	0.3011	0.3015	0.3019	0.3023	0.3027	0.3031	0.3035	0.3039
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.5124	-0.5131	-0.5138	-0.5145	-0.5152	-0.5160	-0.5167	-0.5174	-0.5181
	My+	0.4344	0.4335	0.4326	0.4317	0.4308	0.4299	0.4290	0.4281	0.4272
	Mz-	-0.1481	-0.1519	-0.1557	-0.1596	-0.1634	-0.1672	-0.1711	-0.1749	-0.1787
	Mz+	0.0717	0.0726	0.0734	0.0742	0.0750	0.0758	0.0766	0.0774	0.0782
171/172		0.000 m	0.603 m	1.205 m	1.808 m	2.410 m	3.013 m	3.615 m	4.218 m	4.820 m
	Envolvente (Acero laminado)									
	N-	-2.8713	-2.8496	-2.8279	-2.8062	-2.7845	-2.7628	-2.7411	-2.7194	-2.6977
	N+	1.7869	1.7997	1.8126	1.8255	1.8383	1.8512	1.8641	1.8769	1.8898
	Ty-	-0.0076	-0.0076	-0.0076	-0.0076	-0.0076	-0.0076	-0.0076	-0.0076	-0.0076

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas**

	Ty+	0.0555	0.0555	0.0555	0.0555	0.0555	0.0555	0.0555	0.0555	0.0555
	Tz-	-1.2237	-0.9978	-0.7718	-0.5459	-0.3200	-0.1795	-0.2501	-0.6116	-0.9731
	Tz+	2.0186	1.6571	1.2956	0.9341	0.5726	0.2111	0.2316	0.4575	0.6834
	Mt-	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006
	Mt+	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
	My-	-1.3339	-0.6674	-0.1890	-0.4889	-0.9022	-1.1339	-1.1565	-0.9526	-0.5396
	My+	2.2201	1.1172	0.2234	0.3076	0.5262	0.6482	0.6395	0.4916	0.4600
	Mz-	-0.0118	-0.0072	-0.0026	-0.0047	-0.0281	-0.0616	-0.0951	-0.1285	-0.1620
	Mz+	0.1057	0.0722	0.0388	0.0082	0.0066	0.0112	0.0158	0.0204	0.0250
172/173		0.000 m	0.136 m	0.273 m	0.409 m	0.545 m	0.682 m	0.818 m	0.954 m	1.091 m
	Envolvente (Acero laminado)									
	N-	-2.9359	-2.9310	-2.9261	-2.9212	-2.9163	-2.9114	-2.9064	-2.9015	-2.8966
	N+	2.0906	2.0935	2.0964	2.0993	2.1023	2.1052	2.1081	2.1110	2.1139
	Ty-	-0.1487	-0.1487	-0.1487	-0.1487	-0.1487	-0.1487	-0.1487	-0.1487	-0.1487
	Ty+	0.0230	0.0230	0.0230	0.0230	0.0230	0.0230	0.0230	0.0230	0.0230
	Tz-	-1.9077	-1.9220	-1.9363	-1.9506	-1.9650	-1.9793	-1.9936	-2.0079	-2.0222
	Tz+	1.2656	1.2741	1.2827	1.2913	1.2999	1.3085	1.3171	1.3257	1.3343
	Mt-	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006
	Mt+	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
	My-	-0.5396	-0.2998	-0.3944	-0.5699	-0.7466	-0.9244	-1.1034	-1.2836	-1.4649
	My+	0.4600	0.4846	0.5092	0.5648	0.7717	1.0407	1.3115	1.5843	1.8591
	Mz-	-0.1620	-0.1417	-0.1214	-0.1011	-0.0809	-0.0606	-0.0403	-0.0200	-0.0001
	Mz+	0.0250	0.0219	0.0188	0.0156	0.0125	0.0094	0.0062	0.0031	0.0002
172/200		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
	Envolvente (Acero Conformado)									
	N-	-0.3721	-0.3721	-0.3721	-0.3721	-0.3721	-0.3721	-0.3721	-0.3721	-0.3721
	N+	0.6934	0.6934	0.6934	0.6934	0.6934	0.6934	0.6934	0.6934	0.6934
	Ty-	-0.1043	-0.1030	-0.1018	-0.1005	-0.0993	-0.0980	-0.0967	-0.0955	-0.0942
	Ty+	0.1244	0.1251	0.1259	0.1266	0.1274	0.1281	0.1289	0.1296	0.1304
	Tz-	-0.4380	-0.4380	-0.4380	-0.4380	-0.4380	-0.4380	-0.4380	-0.4380	-0.4380
	Tz+	0.2766	0.2766	0.2766	0.2766	0.2766	0.2766	0.2766	0.2766	0.2766
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.6380	-0.5833	-0.5287	-0.4740	-0.4193	-0.3647	-0.3100	-0.2554	-0.2007
	My+	0.4275	0.3930	0.3585	0.3239	0.2894	0.2549	0.2204	0.1858	0.1513
	Mz-	-0.1488	-0.1359	-0.1232	-0.1106	-0.0982	-0.0859	-0.0741	-0.0628	-0.0516
	Mz+	0.1965	0.1810	0.1653	0.1496	0.1338	0.1179	0.1023	0.0868	0.0712
173/174		0.000 m	0.238 m	0.475 m	0.713 m	0.950 m	1.188 m	1.426 m	1.663 m	1.901 m
	Envolvente (Acero Conformado)									
	N-	-0.9380	-0.9367	-0.9354	-0.9342	-0.9329	-0.9316	-0.9303	-0.9290	-0.9277
	N+	-0.2204	-0.2196	-0.2189	-0.2181	-0.2173	-0.2166	-0.2158	-0.2150	-0.2143
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.0599	-0.0449	-0.0299	-0.0150	0.0000	-0.0249	-0.0499	-0.0748	-0.0998
	Tz+	0.0998	0.0748	0.0499	0.0249	0.0000	0.0150	0.0299	0.0449	0.0599
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0206	-0.0356	-0.0443	-0.0474	-0.0443	-0.0356	-0.0206	0.0000
	My+	0.0000	0.0124	0.0213	0.0266	0.0285	0.0266	0.0213	0.0124	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
173/175		0.000 m	0.066 m	0.132 m	0.198 m	0.264 m	0.330 m	0.396 m	0.462 m	0.528 m
	Envolvente (Acero laminado)									
	N-	-2.4430	-2.4429	-2.4428	-2.4427	-2.4426	-2.4425	-2.4423	-2.4422	-2.4421



## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas**

	N+	1.4748	1.4748	1.4749	1.4750	1.4751	1.4751	1.4752	1.4753	1.4753
	Ty-	-0.1614	-0.1614	-0.1614	-0.1614	-0.1614	-0.1614	-0.1614	-0.1614	-0.1614
	Ty+	0.0708	0.0708	0.0708	0.0708	0.0708	0.0708	0.0708	0.0708	0.0708
	Tz-	-1.8679	-1.8663	-1.8646	-1.8629	-1.8613	-1.8596	-1.8579	-1.8563	-1.8546
	Tz+	2.2367	2.2377	2.2387	2.2397	2.2407	2.2417	2.2427	2.2437	2.2446
	Mt-	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001
	Mt+	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
	My-	-1.8591	-1.7396	-1.6202	-1.5010	-1.3818	-1.2628	-1.1513	-1.0646	-1.0034
	My+	1.4649	1.3173	1.1696	1.0218	0.8740	0.7261	0.5856	0.4697	0.3791
	Mz-	-0.0006	-0.0044	-0.0091	-0.0138	-0.0184	-0.0231	-0.0278	-0.0325	-0.0371
	Mz+	0.0003	0.0101	0.0207	0.0314	0.0420	0.0527	0.0633	0.0740	0.0846
174/201		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
	Envolvente (Acero laminado)									
	N-	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456
	N+	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257
	Ty-	-0.4339	-0.4237	-0.4135	-0.4033	-0.3931	-0.3829	-0.3727	-0.3625	-0.3523
	Ty+	-0.1063	-0.1002	-0.0942	-0.0881	-0.0821	-0.0760	-0.0700	-0.0640	-0.0579
	Tz-	-1.2179	-1.2179	-1.2179	-1.2179	-1.2179	-1.2179	-1.2179	-1.2179	-1.2179
	Tz+	0.7667	0.7667	0.7667	0.7667	0.7667	0.7667	0.7667	0.7667	0.7667
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-6.3729	-6.4687	-6.5646	-6.6604	-6.7562	-6.8521	-6.9479	-7.0437	-7.1396
	My+	10.2622	10.4144	10.5667	10.7189	10.8712	11.0234	11.1756	11.3279	11.4801
	Mz-	-0.5434	-0.4898	-0.4375	-0.3865	-0.3367	-0.2882	-0.2409	-0.1950	-0.1503
	Mz+	-0.1054	-0.0925	-0.0804	-0.0690	-0.0583	-0.0484	-0.0393	-0.0309	-0.0233
175/176		0.000 m	0.169 m	0.337 m	0.506 m	0.675 m	0.843 m	1.012 m	1.180 m	1.349 m
	Envolvente (Acero laminado)									
	N-	-2.9448	-2.9445	-2.9442	-2.9439	-2.9436	-2.9433	-2.9430	-2.9427	-2.9424
	N+	1.7209	1.7211	1.7213	1.7215	1.7216	1.7218	1.7220	1.7222	1.7223
	Ty-	-0.0323	-0.0323	-0.0323	-0.0323	-0.0323	-0.0323	-0.0323	-0.0323	-0.0323
	Ty+	0.0734	0.0734	0.0734	0.0734	0.0734	0.0734	0.0734	0.0734	0.0734
	Tz-	-0.8603	-0.8560	-0.8518	-0.8475	-0.8432	-0.8390	-0.8347	-0.8305	-0.8262
	Tz+	0.6412	0.6437	0.6462	0.6488	0.6513	0.6538	0.6563	0.6589	0.6614
	Mt-	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001
	Mt+	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
	My-	-1.0034	-0.9181	-0.8333	-0.7489	-0.6649	-0.5813	-0.4982	-0.5512	-0.6210
	My+	0.3791	0.3390	0.4024	0.5056	0.6081	0.7099	0.8110	0.9114	1.0110
	Mz-	-0.0371	-0.0317	-0.0262	-0.0208	-0.0153	-0.0099	-0.0050	-0.0065	-0.0160
	Mz+	0.0846	0.0722	0.0599	0.0475	0.0351	0.0228	0.0104	0.0010	0.0064
175/224		0.000 m	0.750 m	1.500 m	2.250 m	3.000 m	3.750 m	4.500 m	5.250 m	6.000 m
	Envolvente (Acero laminado)									
	N-	-1.1208	-1.1208	-1.1208	-1.1208	-1.1208	-1.1208	-1.1208	-1.1208	-1.1208
	N+	2.3797	2.3797	2.3797	2.3797	2.3797	2.3797	2.3797	2.3797	2.3797
	Ty-	-0.0240	-0.0240	-0.0240	-0.0240	-0.0240	-0.0240	-0.0240	-0.0240	-0.0240
	Ty+	0.0306	0.0306	0.0306	0.0306	0.0306	0.0306	0.0306	0.0306	0.0306
	Tz-	-0.5176	-0.4096	-0.3016	-0.2182	-0.1552	-0.0369	-0.1242	-0.2556	-0.3870
	Tz+	0.6643	0.5329	0.4015	0.2700	0.1386	0.0886	0.1528	0.2608	0.3689
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.5635	-0.2694	-0.1417	-0.2314	-0.3726	-0.4253	-0.3834	-0.2390	0.0000
	My+	0.8318	0.3938	0.2017	0.3690	0.4585	0.4638	0.3913	0.2345	0.0000
	Mz-	-0.1441	-0.1261	-0.1081	-0.0901	-0.0721	-0.0540	-0.0360	-0.0180	0.0000
	Mz+	0.1839	0.1609	0.1379	0.1149	0.0919	0.0689	0.0460	0.0230	0.0000
176/177		0.000 m	0.169 m	0.337 m	0.506 m	0.675 m	0.843 m	1.012 m	1.180 m	1.349 m

## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

		Envolvente (Acero laminado)								
	N-	-2.9307	-2.9304	-2.9301	-2.9298	-2.9295	-2.9292	-2.9289	-2.9286	-2.9283
	N+	1.7035	1.7037	1.7039	1.7041	1.7042	1.7044	1.7046	1.7048	1.7049
	Ty-	-0.0154	-0.0154	-0.0154	-0.0154	-0.0154	-0.0154	-0.0154	-0.0154	-0.0154
	Ty+	0.0055	0.0055	0.0055	0.0055	0.0055	0.0055	0.0055	0.0055	0.0055
	Tz-	-0.2348	-0.2323	-0.2298	-0.2273	-0.2247	-0.2222	-0.2197	-0.2172	-0.2146
	Tz+	0.1440	0.1483	0.1525	0.1568	0.1611	0.1653	0.1696	0.1738	0.1781
	Mt-	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001
	Mt+	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
	My-	-0.6210	-0.5983	-0.6005	-0.6031	-0.6061	-0.6096	-0.6135	-0.6178	-0.6225
	My+	1.0110	0.9864	0.9610	0.9349	0.9081	0.8806	0.8524	0.8234	0.7937
	Mz-	-0.0160	-0.0135	-0.0109	-0.0084	-0.0063	-0.0042	-0.0022	-0.0002	-0.0010
	Mz+	0.0064	0.0055	0.0046	0.0037	0.0027	0.0022	0.0023	0.0034	0.0058
176/225		0.000 m	0.750 m	1.500 m	2.250 m	3.000 m	3.750 m	4.500 m	5.250 m	6.000 m
		Envolvente (Acero Conformado)								
	N-	-0.0717	-0.0717	-0.0717	-0.0717	-0.0717	-0.0717	-0.0717	-0.0717	-0.0717
	N+	0.0256	0.0256	0.0256	0.0256	0.0256	0.0256	0.0256	0.0256	0.0256
	Ty-	-0.0044	-0.0044	-0.0044	-0.0044	-0.0044	-0.0044	-0.0044	-0.0044	-0.0044
	Ty+	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078
	Tz-	-0.3821	-0.3020	-0.2219	-0.1649	-0.1298	-0.0322	-0.0959	-0.1651	-0.2343
	Tz+	0.3287	0.2595	0.1903	0.1211	0.0519	0.0731	0.1162	0.1963	0.2764
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.3957	-0.1923	-0.1199	-0.2286	-0.2876	-0.2925	-0.2476	-0.1487	0.0000
	My+	0.3114	0.0973	0.1626	0.2845	0.3487	0.3504	0.2945	0.1761	0.0000
	Mz-	-0.0262	-0.0229	-0.0197	-0.0164	-0.0131	-0.0098	-0.0066	-0.0033	0.0000
	Mz+	0.0465	0.0407	0.0349	0.0291	0.0233	0.0174	0.0116	0.0058	0.0000
177/178		0.000 m	0.169 m	0.337 m	0.506 m	0.675 m	0.843 m	1.012 m	1.180 m	1.349 m
		Envolvente (Acero laminado)								
	N-	-2.9071	-2.9068	-2.9065	-2.9062	-2.9059	-2.9056	-2.9053	-2.9050	-2.9047
	N+	1.6706	1.6708	1.6710	1.6711	1.6713	1.6715	1.6717	1.6719	1.6720
	Ty-	-0.0007	-0.0007	-0.0007	-0.0007	-0.0007	-0.0007	-0.0007	-0.0007	-0.0007
	Ty+	0.0115	0.0115	0.0115	0.0115	0.0115	0.0115	0.0115	0.0115	0.0115
	Tz-	-0.6139	-0.6113	-0.6088	-0.6063	-0.6038	-0.6012	-0.5987	-0.5962	-0.5937
	Tz+	0.9138	0.9181	0.9224	0.9266	0.9309	0.9351	0.9394	0.9437	0.9479
	Mt-	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001
	Mt+	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
	My-	-0.6225	-0.5192	-0.4163	-0.3139	-0.2118	-0.1141	-0.1486	-0.3026	-0.4621
	My+	0.7937	0.6393	0.4841	0.3282	0.1716	0.0181	0.0391	0.1009	0.1920
	Mz-	-0.0010	-0.0009	-0.0008	-0.0019	-0.0033	-0.0047	-0.0062	-0.0077	-0.0097
	Mz+	0.0058	0.0039	0.0020	0.0008	0.0005	0.0002	0.0000	-0.0001	0.0000
177/226		0.000 m	0.750 m	1.500 m	2.250 m	3.000 m	3.750 m	4.500 m	5.250 m	6.000 m
		Envolvente (Acero Conformado)								
	N-	-0.0643	-0.0643	-0.0643	-0.0643	-0.0643	-0.0643	-0.0643	-0.0643	-0.0643
	N+	0.2096	0.2096	0.2096	0.2096	0.2096	0.2096	0.2096	0.2096	0.2096
	Ty-	-0.0048	-0.0048	-0.0048	-0.0048	-0.0048	-0.0048	-0.0048	-0.0048	-0.0048
	Ty+	0.0070	0.0070	0.0070	0.0070	0.0070	0.0070	0.0070	0.0070	0.0070
	Tz-	-0.3787	-0.2986	-0.2185	-0.1612	-0.1261	-0.0259	-0.0909	-0.1601	-0.2293
	Tz+	0.3243	0.2551	0.1859	0.1167	0.0475	0.0774	0.1202	0.2003	0.2803
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.3541	-0.1535	-0.0977	-0.2102	-0.2728	-0.2814	-0.2402	-0.1450	0.0000
	My+	0.2849	0.0827	0.1803	0.2992	0.3605	0.3593	0.3004	0.1790	0.0000
	Mz-	-0.0290	-0.0254	-0.0217	-0.0181	-0.0145	-0.0109	-0.0072	-0.0036	0.0000

## Metal 3D

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	Mz+	0.0421	0.0368	0.0316	0.0263	0.0210	0.0158	0.0105	0.0053	0.0000
178/179		0.000 m	0.169 m	0.337 m	0.506 m	0.675 m	0.843 m	1.012 m	1.180 m	1.349 m
		Envolvente (Acero laminado)								
	N-	-2.8920	-2.8917	-2.8914	-2.8911	-2.8908	-2.8905	-2.8902	-2.8899	-2.8896
	N+	1.6421	1.6422	1.6424	1.6426	1.6428	1.6429	1.6431	1.6433	1.6435
	Ty-	-0.0200	-0.0200	-0.0200	-0.0200	-0.0200	-0.0200	-0.0200	-0.0200	-0.0200
	Ty+	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013
	Tz-	-1.2365	-1.2340	-1.2315	-1.2290	-1.2264	-1.2239	-1.2214	-1.2189	-1.2163
	Tz+	1.7287	1.7330	1.7372	1.7415	1.7457	1.7500	1.7543	1.7585	1.7628
	Mt-	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001
	Mt+	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
	My-	-0.4621	-0.7540	-1.0466	-1.3399	-1.6340	-1.9287	-2.2242	-2.5204	-2.8173
	My+	0.1920	0.4004	0.6082	0.8157	1.0227	1.2293	1.4355	1.6413	1.8466
	Mz-	-0.0097	-0.0066	-0.0035	-0.0015	-0.0017	-0.0019	-0.0021	-0.0023	-0.0025
Mz+	0.0000	0.0003	0.0007	0.0012	0.0046	0.0079	0.0113	0.0147	0.0180	
178/227		0.000 m	0.750 m	1.500 m	2.250 m	3.000 m	3.750 m	4.500 m	5.250 m	6.000 m
		Envolvente (Acero Conformado)								
	N-	-0.0373	-0.0373	-0.0373	-0.0373	-0.0373	-0.0373	-0.0373	-0.0373	-0.0373
	N+	0.0539	0.0539	0.0539	0.0539	0.0539	0.0539	0.0539	0.0539	0.0539
	Ty-	-0.0031	-0.0031	-0.0031	-0.0031	-0.0031	-0.0031	-0.0031	-0.0031	-0.0031
	Ty+	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065
	Tz-	-0.3951	-0.3150	-0.2349	-0.1716	-0.1365	-0.0202	-0.0810	-0.1502	-0.2194
	Tz+	0.3348	0.2656	0.1964	0.1272	0.0580	0.0570	0.0924	0.1724	0.2525
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.4484	-0.1878	-0.0530	-0.1729	-0.2430	-0.2590	-0.2253	-0.1376	0.0000
	My+	0.3480	0.1239	0.0552	0.1949	0.2771	0.2967	0.2587	0.1582	0.0000
	Mz-	-0.0186	-0.0163	-0.0140	-0.0116	-0.0093	-0.0070	-0.0047	-0.0023	0.0000
Mz+	0.0392	0.0343	0.0294	0.0245	0.0196	0.0147	0.0098	0.0049	0.0000	
179/181		0.000 m	0.011 m	0.023 m	0.034 m	0.045 m	0.056 m	0.068 m	0.079 m	0.090 m
		Envolvente (Acero laminado)								
	N-	-2.8777	-2.8776	-2.8776	-2.8776	-2.8776	-2.8776	-2.8775	-2.8775	-2.8775
	N+	1.6285	1.6285	1.6285	1.6285	1.6285	1.6286	1.6286	1.6286	1.6286
	Ty-	-0.4141	-0.4141	-0.4141	-0.4141	-0.4141	-0.4141	-0.4141	-0.4141	-0.4141
	Ty+	0.2374	0.2374	0.2374	0.2374	0.2374	0.2374	0.2374	0.2374	0.2374
	Tz-	-1.9039	-1.9037	-1.9036	-1.9034	-1.9032	-1.9031	-1.9029	-1.9027	-1.9026
	Tz+	2.5617	2.5620	2.5623	2.5626	2.5628	2.5631	2.5634	2.5637	2.5640
	Mt-	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001
	Mt+	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
	My-	-2.8173	-2.8462	-2.8752	-2.9041	-2.9330	-2.9620	-2.9909	-3.0199	-3.0488
	My+	1.8466	1.8681	1.8896	1.9111	1.9326	1.9541	1.9756	1.9971	2.0185
	Mz-	-0.0025	0.0003	-0.0024	-0.0050	-0.0077	-0.0104	-0.0131	-0.0158	-0.0184
Mz+	0.0180	0.0165	0.0165	0.0164	0.0178	0.0208	0.0255	0.0302	0.0349	
179/228		0.000 m	0.750 m	1.500 m	2.250 m	3.000 m	3.750 m	4.500 m	5.250 m	6.000 m
		Envolvente (Acero Conformado)								
	N-	-0.3056	-0.3056	-0.3056	-0.3056	-0.3056	-0.3056	-0.3056	-0.3056	-0.3056
	N+	0.3249	0.3249	0.3249	0.3249	0.3249	0.3249	0.3249	0.3249	0.3249
	Ty-	-0.0059	-0.0059	-0.0059	-0.0059	-0.0059	-0.0059	-0.0059	-0.0059	-0.0059
	Ty+	0.0064	0.0064	0.0064	0.0064	0.0064	0.0064	0.0064	0.0064	0.0064
	Tz-	-0.4065	-0.3264	-0.2463	-0.1797	-0.1446	-0.0196	-0.0704	-0.1396	-0.2088
	Tz+	0.3547	0.2855	0.2163	0.1471	0.0779	0.0567	0.0825	0.1611	0.2412
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.5165	-0.2429	-0.0602	-0.1333	-0.2113	-0.2353	-0.2094	-0.1296	0.0000

## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

	My+	0.4675	0.2284	0.0416	0.1524	0.2474	0.2711	0.2416	0.1497	0.0000
	Mz-	-0.0356	-0.0312	-0.0267	-0.0223	-0.0178	-0.0134	-0.0089	-0.0045	0.0000
	Mz+	0.0382	0.0334	0.0286	0.0238	0.0191	0.0143	0.0095	0.0048	0.0000
180/181		0.000 m	0.791 m	1.583 m	2.374 m	3.165 m	3.956 m	4.748 m	5.539 m	6.330 m
	Envolvente (Acero laminado)									
	N-	-7.1043	-7.0154	-6.9265	-6.8376	-6.7487	-6.6599	-6.5710	-6.4821	-6.3932
	N+	3.6443	3.6970	3.7497	3.8023	3.8550	3.9077	3.9604	4.0130	4.0657
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0036	0.0036	0.0036	0.0036	0.0036	0.0036	0.0036	0.0036	0.0036
	Tz-	-2.4344	-2.4344	-2.4344	-2.4344	-2.4344	-2.4344	-2.4344	-2.4344	-2.4344
	Tz+	1.1778	1.1778	1.1778	1.1778	1.1778	1.1778	1.1778	1.1778	1.1778
	Mt-	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001
	Mt+	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
	My-	-5.5441	-3.6178	-1.7494	-0.2409	-1.1574	-2.0739	-2.9904	-3.9068	-4.8233
	My+	2.7045	1.7725	0.8406	0.3053	2.1612	4.0875	6.0138	7.9402	9.8665
	Mz-	-0.0015	-0.0016	-0.0016	-0.0016	-0.0016	-0.0016	-0.0020	-0.0025	-0.0032
	Mz+	0.0194	0.0167	0.0140	0.0113	0.0086	0.0059	0.0036	0.0013	-0.0010
181/182		0.000 m	0.198 m	0.396 m	0.595 m	0.793 m	0.991 m	1.189 m	1.387 m	1.585 m
	Envolvente (Acero laminado)									
	N-	-8.1083	-8.1065	-8.1048	-8.1032	-8.1015	-8.0945	-8.0929	-8.0914	-8.0899
	N+	3.8740	3.8751	3.8761	3.8771	3.8780	3.8756	3.8765	3.8774	3.8783
	Ty-	-0.0147	-0.0147	-0.0147	-0.0147	-0.0147	-0.0147	-0.0147	-0.0147	-0.0147
	Ty+	0.0300	0.0300	0.0300	0.0300	0.0300	0.0300	0.0300	0.0300	0.0300
	Tz-	-3.4064	-3.3906	-3.3751	-3.3599	-3.3450	-3.3434	-3.3290	-3.3149	-3.3010
	Tz+	2.0525	2.0618	2.0710	2.0800	2.0888	2.1038	2.1123	2.1207	2.1289
	Mt-	-0.0009	-0.0009	-0.0009	-0.0009	-0.0009	-0.0009	-0.0009	-0.0009	-0.0009
	Mt+	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004
	My-	-11.6818	-11.0078	-10.3368	-9.6689	-9.0040	-8.3395	-7.6778	-7.0190	-6.3630
	My+	6.3631	5.9551	5.5452	5.1336	4.7202	4.3038	3.8857	3.4659	3.0445
	Mz-	-0.0194	-0.0165	-0.0136	-0.0107	-0.0078	-0.0075	-0.0084	-0.0118	-0.0159
	Mz+	0.0368	0.0309	0.0249	0.0190	0.0131	0.0071	0.0012	0.0010	0.0039
182/183		0.000 m	0.209 m	0.419 m	0.628 m	0.838 m	1.047 m	1.257 m	1.466 m	1.676 m
	Envolvente (Acero laminado)									
	N-	-8.0067	-8.0052	-8.0037	-7.9988	-7.9974	-8.0152	-8.0140	-8.0129	-8.0117
	N+	3.8337	3.8346	3.8355	3.8343	3.8352	3.8473	3.8480	3.8487	3.8493
	Ty-	-0.0020	-0.0020	-0.0020	-0.0020	-0.0020	-0.0020	-0.0020	-0.0020	-0.0020
	Ty+	0.0070	0.0070	0.0070	0.0070	0.0070	0.0070	0.0070	0.0070	0.0070
	Tz-	-2.5340	-2.5197	-2.5056	-2.5027	-2.4893	-2.4158	-2.4057	-2.3955	-2.3854
	Tz+	1.4441	1.4526	1.4609	1.4743	1.4822	1.4592	1.4652	1.4712	1.4772
	Mt-	-0.0011	-0.0011	-0.0011	-0.0011	-0.0011	-0.0011	-0.0011	-0.0011	-0.0011
	Mt+	0.0017	0.0017	0.0017	0.0017	0.0017	0.0015	0.0015	0.0015	0.0015
	My-	-6.3662	-5.8366	-5.3100	-4.7844	-4.2619	-3.7573	-3.2623	-2.7694	-2.2786
	My+	3.0456	2.7419	2.4365	2.1286	1.8188	1.5110	1.2044	0.9018	0.6102
	Mz-	-0.0160	-0.0171	-0.0183	-0.0195	-0.0206	-0.0218	-0.0230	-0.0241	-0.0253
	Mz+	0.0039	0.0043	0.0047	0.0051	0.0056	0.0060	0.0064	0.0068	0.0072
182/231		0.000 m	0.750 m	1.500 m	2.250 m	3.000 m	3.750 m	4.500 m	5.250 m	6.000 m
	Envolvente (Acero Conformado)									
	N-	-0.0797	-0.0797	-0.0797	-0.0797	-0.0797	-0.0797	-0.0797	-0.0797	-0.0797
	N+	0.0536	0.0536	0.0536	0.0536	0.0536	0.0536	0.0536	0.0536	0.0536
	Ty-	-0.0075	-0.0075	-0.0075	-0.0075	-0.0075	-0.0075	-0.0075	-0.0075	-0.0075
	Ty+	0.0069	0.0069	0.0069	0.0069	0.0069	0.0069	0.0069	0.0069	0.0069
	Tz-	-0.3885	-0.3084	-0.2283	-0.1681	-0.1330	-0.0254	-0.0880	-0.1572	-0.2264
	Tz+	0.3483	0.2791	0.2099	0.1407	0.0715	0.0686	0.1044	0.1845	0.2646
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas**

	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.4089	-0.1833	-0.0847	-0.1993	-0.2641	-0.2749	-0.2358	-0.1428	0.0000
	My+	0.4289	0.1946	0.1093	0.2401	0.3132	0.3238	0.2767	0.1672	0.0000
	Mz-	-0.0452	-0.0395	-0.0339	-0.0282	-0.0226	-0.0169	-0.0113	-0.0056	0.0000
	Mz+	0.0417	0.0365	0.0313	0.0261	0.0208	0.0156	0.0104	0.0052	0.0000
183/184		0.000 m	0.209 m	0.419 m	0.628 m	0.838 m	1.047 m	1.257 m	1.466 m	1.676 m
		Envolvente (Acero laminado)								
	N-	-7.8575	-7.8568	-7.8561	-7.8553	-7.8546	-7.8539	-7.8532	-7.8525	-7.8518
	N+	3.7610	3.7614	3.7618	3.7622	3.7627	3.7631	3.7635	3.7639	3.7643
	Ty-	-0.0391	-0.0391	-0.0391	-0.0391	-0.0391	-0.0391	-0.0391	-0.0391	-0.0391
	Ty+	0.0102	0.0102	0.0102	0.0102	0.0102	0.0102	0.0102	0.0102	0.0102
	Tz-	-2.0108	-2.0006	-1.9905	-1.9803	-1.9701	-1.9600	-1.9498	-1.9396	-1.9295
	Tz+	0.9824	0.9884	0.9944	1.0005	1.0065	1.0125	1.0185	1.0246	1.0306
	Mt-	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010
	Mt+	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026
	My-	-2.2786	-1.8686	-1.4608	-1.0550	-0.6928	-0.6025	-0.6698	-0.8838	-1.0991
	My+	0.6102	0.4162	0.2210	0.0245	-0.0420	0.0917	0.3013	0.6579	1.0631
	Mz-	-0.0252	-0.0175	-0.0098	-0.0022	-0.0014	-0.0035	-0.0056	-0.0078	-0.0099
	Mz+	0.0072	0.0051	0.0029	0.0025	0.0096	0.0178	0.0260	0.0342	0.0423
183/232		0.000 m	0.750 m	1.500 m	2.250 m	3.000 m	3.750 m	4.500 m	5.250 m	6.000 m
		Envolvente (Acero Conformado)								
	N-	-0.0234	-0.0234	-0.0234	-0.0234	-0.0234	-0.0234	-0.0234	-0.0234	-0.0234
	N+	0.0409	0.0409	0.0409	0.0409	0.0409	0.0409	0.0409	0.0409	0.0409
	Ty-	-0.0091	-0.0091	-0.0091	-0.0091	-0.0091	-0.0091	-0.0091	-0.0091	-0.0091
	Ty+	0.0056	0.0056	0.0056	0.0056	0.0056	0.0056	0.0056	0.0056	0.0056
	Tz-	-0.3555	-0.2754	-0.1953	-0.1441	-0.1090	-0.0373	-0.1065	-0.1757	-0.2449
	Tz+	0.3315	0.2623	0.1931	0.1239	0.0547	0.0906	0.1396	0.2197	0.2998
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.2439	-0.1019	-0.1676	-0.2684	-0.3194	-0.3163	-0.2635	-0.1567	0.0000
	My+	0.3284	0.1666	0.2676	0.3720	0.4187	0.4029	0.3295	0.1936	0.0000
	Mz-	-0.0548	-0.0479	-0.0411	-0.0342	-0.0274	-0.0205	-0.0137	-0.0068	0.0000
	Mz+	0.0338	0.0296	0.0254	0.0211	0.0169	0.0127	0.0085	0.0042	0.0000
184/185		0.000 m	0.209 m	0.419 m	0.628 m	0.838 m	1.047 m	1.257 m	1.466 m	1.676 m
		Envolvente (Acero laminado)								
	N-	-7.8033	-7.8025	-7.8018	-7.8011	-7.8004	-7.7997	-7.7990	-7.7983	-7.7976
	N+	3.7346	3.7350	3.7354	3.7359	3.7363	3.7367	3.7371	3.7375	3.7380
	Ty-	-0.0077	-0.0077	-0.0077	-0.0077	-0.0077	-0.0077	-0.0077	-0.0077	-0.0077
	Ty+	0.0371	0.0371	0.0371	0.0371	0.0371	0.0371	0.0371	0.0371	0.0371
	Tz-	-1.3009	-1.2908	-1.2806	-1.2705	-1.2603	-1.2501	-1.2400	-1.2298	-1.2196
	Tz+	0.4214	0.4274	0.4334	0.4395	0.4455	0.4515	0.4575	0.4636	0.4696
	Mt-	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010
	Mt+	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026
	My-	-1.0991	-1.1880	-1.2781	-1.3696	-1.4623	-1.5562	-1.6514	-1.7479	-1.8456
	My+	1.0631	1.3346	1.6039	1.8711	2.1362	2.3991	2.6599	2.9186	3.1751
	Mz-	-0.0099	-0.0083	-0.0067	-0.0051	-0.0035	-0.0019	-0.0043	-0.0121	-0.0199
	Mz+	0.0423	0.0346	0.0268	0.0190	0.0120	0.0058	0.0000	0.0014	0.0030
184/233		0.000 m	0.750 m	1.500 m	2.250 m	3.000 m	3.750 m	4.500 m	5.250 m	6.000 m
		Envolvente (Acero Conformado)								
	N-	-0.3254	-0.3254	-0.3254	-0.3254	-0.3254	-0.3254	-0.3254	-0.3254	-0.3254
	N+	0.1321	0.1321	0.1321	0.1321	0.1321	0.1321	0.1321	0.1321	0.1321
	Ty-	-0.0159	-0.0159	-0.0159	-0.0159	-0.0159	-0.0159	-0.0159	-0.0159	-0.0159
	Ty+	0.0079	0.0079	0.0079	0.0079	0.0079	0.0079	0.0079	0.0079	0.0079
	Tz-	-0.3132	-0.2331	-0.1530	-0.1118	-0.0818	-0.0569	-0.1261	-0.1953	-0.2645

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas**

	Tz+	0.3097	0.2405	0.1713	0.1021	0.0429	0.1207	0.1796	0.2597	0.3398
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0864	-0.1159	-0.2559	-0.3420	-0.3782	-0.3605	-0.2929	-0.1714	0.0000
	My+	0.2571	0.3112	0.4480	0.5223	0.5389	0.4931	0.3896	0.2236	0.0000
	Mz-	-0.0953	-0.0834	-0.0714	-0.0595	-0.0476	-0.0357	-0.0238	-0.0119	0.0000
	Mz+	0.0474	0.0415	0.0356	0.0297	0.0237	0.0178	0.0119	0.0059	0.0000
185/186		0.000 m	0.209 m	0.419 m	0.628 m	0.838 m	1.047 m	1.257 m	1.466 m	1.676 m
		Envolvente (Acero laminado)								
	N-	-7.7455	-7.7448	-7.7441	-7.7434	-7.7427	-7.7420	-7.7412	-7.7405	-7.7398
	N+	3.7048	3.7052	3.7057	3.7061	3.7065	3.7069	3.7074	3.7078	3.7082
	Ty-	-0.0152	-0.0152	-0.0152	-0.0152	-0.0152	-0.0152	-0.0152	-0.0152	-0.0152
	Ty+	0.0165	0.0165	0.0165	0.0165	0.0165	0.0165	0.0165	0.0165	0.0165
	Tz-	-0.6553	-0.6452	-0.6350	-0.6248	-0.6147	-0.6045	-0.5943	-0.5842	-0.5740
	Tz+	-0.1030	-0.0970	-0.0909	-0.0849	-0.0789	-0.0729	-0.0668	-0.0608	-0.0548
	Mt-	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010
	Mt+	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026
	My-	-1.8456	-1.8225	-1.8006	-1.7800	-1.7607	-1.7426	-1.7257	-1.7102	-1.6959
	My+	3.1751	3.3113	3.4454	3.5774	3.7072	3.8349	3.9605	4.0839	4.2052
	Mz-	-0.0199	-0.0180	-0.0195	-0.0230	-0.0265	-0.0299	-0.0334	-0.0369	-0.0403
	Mz+	0.0030	0.0046	0.0062	0.0078	0.0094	0.0111	0.0127	0.0143	0.0159
185/234		0.000 m	0.750 m	1.500 m	2.250 m	3.000 m	3.750 m	4.500 m	5.250 m	6.000 m
		Envolvente (Acero Conformado)								
	N-	-0.0341	-0.0341	-0.0341	-0.0341	-0.0341	-0.0341	-0.0341	-0.0341	-0.0341
	N+	0.0413	0.0413	0.0413	0.0413	0.0413	0.0413	0.0413	0.0413	0.0413
	Ty-	-0.0212	-0.0212	-0.0212	-0.0212	-0.0212	-0.0212	-0.0212	-0.0212	-0.0212
	Ty+	0.0099	0.0099	0.0099	0.0099	0.0099	0.0099	0.0099	0.0099	0.0099
	Tz-	-0.2809	-0.2008	-0.1216	-0.0865	-0.0616	-0.0652	-0.1344	-0.2036	-0.2728
	Tz+	0.2945	0.2253	0.1561	0.0869	0.0487	0.1412	0.2072	0.2873	0.3674
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0146	-0.1595	-0.2933	-0.3731	-0.4032	-0.3792	-0.3054	-0.1776	0.0000
	My+	0.2919	0.4559	0.5720	0.6256	0.6216	0.5551	0.4309	0.2443	0.0000
	Mz-	-0.1272	-0.1113	-0.0954	-0.0795	-0.0636	-0.0477	-0.0318	-0.0159	0.0000
	Mz+	0.0592	0.0518	0.0444	0.0370	0.0296	0.0222	0.0148	0.0074	0.0000
186/187		0.000 m	0.209 m	0.419 m	0.628 m	0.838 m	1.047 m	1.257 m	1.466 m	1.676 m
		Envolvente (Acero laminado)								
	N-	-7.6908	-7.6901	-7.6894	-7.6887	-7.6879	-7.6872	-7.6865	-7.6858	-7.6851
	N+	3.6755	3.6760	3.6764	3.6768	3.6772	3.6777	3.6781	3.6785	3.6789
	Ty-	-0.0114	-0.0114	-0.0114	-0.0114	-0.0114	-0.0114	-0.0114	-0.0114	-0.0114
	Ty+	0.0223	0.0223	0.0223	0.0223	0.0223	0.0223	0.0223	0.0223	0.0223
	Tz-	-0.6583	-0.6481	-0.6380	-0.6285	-0.6225	-0.6164	-0.6104	-0.6044	-0.5984
	Tz+	-0.0171	-0.0110	-0.0050	0.0017	0.0119	0.0220	0.0322	0.0424	0.0525
	Mt-	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010
	Mt+	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026
	My-	-1.6959	-1.5643	-1.4340	-1.3049	-1.1771	-1.0506	-0.9253	-0.8013	-0.6785
	My+	4.2052	4.2157	4.2240	4.2302	4.2343	4.2362	4.2361	4.2338	4.2293
	Mz-	-0.0403	-0.0408	-0.0433	-0.0459	-0.0485	-0.0524	-0.0570	-0.0617	-0.0664
	Mz+	0.0159	0.0153	0.0147	0.0141	0.0134	0.0128	0.0122	0.0116	0.0110
186/235		0.000 m	0.750 m	1.500 m	2.250 m	3.000 m	3.750 m	4.500 m	5.250 m	6.000 m
		Envolvente (Acero Conformado)								
	N-	-0.0390	-0.0390	-0.0390	-0.0390	-0.0390	-0.0390	-0.0390	-0.0390	-0.0390
	N+	0.0860	0.0860	0.0860	0.0860	0.0860	0.0860	0.0860	0.0860	0.0860
	Ty-	-0.0249	-0.0249	-0.0249	-0.0249	-0.0249	-0.0249	-0.0249	-0.0249	-0.0249

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas**

	Ty+	0.0105	0.0105	0.0105	0.0105	0.0105	0.0105	0.0105	0.0105	0.0105
	Tz-	-0.2584	-0.1783	-0.1031	-0.0690	-0.0543	-0.0657	-0.1349	-0.2041	-0.2733
	Tz+	0.2861	0.2168	0.1476	0.0794	0.0637	0.1539	0.2239	0.3040	0.3840
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0210	-0.1622	-0.2957	-0.3751	-0.4047	-0.3804	-0.3062	-0.1780	0.0000
	My+	0.3820	0.5433	0.6469	0.6881	0.6716	0.5926	0.4559	0.2568	0.0000
	Mz-	-0.1492	-0.1305	-0.1119	-0.0932	-0.0746	-0.0559	-0.0373	-0.0186	0.0000
	Mz+	0.0633	0.0553	0.0474	0.0395	0.0316	0.0237	0.0158	0.0079	0.0000
187/188		0.000 m	0.007 m	0.015 m	0.022 m	0.030 m	0.037 m	0.045 m	0.052 m	0.060 m
	Envolvente (Acero laminado)									
	N-	-7.9784	-7.9784	-7.9784	-7.9784	-7.9783	-7.9783	-7.9783	-7.9783	-7.9782
	N+	4.3044	4.3044	4.3044	4.3045	4.3045	4.3045	4.3045	4.3045	4.3045
	Ty-	-1.5683	-1.5683	-1.5683	-1.5683	-1.5683	-1.5683	-1.5683	-1.5683	-1.5683
	Ty+	0.3753	0.3753	0.3753	0.3753	0.3753	0.3753	0.3753	0.3753	0.3753
	Tz-	-0.2331	-0.2329	-0.2326	-0.2324	-0.2322	-0.2320	-0.2318	-0.2316	-0.2314
	Tz+	0.5902	0.5906	0.5910	0.5913	0.5917	0.5921	0.5924	0.5928	0.5932
	Mt-	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010
	Mt+	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026
	My-	-0.6785	-0.6768	-0.6750	-0.6733	-0.6715	-0.6698	-0.6681	-0.6663	-0.6646
	My+	4.2293	4.2249	4.2205	4.2160	4.2116	4.2072	4.2027	4.1983	4.1938
	Mz-	-0.0664	-0.0546	-0.0429	-0.0311	-0.0194	-0.0085	-0.0059	-0.0087	-0.0115
	Mz+	0.0110	0.0082	0.0053	0.0025	0.0037	0.0061	0.0105	0.0194	0.0305
187/236		0.000 m	0.750 m	1.500 m	2.250 m	3.000 m	3.750 m	4.500 m	5.250 m	6.000 m
	Envolvente (Acero Conformado)									
	N-	-2.6355	-2.6355	-2.6355	-2.6355	-2.6355	-2.6355	-2.6355	-2.6355	-2.6355
	N+	1.1582	1.1582	1.1582	1.1582	1.1582	1.1582	1.1582	1.1582	1.1582
	Ty-	-0.0278	-0.0278	-0.0278	-0.0278	-0.0278	-0.0278	-0.0278	-0.0278	-0.0278
	Ty+	0.0122	0.0122	0.0122	0.0122	0.0122	0.0122	0.0122	0.0122	0.0122
	Tz-	-0.3139	-0.2466	-0.1845	-0.1513	-0.1295	-0.0650	-0.0442	-0.0234	-0.0026
	Tz+	-0.0612	-0.0404	-0.0196	0.0030	0.0711	0.1639	0.2419	0.3288	0.4156
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.5148	-0.3962	-0.2925	-0.2051	-0.1326	-0.0764	-0.0351	-0.0101	0.0000
	My+	0.4269	0.5855	0.6978	0.7431	0.7258	0.6407	0.4931	0.2778	0.0000
	Mz-	-0.1668	-0.1460	-0.1251	-0.1043	-0.0834	-0.0626	-0.0417	-0.0209	0.0000
	Mz+	0.0734	0.0643	0.0551	0.0459	0.0367	0.0275	0.0184	0.0092	0.0000
189/188		0.000 m	0.007 m	0.015 m	0.022 m	0.030 m	0.037 m	0.045 m	0.052 m	0.060 m
	Envolvente (Acero laminado)									
	N-	-6.8091	-6.8091	-6.8090	-6.8090	-6.8090	-6.8089	-6.8089	-6.8089	-6.8089
	N+	3.0427	3.0428	3.0428	3.0428	3.0428	3.0428	3.0428	3.0428	3.0429
	Ty-	-0.7713	-0.7713	-0.7713	-0.7713	-0.7713	-0.7713	-0.7713	-0.7713	-0.7713
	Ty+	0.7106	0.7106	0.7106	0.7106	0.7106	0.7106	0.7106	0.7106	0.7106
	Tz-	-0.3329	-0.3327	-0.3325	-0.3323	-0.3321	-0.3319	-0.3317	-0.3314	-0.3312
	Tz+	0.6889	0.6892	0.6896	0.6900	0.6903	0.6907	0.6911	0.6914	0.6918
	Mt-	-0.0017	-0.0017	-0.0017	-0.0017	-0.0017	-0.0017	-0.0017	-0.0017	-0.0017
	Mt+	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	My-	-0.6817	-0.6796	-0.6774	-0.6753	-0.6731	-0.6710	-0.6689	-0.6667	-0.6646
	My+	4.2348	4.2297	4.2246	4.2194	4.2143	4.2092	4.2041	4.1990	4.1938
	Mz-	-0.0425	-0.0371	-0.0317	-0.0271	-0.0235	-0.0201	-0.0199	-0.0252	-0.0306
	Mz+	0.0138	0.0085	0.0040	0.0011	-0.0017	-0.0010	0.0032	0.0074	0.0116
190/189		0.000 m	0.197 m	0.393 m	0.590 m	0.786 m	0.983 m	1.180 m	1.376 m	1.573 m
	Envolvente (Acero laminado)									
	N-	-5.9653	-5.9646	-5.9639	-5.9633	-5.9626	-5.9619	-5.9613	-5.9606	-5.9599

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas**

	N+	2.8229	2.8232	2.8236	2.8240	2.8244	2.8248	2.8252	2.8256	2.8260
	Ty-	0.0055	0.0055	0.0055	0.0055	0.0055	0.0055	0.0055	0.0055	0.0055
	Ty+	0.0364	0.0364	0.0364	0.0364	0.0364	0.0364	0.0364	0.0364	0.0364
	Tz-	-0.7204	-0.7148	-0.7091	-0.7035	-0.6978	-0.6922	-0.6865	-0.6809	-0.6752
	Tz+	0.1019	0.1114	0.1209	0.1305	0.1400	0.1496	0.1591	0.1686	0.1782
	Mt-	-0.0017	-0.0017	-0.0017	-0.0017	-0.0017	-0.0017	-0.0017	-0.0017	-0.0017
	Mt+	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	My-	-1.7137	-1.5808	-1.4490	-1.3184	-1.1888	-1.0604	-0.9330	-0.8068	-0.6817
	My+	4.3509	4.3429	4.3331	4.3214	4.3078	4.2924	4.2750	4.2558	4.2348
	Mz-	-0.0133	-0.0144	-0.0155	-0.0183	-0.0229	-0.0274	-0.0320	-0.0368	-0.0425
	Mz+	0.0513	0.0464	0.0415	0.0366	0.0317	0.0268	0.0225	0.0181	0.0138
189/238		0.000 m	0.750 m	1.500 m	2.250 m	3.000 m	3.750 m	4.500 m	5.250 m	6.000 m
		Envolvente (Acero Conformado)								
	N-	-2.7439	-2.7439	-2.7439	-2.7439	-2.7439	-2.7439	-2.7439	-2.7439	-2.7439
	N+	1.1247	1.1247	1.1247	1.1247	1.1247	1.1247	1.1247	1.1247	1.1247
	Ty-	-0.0298	-0.0298	-0.0298	-0.0298	-0.0298	-0.0298	-0.0298	-0.0298	-0.0298
	Ty+	0.0130	0.0130	0.0130	0.0130	0.0130	0.0130	0.0130	0.0130	0.0130
	Tz-	-0.3142	-0.2472	-0.1851	-0.1518	-0.1300	-0.0656	-0.0448	-0.0240	-0.0032
	Tz+	-0.0612	-0.0404	-0.0196	0.0030	0.0712	0.1641	0.2422	0.3290	0.4159
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.5181	-0.3991	-0.2950	-0.2071	-0.1343	-0.0776	-0.0359	-0.0105	0.0000
	My+	0.4272	0.5863	0.6991	0.7441	0.7266	0.6413	0.4936	0.2780	0.0000
	Mz-	-0.1787	-0.1564	-0.1340	-0.1117	-0.0894	-0.0670	-0.0447	-0.0223	0.0000
	Mz+	0.0782	0.0684	0.0586	0.0489	0.0391	0.0293	0.0195	0.0098	0.0000
191/190		0.000 m	0.197 m	0.393 m	0.590 m	0.786 m	0.983 m	1.180 m	1.376 m	1.573 m
		Envolvente (Acero laminado)								
	N-	-5.9313	-5.9306	-5.9299	-5.9293	-5.9286	-5.9279	-5.9273	-5.9266	-5.9259
	N+	2.8253	2.8257	2.8261	2.8264	2.8268	2.8272	2.8276	2.8280	2.8284
	Ty-	-0.0237	-0.0237	-0.0237	-0.0237	-0.0237	-0.0237	-0.0237	-0.0237	-0.0237
	Ty+	0.0055	0.0055	0.0055	0.0055	0.0055	0.0055	0.0055	0.0055	0.0055
	Tz-	-0.5401	-0.5306	-0.5210	-0.5115	-0.5019	-0.4924	-0.4829	-0.4733	-0.4638
	Tz+	-0.1483	-0.1426	-0.1370	-0.1313	-0.1257	-0.1200	-0.1143	-0.1087	-0.1030
	Mt-	-0.0017	-0.0017	-0.0017	-0.0017	-0.0017	-0.0017	-0.0017	-0.0017	-0.0017
	Mt+	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	My-	-1.9858	-1.9446	-1.9044	-1.8695	-1.8361	-1.8038	-1.7727	-1.7426	-1.7137
	My+	3.5666	3.6667	3.7700	3.8715	3.9712	4.0689	4.1648	4.2587	4.3509
	Mz-	-0.0047	-0.0058	-0.0069	-0.0079	-0.0090	-0.0101	-0.0112	-0.0122	-0.0133
	Mz+	0.0246	0.0276	0.0306	0.0336	0.0366	0.0396	0.0432	0.0473	0.0513
190/239		0.000 m	0.750 m	1.500 m	2.250 m	3.000 m	3.750 m	4.500 m	5.250 m	6.000 m
		Envolvente (Acero Conformado)								
	N-	-0.0630	-0.0630	-0.0630	-0.0630	-0.0630	-0.0630	-0.0630	-0.0630	-0.0630
	N+	0.0326	0.0326	0.0326	0.0326	0.0326	0.0326	0.0326	0.0326	0.0326
	Ty-	-0.0273	-0.0273	-0.0273	-0.0273	-0.0273	-0.0273	-0.0273	-0.0273	-0.0273
	Ty+	0.0117	0.0117	0.0117	0.0117	0.0117	0.0117	0.0117	0.0117	0.0117
	Tz-	-0.2534	-0.1733	-0.0988	-0.0650	-0.0597	-0.0770	-0.1462	-0.2154	-0.2846
	Tz+	0.2782	0.2090	0.1398	0.0719	0.0750	0.1645	0.2352	0.3152	0.3953
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0468	-0.2216	-0.3465	-0.4175	-0.4386	-0.4058	-0.3231	-0.1865	0.0000
	My+	0.4498	0.6026	0.6978	0.7304	0.7055	0.6180	0.4729	0.2653	0.0000
	Mz-	-0.1636	-0.1432	-0.1227	-0.1023	-0.0818	-0.0614	-0.0409	-0.0205	0.0000
	Mz+	0.0700	0.0613	0.0525	0.0438	0.0350	0.0263	0.0175	0.0088	0.0000
192/191		0.000 m	0.197 m	0.393 m	0.590 m	0.786 m	0.983 m	1.180 m	1.376 m	1.573 m



## Metal 3D

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		Envolvente (Acero laminado)								
	N-	-5.9321	-5.9314	-5.9307	-5.9301	-5.9294	-5.9287	-5.9281	-5.9274	-5.9267
	N+	2.8441	2.8445	2.8449	2.8453	2.8457	2.8461	2.8465	2.8469	2.8473
	Ty-	-0.0486	-0.0486	-0.0486	-0.0486	-0.0486	-0.0486	-0.0486	-0.0486	-0.0486
	Ty+	0.0100	0.0100	0.0100	0.0100	0.0100	0.0100	0.0100	0.0100	0.0100
	Tz-	-1.1339	-1.1243	-1.1148	-1.1052	-1.0957	-1.0862	-1.0766	-1.0671	-1.0575
	Tz+	0.2908	0.2965	0.3021	0.3078	0.3134	0.3191	0.3247	0.3304	0.3360
	Mt-	-0.0017	-0.0017	-0.0017	-0.0017	-0.0017	-0.0017	-0.0017	-0.0017	-0.0017
	Mt+	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	My-	-1.4935	-1.5506	-1.6095	-1.6694	-1.7305	-1.7927	-1.8559	-1.9203	-1.9858
	My+	1.8879	2.1043	2.3188	2.5315	2.7423	2.9512	3.1582	3.3633	3.5666
	Mz-	-0.0518	-0.0422	-0.0327	-0.0231	-0.0136	-0.0043	-0.0009	-0.0028	-0.0047
	Mz+	0.0110	0.0090	0.0071	0.0051	0.0031	0.0012	0.0056	0.0151	0.0246
191/240		0.000 m	0.750 m	1.500 m	2.250 m	3.000 m	3.750 m	4.500 m	5.250 m	6.000 m
		Envolvente (Acero Conformado)								
	N-	0.0053	0.0053	0.0053	0.0053	0.0053	0.0053	0.0053	0.0053	0.0053
	N+	0.0731	0.0731	0.0731	0.0731	0.0731	0.0731	0.0731	0.0731	0.0731
	Ty-	-0.0236	-0.0236	-0.0236	-0.0236	-0.0236	-0.0236	-0.0236	-0.0236	-0.0236
	Ty+	0.0111	0.0111	0.0111	0.0111	0.0111	0.0111	0.0111	0.0111	0.0111
	Tz-	-0.2656	-0.1855	-0.1081	-0.0732	-0.0692	-0.0847	-0.1539	-0.2231	-0.2923
	Tz+	0.2761	0.2069	0.1377	0.0687	0.0657	0.1581	0.2259	0.3060	0.3861
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0928	-0.2619	-0.3810	-0.4463	-0.4616	-0.4230	-0.3346	-0.1922	0.0000
	My+	0.3940	0.5538	0.6560	0.6956	0.6776	0.5971	0.4589	0.2583	0.0000
	Mz-	-0.1416	-0.1239	-0.1062	-0.0885	-0.0708	-0.0531	-0.0354	-0.0177	0.0000
	Mz+	0.0665	0.0582	0.0499	0.0416	0.0332	0.0249	0.0166	0.0083	0.0000
193/192		0.000 m	0.197 m	0.393 m	0.590 m	0.786 m	0.983 m	1.180 m	1.376 m	1.573 m
		Envolvente (Acero laminado)								
	N-	-5.9606	-5.9599	-5.9593	-5.9586	-5.9579	-5.9573	-5.9566	-5.9559	-5.9552
	N+	2.8702	2.8706	2.8710	2.8714	2.8718	2.8722	2.8726	2.8730	2.8734
	Ty-	-0.0100	-0.0100	-0.0100	-0.0100	-0.0100	-0.0100	-0.0100	-0.0100	-0.0100
	Ty+	0.0442	0.0442	0.0442	0.0442	0.0442	0.0442	0.0442	0.0442	0.0442
	Tz-	-1.7701	-1.7605	-1.7510	-1.7415	-1.7319	-1.7224	-1.7128	-1.7033	-1.6938
	Tz+	0.7840	0.7897	0.7953	0.8010	0.8066	0.8123	0.8179	0.8236	0.8292
	Mt-	-0.0017	-0.0017	-0.0017	-0.0017	-0.0017	-0.0017	-0.0017	-0.0017	-0.0017
	Mt+	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	My-	-0.8857	-0.7121	-0.6686	-0.7333	-0.8831	-1.0341	-1.1861	-1.3393	-1.4935
	My+	-0.2243	-0.1287	-0.0274	0.2032	0.5439	0.8827	1.2197	1.5547	1.8879
	Mz-	-0.0047	-0.0027	-0.0008	-0.0083	-0.0170	-0.0257	-0.0344	-0.0431	-0.0518
	Mz+	0.0178	0.0091	0.0012	0.0012	0.0031	0.0051	0.0071	0.0090	0.0110
192/241		0.000 m	0.750 m	1.500 m	2.250 m	3.000 m	3.750 m	4.500 m	5.250 m	6.000 m
		Envolvente (Acero Conformado)								
	N-	-0.1022	-0.1022	-0.1022	-0.1022	-0.1022	-0.1022	-0.1022	-0.1022	-0.1022
	N+	0.2238	0.2238	0.2238	0.2238	0.2238	0.2238	0.2238	0.2238	0.2238
	Ty-	-0.0184	-0.0184	-0.0184	-0.0184	-0.0184	-0.0184	-0.0184	-0.0184	-0.0184
	Ty+	0.0099	0.0099	0.0099	0.0099	0.0099	0.0099	0.0099	0.0099	0.0099
	Tz-	-0.2886	-0.2085	-0.1284	-0.0901	-0.0781	-0.0843	-0.1535	-0.2227	-0.2919
	Tz+	0.2794	0.2101	0.1409	0.0717	0.0483	0.1424	0.2043	0.2844	0.3645
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0906	-0.2599	-0.3794	-0.4449	-0.4605	-0.4222	-0.3341	-0.1919	0.0000
	My+	0.2899	0.4406	0.5589	0.6147	0.6129	0.5486	0.4266	0.2421	0.0000
	Mz-	-0.1103	-0.0965	-0.0827	-0.0689	-0.0551	-0.0413	-0.0276	-0.0138	0.0000

## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

	Mz+	0.0593	0.0519	0.0445	0.0371	0.0297	0.0222	0.0148	0.0074	0.0000
194/193		0.000 m	0.197 m	0.393 m	0.590 m	0.786 m	0.983 m	1.180 m	1.376 m	1.573 m
		Envolvente (Acero laminado)								
	N-	-6.0810	-6.0796	-6.3575	-5.9941	-5.9934	-5.9927	-5.9921	-5.9914	-5.9907
	N+	2.9476	2.9484	3.1065	2.9039	2.9043	2.9047	2.9051	2.9055	2.9059
	Ty-	-0.0021	-0.0021	-0.0021	-0.0021	-0.0021	-0.0021	-0.0021	-0.0021	-0.0021
	Ty+	0.0090	0.0090	0.0090	0.0090	0.0090	0.0090	0.0090	0.0090	0.0090
	Tz-	-2.2914	-2.2786	-1.3017	-2.4708	-2.4613	-2.4517	-2.4422	-2.4326	-2.4231
	Tz+	1.2267	1.2342	0.8523	1.3498	1.3554	1.3611	1.3667	1.3724	1.3780
	Mt-	-0.0012	-0.0012	-0.0007	-0.0017	-0.0017	-0.0017	-0.0017	-0.0017	-0.0017
	Mt+	0.0005	0.0005	0.0038	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	My-	-4.4563	-4.0094	-3.7420	-3.2733	-2.7921	-2.3124	-1.8354	-1.3599	-0.8857
	My+	1.7720	1.5299	1.3743	1.1161	0.8502	0.5834	0.3151	0.0458	-0.2243
	Mz-	-0.0081	-0.0076	-0.0072	-0.0068	-0.0064	-0.0059	-0.0055	-0.0051	-0.0047
Mz+	0.0320	0.0303	0.0282	0.0267	0.0249	0.0231	0.0214	0.0196	0.0178	
193/242		0.000 m	0.750 m	1.500 m	2.250 m	3.000 m	3.750 m	4.500 m	5.250 m	6.000 m
		Envolvente (Acero Conformado)								
	N-	-0.0443	-0.0443	-0.0443	-0.0443	-0.0443	-0.0443	-0.0443	-0.0443	-0.0443
	N+	0.0968	0.0968	0.0968	0.0968	0.0968	0.0968	0.0968	0.0968	0.0968
	Ty-	-0.0121	-0.0121	-0.0121	-0.0121	-0.0121	-0.0121	-0.0121	-0.0121	-0.0121
	Ty+	0.0070	0.0070	0.0070	0.0070	0.0070	0.0070	0.0070	0.0070	0.0070
	Tz-	-0.3253	-0.2452	-0.1651	-0.1175	-0.0826	-0.0641	-0.1333	-0.2025	-0.2717
	Tz+	0.2991	0.2299	0.1607	0.0915	0.0225	0.1138	0.1664	0.2465	0.3266
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0458	-0.1536	-0.2882	-0.3689	-0.3998	-0.3766	-0.3037	-0.1768	0.0000
	My+	0.1352	0.2538	0.3884	0.4726	0.4992	0.4633	0.3697	0.2137	0.0000
	Mz-	-0.0728	-0.0637	-0.0546	-0.0455	-0.0364	-0.0273	-0.0182	-0.0091	0.0000
Mz+	0.0421	0.0368	0.0316	0.0263	0.0210	0.0158	0.0105	0.0053	0.0000	
195/194		0.000 m	0.197 m	0.393 m	0.590 m	0.786 m	0.983 m	1.180 m	1.376 m	1.573 m
		Envolvente (Acero laminado)								
	N-	-6.1655	-6.1639	-6.1623	-6.1607	-6.1592	-6.1520	-6.1505	-6.1491	-6.1477
	N+	2.9772	2.9782	2.9791	2.9801	2.9810	2.9787	2.9796	2.9804	2.9813
	Ty-	-0.1178	-0.1178	-0.1178	-0.1178	-0.1178	-0.1178	-0.1178	-0.1178	-0.1178
	Ty+	0.0554	0.0554	0.0554	0.0554	0.0554	0.0554	0.0554	0.0554	0.0554
	Tz-	-3.1133	-3.0984	-3.0838	-3.0694	-3.0553	-3.0529	-3.0393	-3.0260	-3.0130
	Tz+	1.7227	1.7315	1.7402	1.7487	1.7571	1.7693	1.7774	1.7853	1.7930
	Mt-	-0.0022	-0.0022	-0.0022	-0.0022	-0.0022	-0.0023	-0.0023	-0.0023	-0.0023
	Mt+	0.0049	0.0049	0.0049	0.0049	0.0049	0.0051	0.0051	0.0051	0.0051
	My-	-9.2401	-8.6291	-8.0241	-7.4237	-6.8261	-6.2291	-5.6348	-5.0431	-4.4540
	My+	4.4092	4.0859	3.7607	3.4339	3.1055	2.7743	2.4415	2.1072	1.7713
	Mz-	-0.1535	-0.1304	-0.1072	-0.0840	-0.0609	-0.0377	-0.0156	-0.0016	-0.0080
Mz+	0.0903	0.0794	0.0685	0.0576	0.0467	0.0358	0.0249	0.0151	0.0318	
194/243		0.000 m	0.750 m	1.500 m	2.250 m	3.000 m	3.750 m	4.500 m	5.250 m	6.000 m
		Envolvente (Acero Conformado)								
	N-	-0.0174	-0.0174	-0.0174	-0.0174	-0.0174	-0.0174	-0.0174	-0.0174	-0.0174
	N+	0.0152	0.0152	0.0152	0.0152	0.0152	0.0152	0.0152	0.0152	0.0152
	Ty-	-0.0058	-0.0058	-0.0058	-0.0058	-0.0058	-0.0058	-0.0058	-0.0058	-0.0058
	Ty+	0.0042	0.0042	0.0042	0.0042	0.0042	0.0042	0.0042	0.0042	0.0042
	Tz-	-0.3633	-0.2832	-0.2031	-0.1459	-0.1108	-0.0348	-0.1040	-0.1732	-0.2424
	Tz+	0.3143	0.2451	0.1759	0.1067	0.0375	0.0799	0.1230	0.2031	0.2831
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.2573	-0.0626	-0.1567	-0.2593	-0.3121	-0.3109	-0.2599	-0.1548	0.0000

## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

	My+	0.2250	0.0621	0.1929	0.3097	0.3689	0.3656	0.3046	0.1811	0.0000
	Mz-	-0.0346	-0.0303	-0.0260	-0.0216	-0.0173	-0.0130	-0.0087	-0.0043	0.0000
	Mz+	0.0253	0.0221	0.0190	0.0158	0.0127	0.0095	0.0063	0.0032	0.0000
198/195		0.000 m	0.066 m	0.132 m	0.198 m	0.264 m	0.330 m	0.396 m	0.462 m	0.528 m
		Envolvente (Acero laminado)								
	N-	-5.0466	-5.0460	-5.0454	-5.0448	-5.0442	-5.0417	-5.0412	-5.0406	-5.0400
	N+	2.6463	2.6467	2.6470	2.6474	2.6477	2.6465	2.6469	2.6472	2.6475
	Ty-	-0.1731	-0.1731	-0.1731	-0.1731	-0.1731	-0.1731	-0.1731	-0.1731	-0.1731
	Ty+	0.2933	0.2933	0.2933	0.2933	0.2933	0.2933	0.2933	0.2933	0.2933
	Tz-	-4.2283	-4.2230	-4.2178	-4.2125	-4.2074	-4.2045	-4.1994	-4.1943	-4.1893
	Tz+	3.2341	3.2372	3.2403	3.2434	3.2465	3.2508	3.2538	3.2568	3.2598
	Mt-	-0.0387	-0.0387	-0.0387	-0.0387	-0.0387	-0.0386	-0.0386	-0.0386	-0.0386
	Mt+	0.0220	0.0220	0.0220	0.0220	0.0220	0.0220	0.0220	0.0220	0.0220
	My-	-11.5874	-11.3084	-11.0296	-10.7512	-10.4732	-10.1953	-9.9178	-9.6406	-9.3638
	My+	6.1666	5.9529	5.7390	5.5249	5.3106	5.0960	4.8812	4.6662	4.4510
	Mz-	-0.0021	-0.0162	-0.0356	-0.0549	-0.0743	-0.0937	-0.1131	-0.1325	-0.1518
	Mz+	0.0032	0.0093	0.0207	0.0322	0.0436	0.0551	0.0665	0.0779	0.0894
195/244		0.000 m	0.750 m	1.500 m	2.250 m	3.000 m	3.750 m	4.500 m	5.250 m	6.000 m
		Envolvente (Acero laminado)								
	N-	-1.1166	-1.1166	-1.1166	-1.1166	-1.1166	-1.1166	-1.1166	-1.1166	-1.1166
	N+	2.2008	2.2008	2.2008	2.2008	2.2008	2.2008	2.2008	2.2008	2.2008
	Ty-	-0.0247	-0.0247	-0.0247	-0.0247	-0.0247	-0.0247	-0.0247	-0.0247	-0.0247
	Ty+	0.0125	0.0125	0.0125	0.0125	0.0125	0.0125	0.0125	0.0125	0.0125
	Tz-	-0.5152	-0.4072	-0.2992	-0.2106	-0.1476	-0.0380	-0.1161	-0.2475	-0.3789
	Tz+	0.6724	0.5410	0.4096	0.2782	0.1468	0.0850	0.1454	0.2534	0.3614
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.4989	-0.1784	-0.1697	-0.2394	-0.3482	-0.4070	-0.3712	-0.2329	0.0000
	My+	0.8806	0.4275	0.1872	0.3410	0.4361	0.4470	0.3801	0.2289	0.0000
	Mz-	-0.1485	-0.1299	-0.1114	-0.0928	-0.0742	-0.0557	-0.0371	-0.0186	0.0000
	Mz+	0.0749	0.0656	0.0562	0.0468	0.0375	0.0281	0.0187	0.0094	0.0000
196/197		0.000 m	0.603 m	1.205 m	1.808 m	2.410 m	3.013 m	3.615 m	4.218 m	4.820 m
		Envolvente (Acero laminado)								
	N-	-5.5155	-5.4478	-5.3801	-5.3124	-5.2448	-5.1771	-5.1094	-5.0417	-4.9740
	N+	2.5006	2.5407	2.5808	2.6209	2.6610	2.7011	2.7412	2.7813	2.8215
	Ty-	-0.0260	-0.0260	-0.0260	-0.0260	-0.0260	-0.0260	-0.0260	-0.0260	-0.0260
	Ty+	0.1163	0.1163	0.1163	0.1163	0.1163	0.1163	0.1163	0.1163	0.1163
	Tz-	-3.8960	-3.5345	-3.1730	-2.8115	-2.4500	-2.0885	-1.7270	-1.6076	-1.6076
	Tz+	4.2363	4.0104	3.7844	3.6418	3.5062	3.3707	3.2351	3.0996	3.0721
	Mt-	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012
	Mt+	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015
	My-	-6.7114	-4.4773	-2.4523	-0.7990	-0.5490	-2.4928	-4.4593	-6.3660	-8.1943
	My+	8.7058	6.3090	3.9907	1.7680	0.9355	2.2983	3.4521	4.3793	5.0975
	Mz-	-0.0373	-0.0217	-0.0060	-0.0299	-0.0925	-0.1626	-0.2327	-0.3028	-0.3729
	Mz+	0.1879	0.1205	0.0790	0.0566	0.0415	0.0411	0.0567	0.0724	0.0881
197/198		0.000 m	0.189 m	0.378 m	0.566 m	0.755 m	0.944 m	1.133 m	1.322 m	1.510 m
		Envolvente (Acero laminado)								
	N-	-4.9442	-4.9230	-4.9018	-4.8806	-4.8593	-4.8381	-4.8169	-4.7957	-4.7745
	N+	2.8442	2.8568	2.8693	2.8819	2.8945	2.9070	2.9196	2.9322	2.9447
	Ty-	-0.2480	-0.2480	-0.2480	-0.2480	-0.2480	-0.2480	-0.2480	-0.2480	-0.2480
	Ty+	0.0588	0.0588	0.0588	0.0588	0.0588	0.0588	0.0588	0.0588	0.0588
	Tz-	-1.6163	-1.6163	-1.6163	-1.6163	-1.6163	-1.6163	-1.6163	-1.6163	-1.6163
	Tz+	3.0854	3.0854	3.0854	3.0854	3.0854	3.0854	3.0854	3.0854	3.0854
	Mt-	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012

## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

	Mt+	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015
	My-	-8.1943	-8.6938	-9.1920	-9.6889	-10.1846	-10.6790	-11.1721	-11.6639	-12.2048
	My+	5.0975	5.1897	5.2798	5.3677	5.4536	5.5757	5.8749	6.1800	6.4852
	Mz-	-0.3729	-0.3261	-0.2793	-0.2324	-0.1856	-0.1388	-0.0920	-0.0451	-0.0007
	Mz+	0.0881	0.0770	0.0659	0.0548	0.0437	0.0326	0.0215	0.0104	0.0018
197/202		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-1.0618	-1.0618	-1.0618	-1.0618	-1.0618	-1.0618	-1.0618	-1.0618	-1.0618
	N+	1.3306	1.3306	1.3306	1.3306	1.3306	1.3306	1.3306	1.3306	1.3306
	Ty-	-0.0968	-0.0955	-0.0943	-0.0930	-0.0917	-0.0905	-0.0892	-0.0880	-0.0867
	Ty+	0.0734	0.0742	0.0749	0.0757	0.0764	0.0772	0.0779	0.0787	0.0794
	Tz-	-0.2617	-0.2617	-0.2617	-0.2617	-0.2617	-0.2617	-0.2617	-0.2617	-0.2617
	Tz+	0.2589	0.2589	0.2589	0.2589	0.2589	0.2589	0.2589	0.2589	0.2589
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.3988	-0.3661	-0.3334	-0.3007	-0.2680	-0.2353	-0.2026	-0.1698	-0.1371
	My+	0.3919	0.3596	0.3272	0.2949	0.2625	0.2302	0.1978	0.1654	0.1331
	Mz-	-0.1358	-0.1238	-0.1120	-0.1003	-0.0887	-0.0773	-0.0661	-0.0550	-0.0441
	Mz+	0.1239	0.1147	0.1054	0.0960	0.0865	0.0769	0.0672	0.0574	0.0475
198/199		0.000 m	0.185 m	0.370 m	0.556 m	0.741 m	0.926 m	1.111 m	1.296 m	1.481 m
		Envolvente (Acero Conformado)								
	N-	-0.8654	-0.8644	-0.8634	-0.8623	-0.8613	-0.8603	-0.8593	-0.8583	-0.8573
	N+	-0.1908	-0.1902	-0.1896	-0.1890	-0.1884	-0.1878	-0.1872	-0.1866	-0.1860
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.0444	-0.0333	-0.0222	-0.0111	0.0000	-0.0111	-0.0222	-0.0333	-0.0444
	Tz+	0.0444	0.0333	0.0222	0.0111	0.0000	0.0111	0.0222	0.0333	0.0444
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0072	-0.0123	-0.0154	-0.0165	-0.0154	-0.0123	-0.0072	0.0000
	My+	0.0000	0.0072	0.0123	0.0154	0.0165	0.0154	0.0123	0.0072	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
199/203		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367
	N+	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172
	Ty-	-0.3714	-0.3612	-0.3510	-0.3408	-0.3306	-0.3204	-0.3102	-0.3000	-0.2898
	Ty+	-0.1036	-0.0975	-0.0915	-0.0854	-0.0794	-0.0733	-0.0673	-0.0612	-0.0552
	Tz-	-0.7195	-0.7195	-0.7195	-0.7195	-0.7195	-0.7195	-0.7195	-0.7195	-0.7195
	Tz+	0.7198	0.7198	0.7198	0.7198	0.7198	0.7198	0.7198	0.7198	0.7198
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-5.8639	-5.9539	-6.0438	-6.1338	-6.2238	-6.3138	-6.4037	-6.4937	-6.5837
	My+	5.8727	5.9626	6.0525	6.1425	6.2324	6.3223	6.4123	6.5022	6.5921
	Mz-	-0.4049	-0.3591	-0.3146	-0.2713	-0.2294	-0.1887	-0.1493	-0.1112	-0.0743
	Mz+	-0.0812	-0.0687	-0.0568	-0.0458	-0.0355	-0.0260	-0.0172	-0.0091	0.0047
200/201		0.000 m	0.374 m	0.748 m	1.122 m	1.496 m	1.870 m	2.244 m	2.618 m	2.992 m
		Envolvente (Acero Conformado)								
	N-	-0.0286	-0.0266	-0.0246	-0.0225	-0.0207	-0.0195	-0.0183	-0.0171	-0.0159
	N+	0.0364	0.0376	0.0388	0.0400	0.0414	0.0434	0.0454	0.0475	0.0495
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.0942	-0.0707	-0.0471	-0.0236	0.0000	-0.0393	-0.0785	-0.1178	-0.1571

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE** Adrián Freijomil Aradas

	Tz+	0.1571	0.1178	0.0785	0.0393	0.0000	0.0236	0.0471	0.0707	0.0942
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0511	-0.0881	-0.1098	-0.1175	-0.1098	-0.0881	-0.0511	0.0000
	My+	0.0000	0.0307	0.0529	0.0659	0.0705	0.0659	0.0529	0.0307	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
200/204		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-0.3721	-0.3721	-0.3721	-0.3721	-0.3721	-0.3721	-0.3721	-0.3721	-0.3721
	N+	0.6934	0.6934	0.6934	0.6934	0.6934	0.6934	0.6934	0.6934	0.6934
	Ty-	-0.0658	-0.0645	-0.0633	-0.0625	-0.0617	-0.0610	-0.0602	-0.0595	-0.0587
	Ty+	0.0942	0.0949	0.0957	0.0969	0.0981	0.0994	0.1006	0.1019	0.1032
	Tz-	-0.2809	-0.2809	-0.2809	-0.2809	-0.2809	-0.2809	-0.2809	-0.2809	-0.2809
	Tz+	0.1824	0.1824	0.1824	0.1824	0.1824	0.1824	0.1824	0.1824	0.1824
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.2007	-0.1657	-0.1307	-0.0956	-0.0606	-0.0256	-0.0120	-0.0148	-0.0375
	My+	0.1513	0.1286	0.1058	0.0831	0.0603	0.0376	0.0162	0.0512	0.0863
	Mz-	-0.0516	-0.0436	-0.0356	-0.0278	-0.0200	-0.0123	-0.0048	-0.0165	-0.0289
	Mz+	0.0712	0.0595	0.0476	0.0356	0.0234	0.0111	0.0050	0.0052	0.0121
201/205		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456
	N+	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257
	Ty-	-0.3028	-0.2926	-0.2824	-0.2722	-0.2620	-0.2518	-0.2416	-0.2314	-0.2212
	Ty+	-0.0738	-0.0677	-0.0617	-0.0557	-0.0496	-0.0436	-0.0375	-0.0315	-0.0254
	Tz-	-1.0608	-1.0608	-1.0608	-1.0608	-1.0608	-1.0608	-1.0608	-1.0608	-1.0608
	Tz+	0.6724	0.6724	0.6724	0.6724	0.6724	0.6724	0.6724	0.6724	0.6724
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-7.1396	-7.2236	-7.3077	-7.3917	-7.4758	-7.5598	-7.6439	-7.7279	-7.8120
	My+	11.4801	11.6127	11.7453	11.8779	12.0105	12.1432	12.2758	12.4084	12.5410
	Mz-	-0.1503	-0.1131	-0.0771	-0.0425	-0.0165	0.0004	0.0126	0.0199	0.0236
	Mz+	-0.0233	-0.0145	-0.0064	0.0010	0.0075	0.0260	0.0568	0.0862	0.1144
202/203		0.000 m	0.374 m	0.748 m	1.122 m	1.496 m	1.870 m	2.244 m	2.618 m	2.992 m
		Envolvente (Acero Conformado)								
	N-	-0.0255	-0.0235	-0.0218	-0.0206	-0.0194	-0.0182	-0.0170	-0.0158	-0.0146
	N+	0.0239	0.0251	0.0266	0.0286	0.0306	0.0327	0.0347	0.0367	0.0388
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.0898	-0.0673	-0.0449	-0.0224	0.0000	-0.0224	-0.0449	-0.0673	-0.0898
	Tz+	0.0898	0.0673	0.0449	0.0224	0.0000	0.0224	0.0449	0.0673	0.0898
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0292	-0.0503	-0.0628	-0.0671	-0.0628	-0.0503	-0.0292	0.0000
	My+	0.0000	0.0292	0.0503	0.0628	0.0671	0.0628	0.0503	0.0292	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
202/206		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-1.0618	-1.0618	-1.0618	-1.0618	-1.0618	-1.0618	-1.0618	-1.0618	-1.0618
	N+	1.3306	1.3306	1.3306	1.3306	1.3306	1.3306	1.3306	1.3306	1.3306
	Ty-	-0.0614	-0.0601	-0.0588	-0.0576	-0.0565	-0.0557	-0.0550	-0.0542	-0.0535

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas**

	Ty+	0.0558	0.0565	0.0572	0.0580	0.0589	0.0601	0.0614	0.0627	0.0639
	Tz-	-0.1719	-0.1719	-0.1719	-0.1719	-0.1719	-0.1719	-0.1719	-0.1719	-0.1719
	Tz+	0.1691	0.1691	0.1691	0.1691	0.1691	0.1691	0.1691	0.1691	0.1691
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.1371	-0.1156	-0.0941	-0.0727	-0.0512	-0.0297	-0.0175	-0.0324	-0.0531
	My+	0.1331	0.1119	0.0908	0.0697	0.0485	0.0332	0.0324	0.0340	0.0519
	Mz-	-0.0441	-0.0365	-0.0291	-0.0218	-0.0147	-0.0093	-0.0092	-0.0102	-0.0169
	Mz+	0.0475	0.0405	0.0334	0.0262	0.0189	0.0115	0.0071	0.0112	0.0179
203/207		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367
	N+	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172
	Ty-	-0.2510	-0.2408	-0.2306	-0.2204	-0.2102	-0.2000	-0.1898	-0.1796	-0.1694
	Ty+	-0.0698	-0.0638	-0.0577	-0.0517	-0.0456	-0.0396	-0.0335	-0.0275	-0.0214
	Tz-	-0.6297	-0.6297	-0.6297	-0.6297	-0.6297	-0.6297	-0.6297	-0.6297	-0.6297
	Tz+	0.6301	0.6301	0.6301	0.6301	0.6301	0.6301	0.6301	0.6301	0.6301
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-6.5837	-6.6625	-6.7412	-6.8200	-6.8987	-6.9775	-7.0562	-7.1350	-7.2138
	My+	6.5921	6.6708	6.7495	6.8283	6.9070	6.9857	7.0644	7.1431	7.2218
	Mz-	-0.0743	-0.0436	-0.0190	0.0004	0.0190	0.0271	0.0319	0.0360	0.0393
	Mz+	0.0047	0.0180	0.0355	0.0562	0.0756	0.0937	0.1105	0.1261	0.1404
204/205		0.000 m	0.374 m	0.748 m	1.122 m	1.496 m	1.870 m	2.244 m	2.618 m	2.992 m
		Envolvente (Acero Conformado)								
	N-	-0.0262	-0.0250	-0.0238	-0.0226	-0.0214	-0.0202	-0.0190	-0.0178	-0.0166
	N+	0.0706	0.0726	0.0746	0.0767	0.0787	0.0807	0.0827	0.0848	0.0868
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.0942	-0.0707	-0.0471	-0.0236	0.0000	-0.0393	-0.0785	-0.1178	-0.1571
	Tz+	0.1571	0.1178	0.0785	0.0393	0.0000	0.0236	0.0471	0.0707	0.0942
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0511	-0.0881	-0.1098	-0.1175	-0.1098	-0.0881	-0.0511	0.0000
	My+	0.0000	0.0307	0.0529	0.0659	0.0705	0.0659	0.0529	0.0307	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
204/208		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-0.3721	-0.3721	-0.3721	-0.3721	-0.3721	-0.3721	-0.3721	-0.3721	-0.3721
	N+	0.6934	0.6934	0.6934	0.6934	0.6934	0.6934	0.6934	0.6934	0.6934
	Ty-	-0.0357	-0.0344	-0.0331	-0.0319	-0.0306	-0.0294	-0.0282	-0.0274	-0.0267
	Ty+	0.0358	0.0365	0.0373	0.0380	0.0388	0.0395	0.0403	0.0416	0.0428
	Tz-	-0.1238	-0.1238	-0.1238	-0.1238	-0.1238	-0.1238	-0.1238	-0.1238	-0.1238
	Tz+	0.0881	0.0881	0.0881	0.0881	0.0881	0.0881	0.0881	0.0881	0.0881
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0375	-0.0485	-0.0595	-0.0705	-0.0816	-0.0926	-0.1036	-0.1146	-0.1256
	My+	0.0863	0.1017	0.1172	0.1326	0.1480	0.1635	0.1789	0.1943	0.2098
	Mz-	-0.0289	-0.0334	-0.0380	-0.0427	-0.0475	-0.0524	-0.0574	-0.0625	-0.0676
	Mz+	0.0121	0.0165	0.0207	0.0248	0.0287	0.0325	0.0360	0.0395	0.0428
205/209		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE** Adrián Freijomil Aradas

	N+	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257
	Ty-	-0.1347	-0.1245	-0.1143	-0.1041	-0.0939	-0.0837	-0.0735	-0.0633	-0.0531
	Ty+	-0.0417	-0.0357	-0.0296	-0.0236	-0.0175	-0.0115	-0.0055	0.0006	0.0066
	Tz-	-0.9038	-0.9038	-0.9038	-0.9038	-0.9038	-0.9038	-0.9038	-0.9038	-0.9038
	Tz+	0.5782	0.5782	0.5782	0.5782	0.5782	0.5782	0.5782	0.5782	0.5782
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-7.8120	-7.8843	-7.9565	-8.0288	-8.1011	-8.1734	-8.2456	-8.3179	-8.3902
	My+	12.5410	12.6539	12.7669	12.8799	12.9929	13.1058	13.2188	13.3318	13.4447
	Mz-	0.0236	0.0286	0.0328	0.0362	0.0390	0.0409	0.0421	0.0425	0.0422
	Mz+	0.1144	0.1305	0.1453	0.1588	0.1711	0.1820	0.1917	0.2001	0.2073
206/207		0.000 m	0.374 m	0.748 m	1.122 m	1.496 m	1.870 m	2.244 m	2.618 m	2.992 m
	Envolvente (Acero Conformado)									
	N-	-0.0244	-0.0232	-0.0220	-0.0208	-0.0196	-0.0184	-0.0172	-0.0160	-0.0148
	N+	0.0445	0.0465	0.0485	0.0505	0.0526	0.0546	0.0566	0.0587	0.0607
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.0898	-0.0673	-0.0449	-0.0224	0.0000	-0.0224	-0.0449	-0.0673	-0.0898
	Tz+	0.0898	0.0673	0.0449	0.0224	0.0000	0.0224	0.0449	0.0673	0.0898
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0292	-0.0503	-0.0628	-0.0671	-0.0628	-0.0503	-0.0292	0.0000
	My+	0.0000	0.0292	0.0503	0.0628	0.0671	0.0628	0.0503	0.0292	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
206/210		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
	Envolvente (Acero Conformado)									
	N-	-1.0618	-1.0618	-1.0618	-1.0618	-1.0618	-1.0618	-1.0618	-1.0618	-1.0618
	N+	1.3306	1.3306	1.3306	1.3306	1.3306	1.3306	1.3306	1.3306	1.3306
	Ty-	-0.0325	-0.0312	-0.0300	-0.0287	-0.0275	-0.0262	-0.0249	-0.0241	-0.0234
	Ty+	0.0228	0.0236	0.0243	0.0251	0.0258	0.0266	0.0273	0.0285	0.0298
	Tz-	-0.0822	-0.0822	-0.0822	-0.0822	-0.0822	-0.0822	-0.0822	-0.0822	-0.0822
	Tz+	0.0794	0.0794	0.0794	0.0794	0.0794	0.0794	0.0794	0.0794	0.0794
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0531	-0.0626	-0.0721	-0.0815	-0.0910	-0.1005	-0.1099	-0.1194	-0.1289
	My+	0.0519	0.0617	0.0716	0.0814	0.0912	0.1010	0.1109	0.1207	0.1305
	Mz-	-0.0169	-0.0193	-0.0219	-0.0246	-0.0275	-0.0306	-0.0338	-0.0372	-0.0407
	Mz+	0.0179	0.0214	0.0248	0.0281	0.0313	0.0345	0.0375	0.0405	0.0434
207/211		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
	Envolvente (Acero laminado)									
	N-	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367
	N+	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172
	Ty-	-0.1087	-0.0985	-0.0883	-0.0781	-0.0679	-0.0577	-0.0475	-0.0373	-0.0271
	Ty+	-0.0362	-0.0301	-0.0241	-0.0181	-0.0120	-0.0060	0.0001	0.0061	0.0122
	Tz-	-0.5400	-0.5400	-0.5400	-0.5400	-0.5400	-0.5400	-0.5400	-0.5400	-0.5400
	Tz+	0.5403	0.5403	0.5403	0.5403	0.5403	0.5403	0.5403	0.5403	0.5403
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-7.2138	-7.2813	-7.3488	-7.4164	-7.4839	-7.5515	-7.6190	-7.6865	-7.7541
	My+	7.2218	7.2893	7.3568	7.4243	7.4918	7.5593	7.6268	7.6943	7.7618
	Mz-	0.0393	0.0437	0.0473	0.0501	0.0522	0.0536	0.0541	0.0540	0.0530
	Mz+	0.1404	0.1531	0.1646	0.1747	0.1837	0.1913	0.1977	0.2027	0.2066
208/209		0.000 m	0.374 m	0.748 m	1.122 m	1.496 m	1.870 m	2.244 m	2.618 m	2.992 m

## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

		Envolvente (Acero Conformado)								
	N-	-0.0261	-0.0249	-0.0237	-0.0225	-0.0213	-0.0201	-0.0189	-0.0177	-0.0165
	N+	0.0563	0.0583	0.0603	0.0624	0.0644	0.0664	0.0684	0.0705	0.0725
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.0942	-0.0707	-0.0471	-0.0236	0.0000	-0.0393	-0.0785	-0.1178	-0.1571
	Tz+	0.1571	0.1178	0.0785	0.0393	0.0000	0.0236	0.0471	0.0707	0.0942
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0511	-0.0881	-0.1098	-0.1175	-0.1098	-0.0881	-0.0511	0.0000
	My+	0.0000	0.0307	0.0529	0.0659	0.0705	0.0659	0.0529	0.0307	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
208/212		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-0.3721	-0.3721	-0.3721	-0.3721	-0.3721	-0.3721	-0.3721	-0.3721	-0.3721
	N+	0.6934	0.6934	0.6934	0.6934	0.6934	0.6934	0.6934	0.6934	0.6934
	Ty-	-0.0135	-0.0123	-0.0110	-0.0099	-0.0092	-0.0084	-0.0077	-0.0069	-0.0062
	Ty+	-0.0004	0.0003	0.0011	0.0020	0.0032	0.0045	0.0058	0.0070	0.0083
	Tz-	-0.0068	-0.0068	-0.0068	-0.0068	-0.0068	-0.0068	-0.0068	-0.0068	-0.0068
	Tz+	0.0339	0.0339	0.0339	0.0339	0.0339	0.0339	0.0339	0.0339	0.0339
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.1256	-0.1248	-0.1241	-0.1233	-0.1225	-0.1218	-0.1210	-0.1203	-0.1195
	My+	0.2098	0.2056	0.2014	0.1972	0.1930	0.1888	0.1846	0.1804	0.1762
	Mz-	-0.0676	-0.0661	-0.0648	-0.0635	-0.0623	-0.0612	-0.0602	-0.0593	-0.0585
	Mz+	0.0428	0.0429	0.0429	0.0428	0.0425	0.0420	0.0414	0.0406	0.0397
209/213		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456
	N+	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257
	Ty-	-0.0115	-0.0048	0.0013	0.0073	0.0134	0.0194	0.0255	0.0315	0.0375
	Ty+	0.0211	0.0305	0.0407	0.0509	0.0611	0.0713	0.0815	0.0917	0.1019
	Tz-	-0.7467	-0.7467	-0.7467	-0.7467	-0.7467	-0.7467	-0.7467	-0.7467	-0.7467
	Tz+	0.4840	0.4840	0.4840	0.4840	0.4840	0.4840	0.4840	0.4840	0.4840
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-8.3902	-8.4507	-8.5112	-8.5717	-8.6322	-8.6927	-8.7532	-8.8137	-8.8741
	My+	13.4448	13.5381	13.6314	13.7248	13.8181	13.9115	14.0048	14.0981	14.1915
	Mz-	0.0422	0.0432	0.0434	0.0429	0.0416	0.0395	0.0367	0.0332	0.0289
	Mz+	0.2073	0.2041	0.1997	0.1939	0.1869	0.1786	0.1691	0.1583	0.1462
210/211		0.000 m	0.374 m	0.748 m	1.122 m	1.496 m	1.870 m	2.244 m	2.618 m	2.992 m
		Envolvente (Acero Conformado)								
	N-	-0.0247	-0.0235	-0.0223	-0.0211	-0.0199	-0.0187	-0.0175	-0.0163	-0.0151
	N+	0.0354	0.0375	0.0395	0.0415	0.0435	0.0456	0.0476	0.0496	0.0516
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.0898	-0.0673	-0.0449	-0.0224	0.0000	-0.0224	-0.0449	-0.0673	-0.0898
	Tz+	0.0898	0.0673	0.0449	0.0224	0.0000	0.0224	0.0449	0.0673	0.0898
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0292	-0.0503	-0.0628	-0.0671	-0.0628	-0.0503	-0.0292	0.0000
	My+	0.0000	0.0292	0.0503	0.0628	0.0671	0.0628	0.0503	0.0292	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000



## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
210/214		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m	
		Envolvente (Acero Conformado)									
	N-	-1.0618	-1.0618	-1.0618	-1.0618	-1.0618	-1.0618	-1.0618	-1.0618	-1.0618	-1.0618
	N+	1.3306	1.3306	1.3306	1.3306	1.3306	1.3306	1.3306	1.3306	1.3306	1.3306
	Ty-	-0.0064	-0.0051	-0.0038	-0.0026	-0.0017	-0.0009	-0.0002	0.0006	0.0013	0.0013
	Ty+	0.0020	0.0028	0.0035	0.0043	0.0054	0.0066	0.0079	0.0091	0.0104	0.0104
	Tz-	-0.0140	-0.0140	-0.0140	-0.0140	-0.0140	-0.0140	-0.0140	-0.0140	-0.0140	-0.0140
	Tz+	0.0111	0.0111	0.0111	0.0111	0.0111	0.0111	0.0111	0.0111	0.0111	0.0111
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.1289	-0.1271	-0.1254	-0.1237	-0.1219	-0.1202	-0.1184	-0.1167	-0.1149	-0.1149
	My+	0.1305	0.1291	0.1277	0.1263	0.1249	0.1236	0.1222	0.1208	0.1194	0.1194
	Mz-	-0.0407	-0.0400	-0.0395	-0.0391	-0.0388	-0.0387	-0.0388	-0.0390	-0.0394	-0.0394
	Mz+	0.0434	0.0431	0.0427	0.0422	0.0416	0.0409	0.0402	0.0393	0.0383	0.0383
211/215		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m	
		Envolvente (Acero laminado)									
	N-	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367
	N+	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172
	Ty-	-0.0046	0.0014	0.0075	0.0135	0.0195	0.0256	0.0316	0.0377	0.0437	0.0437
	Ty+	0.0263	0.0365	0.0467	0.0569	0.0671	0.0773	0.0875	0.0977	0.1079	0.1079
	Tz-	-0.4502	-0.4502	-0.4502	-0.4502	-0.4502	-0.4502	-0.4502	-0.4502	-0.4502	-0.4502
	Tz+	0.4506	0.4506	0.4506	0.4506	0.4506	0.4506	0.4506	0.4506	0.4506	0.4506
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-7.7541	-7.8104	-7.8667	-7.9230	-7.9794	-8.0357	-8.0920	-8.1483	-8.2046	-8.2046
	My+	7.7618	7.8180	7.8743	7.9306	7.9869	8.0431	8.0994	8.1557	8.2120	8.2120
	Mz-	0.0530	0.0532	0.0527	0.0514	0.0493	0.0465	0.0429	0.0386	0.0335	0.0335
	Mz+	0.2066	0.2026	0.1974	0.1910	0.1832	0.1742	0.1639	0.1523	0.1395	0.1395
212/213		0.000 m	0.374 m	0.748 m	1.122 m	1.496 m	1.870 m	2.244 m	2.618 m	2.992 m	
		Envolvente (Acero Conformado)									
	N-	-0.0256	-0.0244	-0.0232	-0.0220	-0.0208	-0.0196	-0.0184	-0.0172	-0.0160	-0.0160
	N+	0.0693	0.0713	0.0733	0.0754	0.0774	0.0794	0.0814	0.0835	0.0855	0.0855
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.0942	-0.0707	-0.0471	-0.0236	0.0000	-0.0393	-0.0785	-0.1178	-0.1571	-0.1571
	Tz+	0.1571	0.1178	0.0785	0.0393	0.0000	0.0236	0.0471	0.0707	0.0942	0.0942
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0511	-0.0881	-0.1098	-0.1175	-0.1098	-0.0881	-0.0511	0.0000	0.0000
	My+	0.0000	0.0307	0.0529	0.0659	0.0705	0.0659	0.0529	0.0307	0.0000	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
212/216		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m	
		Envolvente (Acero Conformado)									
	N-	-0.3721	-0.3721	-0.3721	-0.3721	-0.3721	-0.3721	-0.3721	-0.3721	-0.3721	-0.3721
	N+	0.6934	0.6934	0.6934	0.6934	0.6934	0.6934	0.6934	0.6934	0.6934	0.6934
	Ty-	-0.0727	-0.0715	-0.0702	-0.0690	-0.0677	-0.0664	-0.0652	-0.0645	-0.0637	-0.0637
	Ty+	0.0311	0.0318	0.0326	0.0333	0.0341	0.0348	0.0356	0.0369	0.0381	0.0381
	Tz-	-0.1011	-0.1011	-0.1011	-0.1011	-0.1011	-0.1011	-0.1011	-0.1011	-0.1011	-0.1011
	Tz+	0.1910	0.1910	0.1910	0.1910	0.1910	0.1910	0.1910	0.1910	0.1910	0.1910
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.1195	-0.1069	-0.0944	-0.0818	-0.0693	-0.0568	-0.0442	-0.0317	-0.0224	-0.0224

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE** Adrián Freijomil Aradas

	My+	0.1762	0.1524	0.1286	0.1047	0.0809	0.0571	0.0332	0.0094	0.0050	
	Mz-	-0.0585	-0.0498	-0.0413	-0.0328	-0.0245	-0.0162	-0.0081	-0.0006	-0.0008	
	Mz+	0.0397	0.0361	0.0324	0.0286	0.0245	0.0204	0.0160	0.0115	0.0117	
213/217		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m	
		Envolvente (Acero laminado)									
	N-	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456
	N+	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257
	Ty-	0.0215	0.0276	0.0336	0.0397	0.0457	0.0517	0.0578	0.0638	0.0699	0.0699
	Ty+	0.1874	0.1976	0.2078	0.2180	0.2282	0.2384	0.2486	0.2588	0.2690	0.2690
	Tz-	-0.5897	-0.5897	-0.5897	-0.5897	-0.5897	-0.5897	-0.5897	-0.5897	-0.5897	-0.5897
	Tz+	0.3897	0.3897	0.3897	0.3897	0.3897	0.3897	0.3897	0.3897	0.3897	0.3897
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-8.8741	-8.9229	-8.9716	-9.0203	-9.0690	-9.1177	-9.1664	-9.2152	-9.2639	-9.2639
	My+	14.1915	14.2652	14.3389	14.4126	14.4863	14.5600	14.6337	14.7074	14.7811	14.7811
	Mz-	0.0289	0.0258	0.0220	0.0174	0.0120	0.0058	-0.0174	-0.0491	-0.0821	-0.0821
	Mz+	0.1462	0.1221	0.0967	0.0701	0.0422	0.0132	-0.0009	-0.0085	-0.0169	-0.0169
214/215		0.000 m	0.374 m	0.748 m	1.122 m	1.496 m	1.870 m	2.244 m	2.618 m	2.992 m	
		Envolvente (Acero Conformado)									
	N-	-0.0244	-0.0232	-0.0220	-0.0208	-0.0196	-0.0184	-0.0172	-0.0160	-0.0147	-0.0147
	N+	0.0450	0.0470	0.0490	0.0510	0.0531	0.0551	0.0571	0.0591	0.0612	0.0612
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.0898	-0.0673	-0.0449	-0.0224	0.0000	-0.0224	-0.0449	-0.0673	-0.0898	-0.0898
	Tz+	0.0898	0.0673	0.0449	0.0224	0.0000	0.0224	0.0449	0.0673	0.0898	0.0898
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0292	-0.0503	-0.0628	-0.0671	-0.0628	-0.0503	-0.0292	0.0000	0.0000
	My+	0.0000	0.0292	0.0503	0.0628	0.0671	0.0628	0.0503	0.0292	0.0000	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
214/218		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m	
		Envolvente (Acero Conformado)									
	N-	-1.0618	-1.0618	-1.0618	-1.0618	-1.0618	-1.0618	-1.0618	-1.0618	-1.0618	-1.0618
	N+	1.3306	1.3306	1.3306	1.3306	1.3306	1.3306	1.3306	1.3306	1.3306	1.3306
	Ty-	-0.0412	-0.0400	-0.0387	-0.0375	-0.0362	-0.0349	-0.0337	-0.0330	-0.0322	-0.0322
	Ty+	0.0324	0.0331	0.0339	0.0346	0.0353	0.0361	0.0369	0.0381	0.0394	0.0394
	Tz-	-0.1037	-0.1037	-0.1037	-0.1037	-0.1037	-0.1037	-0.1037	-0.1037	-0.1037	-0.1037
	Tz+	0.1009	0.1009	0.1009	0.1009	0.1009	0.1009	0.1009	0.1009	0.1009	0.1009
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.1149	-0.1019	-0.0890	-0.0760	-0.0631	-0.0501	-0.0371	-0.0242	-0.0112	-0.0112
	My+	0.1194	0.1068	0.0941	0.0815	0.0689	0.0563	0.0437	0.0311	0.0185	0.0185
	Mz-	-0.0394	-0.0343	-0.0294	-0.0247	-0.0201	-0.0156	-0.0113	-0.0072	-0.0032	-0.0032
	Mz+	0.0383	0.0343	0.0301	0.0258	0.0214	0.0169	0.0124	0.0077	0.0030	0.0030
215/219		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m	
		Envolvente (Acero laminado)									
	N-	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367
	N+	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172
	Ty-	0.0294	0.0355	0.0415	0.0476	0.0536	0.0597	0.0657	0.0718	0.0778	0.0778
	Ty+	0.1686	0.1788	0.1890	0.1992	0.2094	0.2196	0.2298	0.2400	0.2502	0.2502
	Tz-	-0.3605	-0.3605	-0.3605	-0.3605	-0.3605	-0.3605	-0.3605	-0.3605	-0.3605	-0.3605
	Tz+	0.3608	0.3608	0.3608	0.3608	0.3608	0.3608	0.3608	0.3608	0.3608	0.3608
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas**

	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-8.2046	-8.2497	-8.2948	-8.3399	-8.3850	-8.4301	-8.4752	-8.5203	-8.5654
	My+	8.2120	8.2570	8.3021	8.3471	8.3922	8.4372	8.4823	8.5274	8.5724
	Mz-	0.0335	0.0294	0.0246	0.0191	0.0127	0.0056	-0.0099	-0.0392	-0.0699
	Mz+	0.1395	0.1178	0.0948	0.0705	0.0451	0.0184	-0.0021	-0.0108	-0.0201
216/217		0.000 m	0.374 m	0.748 m	1.122 m	1.496 m	1.870 m	2.244 m	2.618 m	2.992 m
		Envolvente (Acero Conformado)								
	N-	-0.0294	-0.0274	-0.0254	-0.0235	-0.0223	-0.0211	-0.0199	-0.0187	-0.0175
	N+	0.0393	0.0405	0.0417	0.0430	0.0451	0.0471	0.0491	0.0511	0.0532
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.0942	-0.0707	-0.0471	-0.0236	0.0000	-0.0393	-0.0785	-0.1178	-0.1571
	Tz+	0.1571	0.1178	0.0785	0.0393	0.0000	0.0236	0.0471	0.0707	0.0942
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0511	-0.0881	-0.1098	-0.1175	-0.1098	-0.0881	-0.0511	0.0000
	My+	0.0000	0.0307	0.0529	0.0659	0.0705	0.0659	0.0529	0.0307	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
216/221		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-0.3721	-0.3721	-0.3721	-0.3721	-0.3721	-0.3721	-0.3721	-0.3721	-0.3721
	N+	0.6934	0.6934	0.6934	0.6934	0.6934	0.6934	0.6934	0.6934	0.6934
	Ty-	-0.1027	-0.1020	-0.1012	-0.1005	-0.0997	-0.0990	-0.0982	-0.0975	-0.0967
	Ty+	0.0672	0.0685	0.0698	0.0710	0.0723	0.0735	0.0748	0.0761	0.0773
	Tz-	-0.1953	-0.1953	-0.1953	-0.1953	-0.1953	-0.1953	-0.1953	-0.1953	-0.1953
	Tz+	0.3481	0.3481	0.3481	0.3481	0.3481	0.3481	0.3481	0.3481	0.3481
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0224	-0.0659	-0.1094	-0.1529	-0.1964	-0.2399	-0.2834	-0.3269	-0.3704
	My+	0.0050	0.0132	0.0376	0.0619	0.0863	0.1107	0.1351	0.1594	0.1838
	Mz-	-0.0008	-0.0048	-0.0128	-0.0210	-0.0296	-0.0387	-0.0479	-0.0573	-0.0668
	Mz+	0.0117	0.0240	0.0361	0.0481	0.0602	0.0726	0.0849	0.0971	0.1092
217/223		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456
	N+	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257
	Ty-	0.0531	0.0591	0.0652	0.0712	0.0773	0.0833	0.0893	0.0954	0.1014
	Ty+	0.3215	0.3317	0.3419	0.3521	0.3623	0.3725	0.3827	0.3929	0.4031
	Tz-	-0.4326	-0.4326	-0.4326	-0.4326	-0.4326	-0.4326	-0.4326	-0.4326	-0.4326
	Tz+	0.2955	0.2955	0.2955	0.2955	0.2955	0.2955	0.2955	0.2955	0.2955
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-9.2639	-9.3008	-9.3377	-9.3747	-9.4116	-9.4485	-9.4855	-9.5224	-9.5593
	My+	14.7811	14.8352	14.8893	14.9433	14.9974	15.0515	15.1056	15.1596	15.2137
	Mz-	-0.0821	-0.1229	-0.1650	-0.2084	-0.2530	-0.2990	-0.3462	-0.3946	-0.4444
	Mz+	-0.0169	-0.0239	-0.0316	-0.0402	-0.0494	-0.0595	-0.0703	-0.0818	-0.0941
218/219		0.000 m	0.374 m	0.748 m	1.122 m	1.496 m	1.870 m	2.244 m	2.618 m	2.992 m
		Envolvente (Acero Conformado)								
	N-	-0.0272	-0.0252	-0.0232	-0.0220	-0.0208	-0.0196	-0.0184	-0.0172	-0.0160
	N+	0.0226	0.0239	0.0251	0.0271	0.0291	0.0312	0.0332	0.0352	0.0373
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.0898	-0.0673	-0.0449	-0.0224	0.0000	-0.0224	-0.0449	-0.0673	-0.0898

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas**

	Tz+	0.0898	0.0673	0.0449	0.0224	0.0000	0.0224	0.0449	0.0673	0.0898	
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
	My-	0.0000	-0.0292	-0.0503	-0.0628	-0.0671	-0.0628	-0.0503	-0.0292	0.0000	
	My+	0.0000	0.0292	0.0503	0.0628	0.0671	0.0628	0.0503	0.0292	0.0000	
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
218/246		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m	
		Envolvente (Acero Conformado)									
		N-	-1.0618	-1.0618	-1.0618	-1.0618	-1.0618	-1.0618	-1.0618	-1.0618	-1.0618
		N+	1.3306	1.3306	1.3306	1.3306	1.3306	1.3306	1.3306	1.3306	1.3306
		Ty-	-0.0538	-0.0530	-0.0523	-0.0515	-0.0508	-0.0500	-0.0493	-0.0485	-0.0478
		Ty+	0.0654	0.0667	0.0679	0.0692	0.0704	0.0717	0.0730	0.0742	0.0755
		Tz-	-0.1935	-0.1935	-0.1935	-0.1935	-0.1935	-0.1935	-0.1935	-0.1935	-0.1935
		Tz+	0.1906	0.1906	0.1906	0.1906	0.1906	0.1906	0.1906	0.1906	0.1906
		Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
		Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
		My-	-0.0112	-0.0113	-0.0346	-0.0580	-0.0814	-0.1048	-0.1282	-0.1516	-0.1749
		My+	0.0185	0.0189	0.0426	0.0664	0.0901	0.1138	0.1376	0.1613	0.1851
		Mz-	-0.0032	-0.0064	-0.0148	-0.0234	-0.0321	-0.0410	-0.0500	-0.0592	-0.0686
		Mz+	0.0030	0.0046	0.0111	0.0176	0.0240	0.0303	0.0365	0.0426	0.0486
219/248		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m	
		Envolvente (Acero laminado)									
		N-	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367
		N+	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172
		Ty-	0.0618	0.0679	0.0739	0.0800	0.0860	0.0920	0.0981	0.1041	0.1102
		Ty+	0.2874	0.2976	0.3078	0.3180	0.3282	0.3384	0.3486	0.3588	0.3690
		Tz-	-0.2707	-0.2707	-0.2707	-0.2707	-0.2707	-0.2707	-0.2707	-0.2707	-0.2707
		Tz+	0.2711	0.2711	0.2711	0.2711	0.2711	0.2711	0.2711	0.2711	0.2711
		Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
		Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
		My-	-8.5654	-8.5993	-8.6332	-8.6671	-8.7010	-8.7349	-8.7687	-8.8026	-8.8365
		My+	8.5724	8.6062	8.6401	8.6739	8.7078	8.7416	8.7754	8.8093	8.8431
		Mz-	-0.0699	-0.1064	-0.1443	-0.1834	-0.2238	-0.2655	-0.3084	-0.3526	-0.3981
		Mz+	-0.0201	-0.0282	-0.0371	-0.0467	-0.0571	-0.0682	-0.0801	-0.0927	-0.1061
220/221		0.000 m	0.603 m	1.205 m	1.808 m	2.410 m	3.013 m	3.615 m	4.218 m	4.820 m	
		Envolvente (Acero laminado)									
		N-	-2.2107	-2.1890	-2.1673	-2.1456	-2.1239	-2.1021	-2.0804	-2.0587	-2.0370
		N+	0.8510	0.8639	0.8768	0.8896	0.9025	0.9154	0.9282	0.9411	0.9540
		Ty-	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004
		Ty+	0.0440	0.0440	0.0440	0.0440	0.0440	0.0440	0.0440	0.0440	0.0440
		Tz-	-1.3892	-1.1632	-0.9373	-0.7113	-0.4854	-0.2607	-0.1797	-0.4475	-0.8090
		Tz+	2.1827	1.8212	1.4597	1.0982	0.7367	0.3752	0.0732	0.2921	0.5180
		Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
		Mt+	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004
		My-	-1.8490	-1.0829	-0.4474	-0.3162	-0.8083	-1.1135	-1.2350	-1.1300	-0.8159
		My+	2.7349	1.5331	0.5404	0.1433	0.4352	0.6315	0.7225	0.6719	0.4906
		Mz-	-0.0010	-0.0010	-0.0011	-0.0012	-0.0176	-0.0441	-0.0705	-0.0970	-0.1235
		Mz+	0.0887	0.0623	0.0359	0.0095	0.0006	0.0008	0.0011	0.0013	0.0015
221/222		0.000 m	0.136 m	0.273 m	0.409 m	0.545 m	0.682 m	0.818 m	0.954 m	1.091 m	
		Envolvente (Acero laminado)									
		N-	-2.1369	-2.1320	-2.1271	-2.1222	-2.1173	-2.1123	-2.1074	-2.1025	-2.0976
		N+	1.1055	1.1084	1.1113	1.1143	1.1172	1.1201	1.1230	1.1259	1.1288
	Ty-	-0.1133	-0.1133	-0.1133	-0.1133	-0.1133	-0.1133	-0.1133	-0.1133	-0.1133	

## Metal 3D

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	Ty+	0.0014	0.0014	0.0014	0.0014	0.0014	0.0014	0.0014	0.0014	0.0014
	Tz-	-1.5512	-1.5655	-1.5798	-1.5941	-1.6085	-1.6228	-1.6371	-1.6514	-1.6657
	Tz+	0.9460	0.9546	0.9632	0.9718	0.9803	0.9889	0.9975	1.0061	1.0147
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004
	My-	-0.8159	-0.6170	-0.4161	-0.2167	-0.2495	-0.3838	-0.5192	-0.6558	-0.7935
	My+	0.4906	0.4273	0.4359	0.4604	0.4848	0.5384	0.7030	0.9273	1.1534
	Mz-	-0.1235	-0.1080	-0.0926	-0.0771	-0.0617	-0.0462	-0.0308	-0.0153	0.0000
	Mz+	0.0015	0.0013	0.0011	0.0009	0.0007	0.0006	0.0004	0.0002	0.0001
221/249		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-0.3048	-0.3048	-0.3048	-0.3048	-0.3048	-0.3048	-0.3048	-0.3048	-0.3048
	N+	0.8506	0.8506	0.8506	0.8506	0.8506	0.8506	0.8506	0.8506	0.8506
	Ty-	-0.0905	-0.0892	-0.0880	-0.0867	-0.0854	-0.0842	-0.0829	-0.0817	-0.0804
	Ty+	0.1123	0.1130	0.1138	0.1145	0.1153	0.1160	0.1168	0.1175	0.1182
	Tz-	-0.3948	-0.3948	-0.3948	-0.3948	-0.3948	-0.3948	-0.3948	-0.3948	-0.3948
	Tz+	0.2336	0.2336	0.2336	0.2336	0.2336	0.2336	0.2336	0.2336	0.2336
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.3704	-0.3212	-0.2719	-0.2226	-0.1734	-0.1241	-0.0748	-0.0290	-0.0582
	My+	0.1838	0.1547	0.1255	0.0964	0.0673	0.0382	0.0090	0.0057	0.0327
	Mz-	-0.0668	-0.0557	-0.0447	-0.0338	-0.0232	-0.0130	-0.0033	-0.0015	-0.0075
	Mz+	0.1092	0.0952	0.0811	0.0669	0.0526	0.0386	0.0248	0.0107	0.0200
222/223		0.000 m	0.238 m	0.475 m	0.713 m	0.950 m	1.188 m	1.426 m	1.663 m	1.901 m
		Envolvente (Acero Conformado)								
	N-	-0.8341	-0.8328	-0.8315	-0.8302	-0.8289	-0.8276	-0.8263	-0.8251	-0.8238
	N+	-0.2125	-0.2118	-0.2110	-0.2102	-0.2095	-0.2087	-0.2079	-0.2072	-0.2064
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.0599	-0.0449	-0.0299	-0.0150	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0150	0.0299	0.0449	0.0599
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My+	0.0000	0.0124	0.0213	0.0266	0.0285	0.0266	0.0213	0.0124	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
222/224		0.000 m	0.066 m	0.132 m	0.198 m	0.264 m	0.330 m	0.396 m	0.462 m	0.528 m
		Envolvente (Acero laminado)								
	N-	-1.7476	-1.7475	-1.7474	-1.7472	-1.7471	-1.7470	-1.7469	-1.7468	-1.7467
	N+	1.1655	1.1656	1.1657	1.1657	1.1658	1.1659	1.1659	1.1660	1.1661
	Ty-	-0.0014	-0.0014	-0.0014	-0.0014	-0.0014	-0.0014	-0.0014	-0.0014	-0.0014
	Ty+	0.1133	0.1133	0.1133	0.1133	0.1133	0.1133	0.1133	0.1133	0.1133
	Tz-	-1.2811	-1.2794	-1.2777	-1.2761	-1.2744	-1.2727	-1.2711	-1.2694	-1.2677
	Tz+	1.2631	1.2641	1.2651	1.2661	1.2671	1.2681	1.2690	1.2700	1.2710
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
	My-	-1.1534	-1.0800	-1.0068	-0.9336	-0.8606	-0.7877	-0.7148	-0.6520	-0.6085
	My+	0.7935	0.7102	0.6267	0.5432	0.4596	0.3760	0.2923	0.2183	0.1637
	Mz-	0.0000	-0.0072	-0.0146	-0.0221	-0.0296	-0.0371	-0.0445	-0.0520	-0.0595
	Mz+	0.0003	0.0001	0.0002	0.0003	0.0004	0.0005	0.0006	0.0006	0.0007
223/250		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456

## Metal 3D

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	N+	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257
	Ty-	-0.4209	-0.4107	-0.4005	-0.3903	-0.3801	-0.3699	-0.3597	-0.3495	-0.3393
	Ty+	-0.1047	-0.0987	-0.0926	-0.0866	-0.0805	-0.0745	-0.0685	-0.0624	-0.0564
	Tz-	-0.4326	-0.4326	-0.4326	-0.4326	-0.4326	-0.4326	-0.4326	-0.4326	-0.4326
	Tz+	0.2356	0.2356	0.2356	0.2356	0.2356	0.2356	0.2356	0.2356	0.2356
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-9.5593	-9.5888	-9.6182	-9.6477	-9.6771	-9.7066	-9.7361	-9.7655	-9.7950
	My+	15.2137	15.2678	15.3219	15.3759	15.4300	15.4841	15.5382	15.5922	15.6463
	Mz-	-0.4444	-0.3924	-0.3418	-0.2924	-0.2443	-0.1974	-0.1518	-0.1075	-0.0645
	Mz+	-0.0941	-0.0814	-0.0694	-0.0581	-0.0477	-0.0379	-0.0290	-0.0208	-0.0133
224/225		0.000 m	0.169 m	0.337 m	0.506 m	0.675 m	0.843 m	1.012 m	1.180 m	1.349 m
	Envolvente (Acero laminado)									
	N-	-1.6699	-1.6696	-1.6693	-1.6690	-1.6687	-1.6684	-1.6681	-1.6678	-1.6675
	N+	1.0785	1.0786	1.0788	1.0790	1.0792	1.0793	1.0795	1.0797	1.0799
	Ty-	-0.0536	-0.0536	-0.0536	-0.0536	-0.0536	-0.0536	-0.0536	-0.0536	-0.0536
	Ty+	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020
	Tz-	-0.4930	-0.4887	-0.4845	-0.4802	-0.4759	-0.4717	-0.4674	-0.4632	-0.4589
	Tz+	0.3623	0.3648	0.3673	0.3698	0.3724	0.3749	0.3774	0.3799	0.3825
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
	My-	-0.6085	-0.5782	-0.5483	-0.5189	-0.4898	-0.4612	-0.4330	-0.4053	-0.3780
	My+	0.1637	0.1626	0.2377	0.3132	0.3881	0.4622	0.5357	0.6084	0.6804
	Mz-	-0.0595	-0.0505	-0.0417	-0.0330	-0.0243	-0.0157	-0.0070	-0.0016	-0.0020
	Mz+	0.0007	0.0004	0.0006	0.0012	0.0019	0.0026	0.0033	0.0042	0.0129
224/273		0.000 m	0.750 m	1.500 m	2.250 m	3.000 m	3.750 m	4.500 m	5.250 m	6.000 m
	Envolvente (Acero laminado)									
	N-	-1.1174	-1.1174	-1.1174	-1.1174	-1.1174	-1.1174	-1.1174	-1.1174	-1.1174
	N+	2.3743	2.3743	2.3743	2.3743	2.3743	2.3743	2.3743	2.3743	2.3743
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.4320	-0.3240	-0.2160	-0.1380	-0.0750	-0.1314	-0.2628	-0.3942	-0.5256
	Tz+	0.5256	0.3942	0.2628	0.1314	0.0000	0.1380	0.2160	0.3240	0.4320
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.3430	-0.5913	-0.7372	-0.7885	-0.7372	-0.5913	-0.3430	0.0000
	My+	0.0000	0.2819	0.4860	0.6059	0.6481	0.6059	0.4860	0.2819	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
225/226		0.000 m	0.169 m	0.337 m	0.506 m	0.675 m	0.843 m	1.012 m	1.180 m	1.349 m
	Envolvente (Acero laminado)									
	N-	-1.6290	-1.6287	-1.6284	-1.6281	-1.6278	-1.6275	-1.6272	-1.6269	-1.6266
	N+	1.0423	1.0425	1.0426	1.0428	1.0430	1.0432	1.0433	1.0435	1.0437
	Ty-	-0.0020	-0.0020	-0.0020	-0.0020	-0.0020	-0.0020	-0.0020	-0.0020	-0.0020
	Ty+	0.0101	0.0101	0.0101	0.0101	0.0101	0.0101	0.0101	0.0101	0.0101
	Tz-	-0.3155	-0.3130	-0.3105	-0.3080	-0.3054	-0.3029	-0.3004	-0.2979	-0.2953
	Tz+	0.1708	0.1751	0.1793	0.1836	0.1879	0.1921	0.1964	0.2006	0.2049
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
	My-	-0.3780	-0.3721	-0.3667	-0.3617	-0.3572	-0.3530	-0.3493	-0.3460	-0.3432
	My+	0.6804	0.6512	0.6213	0.5907	0.5594	0.5273	0.4946	0.4611	0.4269
	Mz-	-0.0020	-0.0016	-0.0013	-0.0010	-0.0007	-0.0003	-0.0001	-0.0009	-0.0017
	Mz+	0.0129	0.0112	0.0095	0.0078	0.0061	0.0044	0.0027	0.0018	0.0017
225/274		0.000 m	0.750 m	1.500 m	2.250 m	3.000 m	3.750 m	4.500 m	5.250 m	6.000 m

## Metal 3D

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		Envolvente (Acero Conformado)								
	N-	-0.0343	-0.0343	-0.0343	-0.0343	-0.0343	-0.0343	-0.0343	-0.0343	-0.0343
	N+	0.0217	0.0217	0.0217	0.0217	0.0217	0.0217	0.0217	0.0217	0.0217
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.3204	-0.2403	-0.1602	-0.1101	-0.0750	-0.0692	-0.1384	-0.2076	-0.2768
	Tz+	0.2768	0.2076	0.1384	0.0692	0.0000	0.1101	0.1602	0.2403	0.3204
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.1806	-0.3114	-0.3882	-0.4152	-0.3882	-0.3114	-0.1806	0.0000
	My+	0.0000	0.2090	0.3604	0.4493	0.4806	0.4493	0.3604	0.2090	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
226/227		0.000 m	0.169 m	0.337 m	0.506 m	0.675 m	0.843 m	1.012 m	1.180 m	1.349 m
		Envolvente (Acero laminado)								
	N-	-1.5893	-1.5890	-1.5887	-1.5884	-1.5881	-1.5878	-1.5875	-1.5872	-1.5869
	N+	1.0075	1.0076	1.0078	1.0080	1.0082	1.0083	1.0085	1.0087	1.0089
	Ty-	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005
	Ty+	0.0063	0.0063	0.0063	0.0063	0.0063	0.0063	0.0063	0.0063	0.0063
	Tz-	-0.6025	-0.6000	-0.5974	-0.5949	-0.5924	-0.5899	-0.5873	-0.5848	-0.5823
	Tz+	0.7989	0.8031	0.8074	0.8117	0.8159	0.8202	0.8245	0.8287	0.8330
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
	My-	-0.3432	-0.3631	-0.3835	-0.4073	-0.4862	-0.5847	-0.6839	-0.7838	-0.8844
	My+	0.4269	0.3143	0.2246	0.1725	0.1743	0.2703	0.3696	0.4684	0.5668
	Mz-	-0.0017	-0.0018	-0.0028	-0.0038	-0.0048	-0.0058	-0.0068	-0.0078	-0.0088
	Mz+	0.0017	0.0007	0.0006	0.0005	0.0005	0.0005	0.0004	0.0004	0.0004
226/275		0.000 m	0.750 m	1.500 m	2.250 m	3.000 m	3.750 m	4.500 m	5.250 m	6.000 m
		Envolvente (Acero Conformado)								
	N-	-0.0622	-0.0622	-0.0622	-0.0622	-0.0622	-0.0622	-0.0622	-0.0622	-0.0622
	N+	0.2044	0.2044	0.2044	0.2044	0.2044	0.2044	0.2044	0.2044	0.2044
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.3204	-0.2403	-0.1602	-0.1101	-0.0750	-0.0692	-0.1384	-0.2076	-0.2768
	Tz+	0.2768	0.2076	0.1384	0.0692	0.0000	0.1101	0.1602	0.2403	0.3204
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.1806	-0.3114	-0.3882	-0.4152	-0.3882	-0.3114	-0.1806	0.0000
	My+	0.0000	0.2090	0.3604	0.4493	0.4806	0.4493	0.3604	0.2090	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
227/228		0.000 m	0.169 m	0.337 m	0.506 m	0.675 m	0.843 m	1.012 m	1.180 m	1.349 m
		Envolvente (Acero laminado)								
	N-	-1.5483	-1.5480	-1.5477	-1.5474	-1.5471	-1.5468	-1.5465	-1.5462	-1.5459
	N+	0.9713	0.9714	0.9716	0.9718	0.9720	0.9722	0.9723	0.9725	0.9727
	Ty-	-0.0189	-0.0189	-0.0189	-0.0189	-0.0189	-0.0189	-0.0189	-0.0189	-0.0189
	Ty+	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012
	Tz-	-1.0771	-1.0745	-1.0720	-1.0695	-1.0670	-1.0644	-1.0619	-1.0594	-1.0569
	Tz+	1.4045	1.4088	1.4130	1.4173	1.4216	1.4258	1.4301	1.4343	1.4386
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
	My-	-0.8844	-1.0838	-1.3095	-1.5360	-1.7631	-1.9910	-2.2196	-2.4489	-2.6790
	My+	0.5668	0.7482	0.9292	1.1098	1.2900	1.4697	1.6490	1.8278	2.0063
	Mz-	-0.0088	-0.0056	-0.0025	-0.0002	-0.0004	-0.0006	-0.0008	-0.0010	-0.0012

## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

	Mz+	0.0004	0.0002	0.0001	0.0008	0.0039	0.0071	0.0103	0.0135	0.0167	
227/276		0.000 m	0.750 m	1.500 m	2.250 m	3.000 m	3.750 m	4.500 m	5.250 m	6.000 m	
		Envolvente (Acero Conformado)									
	N-	-0.0363	-0.0363	-0.0363	-0.0363	-0.0363	-0.0363	-0.0363	-0.0363	-0.0363	-0.0363
	N+	0.0433	0.0433	0.0433	0.0433	0.0433	0.0433	0.0433	0.0433	0.0433	0.0433
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.3204	-0.2403	-0.1602	-0.1101	-0.0750	-0.0692	-0.1384	-0.2076	-0.2768	-0.2768
	Tz+	0.2768	0.2076	0.1384	0.0692	0.0000	0.1101	0.1602	0.2403	0.3204	0.3204
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.1806	-0.3114	-0.3882	-0.4152	-0.3882	-0.3114	-0.1806	0.0000	0.0000
	My+	0.0000	0.2090	0.3604	0.4493	0.4806	0.4493	0.3604	0.2090	0.0000	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
228/230		0.000 m	0.011 m	0.023 m	0.034 m	0.045 m	0.056 m	0.068 m	0.079 m	0.090 m	
		Envolvente (Acero laminado)									
	N-	-1.5080	-1.5079	-1.5079	-1.5079	-1.5079	-1.5079	-1.5078	-1.5078	-1.5078	-1.5078
	N+	0.9337	0.9337	0.9337	0.9337	0.9337	0.9337	0.9337	0.9337	0.9337	0.9338
	Ty-	-0.0021	-0.0021	-0.0021	-0.0021	-0.0021	-0.0021	-0.0021	-0.0021	-0.0021	-0.0021
	Ty+	0.0204	0.0204	0.0204	0.0204	0.0204	0.0204	0.0204	0.0204	0.0204	0.0204
	Tz-	-1.5310	-1.5308	-1.5307	-1.5305	-1.5303	-1.5302	-1.5300	-1.5298	-1.5297	-1.5297
	Tz+	1.9988	1.9991	1.9994	1.9997	2.0000	2.0002	2.0005	2.0008	2.0011	2.0011
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
	My-	-2.6790	-2.7007	-2.7223	-2.7440	-2.7657	-2.7874	-2.8091	-2.8308	-2.8525	-2.8525
	My+	2.0063	2.0236	2.0408	2.0581	2.0754	2.0927	2.1100	2.1272	2.1445	2.1445
	Mz-	-0.0012	-0.0012	-0.0012	-0.0012	-0.0011	-0.0011	-0.0011	-0.0011	-0.0011	-0.0011
Mz+	0.0167	0.0165	0.0162	0.0160	0.0158	0.0156	0.0153	0.0151	0.0149	0.0149	
228/277		0.000 m	0.750 m	1.500 m	2.250 m	3.000 m	3.750 m	4.500 m	5.250 m	6.000 m	
		Envolvente (Acero Conformado)									
	N-	-0.2830	-0.2830	-0.2830	-0.2830	-0.2830	-0.2830	-0.2830	-0.2830	-0.2830	-0.2830
	N+	0.3594	0.3594	0.3594	0.3594	0.3594	0.3594	0.3594	0.3594	0.3594	0.3594
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.3204	-0.2403	-0.1602	-0.1101	-0.0750	-0.0692	-0.1384	-0.2076	-0.2768	-0.2768
	Tz+	0.2768	0.2076	0.1384	0.0692	0.0000	0.1101	0.1602	0.2403	0.3204	0.3204
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.1806	-0.3114	-0.3882	-0.4152	-0.3882	-0.3114	-0.1806	0.0000	0.0000
	My+	0.0000	0.2090	0.3604	0.4493	0.4806	0.4493	0.3604	0.2090	0.0000	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
229/230		0.000 m	0.791 m	1.583 m	2.374 m	3.165 m	3.956 m	4.748 m	5.539 m	6.330 m	
		Envolvente (Acero laminado)									
	N-	-7.3263	-7.2374	-7.1485	-7.0596	-6.9707	-6.8818	-6.7929	-6.7040	-6.6152	-6.6152
	N+	3.1689	3.2215	3.2742	3.3269	3.3796	3.4322	3.4849	3.5376	3.5903	3.5903
	Ty-	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001
	Ty+	0.0029	0.0029	0.0029	0.0029	0.0029	0.0029	0.0029	0.0029	0.0029	0.0029
	Tz-	-3.6666	-3.6666	-3.6666	-3.6666	-3.6666	-3.6666	-3.6666	-3.6666	-3.6666	-3.6666
	Tz+	1.7845	1.7845	1.7845	1.7845	1.7845	1.7845	1.7845	1.7845	1.7845	1.7845
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
	My-	-9.0015	-6.1001	-3.3907	-1.9550	-2.3109	-2.8324	-4.1005	-5.5126	-6.9247	-6.9247



## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas**

	My+	4.3720	2.9599	2.1501	2.1848	3.6592	5.8754	8.4068	11.3082	14.2096
	Mz-	-0.0008	-0.0007	-0.0007	-0.0006	-0.0006	-0.0005	-0.0004	-0.0004	-0.0003
	Mz+	0.0193	0.0171	0.0148	0.0125	0.0102	0.0079	0.0057	0.0034	0.0011
230/231		0.000 m	0.198 m	0.396 m	0.595 m	0.793 m	0.991 m	1.189 m	1.387 m	1.585 m
		Envolvente (Acero laminado)								
	N-	-4.5607	-4.5590	-4.5573	-4.5556	-4.5540	-4.5459	-4.5443	-4.5428	-4.5413
	N+	2.0946	2.0956	2.0966	2.0976	2.0986	2.0960	2.0969	2.0979	2.0987
	Ty-	-0.0020	-0.0020	-0.0020	-0.0020	-0.0020	-0.0020	-0.0020	-0.0020	-0.0020
	Ty+	0.0176	0.0176	0.0176	0.0176	0.0176	0.0176	0.0176	0.0176	0.0176
	Tz-	-4.1743	-4.1586	-4.1431	-4.1279	-4.1129	-4.1052	-4.0908	-4.0767	-4.0628
	Tz+	2.1177	2.1271	2.1363	2.1453	2.1541	2.1662	2.1748	2.1831	2.1913
	Mt-	-0.0009	-0.0009	-0.0009	-0.0009	-0.0009	-0.0009	-0.0009	-0.0009	-0.0009
	Mt+	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
	My-	-16.4561	-15.6297	-14.8064	-13.9862	-13.1690	-12.3534	-11.5406	-10.7307	-9.9236
	My+	7.8234	7.4024	6.9796	6.5550	6.1286	5.6999	5.2694	4.8373	4.4035
	Mz-	-0.0010	-0.0007	-0.0003	-0.0001	-0.0012	-0.0025	-0.0059	-0.0094	-0.0129
	Mz+	0.0150	0.0115	0.0080	0.0046	0.0017	0.0009	0.0013	0.0017	0.0021
231/232		0.000 m	0.209 m	0.419 m	0.628 m	0.838 m	1.047 m	1.257 m	1.466 m	1.676 m
		Envolvente (Acero laminado)								
	N-	-4.4730	-4.4715	-4.4700	-4.4640	-4.4626	-4.4870	-4.4858	-4.4847	-4.4835
	N+	2.0441	2.0450	2.0459	2.0444	2.0453	2.0594	2.0601	2.0608	2.0614
	Ty-	-0.0011	-0.0011	-0.0011	-0.0011	-0.0011	-0.0011	-0.0011	-0.0011	-0.0011
	Ty+	0.0054	0.0054	0.0054	0.0054	0.0054	0.0054	0.0054	0.0054	0.0054
	Tz-	-3.4875	-3.4731	-3.4591	-3.4511	-3.4376	-3.3934	-3.3833	-3.3731	-3.3630
	Tz+	1.6940	1.7025	1.7108	1.7217	1.7297	1.7205	1.7265	1.7325	1.7385
	Mt-	-0.0005	-0.0005	-0.0005	-0.0004	-0.0004	-0.0005	-0.0005	-0.0005	-0.0005
	Mt+	0.0005	0.0005	0.0005	0.0005	0.0005	0.0004	0.0004	0.0004	0.0004
	My-	-9.9260	-9.1966	-8.4701	-7.7455	-7.0236	-6.3084	-5.5980	-4.8896	-4.1833
	My+	4.4056	4.0496	3.6918	3.3319	2.9702	2.6088	2.2475	1.8849	1.5211
	Mz-	-0.0129	-0.0138	-0.0148	-0.0157	-0.0166	-0.0175	-0.0184	-0.0194	-0.0203
	Mz+	0.0021	0.0023	0.0026	0.0028	0.0031	0.0033	0.0035	0.0038	0.0040
231/280		0.000 m	0.750 m	1.500 m	2.250 m	3.000 m	3.750 m	4.500 m	5.250 m	6.000 m
		Envolvente (Acero Conformado)								
	N-	-0.0816	-0.0816	-0.0816	-0.0816	-0.0816	-0.0816	-0.0816	-0.0816	-0.0816
	N+	0.0545	0.0545	0.0545	0.0545	0.0545	0.0545	0.0545	0.0545	0.0545
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.3204	-0.2403	-0.1602	-0.1101	-0.0750	-0.0692	-0.1384	-0.2076	-0.2768
	Tz+	0.2768	0.2076	0.1384	0.0692	0.0000	0.1101	0.1602	0.2403	0.3204
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.1806	-0.3114	-0.3882	-0.4152	-0.3882	-0.3114	-0.1806	0.0000
	My+	0.0000	0.2090	0.3604	0.4493	0.4806	0.4493	0.3604	0.2090	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
232/233		0.000 m	0.209 m	0.419 m	0.628 m	0.838 m	1.047 m	1.257 m	1.466 m	1.676 m
		Envolvente (Acero laminado)								
	N-	-4.3020	-4.3012	-4.3005	-4.2998	-4.2991	-4.2984	-4.2977	-4.2970	-4.2963
	N+	1.9535	1.9539	1.9544	1.9548	1.9552	1.9556	1.9561	1.9565	1.9569
	Ty-	-0.0320	-0.0320	-0.0320	-0.0320	-0.0320	-0.0320	-0.0320	-0.0320	-0.0320
	Ty+	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065
	Tz-	-2.9223	-2.9122	-2.9020	-2.8918	-2.8817	-2.8715	-2.8613	-2.8512	-2.8410
	Tz+	1.3044	1.3104	1.3164	1.3224	1.3284	1.3345	1.3405	1.3465	1.3525
	Mt-	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE** Adrián Freijomil Aradas

	Mt+	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012
	My-	-4.1833	-3.5723	-2.9633	-2.3565	-1.7518	-1.3443	-1.2086	-1.1478	-1.3991
	My+	1.5210	1.2472	0.9721	0.6957	0.5347	0.6819	0.8279	0.9937	1.4689
	Mz-	-0.0203	-0.0136	-0.0070	-0.0004	-0.0015	-0.0029	-0.0042	-0.0056	-0.0070
	Mz+	0.0040	0.0026	0.0013	0.0014	0.0081	0.0148	0.0215	0.0282	0.0349
232/281		0.000 m	0.750 m	1.500 m	2.250 m	3.000 m	3.750 m	4.500 m	5.250 m	6.000 m
		Envolvente (Acero Conformado)								
	N-	-0.0442	-0.0442	-0.0442	-0.0442	-0.0442	-0.0442	-0.0442	-0.0442	-0.0442
	N+	0.0331	0.0331	0.0331	0.0331	0.0331	0.0331	0.0331	0.0331	0.0331
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.3204	-0.2403	-0.1602	-0.1101	-0.0750	-0.0692	-0.1384	-0.2076	-0.2768
	Tz+	0.2768	0.2076	0.1384	0.0692	0.0000	0.1101	0.1602	0.2403	0.3204
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.1806	-0.3114	-0.3882	-0.4152	-0.3882	-0.3114	-0.1806	0.0000
	My+	0.0000	0.2090	0.3604	0.4493	0.4806	0.4493	0.3604	0.2090	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
233/234		0.000 m	0.209 m	0.419 m	0.628 m	0.838 m	1.047 m	1.257 m	1.466 m	1.676 m
		Envolvente (Acero laminado)								
	N-	-4.2625	-4.2618	-4.2611	-4.2604	-4.2597	-4.2590	-4.2583	-4.2576	-4.2568
	N+	1.9270	1.9274	1.9278	1.9283	1.9287	1.9291	1.9295	1.9299	1.9304
	Ty-	-0.0054	-0.0054	-0.0054	-0.0054	-0.0054	-0.0054	-0.0054	-0.0054	-0.0054
	Ty+	0.0292	0.0292	0.0292	0.0292	0.0292	0.0292	0.0292	0.0292	0.0292
	Tz-	-2.1813	-2.1711	-2.1610	-2.1508	-2.1406	-2.1305	-2.1203	-2.1101	-2.1000
	Tz+	0.8120	0.8180	0.8241	0.8301	0.8361	0.8421	0.8482	0.8542	0.8602
	Mt-	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003
	Mt+	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012
	My-	-1.3991	-1.5431	-1.6884	-1.8350	-1.9829	-2.1320	-2.2823	-2.4339	-2.5868
	My+	1.4689	1.8312	2.1914	2.5495	2.9446	3.3767	3.8066	4.2345	4.6602
	Mz-	-0.0070	-0.0058	-0.0047	-0.0035	-0.0024	-0.0013	-0.0019	-0.0079	-0.0140
	Mz+	0.0349	0.0288	0.0227	0.0166	0.0108	0.0052	0.0003	0.0010	0.0021
233/282		0.000 m	0.750 m	1.500 m	2.250 m	3.000 m	3.750 m	4.500 m	5.250 m	6.000 m
		Envolvente (Acero Conformado)								
	N-	-0.2734	-0.2734	-0.2734	-0.2734	-0.2734	-0.2734	-0.2734	-0.2734	-0.2734
	N+	0.1201	0.1201	0.1201	0.1201	0.1201	0.1201	0.1201	0.1201	0.1201
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.3204	-0.2403	-0.1602	-0.1101	-0.0750	-0.0692	-0.1384	-0.2076	-0.2768
	Tz+	0.2768	0.2076	0.1384	0.0692	0.0000	0.1101	0.1602	0.2403	0.3204
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.1806	-0.3114	-0.3882	-0.4152	-0.3882	-0.3114	-0.1806	0.0000
	My+	0.0000	0.2090	0.3604	0.4493	0.4806	0.4493	0.3604	0.2090	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
234/235		0.000 m	0.209 m	0.419 m	0.628 m	0.838 m	1.047 m	1.257 m	1.466 m	1.676 m
		Envolvente (Acero laminado)								
	N-	-4.2268	-4.2261	-4.2254	-4.2247	-4.2240	-4.2233	-4.2225	-4.2218	-4.2211
	N+	1.9018	1.9022	1.9027	1.9031	1.9035	1.9039	1.9044	1.9048	1.9052
	Ty-	-0.0084	-0.0084	-0.0084	-0.0084	-0.0084	-0.0084	-0.0084	-0.0084	-0.0084
	Ty+	0.0163	0.0163	0.0163	0.0163	0.0163	0.0163	0.0163	0.0163	0.0163
	Tz-	-1.4124	-1.4022	-1.3921	-1.3819	-1.3717	-1.3616	-1.3514	-1.3412	-1.3311

## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

	Tz+	0.3113	0.3173	0.3233	0.3293	0.3354	0.3414	0.3474	0.3534	0.3595	
	Mt-	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	
	Mt+	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	
	My-	-2.5868	-2.6289	-2.6723	-2.7169	-2.7628	-2.8099	-2.8583	-2.9080	-2.9589	
	My+	4.6602	4.9413	5.2204	5.4973	5.7721	6.0447	6.3152	6.5836	6.8499	
	Mz-	-0.0140	-0.0147	-0.0180	-0.0213	-0.0247	-0.0280	-0.0314	-0.0347	-0.0380	
	Mz+	0.0021	0.0033	0.0045	0.0057	0.0069	0.0080	0.0092	0.0104	0.0116	
234/283		0.000 m	0.750 m	1.500 m	2.250 m	3.000 m	3.750 m	4.500 m	5.250 m	6.000 m	
		Envolvente (Acero Conformado)									
		N-	-0.0403	-0.0403	-0.0403	-0.0403	-0.0403	-0.0403	-0.0403	-0.0403	-0.0403
		N+	0.0357	0.0357	0.0357	0.0357	0.0357	0.0357	0.0357	0.0357	0.0357
		Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
		Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
		Tz-	-0.3204	-0.2403	-0.1602	-0.1101	-0.0750	-0.0692	-0.1384	-0.2076	-0.2768
		Tz+	0.2768	0.2076	0.1384	0.0692	0.0000	0.1101	0.1602	0.2403	0.3204
		Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
		Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
		My-	0.0000	-0.1806	-0.3114	-0.3882	-0.4152	-0.3882	-0.3114	-0.1806	0.0000
		My+	0.0000	0.2090	0.3604	0.4493	0.4806	0.4493	0.3604	0.2090	0.0000
		Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
		Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
235/236		0.000 m	0.209 m	0.419 m	0.628 m	0.838 m	1.047 m	1.257 m	1.466 m	1.676 m	
		Envolvente (Acero laminado)									
		N-	-4.1940	-4.1933	-4.1925	-4.1918	-4.1911	-4.1904	-4.1897	-4.1890	-4.1883
		N+	1.8773	1.8777	1.8781	1.8786	1.8790	1.8794	1.8798	1.8802	1.8807
		Ty-	-0.0322	-0.0322	-0.0322	-0.0322	-0.0322	-0.0322	-0.0322	-0.0322	-0.0322
		Ty+	0.0100	0.0100	0.0100	0.0100	0.0100	0.0100	0.0100	0.0100	0.0100
		Tz-	-0.6931	-0.6829	-0.6728	-0.6626	-0.6524	-0.6423	-0.6321	-0.6219	-0.6118
		Tz+	-0.0813	-0.0753	-0.0692	-0.0632	-0.0572	-0.0512	-0.0452	-0.0391	-0.0331
		Mt-	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003
		Mt+	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012
		My-	-2.9589	-2.8972	-2.8368	-2.7777	-2.7198	-2.6632	-2.6078	-2.5538	-2.5009
		My+	6.8499	6.9668	7.0817	7.1944	7.3049	7.4134	7.5197	7.6239	7.7259
		Mz-	-0.0380	-0.0313	-0.0245	-0.0178	-0.0114	-0.0051	-0.0013	-0.0032	-0.0053
		Mz+	0.0116	0.0095	0.0074	0.0053	0.0032	0.0011	0.0027	0.0092	0.0160
235/284		0.000 m	0.750 m	1.500 m	2.250 m	3.000 m	3.750 m	4.500 m	5.250 m	6.000 m	
		Envolvente (Acero Conformado)									
		N-	-0.0233	-0.0233	-0.0233	-0.0233	-0.0233	-0.0233	-0.0233	-0.0233	-0.0233
		N+	0.0492	0.0492	0.0492	0.0492	0.0492	0.0492	0.0492	0.0492	0.0492
		Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
		Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
		Tz-	-0.3204	-0.2403	-0.1602	-0.1101	-0.0750	-0.0692	-0.1384	-0.2076	-0.2768
		Tz+	0.2768	0.2076	0.1384	0.0692	0.0000	0.1101	0.1602	0.2403	0.3204
		Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
		Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
		My-	0.0000	-0.1806	-0.3114	-0.3882	-0.4152	-0.3882	-0.3114	-0.1806	0.0000
		My+	0.0000	0.2090	0.3604	0.4493	0.4806	0.4493	0.3604	0.2090	0.0000
		Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
		Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
236/237		0.000 m	0.007 m	0.015 m	0.022 m	0.030 m	0.037 m	0.045 m	0.052 m	0.060 m	
		Envolvente (Acero laminado)									
		N-	-4.1609	-4.1609	-4.1608	-4.1608	-4.1608	-4.1608	-4.1607	-4.1607	-4.1607
		N+	1.8986	1.8986	1.8987	1.8987	1.8987	1.8987	1.8987	1.8987	1.8987
		Ty-	-0.0589	-0.0589	-0.0589	-0.0589	-0.0589	-0.0589	-0.0589	-0.0589	-0.0589

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE** Adrián Freijomil Aradas

	Ty+	0.0021	0.0021	0.0021	0.0021	0.0021	0.0021	0.0021	0.0021	0.0021
	Tz-	-0.1694	-0.1692	-0.1690	-0.1688	-0.1686	-0.1684	-0.1682	-0.1679	-0.1677
	Tz+	0.3321	0.3325	0.3329	0.3332	0.3336	0.3339	0.3343	0.3347	0.3350
	Mt-	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003
	Mt+	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012
	My-	-2.5009	-2.4997	-2.4984	-2.4971	-2.4959	-2.4946	-2.4933	-2.4921	-2.4908
	My+	7.7259	7.7238	7.7217	7.7196	7.7175	7.7154	7.7132	7.7111	7.7090
	Mz-	-0.0053	-0.0052	-0.0051	-0.0051	-0.0050	-0.0050	-0.0049	-0.0048	-0.0048
	Mz+	0.0160	0.0162	0.0164	0.0166	0.0168	0.0170	0.0172	0.0174	0.0176
236/285		0.000 m	0.750 m	1.500 m	2.250 m	3.000 m	3.750 m	4.500 m	5.250 m	6.000 m
		Envolvente (Acero Conformado)								
	N-	-2.6463	-2.6463	-2.6463	-2.6463	-2.6463	-2.6463	-2.6463	-2.6463	-2.6463
	N+	1.1287	1.1287	1.1287	1.1287	1.1287	1.1287	1.1287	1.1287	1.1287
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.3474	-0.2605	-0.1737	-0.1168	-0.0750	0.0208	0.0416	0.0624	0.0832
	Tz+	-0.0832	-0.0624	-0.0416	-0.0208	0.0000	0.1168	0.1737	0.2605	0.3474
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	0.0543	0.0936	0.1167	0.1248	0.1167	0.0936	0.0543	0.0000
	My+	0.0000	0.2267	0.3908	0.4872	0.5211	0.4872	0.3908	0.2267	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
238/237		0.000 m	0.007 m	0.015 m	0.022 m	0.030 m	0.037 m	0.045 m	0.052 m	0.060 m
		Envolvente (Acero laminado)								
	N-	-4.1598	-4.1598	-4.1598	-4.1598	-4.1597	-4.1597	-4.1597	-4.1597	-4.1596
	N+	1.8883	1.8883	1.8883	1.8884	1.8884	1.8884	1.8884	1.8884	1.8884
	Ty-	-0.0589	-0.0589	-0.0589	-0.0589	-0.0589	-0.0589	-0.0589	-0.0589	-0.0589
	Ty+	0.0021	0.0021	0.0021	0.0021	0.0021	0.0021	0.0021	0.0021	0.0021
	Tz-	-0.2079	-0.2077	-0.2075	-0.2073	-0.2070	-0.2068	-0.2066	-0.2064	-0.2062
	Tz+	0.3776	0.3779	0.3783	0.3787	0.3790	0.3794	0.3798	0.3801	0.3805
	Mt-	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012
	Mt+	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
	My-	-2.4951	-2.4946	-2.4940	-2.4935	-2.4930	-2.4924	-2.4919	-2.4913	-2.4908
	My+	7.7268	7.7246	7.7224	7.7202	7.7179	7.7157	7.7135	7.7112	7.7090
	Mz-	-0.0192	-0.0190	-0.0188	-0.0186	-0.0184	-0.0182	-0.0180	-0.0178	-0.0176
	Mz+	0.0043	0.0043	0.0044	0.0045	0.0045	0.0046	0.0047	0.0047	0.0048
239/238		0.000 m	0.197 m	0.393 m	0.590 m	0.786 m	0.983 m	1.180 m	1.376 m	1.573 m
		Envolvente (Acero laminado)								
	N-	-4.2466	-4.2459	-4.2453	-4.2446	-4.2439	-4.2433	-4.2426	-4.2419	-4.2413
	N+	1.8924	1.8928	1.8932	1.8936	1.8940	1.8944	1.8948	1.8952	1.8956
	Ty-	-0.0098	-0.0098	-0.0098	-0.0098	-0.0098	-0.0098	-0.0098	-0.0098	-0.0098
	Ty+	0.0360	0.0360	0.0360	0.0360	0.0360	0.0360	0.0360	0.0360	0.0360
	Tz-	-0.5688	-0.5593	-0.5497	-0.5402	-0.5307	-0.5211	-0.5116	-0.5020	-0.4925
	Tz+	-0.1228	-0.1172	-0.1115	-0.1059	-0.1002	-0.0946	-0.0889	-0.0832	-0.0776
	Mt-	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012
	Mt+	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
	My-	-2.8919	-2.8264	-2.7620	-2.6987	-2.6366	-2.5905	-2.5576	-2.5258	-2.4951
	My+	6.9465	7.0428	7.1461	7.2476	7.3472	7.4449	7.5408	7.6347	7.7268
	Mz-	-0.0111	-0.0091	-0.0072	-0.0053	-0.0038	-0.0035	-0.0054	-0.0121	-0.0192
	Mz+	0.0374	0.0303	0.0233	0.0162	0.0091	0.0020	0.0004	0.0024	0.0043
238/287		0.000 m	0.750 m	1.500 m	2.250 m	3.000 m	3.750 m	4.500 m	5.250 m	6.000 m
		Envolvente (Acero Conformado)								
	N-	-2.6672	-2.6672	-2.6672	-2.6672	-2.6672	-2.6672	-2.6672	-2.6672	-2.6672

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas**

	N+	1.1231	1.1231	1.1231	1.1231	1.1231	1.1231	1.1231	1.1231	1.1231
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.3474	-0.2605	-0.1737	-0.1168	-0.0750	0.0208	0.0416	0.0624	0.0832
	Tz+	-0.0832	-0.0624	-0.0416	-0.0208	0.0000	0.1168	0.1737	0.2605	0.3474
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	0.0543	0.0936	0.1167	0.1248	0.1167	0.0936	0.0543	0.0000
	My+	0.0000	0.2267	0.3908	0.4872	0.5211	0.4872	0.3908	0.2267	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
240/239		0.000 m	0.197 m	0.393 m	0.590 m	0.786 m	0.983 m	1.180 m	1.376 m	1.573 m
	Envolvente (Acero laminado)									
	N-	-4.3284	-4.3277	-4.3270	-4.3264	-4.3257	-4.3250	-4.3244	-4.3237	-4.3230
	N+	1.9395	1.9398	1.9402	1.9406	1.9410	1.9414	1.9418	1.9422	1.9426
	Ty-	-0.0115	-0.0115	-0.0115	-0.0115	-0.0115	-0.0115	-0.0115	-0.0115	-0.0115
	Ty+	0.0047	0.0047	0.0047	0.0047	0.0047	0.0047	0.0047	0.0047	0.0047
	Tz-	-1.3284	-1.3189	-1.3093	-1.2998	-1.2903	-1.2807	-1.2712	-1.2616	-1.2521
	Tz+	0.3157	0.3213	0.3270	0.3326	0.3383	0.3439	0.3496	0.3552	0.3609
	Mt-	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012
	Mt+	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
	My-	-2.5907	-2.6244	-2.6593	-2.6953	-2.7324	-2.7706	-2.8099	-2.8503	-2.8919
	My+	5.1391	5.3716	5.6022	5.8310	6.0578	6.2828	6.5059	6.7271	6.9465
	Mz-	-0.0047	-0.0055	-0.0063	-0.0071	-0.0079	-0.0087	-0.0095	-0.0103	-0.0111
	Mz+	0.0286	0.0297	0.0308	0.0319	0.0330	0.0341	0.0352	0.0363	0.0374
239/288		0.000 m	0.750 m	1.500 m	2.250 m	3.000 m	3.750 m	4.500 m	5.250 m	6.000 m
	Envolvente (Acero Conformado)									
	N-	-0.1030	-0.1030	-0.1030	-0.1030	-0.1030	-0.1030	-0.1030	-0.1030	-0.1030
	N+	0.0464	0.0464	0.0464	0.0464	0.0464	0.0464	0.0464	0.0464	0.0464
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.3204	-0.2403	-0.1602	-0.1101	-0.0750	-0.0692	-0.1384	-0.2076	-0.2768
	Tz+	0.2768	0.2076	0.1384	0.0692	0.0000	0.1101	0.1602	0.2403	0.3204
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.1806	-0.3114	-0.3882	-0.4152	-0.3882	-0.3114	-0.1806	0.0000
	My+	0.0000	0.2090	0.3604	0.4493	0.4806	0.4493	0.3604	0.2090	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
241/240		0.000 m	0.197 m	0.393 m	0.590 m	0.786 m	0.983 m	1.180 m	1.376 m	1.573 m
	Envolvente (Acero laminado)									
	N-	-4.4065	-4.4058	-4.4052	-4.4045	-4.4038	-4.4032	-4.4025	-4.4018	-4.4012
	N+	1.9860	1.9864	1.9868	1.9872	1.9876	1.9880	1.9884	1.9888	1.9892
	Ty-	-0.0532	-0.0532	-0.0532	-0.0532	-0.0532	-0.0532	-0.0532	-0.0532	-0.0532
	Ty+	0.0093	0.0093	0.0093	0.0093	0.0093	0.0093	0.0093	0.0093	0.0093
	Tz-	-2.1078	-2.0983	-2.0887	-2.0792	-2.0697	-2.0601	-2.0506	-2.0410	-2.0315
	Tz+	0.8374	0.8431	0.8487	0.8544	0.8600	0.8657	0.8713	0.8770	0.8826
	Mt-	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012
	Mt+	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
	My-	-1.4922	-1.6256	-1.7601	-1.8958	-2.0325	-2.1704	-2.3094	-2.4495	-2.5907
	My+	2.1232	2.5067	2.8884	3.2682	3.6462	4.0222	4.3964	4.7687	5.1391
	Mz-	-0.0551	-0.0446	-0.0342	-0.0237	-0.0132	-0.0028	-0.0010	-0.0029	-0.0047
	Mz+	0.0100	0.0081	0.0063	0.0045	0.0026	0.0008	0.0077	0.0182	0.0286
240/289		0.000 m	0.750 m	1.500 m	2.250 m	3.000 m	3.750 m	4.500 m	5.250 m	6.000 m

## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

		Envolvente (Acero Conformado)								
	N-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	N+	0.0255	0.0255	0.0255	0.0255	0.0255	0.0255	0.0255	0.0255	0.0255
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.3204	-0.2403	-0.1602	-0.1101	-0.0750	-0.0692	-0.1384	-0.2076	-0.2768
	Tz+	0.2768	0.2076	0.1384	0.0692	0.0000	0.1101	0.1602	0.2403	0.3204
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.1806	-0.3114	-0.3882	-0.4152	-0.3882	-0.3114	-0.1806	0.0000
	My+	0.0000	0.2090	0.3604	0.4493	0.4806	0.4493	0.3604	0.2090	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
242/241		0.000 m	0.197 m	0.393 m	0.590 m	0.786 m	0.983 m	1.180 m	1.376 m	1.573 m
		Envolvente (Acero laminado)								
	N-	-4.4780	-4.4773	-4.4767	-4.4760	-4.4753	-4.4747	-4.4740	-4.4733	-4.4727
	N+	2.0311	2.0315	2.0319	2.0323	2.0327	2.0331	2.0335	2.0339	2.0343
	Ty-	-0.0085	-0.0085	-0.0085	-0.0085	-0.0085	-0.0085	-0.0085	-0.0085	-0.0085
	Ty+	0.0466	0.0466	0.0466	0.0466	0.0466	0.0466	0.0466	0.0466	0.0466
	Tz-	-2.8660	-2.8565	-2.8470	-2.8374	-2.8279	-2.8183	-2.8088	-2.7993	-2.7897
	Tz+	1.3588	1.3645	1.3701	1.3758	1.3814	1.3871	1.3928	1.3984	1.4041
	Mt-	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012
	Mt+	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
	My-	-2.9616	-2.4569	-1.9541	-1.4532	-0.9784	-0.7748	-1.0128	-1.2519	-1.4922
	My+	1.2856	1.0179	0.7491	0.4792	0.2270	0.5663	1.0871	1.6061	2.1232
	Mz-	-0.0034	-0.0018	-0.0005	-0.0093	-0.0184	-0.0276	-0.0368	-0.0459	-0.0551
	Mz+	0.0182	0.0091	0.0002	0.0016	0.0033	0.0049	0.0066	0.0083	0.0100
241/290		0.000 m	0.750 m	1.500 m	2.250 m	3.000 m	3.750 m	4.500 m	5.250 m	6.000 m
		Envolvente (Acero Conformado)								
	N-	-0.0946	-0.0946	-0.0946	-0.0946	-0.0946	-0.0946	-0.0946	-0.0946	-0.0946
	N+	0.3236	0.3236	0.3236	0.3236	0.3236	0.3236	0.3236	0.3236	0.3236
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.3204	-0.2403	-0.1602	-0.1101	-0.0750	-0.0692	-0.1384	-0.2076	-0.2768
	Tz+	0.2768	0.2076	0.1384	0.0692	0.0000	0.1101	0.1602	0.2403	0.3204
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.1806	-0.3114	-0.3882	-0.4152	-0.3882	-0.3114	-0.1806	0.0000
	My+	0.0000	0.2090	0.3604	0.4493	0.4806	0.4493	0.3604	0.2090	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
243/242		0.000 m	0.197 m	0.393 m	0.590 m	0.786 m	0.983 m	1.180 m	1.376 m	1.573 m
		Envolvente (Acero laminado)								
	N-	-4.6648	-4.6634	-5.1360	-4.5386	-4.5379	-4.5372	-4.5366	-4.5359	-4.5352
	N+	2.1287	2.1295	2.3537	2.0729	2.0733	2.0737	2.0741	2.0744	2.0748
	Ty-	-0.0029	-0.0029	-0.0029	-0.0029	-0.0029	-0.0029	-0.0029	-0.0029	-0.0029
	Ty+	0.0095	0.0095	0.0095	0.0095	0.0095	0.0095	0.0095	0.0095	0.0095
	Tz-	-3.4295	-3.4168	-2.6374	-3.5583	-3.5487	-3.5392	-3.5297	-3.5201	-3.5106
	Tz+	1.7895	1.7970	1.4767	1.8772	1.8829	1.8885	1.8942	1.8998	1.9055
	Mt-	-0.0005	-0.0005	-0.0010	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012
	Mt+	0.0002	0.0002	0.0044	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
	My-	-8.1653	-7.4919	-6.9583	-6.2691	-5.5704	-4.8733	-4.2132	-3.5760	-2.9616
	My+	4.1585	3.8057	3.5088	3.1445	2.7749	2.4044	2.0323	1.6594	1.2856
	Mz-	-0.0080	-0.0075	-0.0068	-0.0063	-0.0057	-0.0052	-0.0046	-0.0040	-0.0034

## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

	Mz+	0.0332	0.0314	0.0292	0.0276	0.0257	0.0238	0.0220	0.0201	0.0182	
242/291		0.000 m	0.750 m	1.500 m	2.250 m	3.000 m	3.750 m	4.500 m	5.250 m	6.000 m	
		Envolvente (Acero Conformado)									
	N-	-0.0394	-0.0394	-0.0394	-0.0394	-0.0394	-0.0394	-0.0394	-0.0394	-0.0394	-0.0394
	N+	0.0646	0.0646	0.0646	0.0646	0.0646	0.0646	0.0646	0.0646	0.0646	0.0646
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.3204	-0.2403	-0.1602	-0.1101	-0.0750	-0.0692	-0.1384	-0.2076	-0.2768	-0.2768
	Tz+	0.2768	0.2076	0.1384	0.0692	0.0000	0.1101	0.1602	0.2403	0.3204	0.3204
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.1806	-0.3114	-0.3882	-0.4152	-0.3882	-0.3114	-0.1806	0.0000	0.0000
	My+	0.0000	0.2090	0.3604	0.4493	0.4806	0.4493	0.3604	0.2090	0.0000	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
244/243		0.000 m	0.197 m	0.393 m	0.590 m	0.786 m	0.983 m	1.180 m	1.376 m	1.573 m	
		Envolvente (Acero laminado)									
	N-	-4.7579	-4.7562	-4.7547	-4.7531	-4.7516	-4.7425	-4.7410	-4.7396	-4.7382	-4.7382
	N+	2.1867	2.1877	2.1886	2.1896	2.1905	2.1875	2.1884	2.1892	2.1900	2.1900
	Ty-	-0.0281	-0.0281	-0.0281	-0.0281	-0.0281	-0.0281	-0.0281	-0.0281	-0.0281	-0.0281
	Ty+	0.0213	0.0213	0.0213	0.0213	0.0213	0.0213	0.0213	0.0213	0.0213	0.0213
	Tz-	-4.1257	-4.1108	-4.0961	-4.0817	-4.0676	-4.0626	-4.0490	-4.0357	-4.0227	-4.0227
	Tz+	2.2328	2.2416	2.2503	2.2588	2.2672	2.2792	2.2872	2.2951	2.3028	2.3028
	Mt-	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010
	Mt+	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013
	My-	-14.5731	-13.7629	-12.9556	-12.1512	-11.3495	-10.5489	-9.7510	-8.9558	-8.1632	-8.1632
	My+	7.7273	7.2871	6.8453	6.4017	5.9565	5.5089	5.0597	4.6090	4.1567	4.1567
	Mz-	-0.0150	-0.0109	-0.0068	-0.0028	-0.0010	-0.0027	-0.0045	-0.0063	-0.0080	-0.0080
Mz+	0.0359	0.0317	0.0275	0.0233	0.0199	0.0180	0.0221	0.0277	0.0332	0.0332	
243/292		0.000 m	0.750 m	1.500 m	2.250 m	3.000 m	3.750 m	4.500 m	5.250 m	6.000 m	
		Envolvente (Acero Conformado)									
	N-	-0.0352	-0.0352	-0.0352	-0.0352	-0.0352	-0.0352	-0.0352	-0.0352	-0.0352	-0.0352
	N+	0.0167	0.0167	0.0167	0.0167	0.0167	0.0167	0.0167	0.0167	0.0167	0.0167
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.3204	-0.2403	-0.1602	-0.1101	-0.0750	-0.0692	-0.1384	-0.2076	-0.2768	-0.2768
	Tz+	0.2768	0.2076	0.1384	0.0692	0.0000	0.1101	0.1602	0.2403	0.3204	0.3204
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.1806	-0.3114	-0.3882	-0.4152	-0.3882	-0.3114	-0.1806	0.0000	0.0000
	My+	0.0000	0.2090	0.3604	0.4493	0.4806	0.4493	0.3604	0.2090	0.0000	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
247/244		0.000 m	0.066 m	0.132 m	0.198 m	0.264 m	0.330 m	0.396 m	0.462 m	0.528 m	
		Envolvente (Acero laminado)									
	N-	-4.8684	-4.8678	-4.8672	-4.8666	-4.8660	-4.8632	-4.8626	-4.8621	-4.8615	-4.8615
	N+	2.2964	2.2968	2.2971	2.2975	2.2978	2.2968	2.2971	2.2975	2.2978	2.2978
	Ty-	-0.0688	-0.0688	-0.0688	-0.0688	-0.0688	-0.0688	-0.0688	-0.0688	-0.0688	-0.0688
	Ty+	0.0282	0.0282	0.0282	0.0282	0.0282	0.0282	0.0282	0.0282	0.0282	0.0282
	Tz-	-4.9471	-4.9419	-4.9366	-4.9314	-4.9262	-4.9233	-4.9182	-4.9131	-4.9080	-4.9080
	Tz+	2.8965	2.8996	2.9027	2.9058	2.9089	2.9130	2.9160	2.9191	2.9221	2.9221
	Mt-	-0.0044	-0.0044	-0.0044	-0.0044	-0.0044	-0.0044	-0.0044	-0.0044	-0.0044	-0.0044
	Mt+	0.0086	0.0086	0.0086	0.0086	0.0086	0.0086	0.0086	0.0086	0.0086	0.0086
	My-	-17.1693	-16.8428	-16.5166	-16.1907	-15.8652	-15.5399	-15.2149	-14.8902	-14.5659	-14.5659

## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

	My+	9.1105	8.9381	8.7654	8.5925	8.4195	8.2461	8.0726	7.8988	7.7249
	Mz-	-0.0008	-0.0018	-0.0036	-0.0055	-0.0073	-0.0092	-0.0111	-0.0129	-0.0148
	Mz+	0.0001	0.0037	0.0083	0.0128	0.0174	0.0219	0.0264	0.0310	0.0355
244/293		0.000 m	0.750 m	1.500 m	2.250 m	3.000 m	3.750 m	4.500 m	5.250 m	6.000 m
		Envolvente (Acero laminado)								
	N-	-1.2068	-1.2068	-1.2068	-1.2068	-1.2068	-1.2068	-1.2068	-1.2068	-1.2068
	N+	2.2537	2.2537	2.2537	2.2537	2.2537	2.2537	2.2537	2.2537	2.2537
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.4320	-0.3240	-0.2160	-0.1380	-0.0750	-0.1314	-0.2628	-0.3942	-0.5256
	Tz+	0.5256	0.3942	0.2628	0.1314	0.0000	0.1380	0.2160	0.3240	0.4320
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.3430	-0.5913	-0.7372	-0.7885	-0.7372	-0.5913	-0.3430	0.0000
	My+	0.0000	0.2819	0.4860	0.6059	0.6481	0.6059	0.4860	0.2819	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
245/246		0.000 m	0.603 m	1.205 m	1.808 m	2.410 m	3.013 m	3.615 m	4.218 m	4.820 m
		Envolvente (Acero laminado)								
	N-	-6.8071	-6.7394	-6.6717	-6.6040	-6.5364	-6.4687	-6.4010	-6.3333	-6.2656
	N+	2.3139	2.3541	2.3942	2.4343	2.4744	2.5145	2.5546	2.5947	2.6348
	Ty-	-0.0116	-0.0116	-0.0116	-0.0116	-0.0116	-0.0116	-0.0116	-0.0116	-0.0116
	Ty+	0.0444	0.0444	0.0444	0.0444	0.0444	0.0444	0.0444	0.0444	0.0444
	Tz-	-5.1993	-4.8378	-4.4763	-4.1148	-3.7533	-3.3918	-3.0303	-2.6688	-2.3073
	Tz+	6.1920	5.9660	5.7401	5.5142	5.2882	5.0623	4.9068	4.7713	4.6357
	Mt-	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006
	Mt+	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
	My-	-11.5167	-8.4974	-5.6872	-3.1035	-0.9170	-2.8086	-5.4410	-8.3549	-11.1903
	My+	15.1705	11.5106	7.9814	4.5938	1.5250	1.5317	3.3583	5.0708	6.5742
	Mz-	-0.0126	-0.0056	-0.0025	-0.0049	-0.0074	-0.0235	-0.0503	-0.0771	-0.1039
	Mz+	0.1103	0.0836	0.0580	0.0349	0.0305	0.0307	0.0330	0.0368	0.0434
246/247		0.000 m	0.189 m	0.378 m	0.566 m	0.755 m	0.944 m	1.133 m	1.322 m	1.510 m
		Envolvente (Acero laminado)								
	N-	-6.3091	-6.2879	-6.2667	-6.2455	-6.2243	-6.2031	-6.1819	-6.1607	-6.1395
	N+	2.6536	2.6662	2.6788	2.6913	2.7039	2.7165	2.7290	2.7416	2.7542
	Ty-	-0.0688	-0.0688	-0.0688	-0.0688	-0.0688	-0.0688	-0.0688	-0.0688	-0.0688
	Ty+	0.0282	0.0282	0.0282	0.0282	0.0282	0.0282	0.0282	0.0282	0.0282
	Tz-	-1.9648	-1.9648	-1.9648	-1.9648	-1.9648	-1.9648	-1.9648	-1.9648	-1.9648
	Tz+	4.3773	4.3705	4.3637	4.3569	4.3501	4.3433	4.3365	4.3297	4.3229
	Mt-	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006
	Mt+	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
	My-	-11.1904	-12.0161	-12.8406	-13.6638	-14.4857	-15.3063	-16.1257	-16.9437	-17.7605
	My+	6.5742	6.9295	7.2827	7.6337	7.9827	8.3294	8.6741	9.0166	9.3570
	Mz-	-0.1039	-0.0909	-0.0779	-0.0649	-0.0519	-0.0389	-0.0259	-0.0129	-0.0003
	Mz+	0.0434	0.0381	0.0327	0.0274	0.0221	0.0168	0.0115	0.0062	0.0012
246/251		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-0.9485	-0.9485	-0.9485	-0.9485	-0.9485	-0.9485	-0.9485	-0.9485	-0.9485
	N+	1.3101	1.3101	1.3101	1.3101	1.3101	1.3101	1.3101	1.3101	1.3101
	Ty-	-0.0867	-0.0855	-0.0842	-0.0829	-0.0817	-0.0804	-0.0792	-0.0779	-0.0766
	Ty+	0.0616	0.0623	0.0631	0.0638	0.0646	0.0653	0.0661	0.0668	0.0676
	Tz-	-0.2312	-0.2312	-0.2312	-0.2312	-0.2312	-0.2312	-0.2312	-0.2312	-0.2312
	Tz+	0.2260	0.2260	0.2260	0.2260	0.2260	0.2260	0.2260	0.2260	0.2260
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000



## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas**

	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.1749	-0.1463	-0.1177	-0.0891	-0.0605	-0.0319	-0.0033	-0.0155	-0.0437
	My+	0.1851	0.1571	0.1292	0.1012	0.0732	0.0453	0.0173	0.0301	0.0590
	Mz-	-0.0686	-0.0578	-0.0472	-0.0368	-0.0265	-0.0163	-0.0064	-0.0087	-0.0167
	Mz+	0.0486	0.0408	0.0330	0.0251	0.0170	0.0089	0.0007	0.0046	0.0138
247/248		0.000 m	0.185 m	0.370 m	0.556 m	0.741 m	0.926 m	1.111 m	1.296 m	1.481 m
		Envolvente (Acero Conformado)								
	N-	-0.7485	-0.7475	-0.7465	-0.7455	-0.7445	-0.7435	-0.7425	-0.7415	-0.7404
	N+	-0.2235	-0.2229	-0.2223	-0.2218	-0.2212	-0.2206	-0.2200	-0.2194	-0.2188
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.0444	-0.0333	-0.0222	-0.0111	0.0000	-0.0111	-0.0222	-0.0333	-0.0444
	Tz+	0.0444	0.0333	0.0222	0.0111	0.0000	0.0111	0.0222	0.0333	0.0444
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0072	-0.0123	-0.0154	-0.0165	-0.0154	-0.0123	-0.0072	0.0000
	My+	0.0000	0.0072	0.0123	0.0154	0.0165	0.0154	0.0123	0.0072	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
248/252		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367
	N+	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172
	Ty-	-0.3714	-0.3612	-0.3510	-0.3408	-0.3306	-0.3204	-0.3102	-0.3000	-0.2898
	Ty+	-0.1086	-0.1026	-0.0965	-0.0905	-0.0844	-0.0784	-0.0723	-0.0663	-0.0602
	Tz-	-0.2263	-0.2263	-0.2263	-0.2263	-0.2263	-0.2263	-0.2263	-0.2263	-0.2263
	Tz+	0.2266	0.2266	0.2266	0.2266	0.2266	0.2266	0.2266	0.2266	0.2266
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-8.8365	-8.8648	-8.8932	-8.9215	-8.9498	-8.9781	-9.0065	-9.0348	-9.0631
	My+	8.8431	8.8714	8.8997	8.9279	8.9562	8.9845	9.0128	9.0411	9.0694
	Mz-	-0.3981	-0.3523	-0.3078	-0.2646	-0.2226	-0.1819	-0.1425	-0.1043	-0.0675
	Mz+	-0.1061	-0.0929	-0.0805	-0.0688	-0.0579	-0.0477	-0.0383	-0.0296	-0.0217
249/250		0.000 m	0.374 m	0.748 m	1.122 m	1.496 m	1.870 m	2.244 m	2.618 m	2.992 m
		Envolvente (Acero Conformado)								
	N-	-0.0294	-0.0274	-0.0254	-0.0235	-0.0223	-0.0211	-0.0199	-0.0187	-0.0175
	N+	0.0393	0.0405	0.0417	0.0430	0.0451	0.0471	0.0491	0.0511	0.0532
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.0942	-0.0707	-0.0471	-0.0236	0.0000	-0.0393	-0.0785	-0.1178	-0.1571
	Tz+	0.1571	0.1178	0.0785	0.0393	0.0000	0.0236	0.0471	0.0707	0.0942
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0511	-0.0881	-0.1098	-0.1175	-0.1098	-0.0881	-0.0511	0.0000
	My+	0.0000	0.0307	0.0529	0.0659	0.0705	0.0659	0.0529	0.0307	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
249/253		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-0.3048	-0.3048	-0.3048	-0.3048	-0.3048	-0.3048	-0.3048	-0.3048	-0.3048
	N+	0.8506	0.8506	0.8506	0.8506	0.8506	0.8506	0.8506	0.8506	0.8506
	Ty-	-0.0511	-0.0498	-0.0485	-0.0475	-0.0468	-0.0460	-0.0453	-0.0445	-0.0438
	Ty+	0.0791	0.0798	0.0806	0.0815	0.0828	0.0841	0.0853	0.0866	0.0878
	Tz-	-0.2377	-0.2377	-0.2377	-0.2377	-0.2377	-0.2377	-0.2377	-0.2377	-0.2377

## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

	Tz+	0.1394	0.1394	0.1394	0.1394	0.1394	0.1394	0.1394	0.1394	0.1394
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0582	-0.0756	-0.0930	-0.1104	-0.1279	-0.1453	-0.1627	-0.1801	-0.1976
	My+	0.0327	0.0624	0.0921	0.1218	0.1515	0.1812	0.2109	0.2407	0.2704
	Mz-	-0.0075	-0.0175	-0.0275	-0.0376	-0.0478	-0.0581	-0.0684	-0.0789	-0.0895
	Mz+	0.0200	0.0263	0.0325	0.0385	0.0443	0.0499	0.0554	0.0608	0.0660
250/254		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456
	N+	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257
	Ty-	-0.2866	-0.2764	-0.2662	-0.2560	-0.2458	-0.2356	-0.2254	-0.2152	-0.2050
	Ty+	-0.0734	-0.0674	-0.0613	-0.0553	-0.0493	-0.0432	-0.0372	-0.0311	-0.0251
	Tz-	-0.2755	-0.2755	-0.2755	-0.2755	-0.2755	-0.2755	-0.2755	-0.2755	-0.2755
	Tz+	0.1414	0.1414	0.1414	0.1414	0.1414	0.1414	0.1414	0.1414	0.1414
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-9.7950	-9.8126	-9.8303	-9.8480	-9.8656	-9.8833	-9.9010	-9.9186	-9.9363
	My+	15.6463	15.6807	15.7152	15.7496	15.7841	15.8185	15.8529	15.8874	15.9218
	Mz-	-0.0645	-0.0293	0.0017	0.0096	0.0162	0.0221	0.0271	0.0315	0.0350
	Mz+	-0.0133	-0.0045	0.0092	0.0384	0.0697	0.0997	0.1285	0.1560	0.1822
251/252		0.000 m	0.374 m	0.748 m	1.122 m	1.496 m	1.870 m	2.244 m	2.618 m	2.992 m
		Envolvente (Acero Conformado)								
	N-	-0.0272	-0.0252	-0.0232	-0.0220	-0.0208	-0.0196	-0.0184	-0.0172	-0.0160
	N+	0.0226	0.0239	0.0251	0.0271	0.0291	0.0312	0.0332	0.0352	0.0373
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.0898	-0.0673	-0.0449	-0.0224	0.0000	-0.0224	-0.0449	-0.0673	-0.0898
	Tz+	0.0898	0.0673	0.0449	0.0224	0.0000	0.0224	0.0449	0.0673	0.0898
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0292	-0.0503	-0.0628	-0.0671	-0.0628	-0.0503	-0.0292	0.0000
	My+	0.0000	0.0292	0.0503	0.0628	0.0671	0.0628	0.0503	0.0292	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
251/255		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-0.9485	-0.9485	-0.9485	-0.9485	-0.9485	-0.9485	-0.9485	-0.9485	-0.9485
	N+	1.3101	1.3101	1.3101	1.3101	1.3101	1.3101	1.3101	1.3101	1.3101
	Ty-	-0.0503	-0.0491	-0.0478	-0.0469	-0.0462	-0.0454	-0.0447	-0.0439	-0.0432
	Ty+	0.0458	0.0465	0.0473	0.0484	0.0497	0.0509	0.0522	0.0535	0.0547
	Tz-	-0.1414	-0.1414	-0.1414	-0.1414	-0.1414	-0.1414	-0.1414	-0.1414	-0.1414
	Tz+	0.1363	0.1363	0.1363	0.1363	0.1363	0.1363	0.1363	0.1363	0.1363
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0437	-0.0608	-0.0778	-0.0948	-0.1119	-0.1289	-0.1459	-0.1630	-0.1800
	My+	0.0590	0.0767	0.0944	0.1121	0.1297	0.1474	0.1651	0.1828	0.2005
	Mz-	-0.0167	-0.0224	-0.0283	-0.0342	-0.0403	-0.0466	-0.0530	-0.0596	-0.0664
	Mz+	0.0138	0.0200	0.0260	0.0319	0.0377	0.0434	0.0490	0.0546	0.0600
252/256		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367
	N+	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172
	Ty-	-0.2526	-0.2424	-0.2322	-0.2220	-0.2118	-0.2016	-0.1914	-0.1812	-0.1710

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE** Adrián Freijomil Aradas

	Ty+	-0.0762	-0.0702	-0.0641	-0.0581	-0.0520	-0.0460	-0.0399	-0.0339	-0.0279
	Tz-	-0.1365	-0.1365	-0.1365	-0.1365	-0.1365	-0.1365	-0.1365	-0.1365	-0.1365
	Tz+	0.1369	0.1369	0.1369	0.1369	0.1369	0.1369	0.1369	0.1369	0.1369
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-9.0631	-9.0802	-9.0973	-9.1144	-9.1316	-9.1487	-9.1658	-9.1829	-9.2000
	My+	9.0694	9.0864	9.1035	9.1205	9.1376	9.1547	9.1717	9.1888	9.2059
	Mz-	-0.0675	-0.0393	-0.0151	0.0021	0.0090	0.0152	0.0206	0.0253	0.0292
	Mz+	-0.0217	-0.0125	-0.0014	0.0229	0.0500	0.0758	0.1003	0.1235	0.1455
253/254		0.000 m	0.374 m	0.748 m	1.122 m	1.496 m	1.870 m	2.244 m	2.618 m	2.992 m
	Envolvente (Acero Conformado)									
	N-	-0.0256	-0.0244	-0.0232	-0.0220	-0.0208	-0.0196	-0.0184	-0.0172	-0.0160
	N+	0.0692	0.0712	0.0733	0.0753	0.0773	0.0794	0.0814	0.0834	0.0854
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.0942	-0.0707	-0.0471	-0.0236	0.0000	-0.0393	-0.0785	-0.1178	-0.1571
	Tz+	0.1571	0.1178	0.0785	0.0393	0.0000	0.0236	0.0471	0.0707	0.0942
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0511	-0.0881	-0.1098	-0.1175	-0.1098	-0.0881	-0.0511	0.0000
	My+	0.0000	0.0307	0.0529	0.0659	0.0705	0.0659	0.0529	0.0307	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
253/257		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
	Envolvente (Acero Conformado)									
	N-	-0.3048	-0.3048	-0.3048	-0.3048	-0.3048	-0.3048	-0.3048	-0.3048	-0.3048
	N+	0.8506	0.8506	0.8506	0.8506	0.8506	0.8506	0.8506	0.8506	0.8506
	Ty-	-0.0213	-0.0200	-0.0188	-0.0175	-0.0163	-0.0150	-0.0139	-0.0131	-0.0124
	Ty+	0.0217	0.0225	0.0232	0.0240	0.0247	0.0255	0.0264	0.0276	0.0289
	Tz-	-0.0807	-0.0807	-0.0807	-0.0807	-0.0807	-0.0807	-0.0807	-0.0807	-0.0807
	Tz+	0.0452	0.0452	0.0452	0.0452	0.0452	0.0452	0.0452	0.0452	0.0452
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.1976	-0.2032	-0.2089	-0.2145	-0.2202	-0.2258	-0.2314	-0.2371	-0.2427
	My+	0.2704	0.2804	0.2905	0.3006	0.3107	0.3208	0.3309	0.3409	0.3510
	Mz-	-0.0895	-0.0923	-0.0951	-0.0981	-0.1011	-0.1042	-0.1075	-0.1108	-0.1142
	Mz+	0.0660	0.0686	0.0710	0.0733	0.0754	0.0773	0.0791	0.0807	0.0822
254/258		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
	Envolvente (Acero laminado)									
	N-	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456
	N+	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257
	Ty-	-0.1195	-0.1093	-0.0991	-0.0889	-0.0787	-0.0685	-0.0583	-0.0481	-0.0379
	Ty+	-0.0411	-0.0350	-0.0290	-0.0229	-0.0169	-0.0108	-0.0048	0.0012	0.0073
	Tz-	-0.1185	-0.1185	-0.1185	-0.1185	-0.1185	-0.1185	-0.1185	-0.1185	-0.1185
	Tz+	0.0471	0.0471	0.0471	0.0471	0.0471	0.0471	0.0471	0.0471	0.0471
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-9.9363	-9.9422	-9.9481	-9.9540	-9.9599	-9.9658	-9.9717	-9.9776	-9.9834
	My+	15.9218	15.9366	15.9514	15.9663	15.9811	15.9959	16.0107	16.0255	16.0403
	Mz-	0.0350	0.0398	0.0438	0.0471	0.0496	0.0513	0.0523	0.0526	0.0521
	Mz+	0.1822	0.1964	0.2095	0.2212	0.2316	0.2408	0.2487	0.2554	0.2607
255/256		0.000 m	0.374 m	0.748 m	1.122 m	1.496 m	1.870 m	2.244 m	2.618 m	2.992 m
	Envolvente (Acero Conformado)									
	N-	-0.0244	-0.0232	-0.0220	-0.0208	-0.0196	-0.0184	-0.0172	-0.0160	-0.0148

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas**

	N+	0.0450	0.0470	0.0490	0.0510	0.0531	0.0551	0.0571	0.0592	0.0612
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.0898	-0.0673	-0.0449	-0.0224	0.0000	-0.0224	-0.0449	-0.0673	-0.0898
	Tz+	0.0898	0.0673	0.0449	0.0224	0.0000	0.0224	0.0449	0.0673	0.0898
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0292	-0.0503	-0.0628	-0.0671	-0.0628	-0.0503	-0.0292	0.0000
	My+	0.0000	0.0292	0.0503	0.0628	0.0671	0.0628	0.0503	0.0292	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
255/259		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
	Envolvente (Acero Conformado)									
	N-	-0.9485	-0.9485	-0.9485	-0.9485	-0.9485	-0.9485	-0.9485	-0.9485	-0.9485
	N+	1.3101	1.3101	1.3101	1.3101	1.3101	1.3101	1.3101	1.3101	1.3101
	Ty-	-0.0213	-0.0201	-0.0188	-0.0175	-0.0163	-0.0151	-0.0143	-0.0136	-0.0129
	Ty+	0.0122	0.0130	0.0137	0.0145	0.0152	0.0161	0.0173	0.0186	0.0198
	Tz-	-0.0517	-0.0517	-0.0517	-0.0517	-0.0517	-0.0517	-0.0517	-0.0517	-0.0517
	Tz+	0.0465	0.0465	0.0465	0.0465	0.0465	0.0465	0.0465	0.0465	0.0465
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.1800	-0.1858	-0.1917	-0.1975	-0.2033	-0.2091	-0.2149	-0.2207	-0.2265
	My+	0.2005	0.2069	0.2134	0.2198	0.2263	0.2328	0.2392	0.2457	0.2521
	Mz-	-0.0664	-0.0677	-0.0691	-0.0708	-0.0725	-0.0745	-0.0765	-0.0788	-0.0812
	Mz+	0.0600	0.0623	0.0645	0.0666	0.0687	0.0706	0.0724	0.0742	0.0758
256/260		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
	Envolvente (Acero laminado)									
	N-	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367
	N+	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172
	Ty-	-0.1103	-0.1001	-0.0899	-0.0797	-0.0695	-0.0593	-0.0491	-0.0389	-0.0287
	Ty+	-0.0421	-0.0361	-0.0300	-0.0240	-0.0180	-0.0119	-0.0059	0.0002	0.0062
	Tz-	-0.0468	-0.0468	-0.0468	-0.0468	-0.0468	-0.0468	-0.0468	-0.0468	-0.0468
	Tz+	0.0471	0.0471	0.0471	0.0471	0.0471	0.0471	0.0471	0.0471	0.0471
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-9.2000	-9.2059	-9.2118	-9.2177	-9.2235	-9.2294	-9.2353	-9.2412	-9.2471
	My+	9.2059	9.2117	9.2175	9.2234	9.2292	9.2351	9.2409	9.2468	9.2526
	Mz-	0.0292	0.0342	0.0384	0.0419	0.0446	0.0466	0.0477	0.0481	0.0477
	Mz+	0.1455	0.1585	0.1703	0.1807	0.1900	0.1979	0.2046	0.2099	0.2141
257/258		0.000 m	0.374 m	0.748 m	1.122 m	1.496 m	1.870 m	2.244 m	2.618 m	2.992 m
	Envolvente (Acero Conformado)									
	N-	-0.0262	-0.0250	-0.0238	-0.0226	-0.0214	-0.0202	-0.0190	-0.0178	-0.0166
	N+	0.0566	0.0586	0.0606	0.0627	0.0647	0.0667	0.0687	0.0708	0.0728
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.0942	-0.0707	-0.0471	-0.0236	0.0000	-0.0393	-0.0785	-0.1178	-0.1571
	Tz+	0.1571	0.1178	0.0785	0.0393	0.0000	0.0236	0.0471	0.0707	0.0942
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0511	-0.0881	-0.1098	-0.1175	-0.1098	-0.0881	-0.0511	0.0000
	My+	0.0000	0.0307	0.0529	0.0659	0.0705	0.0659	0.0529	0.0307	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
257/261		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m

## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

		Envolvente (Acero Conformado)								
	N-	-0.3048	-0.3048	-0.3048	-0.3048	-0.3048	-0.3048	-0.3048	-0.3048	-0.3048
	N+	0.8506	0.8506	0.8506	0.8506	0.8506	0.8506	0.8506	0.8506	0.8506
	Ty-	-0.0278	-0.0265	-0.0252	-0.0242	-0.0234	-0.0227	-0.0219	-0.0212	-0.0204
	Ty+	0.0139	0.0146	0.0154	0.0163	0.0176	0.0188	0.0201	0.0214	0.0226
	Tz-	-0.0497	-0.0497	-0.0497	-0.0497	-0.0497	-0.0497	-0.0497	-0.0497	-0.0497
	Tz+	0.0770	0.0770	0.0770	0.0770	0.0770	0.0770	0.0770	0.0770	0.0770
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.2427	-0.2366	-0.2305	-0.2243	-0.2182	-0.2121	-0.2059	-0.1998	-0.1937
	My+	0.3510	0.3415	0.3319	0.3224	0.3128	0.3033	0.2937	0.2842	0.2746
	Mz-	-0.1142	-0.1110	-0.1078	-0.1048	-0.1018	-0.0989	-0.0961	-0.0935	-0.0909
	Mz+	0.0822	0.0806	0.0788	0.0768	0.0747	0.0725	0.0700	0.0675	0.0647
258/262		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456
	N+	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257
	Ty-	-0.0095	-0.0034	0.0026	0.0087	0.0147	0.0208	0.0268	0.0328	0.0389
	Ty+	0.0350	0.0452	0.0554	0.0656	0.0758	0.0860	0.0962	0.1064	0.1166
	Tz-	-0.0471	-0.0471	-0.0471	-0.0471	-0.0471	-0.0471	-0.0471	-0.0471	-0.0471
	Tz+	0.0386	0.0386	0.0386	0.0386	0.0386	0.0386	0.0386	0.0386	0.0386
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-9.9834	-9.9776	-9.9717	-9.9658	-9.9599	-9.9540	-9.9481	-9.9422	-9.9363
	My+	16.0403	16.0355	16.0306	16.0258	16.0210	16.0162	16.0113	16.0065	16.0017
	Mz-	0.0521	0.0529	0.0529	0.0522	0.0508	0.0485	0.0456	0.0418	0.0374
	Mz+	0.2607	0.2557	0.2494	0.2419	0.2330	0.2229	0.2115	0.1988	0.1849
259/260		0.000 m	0.374 m	0.748 m	1.122 m	1.496 m	1.870 m	2.244 m	2.618 m	2.992 m
		Envolvente (Acero Conformado)								
	N-	-0.0247	-0.0235	-0.0223	-0.0211	-0.0199	-0.0187	-0.0175	-0.0163	-0.0151
	N+	0.0354	0.0374	0.0395	0.0415	0.0435	0.0456	0.0476	0.0496	0.0516
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.0898	-0.0673	-0.0449	-0.0224	0.0000	-0.0224	-0.0449	-0.0673	-0.0898
	Tz+	0.0898	0.0673	0.0449	0.0224	0.0000	0.0224	0.0449	0.0673	0.0898
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0292	-0.0503	-0.0628	-0.0671	-0.0628	-0.0503	-0.0292	0.0000
	My+	0.0000	0.0292	0.0503	0.0628	0.0671	0.0628	0.0503	0.0292	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
259/263		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-0.9485	-0.9485	-0.9485	-0.9485	-0.9485	-0.9485	-0.9485	-0.9485	-0.9485
	N+	1.3101	1.3101	1.3101	1.3101	1.3101	1.3101	1.3101	1.3101	1.3101
	Ty-	-0.0160	-0.0147	-0.0135	-0.0127	-0.0119	-0.0112	-0.0105	-0.0097	-0.0090
	Ty+	0.0123	0.0130	0.0138	0.0150	0.0163	0.0175	0.0188	0.0201	0.0213
	Tz-	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456
	Tz+	0.0405	0.0405	0.0405	0.0405	0.0405	0.0405	0.0405	0.0405	0.0405
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.2265	-0.2211	-0.2157	-0.2103	-0.2049	-0.1995	-0.1941	-0.1887	-0.1833
	My+	0.2521	0.2474	0.2426	0.2379	0.2331	0.2283	0.2236	0.2188	0.2141
	Mz-	-0.0812	-0.0793	-0.0776	-0.0761	-0.0747	-0.0735	-0.0725	-0.0716	-0.0708

## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

	Mz+	0.0758	0.0743	0.0727	0.0710	0.0692	0.0674	0.0654	0.0633	0.0612	
260/264		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m	
		Envolvente (Acero laminado)									
	N-	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367
	N+	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172
	Ty-	-0.0096	-0.0035	0.0025	0.0086	0.0146	0.0207	0.0267	0.0327	0.0388	0.0388
	Ty+	0.0236	0.0338	0.0440	0.0542	0.0644	0.0746	0.0848	0.0950	0.1052	0.1052
	Tz-	-0.0426	-0.0426	-0.0426	-0.0426	-0.0426	-0.0426	-0.0426	-0.0426	-0.0426	-0.0426
	Tz+	0.0430	0.0430	0.0430	0.0430	0.0430	0.0430	0.0430	0.0430	0.0430	0.0430
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-9.2471	-9.2418	-9.2364	-9.2311	-9.2258	-9.2205	-9.2151	-9.2098	-9.2045	-9.2045
	My+	9.2526	9.2472	9.2419	9.2365	9.2311	9.2257	9.2204	9.2150	9.2096	9.2096
	Mz-	0.0477	0.0485	0.0485	0.0477	0.0462	0.0440	0.0409	0.0372	0.0326	0.0326
	Mz+	0.2141	0.2105	0.2056	0.1995	0.1921	0.1835	0.1736	0.1624	0.1500	0.1500
261/262		0.000 m	0.374 m	0.748 m	1.122 m	1.496 m	1.870 m	2.244 m	2.618 m	2.992 m	
		Envolvente (Acero Conformado)									
	N-	-0.0257	-0.0245	-0.0233	-0.0221	-0.0209	-0.0197	-0.0185	-0.0173	-0.0161	-0.0161
	N+	0.0691	0.0712	0.0732	0.0752	0.0773	0.0793	0.0813	0.0833	0.0854	0.0854
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.0942	-0.0707	-0.0471	-0.0236	0.0000	-0.0393	-0.0785	-0.1178	-0.1571	-0.1571
	Tz+	0.1571	0.1178	0.0785	0.0393	0.0000	0.0236	0.0471	0.0707	0.0942	0.0942
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0511	-0.0881	-0.1098	-0.1175	-0.1098	-0.0881	-0.0511	0.0000	0.0000
	My+	0.0000	0.0307	0.0529	0.0659	0.0705	0.0659	0.0529	0.0307	0.0000	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
261/265		0.000 m	0.125 m	0.249 m	0.374 m	0.499 m	0.624 m	0.748 m	0.873 m	0.998 m	
		Envolvente (Acero Conformado)									
	N-	-0.3048	-0.3048	-0.3048	-0.3048	-0.3048	-0.3048	-0.3048	-0.3048	-0.3048	-0.3048
	N+	0.8506	0.8506	0.8506	0.8506	0.8506	0.8506	0.8506	0.8506	0.8506	0.8506
	Ty-	-0.0868	-0.0856	-0.0843	-0.0831	-0.0818	-0.0806	-0.0794	-0.0787	-0.0779	-0.0779
	Ty+	0.0455	0.0463	0.0470	0.0478	0.0485	0.0493	0.0501	0.0514	0.0526	0.0526
	Tz-	-0.1439	-0.1439	-0.1439	-0.1439	-0.1439	-0.1439	-0.1439	-0.1439	-0.1439	-0.1439
	Tz+	0.2341	0.2341	0.2341	0.2341	0.2341	0.2341	0.2341	0.2341	0.2341	0.2341
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.1937	-0.1758	-0.1579	-0.1400	-0.1222	-0.1043	-0.0864	-0.0685	-0.0507	-0.0507
	My+	0.2746	0.2455	0.2164	0.1872	0.1581	0.1290	0.0999	0.0707	0.0416	0.0416
	Mz-	-0.0909	-0.0805	-0.0702	-0.0600	-0.0499	-0.0399	-0.0300	-0.0202	-0.0105	-0.0105
	Mz+	0.0647	0.0594	0.0539	0.0482	0.0424	0.0364	0.0303	0.0240	0.0176	0.0176
262/266		0.000 m	0.125 m	0.249 m	0.374 m	0.499 m	0.624 m	0.748 m	0.873 m	0.998 m	
		Envolvente (Acero laminado)									
	N-	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456
	N+	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257
	Ty-	0.0231	0.0291	0.0351	0.0412	0.0472	0.0532	0.0593	0.0653	0.0713	0.0713
	Ty+	0.2017	0.2119	0.2221	0.2323	0.2425	0.2526	0.2628	0.2730	0.2832	0.2832
	Tz-	-0.1414	-0.1414	-0.1414	-0.1414	-0.1414	-0.1414	-0.1414	-0.1414	-0.1414	-0.1414
	Tz+	0.1957	0.1957	0.1957	0.1957	0.1957	0.1957	0.1957	0.1957	0.1957	0.1957
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-9.9363	-9.9187	-9.9011	-9.8834	-9.8658	-9.8482	-9.8305	-9.8129	-9.7953	-9.7953

## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

	My+	16.0017	15.9773	15.9529	15.9285	15.9041	15.8797	15.8552	15.8308	15.8064
	Mz-	0.0374	0.0341	0.0301	0.0253	0.0198	0.0135	0.0045	-0.0229	-0.0576
	Mz+	0.1849	0.1591	0.1320	0.1037	0.0741	0.0432	0.0110	-0.0007	-0.0093
263/264		0.000 m	0.374 m	0.748 m	1.122 m	1.496 m	1.870 m	2.244 m	2.618 m	2.992 m
		Envolvente (Acero Conformado)								
	N-	-0.0244	-0.0232	-0.0220	-0.0208	-0.0196	-0.0184	-0.0172	-0.0160	-0.0148
	N+	0.0448	0.0468	0.0488	0.0509	0.0529	0.0549	0.0569	0.0590	0.0610
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.0898	-0.0673	-0.0449	-0.0224	0.0000	-0.0224	-0.0449	-0.0673	-0.0898
	Tz+	0.0898	0.0673	0.0449	0.0224	0.0000	0.0224	0.0449	0.0673	0.0898
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0292	-0.0503	-0.0628	-0.0671	-0.0628	-0.0503	-0.0292	0.0000
	My+	0.0000	0.0292	0.0503	0.0628	0.0671	0.0628	0.0503	0.0292	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
263/267		0.000 m	0.125 m	0.249 m	0.374 m	0.499 m	0.624 m	0.748 m	0.873 m	0.998 m
		Envolvente (Acero Conformado)								
	N-	-0.9485	-0.9485	-0.9485	-0.9485	-0.9485	-0.9485	-0.9485	-0.9485	-0.9485
	N+	1.3101	1.3101	1.3101	1.3101	1.3101	1.3101	1.3101	1.3101	1.3101
	Ty-	-0.0502	-0.0489	-0.0477	-0.0464	-0.0452	-0.0442	-0.0434	-0.0427	-0.0419
	Ty+	0.0422	0.0429	0.0437	0.0444	0.0452	0.0461	0.0474	0.0487	0.0499
	Tz-	-0.1354	-0.1354	-0.1354	-0.1354	-0.1354	-0.1354	-0.1354	-0.1354	-0.1354
	Tz+	0.1302	0.1302	0.1302	0.1302	0.1302	0.1302	0.1302	0.1302	0.1302
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.1833	-0.1667	-0.1501	-0.1336	-0.1170	-0.1004	-0.0838	-0.0672	-0.0506
	My+	0.2141	0.1981	0.1822	0.1662	0.1503	0.1343	0.1184	0.1025	0.0865
	Mz-	-0.0708	-0.0647	-0.0587	-0.0528	-0.0471	-0.0416	-0.0362	-0.0309	-0.0259
	Mz+	0.0612	0.0559	0.0505	0.0450	0.0394	0.0338	0.0280	0.0222	0.0162
264/268		0.000 m	0.125 m	0.249 m	0.374 m	0.499 m	0.624 m	0.748 m	0.873 m	0.998 m
		Envolvente (Acero laminado)								
	N-	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367
	N+	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172
	Ty-	0.0240	0.0300	0.0361	0.0421	0.0481	0.0542	0.0602	0.0662	0.0723
	Ty+	0.1662	0.1764	0.1866	0.1968	0.2070	0.2171	0.2273	0.2375	0.2477
	Tz-	-0.1324	-0.1324	-0.1324	-0.1324	-0.1324	-0.1324	-0.1324	-0.1324	-0.1324
	Tz+	0.1328	0.1328	0.1328	0.1328	0.1328	0.1328	0.1328	0.1328	0.1328
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-9.2045	-9.1880	-9.1714	-9.1549	-9.1384	-9.1219	-9.1054	-9.0889	-9.0724
	My+	9.2096	9.1930	9.1765	9.1599	9.1434	9.1268	9.1103	9.0937	9.0771
	Mz-	0.0326	0.0292	0.0249	0.0200	0.0143	0.0078	-0.0008	-0.0267	-0.0569
	Mz+	0.1500	0.1288	0.1063	0.0825	0.0575	0.0312	0.0052	-0.0060	-0.0146
265/266		0.000 m	0.374 m	0.748 m	1.122 m	1.496 m	1.870 m	2.244 m	2.618 m	2.992 m
		Envolvente (Acero Conformado)								
	N-	-0.0292	-0.0272	-0.0252	-0.0233	-0.0221	-0.0209	-0.0197	-0.0185	-0.0173
	N+	0.0394	0.0406	0.0418	0.0432	0.0453	0.0473	0.0493	0.0513	0.0534
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.0942	-0.0707	-0.0471	-0.0236	0.0000	-0.0393	-0.0785	-0.1178	-0.1571
	Tz+	0.1571	0.1178	0.0785	0.0393	0.0000	0.0236	0.0471	0.0707	0.0942
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0511	-0.0881	-0.1098	-0.1175	-0.1098	-0.0881	-0.0511	0.0000
	My+	0.0000	0.0307	0.0529	0.0659	0.0705	0.0659	0.0529	0.0307	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
265/270		0.000 m	0.125 m	0.251 m	0.376 m	0.501 m	0.626 m	0.752 m	0.877 m	1.002 m
		Envolvente (Acero Conformado)								
	N-	-0.3048	-0.3048	-0.3048	-0.3048	-0.3048	-0.3048	-0.3048	-0.3048	-0.3048
	N+	0.8506	0.8506	0.8506	0.8506	0.8506	0.8506	0.8506	0.8506	0.8506
	Ty-	-0.1170	-0.1163	-0.1155	-0.1148	-0.1140	-0.1133	-0.1125	-0.1118	-0.1110
	Ty+	0.0815	0.0828	0.0840	0.0853	0.0865	0.0878	0.0891	0.0903	0.0916
	Tz-	-0.2382	-0.2382	-0.2382	-0.2382	-0.2382	-0.2382	-0.2382	-0.2382	-0.2382
	Tz+	0.3912	0.3912	0.3912	0.3912	0.3912	0.3912	0.3912	0.3912	0.3912
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0507	-0.0228	-0.0679	-0.1169	-0.1659	-0.2149	-0.2639	-0.3129	-0.3619
	My+	0.0416	0.0121	0.0205	0.0503	0.0802	0.1100	0.1398	0.1697	0.1995
	Mz-	-0.0105	-0.0036	-0.0071	-0.0170	-0.0271	-0.0378	-0.0488	-0.0600	-0.0714
	Mz+	0.0176	0.0091	0.0225	0.0363	0.0500	0.0640	0.0781	0.0921	0.1060
266/272		0.000 m	0.125 m	0.251 m	0.376 m	0.501 m	0.626 m	0.752 m	0.877 m	1.002 m
		Envolvente (Acero laminado)								
	N-	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456
	N+	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257
	Ty-	0.0540	0.0601	0.0662	0.0722	0.0783	0.0843	0.0904	0.0964	0.1025
	Ty+	0.3365	0.3468	0.3570	0.3672	0.3774	0.3877	0.3979	0.4081	0.4183
	Tz-	-0.2356	-0.2356	-0.2356	-0.2356	-0.2356	-0.2356	-0.2356	-0.2356	-0.2356
	Tz+	0.3527	0.3527	0.3527	0.3527	0.3527	0.3527	0.3527	0.3527	0.3527
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-9.7953	-9.7658	-9.7363	-9.7067	-9.6772	-9.6477	-9.6182	-9.5887	-9.5592
	My+	15.8064	15.7622	15.7181	15.6739	15.6297	15.5855	15.5413	15.4971	15.4530
	Mz-	-0.0576	-0.1003	-0.1443	-0.1895	-0.2361	-0.2840	-0.3331	-0.3836	-0.4353
	Mz+	-0.0093	-0.0165	-0.0245	-0.0332	-0.0427	-0.0530	-0.0640	-0.0757	-0.0882
267/268		0.000 m	0.374 m	0.748 m	1.122 m	1.496 m	1.870 m	2.244 m	2.618 m	2.992 m
		Envolvente (Acero Conformado)								
	N-	-0.0269	-0.0249	-0.0231	-0.0219	-0.0207	-0.0195	-0.0183	-0.0171	-0.0159
	N+	0.0230	0.0242	0.0256	0.0276	0.0297	0.0317	0.0337	0.0358	0.0378
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.0898	-0.0673	-0.0449	-0.0224	0.0000	-0.0224	-0.0449	-0.0673	-0.0898
	Tz+	0.0898	0.0673	0.0449	0.0224	0.0000	0.0224	0.0449	0.0673	0.0898
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0292	-0.0503	-0.0628	-0.0671	-0.0628	-0.0503	-0.0292	0.0000
	My+	0.0000	0.0292	0.0503	0.0628	0.0671	0.0628	0.0503	0.0292	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
267/295		0.000 m	0.125 m	0.251 m	0.376 m	0.501 m	0.626 m	0.752 m	0.877 m	1.002 m
		Envolvente (Acero Conformado)								
	N-	-0.9485	-0.9485	-0.9485	-0.9485	-0.9485	-0.9485	-0.9485	-0.9485	-0.9485
	N+	1.3101	1.3101	1.3101	1.3101	1.3101	1.3101	1.3101	1.3101	1.3101
	Ty-	-0.0649	-0.0641	-0.0634	-0.0627	-0.0619	-0.0612	-0.0604	-0.0597	-0.0589
	Ty+	0.0768	0.0781	0.0794	0.0806	0.0819	0.0832	0.0844	0.0857	0.0869
	Tz-	-0.2251	-0.2251	-0.2251	-0.2251	-0.2251	-0.2251	-0.2251	-0.2251	-0.2251



## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas**

	Tz+	0.2200	0.2200	0.2200	0.2200	0.2200	0.2200	0.2200	0.2200	0.2200
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0506	-0.0227	-0.0093	-0.0109	-0.0385	-0.0660	-0.0936	-0.1211	-0.1487
	My+	0.0865	0.0593	0.0329	0.0487	0.0769	0.1051	0.1333	0.1615	0.1897
	Mz-	-0.0259	-0.0184	-0.0113	-0.0173	-0.0275	-0.0378	-0.0483	-0.0590	-0.0698
	Mz+	0.0162	0.0071	0.0026	0.0023	0.0098	0.0175	0.0251	0.0327	0.0401
268/297		0.000 m	0.125 m	0.251 m	0.376 m	0.501 m	0.626 m	0.752 m	0.877 m	1.002 m
	Envolvente (Acero laminado)									
	N-	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367
	N+	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172
	Ty-	0.0575	0.0636	0.0696	0.0757	0.0817	0.0878	0.0939	0.0999	0.1060
	Ty+	0.2845	0.2947	0.3050	0.3152	0.3254	0.3356	0.3459	0.3561	0.3663
	Tz-	-0.2221	-0.2221	-0.2221	-0.2221	-0.2221	-0.2221	-0.2221	-0.2221	-0.2221
	Tz+	0.2225	0.2225	0.2225	0.2225	0.2225	0.2225	0.2225	0.2225	0.2225
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-9.0724	-9.0445	-9.0167	-8.9889	-8.9611	-8.9332	-8.9054	-8.8776	-8.8498
	My+	9.0771	9.0493	9.0214	8.9935	8.9657	8.9378	8.9099	8.8820	8.8542
	Mz-	-0.0569	-0.0931	-0.1307	-0.1695	-0.2097	-0.2511	-0.2938	-0.3377	-0.3830
	Mz+	-0.0146	-0.0222	-0.0306	-0.0397	-0.0495	-0.0602	-0.0716	-0.0837	-0.0966
269/270		0.000 m	0.603 m	1.205 m	1.808 m	2.410 m	3.013 m	3.615 m	4.218 m	4.820 m
	Envolvente (Acero laminado)									
	N-	-2.2402	-2.2185	-2.1968	-2.1751	-2.1534	-2.1317	-2.1099	-2.0882	-2.0665
	N+	0.8713	0.8841	0.8970	0.9099	0.9227	0.9356	0.9485	0.9613	0.9742
	Ty-	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010
	Ty+	0.0472	0.0472	0.0472	0.0472	0.0472	0.0472	0.0472	0.0472	0.0472
	Tz-	-1.3807	-1.1548	-0.9288	-0.7029	-0.4770	-0.2554	-0.1859	-0.4489	-0.8104
	Tz+	2.1847	1.8232	1.4617	1.1002	0.7387	0.3772	0.0779	0.3039	0.5298
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004
	My-	-1.8272	-1.0661	-0.4357	-0.3102	-0.7997	-1.1079	-1.2305	-1.1267	-0.8138
	My+	2.7465	1.5435	0.5496	0.1461	0.4349	0.6279	0.7138	0.6581	0.4818
	Mz-	-0.0025	-0.0019	-0.0013	-0.0006	-0.0184	-0.0468	-0.0752	-0.1036	-0.1321
	Mz+	0.0954	0.0670	0.0385	0.0101	0.0001	0.0006	0.0012	0.0019	0.0025
270/271		0.000 m	0.136 m	0.273 m	0.409 m	0.545 m	0.682 m	0.818 m	0.954 m	1.091 m
	Envolvente (Acero laminado)									
	N-	-2.1665	-2.1616	-2.1566	-2.1517	-2.1468	-2.1419	-2.1370	-2.1321	-2.1272
	N+	1.1285	1.1314	1.1343	1.1372	1.1402	1.1431	1.1460	1.1489	1.1518
	Ty-	-0.1212	-0.1212	-0.1212	-0.1212	-0.1212	-0.1212	-0.1212	-0.1212	-0.1212
	Ty+	0.0023	0.0023	0.0023	0.0023	0.0023	0.0023	0.0023	0.0023	0.0023
	Tz-	-1.5477	-1.5620	-1.5763	-1.5906	-1.6049	-1.6193	-1.6336	-1.6479	-1.6622
	Tz+	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004
	My-	-0.8138	-0.6161	-0.4165	-0.2215	-0.2803	-0.4122	-0.5440	-0.6759	-0.8078
	My+	0.4818	0.4360	0.4572	0.4831	0.5090	0.5576	0.7122	0.9359	1.1615
	Mz-	-0.1321	-0.1155	-0.0990	-0.0825	-0.0660	-0.0494	-0.0329	-0.0164	0.0000
	Mz+	0.0025	0.0022	0.0019	0.0016	0.0012	0.0009	0.0006	0.0003	0.0001
270/298		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
	Envolvente (Acero Conformado)									
	N-	-0.2410	-0.2410	-0.2410	-0.2410	-0.2410	-0.2410	-0.2410	-0.2410	-0.2410
	N+	1.0173	1.0173	1.0173	1.0173	1.0173	1.0173	1.0173	1.0173	1.0173
	Ty-	-0.0781	-0.0768	-0.0756	-0.0743	-0.0731	-0.0718	-0.0705	-0.0693	-0.0680

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE** Adrián Freijomil Aradas

	Ty+	0.0959	0.0967	0.0974	0.0981	0.0989	0.0996	0.1004	0.1011	0.1019
	Tz-	-0.3461	-0.3461	-0.3461	-0.3461	-0.3461	-0.3461	-0.3461	-0.3461	-0.3461
	Tz+	0.1991	0.1991	0.1991	0.1991	0.1991	0.1991	0.1991	0.1991	0.1991
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.3619	-0.3186	-0.2753	-0.2320	-0.1888	-0.1455	-0.1022	-0.0590	-0.0193
	My+	0.1995	0.1746	0.1497	0.1249	0.1000	0.0751	0.0502	0.0254	0.0107
	Mz-	-0.0714	-0.0617	-0.0522	-0.0429	-0.0338	-0.0254	-0.0170	-0.0088	-0.0027
	Mz+	0.1060	0.0940	0.0819	0.0697	0.0574	0.0457	0.0338	0.0217	0.0098
271/272		0.000 m	0.238 m	0.475 m	0.713 m	0.950 m	1.188 m	1.426 m	1.663 m	1.901 m
	Envolvente (Acero Conformado)									
	N-	-0.8257	-0.8244	-0.8231	-0.8218	-0.8205	-0.8192	-0.8179	-0.8167	-0.8154
	N+	-0.2057	-0.2049	-0.2042	-0.2034	-0.2026	-0.2019	-0.2011	-0.2004	-0.1996
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.0599	-0.0449	-0.0299	-0.0150	0.0000	-0.0249	-0.0499	-0.0748	-0.0998
	Tz+	0.0998	0.0748	0.0499	0.0249	0.0000	0.0150	0.0299	0.0449	0.0599
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0206	-0.0356	-0.0443	-0.0474	-0.0443	-0.0356	-0.0206	0.0000
	My+	0.0000	0.0124	0.0213	0.0266	0.0285	0.0266	0.0213	0.0124	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
271/273		0.000 m	0.066 m	0.132 m	0.198 m	0.264 m	0.330 m	0.396 m	0.462 m	0.528 m
	Envolvente (Acero laminado)									
	N-	-1.8460	-1.8458	-1.8457	-1.8456	-1.8455	-1.8454	-1.8453	-1.8451	-1.8450
	N+	1.1192	1.1192	1.1193	1.1194	1.1194	1.1195	1.1196	1.1196	1.1197
	Ty-	-0.0023	-0.0023	-0.0023	-0.0023	-0.0023	-0.0023	-0.0023	-0.0023	-0.0023
	Ty+	0.1212	0.1212	0.1212	0.1212	0.1212	0.1212	0.1212	0.1212	0.1212
	Tz-	-1.3144	-1.3127	-1.3111	-1.3094	-1.3077	-1.3061	-1.3044	-1.3027	-1.3011
	Tz+	1.2836	1.2845	1.2855	1.2865	1.2875	1.2885	1.2895	1.2905	1.2915
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
	My-	-1.1615	-1.0864	-1.0114	-0.9365	-0.8617	-0.7871	-0.7125	-0.6449	-0.5969
	My+	0.8078	0.7230	0.6382	0.5534	0.4684	0.3834	0.2984	0.2201	0.1613
	Mz-	0.0000	-0.0076	-0.0156	-0.0236	-0.0316	-0.0396	-0.0476	-0.0556	-0.0636
	Mz+	0.0004	0.0001	0.0003	0.0004	0.0006	0.0007	0.0009	0.0010	0.0012
272/299		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
	Envolvente (Acero laminado)									
	N-	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456
	N+	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257
	Ty-	-0.3970	-0.3868	-0.3766	-0.3664	-0.3562	-0.3460	-0.3358	-0.3256	-0.3154
	Ty+	-0.0971	-0.0911	-0.0850	-0.0790	-0.0729	-0.0669	-0.0608	-0.0548	-0.0487
	Tz-	-0.2955	-0.2955	-0.2955	-0.2955	-0.2955	-0.2955	-0.2955	-0.2955	-0.2955
	Tz+	0.4525	0.4525	0.4525	0.4525	0.4525	0.4525	0.4525	0.4525	0.4525
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-9.5592	-9.5223	-9.4853	-9.4484	-9.4115	-9.3745	-9.3376	-9.3007	-9.2637
	My+	15.4530	15.3964	15.3398	15.2833	15.2267	15.1701	15.1136	15.0570	15.0004
	Mz-	-0.4353	-0.3863	-0.3386	-0.2922	-0.2470	-0.2031	-0.1605	-0.1192	-0.0792
	Mz+	-0.0882	-0.0764	-0.0654	-0.0552	-0.0457	-0.0369	-0.0289	-0.0216	-0.0151
273/274		0.000 m	0.169 m	0.337 m	0.506 m	0.675 m	0.843 m	1.012 m	1.180 m	1.349 m
	Envolvente (Acero laminado)									
	N-	-1.7662	-1.7659	-1.7656	-1.7653	-1.7650	-1.7647	-1.7644	-1.7641	-1.7638

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas**

	N+	1.0378	1.0380	1.0382	1.0384	1.0385	1.0387	1.0389	1.0391	1.0392
	Ty-	-0.0557	-0.0557	-0.0557	-0.0557	-0.0557	-0.0557	-0.0557	-0.0557	-0.0557
	Ty+	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
	Tz-	-0.5188	-0.5146	-0.5103	-0.5061	-0.5018	-0.4975	-0.4933	-0.4890	-0.4847
	Tz+	0.3790	0.3815	0.3841	0.3866	0.3891	0.3916	0.3942	0.3967	0.3992
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
	My-	-0.5969	-0.5658	-0.5351	-0.5048	-0.4750	-0.4456	-0.4166	-0.3881	-0.3969
	My+	0.1613	0.1582	0.2365	0.3169	0.3966	0.4756	0.5538	0.6314	0.7082
	Mz-	-0.0636	-0.0542	-0.0448	-0.0354	-0.0260	-0.0166	-0.0072	-0.0011	-0.0003
	Mz+	0.0012	0.0011	0.0011	0.0010	0.0010	0.0009	0.0009	0.0026	0.0119
273/322		0.000 m	0.750 m	1.500 m	2.250 m	3.000 m	3.750 m	4.500 m	5.250 m	6.000 m
	Envolvente (Acero laminado)									
	N-	-1.1178	-1.1178	-1.1178	-1.1178	-1.1178	-1.1178	-1.1178	-1.1178	-1.1178
	N+	2.3769	2.3769	2.3769	2.3769	2.3769	2.3769	2.3769	2.3769	2.3769
	Ty-	-0.0323	-0.0323	-0.0323	-0.0323	-0.0323	-0.0323	-0.0323	-0.0323	-0.0323
	Ty+	0.0180	0.0180	0.0180	0.0180	0.0180	0.0180	0.0180	0.0180	0.0180
	Tz-	-0.3761	-0.2681	-0.1601	-0.0927	-0.1775	-0.2668	-0.3982	-0.5296	-0.6610
	Tz+	0.3903	0.2589	0.1275	0.0314	0.0875	0.2123	0.2942	0.4022	0.5102
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.2415	-0.3883	-0.4327	-0.3824	-0.2296	-0.1032	-0.2415	-0.5247
	My+	0.0000	0.2400	0.4022	0.4801	0.4803	0.3962	0.2344	0.3831	0.8121
	Mz-	0.0000	-0.0135	-0.0271	-0.0406	-0.0541	-0.0677	-0.0812	-0.0947	-0.1082
	Mz+	0.0000	0.0242	0.0484	0.0726	0.0968	0.1209	0.1451	0.1693	0.1935
274/275		0.000 m	0.169 m	0.337 m	0.506 m	0.675 m	0.843 m	1.012 m	1.180 m	1.349 m
	Envolvente (Acero laminado)									
	N-	-1.7261	-1.7258	-1.7255	-1.7252	-1.7249	-1.7246	-1.7243	-1.7240	-1.7237
	N+	1.0031	1.0032	1.0034	1.0036	1.0038	1.0039	1.0041	1.0043	1.0045
	Ty-	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002
	Ty+	0.0086	0.0086	0.0086	0.0086	0.0086	0.0086	0.0086	0.0086	0.0086
	Tz-	-0.2938	-0.2913	-0.2888	-0.2863	-0.2837	-0.2812	-0.2787	-0.2762	-0.2736
	Tz+	0.1518	0.1560	0.1603	0.1645	0.1688	0.1731	0.1773	0.1816	0.1858
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
	My-	-0.3969	-0.3792	-0.3619	-0.3451	-0.3381	-0.3337	-0.3298	-0.3262	-0.3231
	My+	0.7082	0.6822	0.6556	0.6282	0.6001	0.5712	0.5417	0.5114	0.4805
	Mz-	-0.0003	-0.0002	-0.0002	-0.0002	-0.0001	-0.0001	-0.0001	0.0000	0.0000
	Mz+	0.0119	0.0105	0.0090	0.0076	0.0062	0.0047	0.0033	0.0018	0.0014
274/323		0.000 m	0.750 m	1.500 m	2.250 m	3.000 m	3.750 m	4.500 m	5.250 m	6.000 m
	Envolvente (Acero Conformado)									
	N-	-0.0342	-0.0342	-0.0342	-0.0342	-0.0342	-0.0342	-0.0342	-0.0342	-0.0342
	N+	0.0753	0.0753	0.0753	0.0753	0.0753	0.0753	0.0753	0.0753	0.0753
	Ty-	-0.0077	-0.0077	-0.0077	-0.0077	-0.0077	-0.0077	-0.0077	-0.0077	-0.0077
	Ty+	0.0056	0.0056	0.0056	0.0056	0.0056	0.0056	0.0056	0.0056	0.0056
	Tz-	-0.2859	-0.2058	-0.1257	-0.0806	-0.0923	-0.1203	-0.1895	-0.2587	-0.3280
	Tz+	0.2299	0.1607	0.0915	0.0285	0.0576	0.1573	0.2124	0.2925	0.3726
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.1455	-0.2411	-0.2827	-0.2746	-0.2124	-0.1004	-0.1620	-0.3459
	My+	0.0000	0.1832	0.3087	0.3717	0.3770	0.3199	0.2051	0.1071	0.3068
	Mz-	0.0000	-0.0042	-0.0084	-0.0127	-0.0169	-0.0211	-0.0253	-0.0295	-0.0337
	Mz+	0.0000	0.0058	0.0116	0.0174	0.0232	0.0290	0.0348	0.0406	0.0463
275/276		0.000 m	0.169 m	0.337 m	0.506 m	0.675 m	0.843 m	1.012 m	1.180 m	1.349 m

## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

		Envolvente (Acero laminado)								
	N-	-1.6890	-1.6887	-1.6884	-1.6881	-1.6878	-1.6875	-1.6872	-1.6869	-1.6866
	N+	0.9685	0.9686	0.9688	0.9690	0.9692	0.9693	0.9695	0.9697	0.9699
	Ty-	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001
	Ty+	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078
	Tz-	-0.5987	-0.5962	-0.5936	-0.5911	-0.5886	-0.5861	-0.5835	-0.5810	-0.5785
	Tz+	0.7941	0.7984	0.8026	0.8069	0.8112	0.8154	0.8197	0.8239	0.8282
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
	My-	-0.3231	-0.3437	-0.3648	-0.3862	-0.4383	-0.5370	-0.6365	-0.7366	-0.8375
	My+	0.4805	0.3462	0.2399	0.1699	0.1468	0.2323	0.3309	0.4291	0.5269
	Mz-	0.0000	-0.0010	-0.0023	-0.0036	-0.0049	-0.0062	-0.0075	-0.0088	-0.0101
	Mz+	0.0014	0.0004	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
275/324		0.000 m	0.750 m	1.500 m	2.250 m	3.000 m	3.750 m	4.500 m	5.250 m	6.000 m
		Envolvente (Acero Conformado)								
	N-	-0.0620	-0.0620	-0.0620	-0.0620	-0.0620	-0.0620	-0.0620	-0.0620	-0.0620
	N+	0.2044	0.2044	0.2044	0.2044	0.2044	0.2044	0.2044	0.2044	0.2044
	Ty-	-0.0050	-0.0050	-0.0050	-0.0050	-0.0050	-0.0050	-0.0050	-0.0050	-0.0050
	Ty+	0.0075	0.0075	0.0075	0.0075	0.0075	0.0075	0.0075	0.0075	0.0075
	Tz-	-0.2888	-0.2088	-0.1287	-0.0829	-0.0816	-0.1089	-0.1781	-0.2473	-0.3165
	Tz+	0.2371	0.1679	0.0987	0.0315	0.0548	0.1548	0.2092	0.2893	0.3694
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.1508	-0.2519	-0.2989	-0.2961	-0.2394	-0.1328	-0.1524	-0.3287
	My+	0.0000	0.1854	0.3131	0.3784	0.3860	0.3311	0.2185	0.0768	0.2382
	Mz-	0.0000	-0.0056	-0.0113	-0.0169	-0.0226	-0.0282	-0.0338	-0.0395	-0.0451
	Mz+	0.0000	0.0037	0.0074	0.0112	0.0149	0.0186	0.0223	0.0260	0.0298
276/277		0.000 m	0.169 m	0.337 m	0.506 m	0.675 m	0.843 m	1.012 m	1.180 m	1.349 m
		Envolvente (Acero laminado)								
	N-	-1.6503	-1.6500	-1.6497	-1.6494	-1.6491	-1.6488	-1.6485	-1.6482	-1.6479
	N+	0.9324	0.9326	0.9328	0.9330	0.9332	0.9333	0.9335	0.9337	0.9339
	Ty-	-0.0209	-0.0209	-0.0209	-0.0209	-0.0209	-0.0209	-0.0209	-0.0209	-0.0209
	Ty+	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004
	Tz-	-1.0760	-1.0735	-1.0709	-1.0684	-1.0659	-1.0634	-1.0608	-1.0583	-1.0558
	Tz+	1.4137	1.4180	1.4222	1.4265	1.4308	1.4350	1.4393	1.4435	1.4478
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
	My-	-0.8375	-1.0291	-1.2570	-1.4857	-1.7151	-1.9452	-2.1760	-2.4076	-2.6398
	My+	0.5269	0.7081	0.8889	1.0693	1.2493	1.4288	1.6079	1.7866	1.9649
	Mz-	-0.0101	-0.0066	-0.0031	-0.0001	-0.0002	-0.0002	-0.0003	-0.0004	-0.0004
	Mz+	0.0001	0.0000	0.0000	0.0004	0.0039	0.0075	0.0110	0.0145	0.0180
276/325		0.000 m	0.750 m	1.500 m	2.250 m	3.000 m	3.750 m	4.500 m	5.250 m	6.000 m
		Envolvente (Acero Conformado)								
	N-	-0.0400	-0.0400	-0.0400	-0.0400	-0.0400	-0.0400	-0.0400	-0.0400	-0.0400
	N+	0.0418	0.0418	0.0418	0.0418	0.0418	0.0418	0.0418	0.0418	0.0418
	Ty-	-0.0047	-0.0047	-0.0047	-0.0047	-0.0047	-0.0047	-0.0047	-0.0047	-0.0047
	Ty+	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044
	Tz-	-0.2663	-0.1863	-0.1062	-0.0668	-0.0979	-0.1293	-0.1985	-0.2677	-0.3369
	Tz+	0.2221	0.1529	0.0837	0.0178	0.0603	0.1601	0.2205	0.3006	0.3807
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.1396	-0.2293	-0.2651	-0.2511	-0.1830	-0.0652	-0.1217	-0.3620
	My+	0.0000	0.1685	0.2794	0.3278	0.3185	0.2467	0.1173	0.1351	0.3608
	Mz-	0.0000	-0.0033	-0.0065	-0.0098	-0.0131	-0.0163	-0.0196	-0.0229	-0.0261

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	Mz+	0.0000	0.0035	0.0071	0.0106	0.0141	0.0177	0.0212	0.0247	0.0283
277/279		0.000 m	0.011 m	0.023 m	0.034 m	0.045 m	0.056 m	0.068 m	0.079 m	0.090 m
		Envolvente (Acero laminado)								
	N-	-1.6101	-1.6101	-1.6101	-1.6101	-1.6101	-1.6100	-1.6100	-1.6100	-1.6100
	N+	0.8957	0.8957	0.8957	0.8957	0.8957	0.8957	0.8957	0.8957	0.8957
	Ty-	-0.0011	-0.0011	-0.0011	-0.0011	-0.0011	-0.0011	-0.0011	-0.0011	-0.0011
	Ty+	0.0214	0.0214	0.0214	0.0214	0.0214	0.0214	0.0214	0.0214	0.0214
	Tz-	-1.5314	-1.5313	-1.5311	-1.5309	-1.5308	-1.5306	-1.5304	-1.5303	-1.5301
	Tz+	2.0109	2.0111	2.0114	2.0117	2.0120	2.0123	2.0126	2.0129	2.0131
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
	My-	-2.6398	-2.6617	-2.6835	-2.7054	-2.7273	-2.7491	-2.7710	-2.7929	-2.8147
	My+	1.9649	1.9822	1.9995	2.0167	2.0340	2.0513	2.0686	2.0859	2.1032
	Mz-	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004	-0.0003	-0.0003	-0.0003
Mz+	0.0180	0.0178	0.0175	0.0173	0.0171	0.0168	0.0166	0.0163	0.0161	
277/326		0.000 m	0.750 m	1.500 m	2.250 m	3.000 m	3.750 m	4.500 m	5.250 m	6.000 m
		Envolvente (Acero Conformado)								
	N-	-0.2662	-0.2662	-0.2662	-0.2662	-0.2662	-0.2662	-0.2662	-0.2662	-0.2662
	N+	0.4002	0.4002	0.4002	0.4002	0.4002	0.4002	0.4002	0.4002	0.4002
	Ty-	-0.0064	-0.0064	-0.0064	-0.0064	-0.0064	-0.0064	-0.0064	-0.0064	-0.0064
	Ty+	0.0055	0.0055	0.0055	0.0055	0.0055	0.0055	0.0055	0.0055	0.0055
	Tz-	-0.2440	-0.1639	-0.0848	-0.0579	-0.1099	-0.1457	-0.2149	-0.2841	-0.3533
	Tz+	0.2095	0.1403	0.0711	0.0188	0.0834	0.1775	0.2436	0.3237	0.4038
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.1301	-0.2104	-0.2367	-0.2132	-0.1358	-0.0544	-0.2288	-0.5004
	My+	0.0000	0.1517	0.2458	0.2774	0.2543	0.1628	0.0418	0.2209	0.4589
	Mz-	0.0000	-0.0041	-0.0082	-0.0123	-0.0164	-0.0205	-0.0246	-0.0287	-0.0328
Mz+	0.0000	0.0048	0.0096	0.0144	0.0192	0.0239	0.0287	0.0335	0.0383	
278/279		0.000 m	0.791 m	1.583 m	2.374 m	3.165 m	3.956 m	4.748 m	5.539 m	6.330 m
		Envolvente (Acero laminado)								
	N-	-7.1210	-7.0321	-6.9432	-6.8543	-6.7654	-6.6765	-6.5877	-6.4988	-6.4099
	N+	3.0530	3.1056	3.1583	3.2110	3.2637	3.3163	3.3690	3.4217	3.4744
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0033	0.0033	0.0033	0.0033	0.0033	0.0033	0.0033	0.0033	0.0033
	Tz-	-3.4852	-3.4852	-3.4852	-3.4852	-3.4852	-3.4852	-3.4852	-3.4852	-3.4852
	Tz+	1.7184	1.7184	1.7184	1.7184	1.7184	1.7184	1.7184	1.7184	1.7184
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
	My-	-8.6228	-5.8650	-3.3037	-1.9018	-2.1711	-2.6338	-3.9272	-5.2870	-6.6467
	My+	4.2313	2.8716	2.2966	2.2309	3.5000	5.5105	7.9242	10.6820	13.4398
	Mz-	-0.0003	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0001	-0.0001	-0.0001
Mz+	0.0216	0.0190	0.0163	0.0137	0.0111	0.0085	0.0059	0.0032	0.0006	
279/280		0.000 m	0.198 m	0.396 m	0.595 m	0.793 m	0.991 m	1.189 m	1.387 m	1.585 m
		Envolvente (Acero laminado)								
	N-	-4.3877	-4.3860	-4.3843	-4.3826	-4.3809	-4.3732	-4.3717	-4.3702	-4.3687
	N+	2.0336	2.0346	2.0357	2.0366	2.0376	2.0352	2.0361	2.0370	2.0379
	Ty-	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010
	Ty+	0.0181	0.0181	0.0181	0.0181	0.0181	0.0181	0.0181	0.0181	0.0181
	Tz-	-3.9771	-3.9613	-3.9459	-3.9306	-3.9157	-3.9077	-3.8933	-3.8792	-3.8653
	Tz+	2.0479	2.0572	2.0664	2.0754	2.0843	2.0963	2.1048	2.1132	2.1214
	Mt-	-0.0009	-0.0009	-0.0009	-0.0009	-0.0009	-0.0009	-0.0009	-0.0009	-0.0009
	Mt+	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
	My-	-15.6616	-14.8743	-14.0902	-13.3091	-12.5310	-11.7545	-10.9809	-10.2102	-9.4422

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	My+	7.5487	7.1416	6.7326	6.3219	5.9094	5.4945	5.0779	4.6596	4.2397
	Mz-	-0.0003	-0.0001	0.0000	-0.0004	-0.0008	-0.0017	-0.0053	-0.0089	-0.0125
	Mz+	0.0162	0.0127	0.0091	0.0057	0.0023	0.0007	0.0009	0.0011	0.0013
280/281		0.000 m	0.209 m	0.419 m	0.628 m	0.838 m	1.047 m	1.257 m	1.466 m	1.676 m
		Envolvente (Acero laminado)								
	N-	-4.2989	-4.2973	-4.2958	-4.2901	-4.2887	-4.3116	-4.3104	-4.3093	-4.3081
	N+	1.9827	1.9836	1.9845	1.9831	1.9840	1.9976	1.9983	1.9990	1.9996
	Ty-	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005
	Ty+	0.0047	0.0047	0.0047	0.0047	0.0047	0.0047	0.0047	0.0047	0.0047
	Tz-	-3.3093	-3.2950	-3.2809	-3.2727	-3.2592	-3.2164	-3.2062	-3.1961	-3.1860
	Tz+	1.6333	1.6418	1.6501	1.6609	1.6689	1.6602	1.6662	1.6722	1.6782
	Mt-	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0003	-0.0003	-0.0003	-0.0003
	Mt+	0.0001	0.0001	0.0001	0.0001	0.0001	0.0000	0.0000	0.0000	0.0000
	My-	-9.4448	-8.7527	-8.0636	-7.3764	-6.6918	-6.0139	-5.3406	-4.6693	-4.0002
	My+	4.2419	3.8986	3.5536	3.2064	2.8574	2.5087	2.1600	1.8101	1.4589
	Mz-	-0.0125	-0.0133	-0.0140	-0.0147	-0.0155	-0.0162	-0.0169	-0.0177	-0.0184
	Mz+	0.0013	0.0014	0.0015	0.0017	0.0018	0.0019	0.0020	0.0021	0.0022
280/331		0.000 m	0.750 m	1.500 m	2.250 m	3.000 m	3.750 m	4.500 m	5.250 m	6.000 m
		Envolvente (Acero Conformado)								
	N-	-0.0806	-0.0806	-0.0806	-0.0806	-0.0806	-0.0806	-0.0806	-0.0806	-0.0806
	N+	0.0550	0.0550	0.0550	0.0550	0.0550	0.0550	0.0550	0.0550	0.0550
	Ty-	-0.0095	-0.0095	-0.0095	-0.0095	-0.0095	-0.0095	-0.0095	-0.0095	-0.0095
	Ty+	0.0072	0.0072	0.0072	0.0072	0.0072	0.0072	0.0072	0.0072	0.0072
	Tz-	-0.2452	-0.1651	-0.0850	-0.0597	-0.1162	-0.1514	-0.2206	-0.2898	-0.3590
	Tz+	0.2172	0.1480	0.0788	0.0284	0.0894	0.1851	0.2496	0.3297	0.4098
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.1359	-0.2220	-0.2541	-0.2363	-0.1646	-0.1093	-0.2810	-0.5363
	My+	0.0000	0.1527	0.2477	0.2802	0.2551	0.1675	0.0730	0.2508	0.4931
	Mz-	0.0000	-0.0054	-0.0107	-0.0161	-0.0215	-0.0268	-0.0322	-0.0375	-0.0429
	Mz+	0.0000	0.0071	0.0143	0.0214	0.0286	0.0357	0.0429	0.0500	0.0572
281/282		0.000 m	0.209 m	0.419 m	0.628 m	0.838 m	1.047 m	1.257 m	1.466 m	1.676 m
		Envolvente (Acero laminado)								
	N-	-4.1307	-4.1300	-4.1293	-4.1286	-4.1279	-4.1271	-4.1264	-4.1257	-4.1250
	N+	1.8930	1.8935	1.8939	1.8943	1.8947	1.8951	1.8956	1.8960	1.8964
	Ty-	-0.0303	-0.0303	-0.0303	-0.0303	-0.0303	-0.0303	-0.0303	-0.0303	-0.0303
	Ty+	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043
	Tz-	-2.7720	-2.7618	-2.7517	-2.7415	-2.7313	-2.7212	-2.7110	-2.7008	-2.6907
	Tz+	1.2534	1.2594	1.2654	1.2714	1.2774	1.2835	1.2895	1.2955	1.3015
	Mt-	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001
	Mt+	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008
	My-	-4.0002	-3.4206	-2.8431	-2.2678	-1.6945	-1.3166	-1.1829	-1.1110	-1.3363
	My+	1.4589	1.1957	0.9313	0.6656	0.6023	0.7330	0.8625	1.0012	1.4337
	Mz-	-0.0184	-0.0120	-0.0057	-0.0005	-0.0014	-0.0023	-0.0032	-0.0041	-0.0050
	Mz+	0.0022	0.0013	0.0004	0.0013	0.0071	0.0133	0.0196	0.0260	0.0323
281/332		0.000 m	0.750 m	1.500 m	2.250 m	3.000 m	3.750 m	4.500 m	5.250 m	6.000 m
		Envolvente (Acero Conformado)								
	N-	-0.0635	-0.0635	-0.0635	-0.0635	-0.0635	-0.0635	-0.0635	-0.0635	-0.0635
	N+	0.0380	0.0380	0.0380	0.0380	0.0380	0.0380	0.0380	0.0380	0.0380
	Ty-	-0.0090	-0.0090	-0.0090	-0.0090	-0.0090	-0.0090	-0.0090	-0.0090	-0.0090
	Ty+	0.0077	0.0077	0.0077	0.0077	0.0077	0.0077	0.0077	0.0077	0.0077
	Tz-	-0.2658	-0.1857	-0.1056	-0.0687	-0.1116	-0.1429	-0.2121	-0.2813	-0.3505
	Tz+	0.2331	0.1639	0.0947	0.0333	0.0747	0.1739	0.2320	0.3121	0.3922
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.1478	-0.2458	-0.2899	-0.2841	-0.2243	-0.1147	-0.2314	-0.4481
	My+	0.0000	0.1681	0.2786	0.3266	0.3169	0.2447	0.1149	0.2062	0.4421
	Mz-	0.0000	-0.0058	-0.0115	-0.0173	-0.0230	-0.0288	-0.0345	-0.0403	-0.0460
	Mz+	0.0000	0.0067	0.0135	0.0202	0.0270	0.0337	0.0405	0.0472	0.0540
282/283		0.000 m	0.209 m	0.419 m	0.628 m	0.838 m	1.047 m	1.257 m	1.466 m	1.676 m
		Envolvente (Acero laminado)								
	N-	-4.0861	-4.0854	-4.0847	-4.0839	-4.0832	-4.0825	-4.0818	-4.0811	-4.0804
	N+	1.8649	1.8654	1.8658	1.8662	1.8666	1.8670	1.8675	1.8679	1.8683
	Ty-	-0.0046	-0.0046	-0.0046	-0.0046	-0.0046	-0.0046	-0.0046	-0.0046	-0.0046
	Ty+	0.0282	0.0282	0.0282	0.0282	0.0282	0.0282	0.0282	0.0282	0.0282
	Tz-	-2.0709	-2.0607	-2.0505	-2.0404	-2.0302	-2.0200	-2.0099	-1.9997	-1.9895
	Tz+	0.7743	0.7804	0.7864	0.7924	0.7984	0.8045	0.8105	0.8165	0.8225
	Mt-	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001
	Mt+	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008
	My-	-1.3363	-1.4681	-1.6013	-1.7357	-1.8713	-2.0082	-2.1464	-2.2858	-2.4265
	My+	1.4337	1.7709	2.1059	2.4388	2.7858	3.1917	3.5955	3.9971	4.3967
	Mz-	-0.0050	-0.0040	-0.0030	-0.0021	-0.0011	-0.0001	-0.0031	-0.0090	-0.0149
	Mz+	0.0323	0.0264	0.0205	0.0146	0.0093	0.0041	0.0008	0.0018	0.0028
282/333		0.000 m	0.750 m	1.500 m	2.250 m	3.000 m	3.750 m	4.500 m	5.250 m	6.000 m
		Envolvente (Acero Conformado)								
	N-	-0.2293	-0.2293	-0.2293	-0.2293	-0.2293	-0.2293	-0.2293	-0.2293	-0.2293
	N+	0.1129	0.1129	0.1129	0.1129	0.1129	0.1129	0.1129	0.1129	0.1129
	Ty-	-0.0063	-0.0063	-0.0063	-0.0063	-0.0063	-0.0063	-0.0063	-0.0063	-0.0063
	Ty+	0.0091	0.0091	0.0091	0.0091	0.0091	0.0091	0.0091	0.0091	0.0091
	Tz-	-0.3004	-0.2203	-0.1402	-0.0889	-0.0996	-0.1246	-0.1938	-0.2630	-0.3322
	Tz+	0.2513	0.1821	0.1129	0.0437	0.0419	0.1464	0.1953	0.2754	0.3555
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.1615	-0.2732	-0.3308	-0.3387	-0.2926	-0.1966	-0.1134	-0.2567
	My+	0.0000	0.1940	0.3304	0.4043	0.4205	0.3743	0.2704	0.1760	0.3325
	Mz-	0.0000	-0.0068	-0.0136	-0.0204	-0.0272	-0.0340	-0.0408	-0.0476	-0.0545
	Mz+	0.0000	0.0047	0.0094	0.0141	0.0188	0.0235	0.0283	0.0330	0.0377
283/284		0.000 m	0.209 m	0.419 m	0.628 m	0.838 m	1.047 m	1.257 m	1.466 m	1.676 m
		Envolvente (Acero laminado)								
	N-	-4.0459	-4.0452	-4.0445	-4.0438	-4.0430	-4.0423	-4.0416	-4.0409	-4.0402
	N+	1.8384	1.8388	1.8392	1.8397	1.8401	1.8405	1.8409	1.8414	1.8418
	Ty-	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003
	Ty+	0.0034	0.0034	0.0034	0.0034	0.0034	0.0034	0.0034	0.0034	0.0034
	Tz-	-1.3426	-1.3325	-1.3223	-1.3121	-1.3020	-1.2918	-1.2816	-1.2715	-1.2613
	Tz+	0.2872	0.2932	0.2992	0.3052	0.3113	0.3173	0.3233	0.3293	0.3353
	Mt-	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001
	Mt+	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008
	My-	-2.4265	-2.4617	-2.4981	-2.5358	-2.5747	-2.6149	-2.6564	-2.6991	-2.7431
	My+	4.3967	4.6608	4.9229	5.1828	5.4405	5.6962	5.9497	6.2011	6.4503
	Mz-	-0.0149	-0.0155	-0.0162	-0.0168	-0.0175	-0.0181	-0.0188	-0.0194	-0.0201
	Mz+	0.0028	0.0027	0.0026	0.0026	0.0025	0.0024	0.0024	0.0023	0.0023
283/336		0.000 m	0.750 m	1.500 m	2.250 m	3.000 m	3.750 m	4.500 m	5.250 m	6.000 m
		Envolvente (Acero Conformado)								
	N-	-0.0584	-0.0584	-0.0584	-0.0584	-0.0584	-0.0584	-0.0584	-0.0584	-0.0584
	N+	0.0232	0.0232	0.0232	0.0232	0.0232	0.0232	0.0232	0.0232	0.0232
	Ty-	-0.0075	-0.0075	-0.0075	-0.0075	-0.0075	-0.0075	-0.0075	-0.0075	-0.0075
	Ty+	0.0142	0.0142	0.0142	0.0142	0.0142	0.0142	0.0142	0.0142	0.0142
	Tz-	-0.3271	-0.2470	-0.1669	-0.1085	-0.0980	-0.1117	-0.1809	-0.2501	-0.3193

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas**

	Tz+	0.2593	0.1901	0.1209	0.0517	0.0160	0.1222	0.1640	0.2441	0.3242
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.1675	-0.2852	-0.3489	-0.3628	-0.3227	-0.2328	-0.0889	-0.1137
	My+	0.0000	0.2141	0.3705	0.4645	0.5008	0.4746	0.3907	0.2523	0.2784
	Mz-	0.0000	-0.0107	-0.0213	-0.0320	-0.0426	-0.0533	-0.0640	-0.0746	-0.0853
	Mz+	0.0000	0.0057	0.0113	0.0170	0.0226	0.0283	0.0340	0.0396	0.0453
284/285		0.000 m	0.209 m	0.419 m	0.628 m	0.838 m	1.047 m	1.257 m	1.466 m	1.676 m
		Envolvente (Acero laminado)								
	N-	-4.0089	-4.0082	-4.0075	-4.0068	-4.0061	-4.0054	-4.0047	-4.0039	-4.0032
	N+	1.8126	1.8130	1.8134	1.8138	1.8143	1.8147	1.8151	1.8155	1.8159
	Ty-	-0.0199	-0.0199	-0.0199	-0.0199	-0.0199	-0.0199	-0.0199	-0.0199	-0.0199
	Ty+	0.0021	0.0021	0.0021	0.0021	0.0021	0.0021	0.0021	0.0021	0.0021
	Tz-	-0.6770	-0.6668	-0.6566	-0.6465	-0.6363	-0.6261	-0.6160	-0.6058	-0.5957
	Tz+	-0.0581	-0.0521	-0.0461	-0.0401	-0.0341	-0.0280	-0.0220	-0.0160	-0.0100
	Mt-	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001
	Mt+	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008
	My-	-2.7431	-2.6790	-2.6162	-2.5547	-2.4944	-2.4354	-2.3776	-2.3211	-2.2659
	My+	6.4503	6.5596	6.6667	6.7716	6.8745	6.9752	7.0738	7.1702	7.2646
	Mz-	-0.0201	-0.0159	-0.0117	-0.0075	-0.0035	-0.0002	-0.0004	-0.0008	-0.0012
	Mz+	0.0023	0.0018	0.0014	0.0010	0.0006	0.0017	0.0050	0.0092	0.0133
284/337		0.000 m	0.750 m	1.500 m	2.250 m	3.000 m	3.750 m	4.500 m	5.250 m	6.000 m
		Envolvente (Acero Conformado)								
	N-	-0.0252	-0.0252	-0.0252	-0.0252	-0.0252	-0.0252	-0.0252	-0.0252	-0.0252
	N+	0.0379	0.0379	0.0379	0.0379	0.0379	0.0379	0.0379	0.0379	0.0379
	Ty-	-0.0083	-0.0083	-0.0083	-0.0083	-0.0083	-0.0083	-0.0083	-0.0083	-0.0083
	Ty+	0.0181	0.0181	0.0181	0.0181	0.0181	0.0181	0.0181	0.0181	0.0181
	Tz-	-0.3434	-0.2633	-0.1832	-0.1207	-0.1003	-0.0998	-0.1690	-0.2382	-0.3074
	Tz+	0.2596	0.1904	0.1212	0.0520	0.0021	0.1044	0.1421	0.2222	0.3023
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.1677	-0.2856	-0.3495	-0.3635	-0.3236	-0.2339	-0.0901	-0.0127
	My+	0.0000	0.2263	0.3949	0.5011	0.5496	0.5356	0.4640	0.3298	0.2623
	Mz-	0.0000	-0.0136	-0.0271	-0.0407	-0.0543	-0.0678	-0.0814	-0.0950	-0.1086
	Mz+	0.0000	0.0062	0.0124	0.0186	0.0248	0.0310	0.0373	0.0435	0.0497
285/286		0.000 m	0.007 m	0.015 m	0.022 m	0.030 m	0.037 m	0.045 m	0.052 m	0.060 m
		Envolvente (Acero laminado)								
	N-	-3.9712	-3.9712	-3.9712	-3.9711	-3.9711	-3.9711	-3.9711	-3.9710	-3.9710
	N+	1.8324	1.8325	1.8325	1.8325	1.8325	1.8325	1.8325	1.8326	1.8326
	Ty-	-0.0059	-0.0059	-0.0059	-0.0059	-0.0059	-0.0059	-0.0059	-0.0059	-0.0059
	Ty+	0.0588	0.0588	0.0588	0.0588	0.0588	0.0588	0.0588	0.0588	0.0588
	Tz-	-0.1555	-0.1553	-0.1551	-0.1549	-0.1547	-0.1545	-0.1543	-0.1540	-0.1538
	Tz+	0.3286	0.3290	0.3294	0.3297	0.3301	0.3304	0.3308	0.3312	0.3315
	Mt-	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001
	Mt+	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008
	My-	-2.2659	-2.2647	-2.2635	-2.2624	-2.2612	-2.2600	-2.2589	-2.2577	-2.2566
	My+	7.2646	7.2625	7.2605	7.2584	7.2564	7.2543	7.2523	7.2502	7.2481
	Mz-	-0.0012	-0.0013	-0.0014	-0.0014	-0.0015	-0.0016	-0.0016	-0.0017	-0.0017
	Mz+	0.0133	0.0132	0.0130	0.0128	0.0127	0.0125	0.0123	0.0122	0.0120
285/338		0.000 m	0.750 m	1.500 m	2.250 m	3.000 m	3.750 m	4.500 m	5.250 m	6.000 m
		Envolvente (Acero Conformado)								
	N-	-2.5910	-2.5910	-2.5910	-2.5910	-2.5910	-2.5910	-2.5910	-2.5910	-2.5910
	N+	1.1633	1.1633	1.1633	1.1633	1.1633	1.1633	1.1633	1.1633	1.1633
	Ty-	-0.0098	-0.0098	-0.0098	-0.0098	-0.0098	-0.0098	-0.0098	-0.0098	-0.0098



## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas**

	Ty+	0.0206	0.0206	0.0206	0.0206	0.0206	0.0206	0.0206	0.0206	0.0206
	Tz-	-0.3706	-0.2838	-0.1969	-0.1267	-0.0906	0.0127	0.0335	0.0543	0.0751
	Tz+	-0.0133	0.0075	0.0283	0.0490	0.0698	0.1505	0.1864	0.2576	0.3377
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	0.0019	-0.0112	-0.0405	-0.0848	-0.1453	-0.2207	-0.3124	-0.4191
	My+	0.0000	0.2441	0.4257	0.5395	0.5908	0.5744	0.4954	0.3634	0.1765
	Mz-	0.0000	-0.0154	-0.0309	-0.0463	-0.0617	-0.0771	-0.0926	-0.1080	-0.1234
	Mz+	0.0000	0.0073	0.0147	0.0220	0.0293	0.0367	0.0440	0.0514	0.0587
287/286		0.000 m	0.007 m	0.015 m	0.022 m	0.030 m	0.037 m	0.045 m	0.052 m	0.060 m
	Envolvente (Acero laminado)									
	N-	-3.9708	-3.9708	-3.9708	-3.9707	-3.9707	-3.9707	-3.9707	-3.9706	-3.9706
	N+	1.8222	1.8222	1.8222	1.8223	1.8223	1.8223	1.8223	1.8223	1.8223
	Ty-	-0.0059	-0.0059	-0.0059	-0.0059	-0.0059	-0.0059	-0.0059	-0.0059	-0.0059
	Ty+	0.0588	0.0588	0.0588	0.0588	0.0588	0.0588	0.0588	0.0588	0.0588
	Tz-	-0.2028	-0.2026	-0.2024	-0.2021	-0.2019	-0.2017	-0.2015	-0.2013	-0.2011
	Tz+	0.3638	0.3642	0.3645	0.3649	0.3653	0.3656	0.3660	0.3663	0.3667
	Mt-	-0.0009	-0.0009	-0.0009	-0.0009	-0.0009	-0.0009	-0.0009	-0.0009	-0.0009
	Mt+	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
	My-	-2.2606	-2.2601	-2.2596	-2.2591	-2.2586	-2.2581	-2.2576	-2.2571	-2.2566
	My+	7.2649	7.2628	7.2607	7.2586	7.2565	7.2544	7.2524	7.2503	7.2481
	Mz-	-0.0106	-0.0108	-0.0110	-0.0111	-0.0113	-0.0115	-0.0116	-0.0118	-0.0120
	Mz+	0.0023	0.0022	0.0021	0.0021	0.0020	0.0019	0.0019	0.0018	0.0017
288/287		0.000 m	0.197 m	0.393 m	0.590 m	0.786 m	0.983 m	1.180 m	1.376 m	1.573 m
	Envolvente (Acero laminado)									
	N-	-4.0452	-4.0446	-4.0439	-4.0432	-4.0426	-4.0419	-4.0412	-4.0406	-4.0399
	N+	1.8225	1.8229	1.8233	1.8237	1.8241	1.8245	1.8248	1.8252	1.8256
	Ty-	-0.0024	-0.0024	-0.0024	-0.0024	-0.0024	-0.0024	-0.0024	-0.0024	-0.0024
	Ty+	0.0168	0.0168	0.0168	0.0168	0.0168	0.0168	0.0168	0.0168	0.0168
	Tz-	-0.5545	-0.5450	-0.5354	-0.5259	-0.5163	-0.5068	-0.4973	-0.4877	-0.4782
	Tz+	-0.1136	-0.1079	-0.1023	-0.0966	-0.0910	-0.0853	-0.0797	-0.0740	-0.0683
	Mt-	-0.0009	-0.0009	-0.0009	-0.0009	-0.0009	-0.0009	-0.0009	-0.0009	-0.0009
	Mt+	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
	My-	-2.7618	-2.6946	-2.6284	-2.5634	-2.4995	-2.4367	-2.3750	-2.3144	-2.2606
	My+	6.5706	6.6443	6.7161	6.8116	6.9060	6.9985	7.0892	7.1780	7.2649
	Mz-	-0.0016	-0.0011	-0.0006	-0.0001	0.0003	-0.0011	-0.0041	-0.0073	-0.0106
	Mz+	0.0157	0.0124	0.0091	0.0059	0.0026	0.0012	0.0014	0.0018	0.0023
287/342		0.000 m	0.750 m	1.500 m	2.250 m	3.000 m	3.750 m	4.500 m	5.250 m	6.000 m
	Envolvente (Acero Conformado)									
	N-	-2.6935	-2.6935	-2.6935	-2.6935	-2.6935	-2.6935	-2.6935	-2.6935	-2.6935
	N+	1.1121	1.1121	1.1121	1.1121	1.1121	1.1121	1.1121	1.1121	1.1121
	Ty-	-0.0102	-0.0102	-0.0102	-0.0102	-0.0102	-0.0102	-0.0102	-0.0102	-0.0102
	Ty+	0.0215	0.0215	0.0215	0.0215	0.0215	0.0215	0.0215	0.0215	0.0215
	Tz-	-0.3708	-0.2840	-0.1971	-0.1268	-0.0906	0.0127	0.0335	0.0543	0.0751
	Tz+	-0.0132	0.0076	0.0284	0.0492	0.0700	0.1506	0.1866	0.2577	0.3378
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	0.0018	-0.0114	-0.0408	-0.0851	-0.1457	-0.2213	-0.3131	-0.4198
	My+	0.0000	0.2442	0.4259	0.5399	0.5913	0.5750	0.4962	0.3635	0.1765
	Mz-	0.0000	-0.0161	-0.0322	-0.0483	-0.0645	-0.0806	-0.0967	-0.1128	-0.1289
	Mz+	0.0000	0.0076	0.0153	0.0229	0.0306	0.0382	0.0458	0.0535	0.0611
289/288		0.000 m	0.197 m	0.393 m	0.590 m	0.786 m	0.983 m	1.180 m	1.376 m	1.573 m
	Envolvente (Acero laminado)									
	N-	-4.1138	-4.1132	-4.1125	-4.1118	-4.1112	-4.1105	-4.1098	-4.1092	-4.1085

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE** Adrián Freijomil Aradas

	N+	1.8655	1.8659	1.8663	1.8667	1.8671	1.8675	1.8679	1.8683	1.8687
	Ty-	-0.0034	-0.0034	-0.0034	-0.0034	-0.0034	-0.0034	-0.0034	-0.0034	-0.0034
	Ty+	0.0138	0.0138	0.0138	0.0138	0.0138	0.0138	0.0138	0.0138	0.0138
	Tz-	-1.2566	-1.2471	-1.2376	-1.2280	-1.2185	-1.2090	-1.1994	-1.1899	-1.1803
	Tz+	0.2714	0.2771	0.2827	0.2884	0.2941	0.2997	0.3054	0.3110	0.3167
	Mt-	-0.0009	-0.0009	-0.0009	-0.0009	-0.0009	-0.0009	-0.0009	-0.0009	-0.0009
	Mt+	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
	My-	-2.4970	-2.5262	-2.5566	-2.5880	-2.6205	-2.6542	-2.6890	-2.7248	-2.7618
	My+	4.8718	5.0907	5.3078	5.5229	5.7362	5.9476	6.1572	6.3648	6.5706
	Mz-	-0.0068	-0.0061	-0.0055	-0.0048	-0.0042	-0.0035	-0.0029	-0.0022	-0.0016
	Mz+	0.0374	0.0347	0.0320	0.0293	0.0266	0.0239	0.0212	0.0184	0.0157
288/343		0.000 m	0.750 m	1.500 m	2.250 m	3.000 m	3.750 m	4.500 m	5.250 m	6.000 m
	Envolvente (Acero Conformado)									
	N-	-0.1001	-0.1001	-0.1001	-0.1001	-0.1001	-0.1001	-0.1001	-0.1001	-0.1001
	N+	0.0455	0.0455	0.0455	0.0455	0.0455	0.0455	0.0455	0.0455	0.0455
	Ty-	-0.0087	-0.0087	-0.0087	-0.0087	-0.0087	-0.0087	-0.0087	-0.0087	-0.0087
	Ty+	0.0185	0.0185	0.0185	0.0185	0.0185	0.0185	0.0185	0.0185	0.0185
	Tz-	-0.3491	-0.2690	-0.1889	-0.1261	-0.0932	-0.0861	-0.1554	-0.2246	-0.2938
	Tz+	0.2610	0.1918	0.1226	0.0534	-0.0065	0.0982	0.1356	0.2157	0.2958
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.1687	-0.2876	-0.3526	-0.3677	-0.3288	-0.2401	-0.0974	0.0390
	My+	0.0000	0.2306	0.4035	0.5140	0.5667	0.5570	0.4897	0.3598	0.1857
	Mz-	0.0000	-0.0139	-0.0278	-0.0417	-0.0556	-0.0695	-0.0834	-0.0973	-0.1112
	Mz+	0.0000	0.0065	0.0130	0.0195	0.0260	0.0325	0.0390	0.0455	0.0519
290/289		0.000 m	0.197 m	0.393 m	0.590 m	0.786 m	0.983 m	1.180 m	1.376 m	1.573 m
	Envolvente (Acero laminado)									
	N-	-4.1787	-4.1781	-4.1774	-4.1767	-4.1761	-4.1754	-4.1747	-4.1741	-4.1734
	N+	1.9080	1.9084	1.9088	1.9092	1.9096	1.9100	1.9104	1.9108	1.9112
	Ty-	-0.0634	-0.0634	-0.0634	-0.0634	-0.0634	-0.0634	-0.0634	-0.0634	-0.0634
	Ty+	0.0106	0.0106	0.0106	0.0106	0.0106	0.0106	0.0106	0.0106	0.0106
	Tz-	-1.9889	-1.9794	-1.9699	-1.9603	-1.9508	-1.9412	-1.9317	-1.9222	-1.9126
	Tz+	0.7691	0.7747	0.7804	0.7861	0.7917	0.7974	0.8030	0.8087	0.8143
	Mt-	-0.0009	-0.0009	-0.0009	-0.0009	-0.0009	-0.0009	-0.0009	-0.0009	-0.0009
	Mt+	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
	My-	-1.4579	-1.5839	-1.7110	-1.8393	-1.9686	-2.0990	-2.2306	-2.3633	-2.4970
	My+	2.0318	2.3934	2.7531	3.1109	3.4668	3.8209	4.1731	4.5234	4.8718
	Mz-	-0.0623	-0.0498	-0.0373	-0.0249	-0.0124	-0.0008	-0.0026	-0.0047	-0.0068
	Mz+	0.0098	0.0078	0.0057	0.0036	0.0015	0.0014	0.0125	0.0249	0.0374
289/344		0.000 m	0.750 m	1.500 m	2.250 m	3.000 m	3.750 m	4.500 m	5.250 m	6.000 m
	Envolvente (Acero Conformado)									
	N-	-0.0516	-0.0516	-0.0516	-0.0516	-0.0516	-0.0516	-0.0516	-0.0516	-0.0516
	N+	0.0280	0.0280	0.0280	0.0280	0.0280	0.0280	0.0280	0.0280	0.0280
	Ty-	-0.0081	-0.0081	-0.0081	-0.0081	-0.0081	-0.0081	-0.0081	-0.0081	-0.0081
	Ty+	0.0148	0.0148	0.0148	0.0148	0.0148	0.0148	0.0148	0.0148	0.0148
	Tz-	-0.3382	-0.2581	-0.1780	-0.1186	-0.0838	-0.0834	-0.1526	-0.2218	-0.2910
	Tz+	0.2678	0.1986	0.1294	0.0602	-0.0028	0.1082	0.1491	0.2291	0.3092
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.1739	-0.2979	-0.3680	-0.3882	-0.3545	-0.2709	-0.1334	0.0000
	My+	0.0000	0.2224	0.3871	0.4893	0.5339	0.5160	0.4404	0.3024	0.1236
	Mz-	0.0000	-0.0111	-0.0222	-0.0334	-0.0445	-0.0556	-0.0667	-0.0778	-0.0889
	Mz+	0.0000	0.0061	0.0121	0.0182	0.0242	0.0303	0.0363	0.0424	0.0484
291/290		0.000 m	0.197 m	0.393 m	0.590 m	0.786 m	0.983 m	1.180 m	1.376 m	1.573 m

## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

		Envolvente (Acero laminado)								
	N-	-4.2367	-4.2360	-4.2354	-4.2347	-4.2340	-4.2334	-4.2327	-4.2320	-4.2314
	N+	1.9489	1.9493	1.9497	1.9501	1.9505	1.9509	1.9513	1.9516	1.9520
	Ty-	-0.0077	-0.0077	-0.0077	-0.0077	-0.0077	-0.0077	-0.0077	-0.0077	-0.0077
	Ty+	0.0523	0.0523	0.0523	0.0523	0.0523	0.0523	0.0523	0.0523	0.0523
	Tz-	-2.6991	-2.6896	-2.6800	-2.6705	-2.6609	-2.6514	-2.6419	-2.6323	-2.6228
	Tz+	1.2671	1.2728	1.2784	1.2841	1.2897	1.2954	1.3010	1.3067	1.3124
	Mt-	-0.0009	-0.0009	-0.0009	-0.0009	-0.0009	-0.0009	-0.0009	-0.0009	-0.0009
	Mt+	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
	My-	-2.8475	-2.3730	-1.9005	-1.4298	-0.9957	-0.8012	-0.9992	-1.2280	-1.4579
	My+	1.1677	0.9180	0.6672	0.4153	0.1956	0.5668	1.0570	1.5453	2.0318
	Mz-	-0.0023	-0.0007	-0.0013	-0.0108	-0.0211	-0.0314	-0.0417	-0.0520	-0.0623
	Mz+	0.0200	0.0098	0.0008	0.0023	0.0038	0.0053	0.0068	0.0083	0.0098
290/345		0.000 m	0.750 m	1.500 m	2.250 m	3.000 m	3.750 m	4.500 m	5.250 m	6.000 m
		Envolvente (Acero Conformado)								
	N-	-0.0952	-0.0952	-0.0952	-0.0952	-0.0952	-0.0952	-0.0952	-0.0952	-0.0952
	N+	0.4393	0.4393	0.4393	0.4393	0.4393	0.4393	0.4393	0.4393	0.4393
	Ty-	-0.0066	-0.0066	-0.0066	-0.0066	-0.0066	-0.0066	-0.0066	-0.0066	-0.0066
	Ty+	0.0090	0.0090	0.0090	0.0090	0.0090	0.0090	0.0090	0.0090	0.0090
	Tz-	-0.3156	-0.2355	-0.1554	-0.1024	-0.0747	-0.0869	-0.1561	-0.2253	-0.2945
	Tz+	0.2681	0.1989	0.1297	0.0605	0.0128	0.1257	0.1730	0.2531	0.3332
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.1741	-0.2984	-0.3687	-0.3892	-0.3557	-0.2724	-0.1373	-0.0938
	My+	0.0000	0.2055	0.3532	0.4385	0.4662	0.4314	0.3389	0.1890	0.1063
	Mz-	0.0000	-0.0068	-0.0135	-0.0203	-0.0270	-0.0338	-0.0405	-0.0473	-0.0540
	Mz+	0.0000	0.0049	0.0099	0.0148	0.0198	0.0247	0.0297	0.0346	0.0396
292/291		0.000 m	0.197 m	0.393 m	0.590 m	0.786 m	0.983 m	1.180 m	1.376 m	1.573 m
		Envolvente (Acero laminado)								
	N-	-4.4049	-4.4036	-4.4876	-4.2861	-4.2854	-4.2847	-4.2841	-4.2834	-4.2827
	N+	2.0407	2.0415	2.2569	1.9872	1.9876	1.9879	1.9883	1.9887	1.9891
	Ty-	-0.0045	-0.0045	-0.0045	-0.0045	-0.0045	-0.0045	-0.0045	-0.0045	-0.0045
	Ty+	0.0107	0.0107	0.0107	0.0107	0.0107	0.0107	0.0107	0.0107	0.0107
	Tz-	-3.2262	-3.2134	-2.4771	-3.3459	-3.3364	-3.3268	-3.3173	-3.3077	-3.2982
	Tz+	1.6816	1.6891	1.3966	1.7634	1.7691	1.7747	1.7804	1.7860	1.7917
	Mt-	-0.0002	-0.0002	-0.0013	-0.0009	-0.0009	-0.0009	-0.0009	-0.0009	-0.0009
	Mt+	0.0000	0.0000	0.0053	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
	My-	-7.7012	-7.0678	-6.5665	-5.9185	-5.2616	-4.6062	-4.0089	-3.4231	-2.8475
	My+	3.8692	3.5377	3.2569	2.9146	2.5674	2.2193	1.8696	1.5191	1.1677
	Mz-	-0.0093	-0.0084	-0.0074	-0.0067	-0.0058	-0.0049	-0.0040	-0.0031	-0.0023
	Mz+	0.0366	0.0345	0.0320	0.0304	0.0283	0.0262	0.0242	0.0221	0.0200
291/348		0.000 m	0.750 m	1.500 m	2.250 m	3.000 m	3.750 m	4.500 m	5.250 m	6.000 m
		Envolvente (Acero Conformado)								
	N-	-0.0398	-0.0398	-0.0398	-0.0398	-0.0398	-0.0398	-0.0398	-0.0398	-0.0398
	N+	0.0465	0.0465	0.0465	0.0465	0.0465	0.0465	0.0465	0.0465	0.0465
	Ty-	-0.0042	-0.0042	-0.0042	-0.0042	-0.0042	-0.0042	-0.0042	-0.0042	-0.0042
	Ty+	0.0049	0.0049	0.0049	0.0049	0.0049	0.0049	0.0049	0.0049	0.0049
	Tz-	-0.2805	-0.2004	-0.1203	-0.0762	-0.0764	-0.1058	-0.1750	-0.2442	-0.3134
	Tz+	0.2492	0.1800	0.1108	0.0416	0.0463	0.1504	0.2065	0.2866	0.3667
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.1599	-0.2700	-0.3261	-0.3324	-0.2847	-0.1872	-0.0938	-0.2778
	My+	0.0000	0.1791	0.3006	0.3595	0.3608	0.2997	0.1808	0.0547	0.2197
	Mz-	0.0000	-0.0036	-0.0073	-0.0109	-0.0146	-0.0182	-0.0219	-0.0255	-0.0292

## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

	Mz+	0.0000	0.0031	0.0062	0.0094	0.0125	0.0156	0.0187	0.0219	0.0250
293/292		0.000 m	0.197 m	0.393 m	0.590 m	0.786 m	0.983 m	1.180 m	1.376 m	1.573 m
		Envolvente (Acero laminado)								
	N-	-4.4885	-4.4869	-4.4853	-4.4837	-4.4822	-4.4735	-4.4721	-4.4707	-4.4693
	N+	2.0940	2.0949	2.0959	2.0968	2.0977	2.0949	2.0958	2.0966	2.0974
	Ty-	-0.0181	-0.0181	-0.0181	-0.0181	-0.0181	-0.0181	-0.0181	-0.0181	-0.0181
	Ty+	0.0130	0.0130	0.0130	0.0130	0.0130	0.0130	0.0130	0.0130	0.0130
	Tz-	-3.8910	-3.8760	-3.8614	-3.8470	-3.8329	-3.8274	-3.8138	-3.8005	-3.7874
	Tz+	2.1098	2.1186	2.1273	2.1358	2.1442	2.1558	2.1639	2.1718	2.1795
	Mt-	-0.0008	-0.0008	-0.0008	-0.0008	-0.0008	-0.0008	-0.0008	-0.0008	-0.0008
	Mt+	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013
	My-	-13.7395	-12.9755	-12.2144	-11.4561	-10.7006	-9.9463	-9.1947	-8.4457	-7.6994
	My+	7.2444	6.8284	6.4107	5.9914	5.5703	5.1470	4.7221	4.2957	3.8677
	Mz-	-0.0032	-0.0003	-0.0014	-0.0027	-0.0041	-0.0054	-0.0067	-0.0080	-0.0093
	Mz+	0.0204	0.0179	0.0168	0.0190	0.0225	0.0260	0.0295	0.0330	0.0365
292/349		0.000 m	0.750 m	1.500 m	2.250 m	3.000 m	3.750 m	4.500 m	5.250 m	6.000 m
		Envolvente (Acero Conformado)								
	N-	-0.0635	-0.0635	-0.0635	-0.0635	-0.0635	-0.0635	-0.0635	-0.0635	-0.0635
	N+	0.0300	0.0300	0.0300	0.0300	0.0300	0.0300	0.0300	0.0300	0.0300
	Ty-	-0.0028	-0.0028	-0.0028	-0.0028	-0.0028	-0.0028	-0.0028	-0.0028	-0.0028
	Ty+	0.0016	0.0016	0.0016	0.0016	0.0016	0.0016	0.0016	0.0016	0.0016
	Tz-	-0.2502	-0.1701	-0.0900	-0.0544	-0.0893	-0.1235	-0.1927	-0.2619	-0.3311
	Tz+	0.2264	0.1571	0.0879	0.0208	0.0723	0.1690	0.2325	0.3126	0.3926
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.1428	-0.2357	-0.2747	-0.2638	-0.1990	-0.0843	-0.1714	-0.4336
	My+	0.0000	0.1564	0.2551	0.2913	0.2699	0.1860	0.0444	0.1045	0.3259
	Mz-	0.0000	-0.0012	-0.0024	-0.0036	-0.0048	-0.0060	-0.0072	-0.0084	-0.0096
	Mz+	0.0000	0.0021	0.0041	0.0062	0.0083	0.0103	0.0124	0.0145	0.0165
296/293		0.000 m	0.066 m	0.132 m	0.198 m	0.264 m	0.330 m	0.396 m	0.462 m	0.528 m
		Envolvente (Acero laminado)								
	N-	-4.5968	-4.5963	-4.5957	-4.5951	-4.5945	-4.5918	-4.5912	-4.5907	-4.5901
	N+	2.2036	2.2039	2.2043	2.2046	2.2050	2.2040	2.2043	2.2047	2.2050
	Ty-	-0.0390	-0.0390	-0.0390	-0.0390	-0.0390	-0.0390	-0.0390	-0.0390	-0.0390
	Ty+	0.0055	0.0055	0.0055	0.0055	0.0055	0.0055	0.0055	0.0055	0.0055
	Tz-	-4.6808	-4.6755	-4.6702	-4.6650	-4.6598	-4.6568	-4.6517	-4.6466	-4.6415
	Tz+	2.8052	2.8084	2.8115	2.8146	2.8177	2.8217	2.8248	2.8278	2.8308
	Mt-	-0.0011	-0.0011	-0.0011	-0.0011	-0.0011	-0.0011	-0.0011	-0.0011	-0.0011
	Mt+	0.0047	0.0047	0.0047	0.0047	0.0047	0.0047	0.0047	0.0047	0.0047
	My-	-16.1950	-15.8861	-15.5775	-15.2692	-14.9613	-14.6535	-14.3462	-14.0391	-13.7324
	My+	8.5539	8.3907	8.2273	8.0636	7.8997	7.7356	7.5713	7.4068	7.2421
	Mz-	-0.0008	-0.0006	-0.0010	-0.0014	-0.0017	-0.0021	-0.0024	-0.0028	-0.0032
	Mz+	0.0001	0.0022	0.0047	0.0073	0.0099	0.0125	0.0150	0.0176	0.0202
293/350		0.000 m	0.750 m	1.500 m	2.250 m	3.000 m	3.750 m	4.500 m	5.250 m	6.000 m
		Envolvente (Acero laminado)								
	N-	-1.2588	-1.2588	-1.2588	-1.2588	-1.2588	-1.2588	-1.2588	-1.2588	-1.2588
	N+	2.2640	2.2640	2.2640	2.2640	2.2640	2.2640	2.2640	2.2640	2.2640
	Ty-	-0.0119	-0.0119	-0.0119	-0.0119	-0.0119	-0.0119	-0.0119	-0.0119	-0.0119
	Ty+	0.0262	0.0262	0.0262	0.0262	0.0262	0.0262	0.0262	0.0262	0.0262
	Tz-	-0.3293	-0.2213	-0.1158	-0.0758	-0.1914	-0.2896	-0.4210	-0.5525	-0.6839
	Tz+	0.3674	0.2360	0.1046	0.0286	0.1122	0.2328	0.3282	0.4362	0.5442
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.2243	-0.3540	-0.3812	-0.3138	-0.1755	-0.1090	-0.3071	-0.6731

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas**

	My+	0.0000	0.2049	0.3320	0.3749	0.3473	0.2227	0.1207	0.4877	0.9493
	Mz-	0.0000	-0.0197	-0.0393	-0.0590	-0.0786	-0.0983	-0.1179	-0.1376	-0.1572
	Mz+	0.0000	0.0089	0.0179	0.0268	0.0357	0.0447	0.0536	0.0625	0.0715
294/295		0.000 m	0.603 m	1.205 m	1.808 m	2.410 m	3.013 m	3.615 m	4.218 m	4.820 m
		Envolvente (Acero laminado)								
	N-	-6.5080	-6.4403	-6.3726	-6.3050	-6.2373	-6.1696	-6.1019	-6.0342	-5.9666
	N+	2.2444	2.2845	2.3246	2.3647	2.4048	2.4449	2.4850	2.5251	2.5652
	Ty-	-0.0028	-0.0028	-0.0028	-0.0028	-0.0028	-0.0028	-0.0028	-0.0028	-0.0028
	Ty+	0.0271	0.0271	0.0271	0.0271	0.0271	0.0271	0.0271	0.0271	0.0271
	Tz-	-5.0283	-4.6668	-4.3053	-3.9438	-3.5823	-3.2208	-2.8593	-2.4978	-2.1363
	Tz+	5.9528	5.7268	5.5009	5.2749	5.0490	4.8231	4.6374	4.5018	4.3663
	Mt-	-0.0008	-0.0008	-0.0008	-0.0008	-0.0008	-0.0008	-0.0008	-0.0008	-0.0008
	Mt+	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
	My-	-11.0285	-8.1122	-5.4051	-2.9244	-0.8645	-2.6947	-5.1218	-7.8734	-10.5465
	My+	14.6199	11.1041	7.7191	4.4756	1.5744	1.4917	3.2282	4.8376	6.2379
	Mz-	-0.0165	-0.0148	-0.0131	-0.0115	-0.0098	-0.0151	-0.0296	-0.0442	-0.0587
	Mz+	0.0996	0.0839	0.0683	0.0526	0.0370	0.0220	0.0149	0.0118	0.0087
295/296		0.000 m	0.189 m	0.378 m	0.566 m	0.755 m	0.944 m	1.133 m	1.322 m	1.510 m
		Envolvente (Acero laminado)								
	N-	-6.0014	-5.9802	-5.9590	-5.9378	-5.9165	-5.8953	-5.8741	-5.8529	-5.8317
	N+	2.5798	2.5924	2.6049	2.6175	2.6301	2.6427	2.6552	2.6678	2.6804
	Ty-	-0.0390	-0.0390	-0.0390	-0.0390	-0.0390	-0.0390	-0.0390	-0.0390	-0.0390
	Ty+	0.0055	0.0055	0.0055	0.0055	0.0055	0.0055	0.0055	0.0055	0.0055
	Tz-	-1.8826	-1.8826	-1.8826	-1.8826	-1.8826	-1.8826	-1.8826	-1.8826	-1.8826
	Tz+	4.1367	4.1299	4.1231	4.1163	4.1095	4.1027	4.0959	4.0891	4.0823
	Mt-	-0.0008	-0.0008	-0.0008	-0.0008	-0.0008	-0.0008	-0.0008	-0.0008	-0.0008
	Mt+	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
	My-	-10.5465	-11.3268	-12.1059	-12.8836	-13.6601	-14.4353	-15.2092	-15.9818	-16.7532
	My+	6.2380	6.5630	6.8860	7.2067	7.5254	7.8419	8.1564	8.4686	8.7787
	Mz-	-0.0587	-0.0513	-0.0440	-0.0366	-0.0293	-0.0219	-0.0145	-0.0072	-0.0001
	Mz+	0.0087	0.0076	0.0066	0.0056	0.0045	0.0035	0.0025	0.0014	0.0009
295/300		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-0.8854	-0.8854	-0.8854	-0.8854	-0.8854	-0.8854	-0.8854	-0.8854	-0.8854
	N+	1.3536	1.3536	1.3536	1.3536	1.3536	1.3536	1.3536	1.3536	1.3536
	Ty-	-0.0750	-0.0737	-0.0725	-0.0712	-0.0699	-0.0687	-0.0674	-0.0662	-0.0649
	Ty+	0.0448	0.0456	0.0463	0.0471	0.0478	0.0486	0.0493	0.0501	0.0508
	Tz-	-0.1775	-0.1775	-0.1775	-0.1775	-0.1775	-0.1775	-0.1775	-0.1775	-0.1775
	Tz+	0.1895	0.1895	0.1895	0.1895	0.1895	0.1895	0.1895	0.1895	0.1895
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.1487	-0.1265	-0.1043	-0.0821	-0.0599	-0.0378	-0.0156	-0.0097	-0.0134
	My+	0.1897	0.1660	0.1423	0.1187	0.0950	0.0713	0.0476	0.0268	0.0424
	Mz-	-0.0698	-0.0605	-0.0513	-0.0424	-0.0335	-0.0249	-0.0164	-0.0086	-0.0113
	Mz+	0.0401	0.0344	0.0287	0.0229	0.0169	0.0109	0.0048	0.0031	0.0038
296/297		0.000 m	0.185 m	0.370 m	0.556 m	0.741 m	0.926 m	1.111 m	1.296 m	1.481 m
		Envolvente (Acero Conformado)								
	N-	-0.7304	-0.7294	-0.7284	-0.7274	-0.7264	-0.7254	-0.7244	-0.7234	-0.7224
	N+	-0.2148	-0.2143	-0.2137	-0.2131	-0.2125	-0.2119	-0.2113	-0.2107	-0.2101
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.0444	-0.0333	-0.0222	-0.0111	0.0000	-0.0111	-0.0222	-0.0333	-0.0444
	Tz+	0.0444	0.0333	0.0222	0.0111	0.0000	0.0111	0.0222	0.0333	0.0444
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0072	-0.0123	-0.0154	-0.0165	-0.0154	-0.0123	-0.0072	0.0000
	My+	0.0000	0.0072	0.0123	0.0154	0.0165	0.0154	0.0123	0.0072	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
297/301		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367
	N+	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172
	Ty-	-0.3561	-0.3459	-0.3357	-0.3255	-0.3153	-0.3051	-0.2949	-0.2847	-0.2745
	Ty+	-0.1041	-0.0980	-0.0920	-0.0859	-0.0799	-0.0738	-0.0678	-0.0618	-0.0557
	Tz-	-0.2666	-0.2666	-0.2666	-0.2666	-0.2666	-0.2666	-0.2666	-0.2666	-0.2666
	Tz+	0.2669	0.2669	0.2669	0.2669	0.2669	0.2669	0.2669	0.2669	0.2669
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-8.8498	-8.8164	-8.7831	-8.7498	-8.7165	-8.6832	-8.6498	-8.6165	-8.5832
	My+	8.8542	8.8208	8.7874	8.7541	8.7207	8.6873	8.6540	8.6206	8.5872
	Mz-	-0.3830	-0.3391	-0.2965	-0.2552	-0.2151	-0.1763	-0.1388	-0.1026	-0.0677
	Mz+	-0.0966	-0.0840	-0.0721	-0.0610	-0.0506	-0.0410	-0.0321	-0.0240	-0.0167
298/299		0.000 m	0.374 m	0.748 m	1.122 m	1.496 m	1.870 m	2.244 m	2.618 m	2.992 m
		Envolvente (Acero Conformado)								
	N-	-0.0292	-0.0272	-0.0252	-0.0233	-0.0221	-0.0209	-0.0197	-0.0185	-0.0173
	N+	0.0394	0.0406	0.0418	0.0432	0.0452	0.0473	0.0493	0.0513	0.0533
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.0942	-0.0707	-0.0471	-0.0236	0.0000	-0.0393	-0.0785	-0.1178	-0.1571
	Tz+	0.1571	0.1178	0.0785	0.0393	0.0000	0.0236	0.0471	0.0707	0.0942
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0511	-0.0881	-0.1098	-0.1175	-0.1098	-0.0881	-0.0511	0.0000
	My+	0.0000	0.0307	0.0529	0.0659	0.0705	0.0659	0.0529	0.0307	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
298/302		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-0.2410	-0.2410	-0.2410	-0.2410	-0.2410	-0.2410	-0.2410	-0.2410	-0.2410
	N+	1.0173	1.0173	1.0173	1.0173	1.0173	1.0173	1.0173	1.0173	1.0173
	Ty-	-0.0393	-0.0380	-0.0369	-0.0361	-0.0354	-0.0346	-0.0339	-0.0331	-0.0324
	Ty+	0.0630	0.0637	0.0646	0.0658	0.0671	0.0684	0.0696	0.0709	0.0721
	Tz-	-0.1891	-0.1891	-0.1891	-0.1891	-0.1891	-0.1891	-0.1891	-0.1891	-0.1891
	Tz+	0.1048	0.1048	0.1048	0.1048	0.1048	0.1048	0.1048	0.1048	0.1048
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0193	-0.0231	-0.0360	-0.0489	-0.0618	-0.0747	-0.0876	-0.1005	-0.1134
	My+	0.0107	0.0183	0.0418	0.0652	0.0887	0.1121	0.1356	0.1590	0.1825
	Mz-	-0.0027	-0.0030	-0.0109	-0.0190	-0.0271	-0.0353	-0.0437	-0.0521	-0.0606
	Mz+	0.0098	0.0094	0.0133	0.0177	0.0220	0.0261	0.0301	0.0339	0.0376
299/303		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456
	N+	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257
	Ty-	-0.2625	-0.2523	-0.2421	-0.2319	-0.2217	-0.2115	-0.2013	-0.1911	-0.1809
	Ty+	-0.0657	-0.0596	-0.0536	-0.0476	-0.0415	-0.0355	-0.0294	-0.0234	-0.0173
	Tz-	-0.3897	-0.3897	-0.3897	-0.3897	-0.3897	-0.3897	-0.3897	-0.3897	-0.3897

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas**

	Tz+	0.6096	0.6096	0.6096	0.6096	0.6096	0.6096	0.6096	0.6096	0.6096
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-9.2637	-9.2150	-9.1663	-9.1176	-9.0689	-9.0202	-8.9714	-8.9227	-8.8740
	My+	15.0004	14.9242	14.8480	14.7718	14.6956	14.6194	14.5432	14.4670	14.3908
	Mz-	-0.0792	-0.0470	-0.0161	0.0059	0.0117	0.0165	0.0205	0.0238	0.0264
	Mz+	-0.0151	-0.0073	-0.0002	0.0135	0.0419	0.0689	0.0947	0.1193	0.1425
300/301		0.000 m	0.374 m	0.748 m	1.122 m	1.496 m	1.870 m	2.244 m	2.618 m	2.992 m
		Envolvente (Acero Conformado)								
	N-	-0.0269	-0.0249	-0.0231	-0.0219	-0.0207	-0.0195	-0.0183	-0.0171	-0.0159
	N+	0.0230	0.0242	0.0256	0.0276	0.0296	0.0317	0.0337	0.0357	0.0378
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.0898	-0.0673	-0.0449	-0.0224	0.0000	-0.0224	-0.0449	-0.0673	-0.0898
	Tz+	0.0898	0.0673	0.0449	0.0224	0.0000	0.0224	0.0449	0.0673	0.0898
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0292	-0.0503	-0.0628	-0.0671	-0.0628	-0.0503	-0.0292	0.0000
	My+	0.0000	0.0292	0.0503	0.0628	0.0671	0.0628	0.0503	0.0292	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
300/304		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-0.8854	-0.8854	-0.8854	-0.8854	-0.8854	-0.8854	-0.8854	-0.8854	-0.8854
	N+	1.3536	1.3536	1.3536	1.3536	1.3536	1.3536	1.3536	1.3536	1.3536
	Ty-	-0.0380	-0.0367	-0.0354	-0.0342	-0.0330	-0.0323	-0.0315	-0.0308	-0.0300
	Ty+	0.0278	0.0286	0.0293	0.0301	0.0309	0.0322	0.0335	0.0347	0.0360
	Tz-	-0.0877	-0.0877	-0.0877	-0.0877	-0.0877	-0.0877	-0.0877	-0.0877	-0.0877
	Tz+	0.0997	0.0997	0.0997	0.0997	0.0997	0.0997	0.0997	0.0997	0.0997
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0134	-0.0254	-0.0374	-0.0495	-0.0615	-0.0735	-0.0855	-0.0976	-0.1096
	My+	0.0424	0.0529	0.0634	0.0740	0.0845	0.0950	0.1055	0.1161	0.1266
	Mz-	-0.0113	-0.0146	-0.0180	-0.0216	-0.0254	-0.0293	-0.0333	-0.0376	-0.0419
	Mz+	0.0038	0.0082	0.0125	0.0167	0.0209	0.0249	0.0289	0.0327	0.0365
301/305		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367
	N+	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172
	Ty-	-0.2378	-0.2276	-0.2174	-0.2072	-0.1970	-0.1868	-0.1766	-0.1664	-0.1562
	Ty+	-0.0704	-0.0644	-0.0583	-0.0523	-0.0462	-0.0402	-0.0341	-0.0281	-0.0221
	Tz-	-0.3563	-0.3563	-0.3563	-0.3563	-0.3563	-0.3563	-0.3563	-0.3563	-0.3563
	Tz+	0.3567	0.3567	0.3567	0.3567	0.3567	0.3567	0.3567	0.3567	0.3567
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-8.5832	-8.5386	-8.4941	-8.4496	-8.4050	-8.3605	-8.3159	-8.2714	-8.2269
	My+	8.5872	8.5426	8.4980	8.4535	8.4089	8.3643	8.3197	8.2751	8.2305
	Mz-	-0.0677	-0.0386	-0.0109	0.0055	0.0118	0.0173	0.0221	0.0261	0.0293
	Mz+	-0.0167	-0.0083	-0.0006	0.0167	0.0414	0.0652	0.0878	0.1092	0.1293
302/303		0.000 m	0.374 m	0.748 m	1.122 m	1.496 m	1.870 m	2.244 m	2.618 m	2.992 m
		Envolvente (Acero Conformado)								
	N-	-0.0257	-0.0245	-0.0233	-0.0221	-0.0209	-0.0197	-0.0185	-0.0173	-0.0161
	N+	0.0692	0.0713	0.0733	0.0753	0.0773	0.0794	0.0814	0.0834	0.0855
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE** Adrián Freijomil Aradas

	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.0942	-0.0707	-0.0471	-0.0236	0.0000	-0.0393	-0.0785	-0.1178	-0.1571
	Tz+	0.1571	0.1178	0.0785	0.0393	0.0000	0.0236	0.0471	0.0707	0.0942
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0511	-0.0881	-0.1098	-0.1175	-0.1098	-0.0881	-0.0511	0.0000
	My+	0.0000	0.0307	0.0529	0.0659	0.0705	0.0659	0.0529	0.0307	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
302/306		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-0.2410	-0.2410	-0.2410	-0.2410	-0.2410	-0.2410	-0.2410	-0.2410	-0.2410
	N+	1.0173	1.0173	1.0173	1.0173	1.0173	1.0173	1.0173	1.0173	1.0173
	Ty-	-0.0093	-0.0080	-0.0068	-0.0055	-0.0042	-0.0030	-0.0022	-0.0015	-0.0008
	Ty+	0.0055	0.0062	0.0070	0.0077	0.0085	0.0092	0.0105	0.0117	0.0130
	Tz-	-0.0320	-0.0320	-0.0320	-0.0320	-0.0320	-0.0320	-0.0320	-0.0320	-0.0320
	Tz+	0.0106	0.0106	0.0106	0.0106	0.0106	0.0106	0.0106	0.0106	0.0106
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.1134	-0.1146	-0.1157	-0.1168	-0.1179	-0.1191	-0.1202	-0.1213	-0.1225
	My+	0.1825	0.1863	0.1901	0.1939	0.1977	0.2016	0.2054	0.2092	0.2130
	Mz-	-0.0606	-0.0613	-0.0621	-0.0630	-0.0639	-0.0650	-0.0662	-0.0674	-0.0688
	Mz+	0.0376	0.0386	0.0395	0.0403	0.0408	0.0413	0.0415	0.0416	0.0416
303/307		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456
	N+	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257
	Ty-	-0.0954	-0.0852	-0.0750	-0.0648	-0.0546	-0.0444	-0.0342	-0.0240	-0.0156
	Ty+	-0.0334	-0.0274	-0.0213	-0.0153	-0.0092	-0.0032	0.0029	0.0089	0.0168
	Tz-	-0.4839	-0.4839	-0.4839	-0.4839	-0.4839	-0.4839	-0.4839	-0.4839	-0.4839
	Tz+	0.7667	0.7667	0.7667	0.7667	0.7667	0.7667	0.7667	0.7667	0.7667
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-8.8740	-8.8135	-8.7530	-8.6925	-8.6320	-8.5716	-8.5111	-8.4506	-8.3901
	My+	14.3908	14.2950	14.1992	14.1033	14.0075	13.9117	13.8158	13.7200	13.6242
	Mz-	0.0264	0.0302	0.0332	0.0355	0.0370	0.0378	0.0378	0.0371	0.0356
	Mz+	0.1425	0.1538	0.1638	0.1725	0.1800	0.1862	0.1911	0.1948	0.1971
304/305		0.000 m	0.374 m	0.748 m	1.122 m	1.496 m	1.870 m	2.244 m	2.618 m	2.992 m
		Envolvente (Acero Conformado)								
	N-	-0.0244	-0.0232	-0.0220	-0.0208	-0.0196	-0.0184	-0.0172	-0.0160	-0.0148
	N+	0.0448	0.0468	0.0489	0.0509	0.0529	0.0549	0.0570	0.0590	0.0610
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.0898	-0.0673	-0.0449	-0.0224	0.0000	-0.0224	-0.0449	-0.0673	-0.0898
	Tz+	0.0898	0.0673	0.0449	0.0224	0.0000	0.0224	0.0449	0.0673	0.0898
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0292	-0.0503	-0.0628	-0.0671	-0.0628	-0.0503	-0.0292	0.0000
	My+	0.0000	0.0292	0.0503	0.0628	0.0671	0.0628	0.0503	0.0292	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
304/308		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-0.8854	-0.8854	-0.8854	-0.8854	-0.8854	-0.8854	-0.8854	-0.8854	-0.8854



## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE** Adrián Freijomil Aradas

	N+	1.3536	1.3536	1.3536	1.3536	1.3536	1.3536	1.3536	1.3536	1.3536
	Ty-	-0.0094	-0.0082	-0.0069	-0.0057	-0.0044	-0.0031	-0.0019	-0.0010	-0.0002
	Ty+	-0.0032	-0.0024	-0.0017	-0.0009	-0.0002	0.0006	0.0013	0.0024	0.0037
	Tz-	-0.0014	-0.0014	-0.0014	-0.0014	-0.0014	-0.0014	-0.0014	-0.0014	-0.0014
	Tz+	0.0100	0.0100	0.0100	0.0100	0.0100	0.0100	0.0100	0.0100	0.0100
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.1096	-0.1104	-0.1112	-0.1120	-0.1128	-0.1136	-0.1144	-0.1152	-0.1160
	My+	0.1266	0.1259	0.1252	0.1245	0.1238	0.1231	0.1224	0.1217	0.1210
	Mz-	-0.0419	-0.0409	-0.0400	-0.0392	-0.0386	-0.0382	-0.0380	-0.0379	-0.0378
	Mz+	0.0365	0.0371	0.0376	0.0381	0.0384	0.0387	0.0389	0.0390	0.0389
305/309		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367
	N+	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172
	Ty-	-0.0951	-0.0849	-0.0747	-0.0645	-0.0543	-0.0441	-0.0339	-0.0237	-0.0135
	Ty+	-0.0368	-0.0308	-0.0247	-0.0187	-0.0127	-0.0066	-0.0006	0.0055	0.0115
	Tz-	-0.4461	-0.4461	-0.4461	-0.4461	-0.4461	-0.4461	-0.4461	-0.4461	-0.4461
	Tz+	0.4464	0.4464	0.4464	0.4464	0.4464	0.4464	0.4464	0.4464	0.4464
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-8.2269	-8.1711	-8.1153	-8.0596	-8.0038	-7.9481	-7.8923	-7.8365	-7.7808
	My+	8.2305	8.1747	8.1189	8.0631	8.0073	7.9515	7.8957	7.8399	7.7841
	Mz-	0.0293	0.0337	0.0372	0.0399	0.0419	0.0431	0.0436	0.0432	0.0422
	Mz+	0.1293	0.1406	0.1506	0.1593	0.1667	0.1729	0.1777	0.1813	0.1837
306/307		0.000 m	0.374 m	0.748 m	1.122 m	1.496 m	1.870 m	2.244 m	2.618 m	2.992 m
		Envolvente (Acero Conformado)								
	N-	-0.0261	-0.0249	-0.0237	-0.0225	-0.0213	-0.0201	-0.0189	-0.0177	-0.0165
	N+	0.0562	0.0583	0.0603	0.0623	0.0644	0.0664	0.0684	0.0704	0.0725
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.0942	-0.0707	-0.0471	-0.0236	0.0000	-0.0393	-0.0785	-0.1178	-0.1571
	Tz+	0.1571	0.1178	0.0785	0.0393	0.0000	0.0236	0.0471	0.0707	0.0942
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0511	-0.0881	-0.1098	-0.1175	-0.1098	-0.0881	-0.0511	0.0000
	My+	0.0000	0.0307	0.0529	0.0659	0.0705	0.0659	0.0529	0.0307	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
306/310		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-0.2410	-0.2410	-0.2410	-0.2410	-0.2410	-0.2410	-0.2410	-0.2410	-0.2410
	N+	1.0173	1.0173	1.0173	1.0173	1.0173	1.0173	1.0173	1.0173	1.0173
	Ty-	-0.0435	-0.0422	-0.0411	-0.0404	-0.0396	-0.0389	-0.0381	-0.0374	-0.0366
	Ty+	0.0256	0.0264	0.0273	0.0285	0.0298	0.0310	0.0323	0.0336	0.0348
	Tz-	-0.0852	-0.0852	-0.0852	-0.0852	-0.0852	-0.0852	-0.0852	-0.0852	-0.0852
	Tz+	0.1266	0.1266	0.1266	0.1266	0.1266	0.1266	0.1266	0.1266	0.1266
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.1225	-0.1118	-0.1012	-0.0905	-0.0799	-0.0692	-0.0586	-0.0479	-0.0373
	My+	0.2130	0.1972	0.1814	0.1655	0.1497	0.1339	0.1181	0.1023	0.0865
	Mz-	-0.0688	-0.0635	-0.0583	-0.0532	-0.0482	-0.0433	-0.0385	-0.0338	-0.0292
	Mz+	0.0416	0.0384	0.0351	0.0316	0.0279	0.0241	0.0202	0.0161	0.0118
307/311		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m

## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

		Envolvente (Acero laminado)								
	N-	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456
	N+	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257
	Ty-	-0.0017	0.0044	0.0104	0.0165	0.0225	0.0286	0.0346	0.0407	0.0467
	Ty+	0.0587	0.0689	0.0791	0.0893	0.0995	0.1097	0.1199	0.1301	0.1403
	Tz-	-0.5782	-0.5782	-0.5782	-0.5782	-0.5782	-0.5782	-0.5782	-0.5782	-0.5782
	Tz+	0.9237	0.9237	0.9237	0.9237	0.9237	0.9237	0.9237	0.9237	0.9237
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-8.3901	-8.3178	-8.2455	-8.1733	-8.1010	-8.0287	-7.9564	-7.8842	-7.8119
	My+	13.6242	13.5087	13.3933	13.2778	13.1623	13.0469	12.9314	12.8159	12.7005
	Mz-	0.0356	0.0354	0.0344	0.0327	0.0303	0.0271	0.0231	0.0183	0.0129
	Mz+	0.1971	0.1892	0.1799	0.1694	0.1577	0.1446	0.1303	0.1147	0.0978
308/309		0.000 m	0.374 m	0.748 m	1.122 m	1.496 m	1.870 m	2.244 m	2.618 m	2.992 m
		Envolvente (Acero Conformado)								
	N-	-0.0247	-0.0235	-0.0223	-0.0211	-0.0199	-0.0187	-0.0175	-0.0163	-0.0151
	N+	0.0353	0.0374	0.0394	0.0414	0.0435	0.0455	0.0475	0.0495	0.0516
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.0898	-0.0673	-0.0449	-0.0224	0.0000	-0.0224	-0.0449	-0.0673	-0.0898
	Tz+	0.0898	0.0673	0.0449	0.0224	0.0000	0.0224	0.0449	0.0673	0.0898
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0292	-0.0503	-0.0628	-0.0671	-0.0628	-0.0503	-0.0292	0.0000
	My+	0.0000	0.0292	0.0503	0.0628	0.0671	0.0628	0.0503	0.0292	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
308/312		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-0.8854	-0.8854	-0.8854	-0.8854	-0.8854	-0.8854	-0.8854	-0.8854	-0.8854
	N+	1.3536	1.3536	1.3536	1.3536	1.3536	1.3536	1.3536	1.3536	1.3536
	Ty-	-0.0342	-0.0329	-0.0317	-0.0304	-0.0295	-0.0287	-0.0280	-0.0272	-0.0265
	Ty+	0.0252	0.0259	0.0267	0.0274	0.0285	0.0297	0.0310	0.0322	0.0335
	Tz-	-0.0833	-0.0833	-0.0833	-0.0833	-0.0833	-0.0833	-0.0833	-0.0833	-0.0833
	Tz+	0.0953	0.0953	0.0953	0.0953	0.0953	0.0953	0.0953	0.0953	0.0953
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.1160	-0.1056	-0.0952	-0.0848	-0.0744	-0.0640	-0.0536	-0.0432	-0.0328
	My+	0.1210	0.1091	0.0972	0.0852	0.0733	0.0614	0.0495	0.0376	0.0257
	Mz-	-0.0378	-0.0338	-0.0299	-0.0261	-0.0224	-0.0187	-0.0152	-0.0118	-0.0087
	Mz+	0.0389	0.0358	0.0327	0.0294	0.0259	0.0222	0.0185	0.0146	0.0107
309/313		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367
	N+	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172
	Ty-	-0.0047	0.0014	0.0074	0.0135	0.0195	0.0256	0.0316	0.0377	0.0437
	Ty+	0.0391	0.0493	0.0595	0.0697	0.0799	0.0901	0.1003	0.1105	0.1207
	Tz-	-0.5358	-0.5358	-0.5358	-0.5358	-0.5358	-0.5358	-0.5358	-0.5358	-0.5358
	Tz+	0.5362	0.5362	0.5362	0.5362	0.5362	0.5362	0.5362	0.5362	0.5362
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-7.7808	-7.7138	-7.6468	-7.5798	-7.5129	-7.4459	-7.3789	-7.3119	-7.2449
	My+	7.7841	7.7171	7.6500	7.5830	7.5160	7.4490	7.3819	7.3149	7.2479
	Mz-	0.0422	0.0422	0.0415	0.0401	0.0379	0.0349	0.0312	0.0267	0.0214

## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

	Mz+	0.1837	0.1783	0.1717	0.1637	0.1546	0.1441	0.1323	0.1193	0.1050
310/311		0.000 m	0.374 m	0.748 m	1.122 m	1.496 m	1.870 m	2.244 m	2.618 m	2.992 m
		Envolvente (Acero Conformado)								
	N-	-0.0261	-0.0249	-0.0237	-0.0225	-0.0213	-0.0201	-0.0189	-0.0177	-0.0164
	N+	0.0708	0.0729	0.0749	0.0769	0.0789	0.0810	0.0830	0.0850	0.0871
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.0942	-0.0707	-0.0471	-0.0236	0.0000	-0.0393	-0.0785	-0.1178	-0.1571
	Tz+	0.1571	0.1178	0.0785	0.0393	0.0000	0.0236	0.0471	0.0707	0.0942
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0511	-0.0881	-0.1098	-0.1175	-0.1098	-0.0881	-0.0511	0.0000
	My+	0.0000	0.0307	0.0529	0.0659	0.0705	0.0659	0.0529	0.0307	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
310/314		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-0.2410	-0.2410	-0.2410	-0.2410	-0.2410	-0.2410	-0.2410	-0.2410	-0.2410
	N+	1.0173	1.0173	1.0173	1.0173	1.0173	1.0173	1.0173	1.0173	1.0173
	Ty-	-0.1041	-0.1028	-0.1015	-0.1003	-0.0990	-0.0978	-0.0967	-0.0959	-0.0952
	Ty+	0.0573	0.0581	0.0588	0.0596	0.0603	0.0611	0.0620	0.0633	0.0645
	Tz-	-0.1794	-0.1794	-0.1794	-0.1794	-0.1794	-0.1794	-0.1794	-0.1794	-0.1794
	Tz+	0.2836	0.2836	0.2836	0.2836	0.2836	0.2836	0.2836	0.2836	0.2836
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0373	-0.0149	-0.0103	-0.0255	-0.0607	-0.0960	-0.1312	-0.1665	-0.2018
	My+	0.0865	0.0510	0.0155	0.0356	0.0578	0.0800	0.1023	0.1245	0.1468
	Mz-	-0.0292	-0.0166	-0.0044	-0.0118	-0.0193	-0.0269	-0.0346	-0.0423	-0.0502
Mz+	0.0118	0.0049	0.0043	0.0108	0.0232	0.0355	0.0476	0.0596	0.0714	
311/315		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456
	N+	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257
	Ty-	0.0305	0.0365	0.0426	0.0486	0.0546	0.0607	0.0667	0.0728	0.0788
	Ty+	0.2272	0.2374	0.2476	0.2578	0.2680	0.2782	0.2884	0.2986	0.3088
	Tz-	-0.6724	-0.6724	-0.6724	-0.6724	-0.6724	-0.6724	-0.6724	-0.6724	-0.6724
	Tz+	1.0808	1.0808	1.0808	1.0808	1.0808	1.0808	1.0808	1.0808	1.0808
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-7.8119	-7.7278	-7.6438	-7.5597	-7.4757	-7.3916	-7.3076	-7.2235	-7.1395
	My+	12.7005	12.5654	12.4303	12.2952	12.1601	12.0250	11.8899	11.7548	11.6197
	Mz-	0.0129	0.0087	0.0037	-0.0020	-0.0265	-0.0606	-0.0960	-0.1326	-0.1706
Mz+	0.0978	0.0688	0.0385	0.0069	-0.0079	-0.0152	-0.0231	-0.0319	-0.0414	
312/313		0.000 m	0.374 m	0.748 m	1.122 m	1.496 m	1.870 m	2.244 m	2.618 m	2.992 m
		Envolvente (Acero Conformado)								
	N-	-0.0243	-0.0231	-0.0219	-0.0207	-0.0195	-0.0183	-0.0171	-0.0159	-0.0146
	N+	0.0453	0.0473	0.0493	0.0513	0.0534	0.0554	0.0574	0.0595	0.0615
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.0898	-0.0673	-0.0449	-0.0224	0.0000	-0.0224	-0.0449	-0.0673	-0.0898
	Tz+	0.0898	0.0673	0.0449	0.0224	0.0000	0.0224	0.0449	0.0673	0.0898
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0292	-0.0503	-0.0628	-0.0671	-0.0628	-0.0503	-0.0292	0.0000

## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

	My+	0.0000	0.0292	0.0503	0.0628	0.0671	0.0628	0.0503	0.0292	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
312/316		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-0.8854	-0.8854	-0.8854	-0.8854	-0.8854	-0.8854	-0.8854	-0.8854	-0.8854
	N+	1.3536	1.3536	1.3536	1.3536	1.3536	1.3536	1.3536	1.3536	1.3536
	Ty-	-0.0694	-0.0681	-0.0669	-0.0656	-0.0643	-0.0631	-0.0618	-0.0610	-0.0602
	Ty+	0.0554	0.0562	0.0569	0.0576	0.0584	0.0591	0.0599	0.0610	0.0623
	Tz-	-0.1730	-0.1730	-0.1730	-0.1730	-0.1730	-0.1730	-0.1730	-0.1730	-0.1730
	Tz+	0.1851	0.1851	0.1851	0.1851	0.1851	0.1851	0.1851	0.1851	0.1851
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0328	-0.0111	-0.0227	-0.0454	-0.0683	-0.0911	-0.1140	-0.1369	-0.1599
	My+	0.0257	0.0041	0.0126	0.0338	0.0551	0.0765	0.0979	0.1193	0.1407
	Mz-	-0.0087	-0.0009	-0.0039	-0.0109	-0.0180	-0.0253	-0.0326	-0.0401	-0.0477
	Mz+	0.0107	0.0038	0.0089	0.0171	0.0250	0.0329	0.0406	0.0482	0.0557
313/317		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367
	N+	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172
	Ty-	0.0295	0.0356	0.0416	0.0477	0.0537	0.0597	0.0658	0.0718	0.0779
	Ty+	0.1817	0.1919	0.2021	0.2123	0.2225	0.2327	0.2429	0.2531	0.2633
	Tz-	-0.6256	-0.6256	-0.6256	-0.6256	-0.6256	-0.6256	-0.6256	-0.6256	-0.6256
	Tz+	0.6259	0.6259	0.6259	0.6259	0.6259	0.6259	0.6259	0.6259	0.6259
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-7.2449	-7.1668	-7.0886	-7.0104	-6.9322	-6.8540	-6.7758	-6.6976	-6.6194
	My+	7.2479	7.1696	7.0914	7.0132	6.9349	6.8567	6.7784	6.7002	6.6219
	Mz-	0.0214	0.0173	0.0123	0.0067	-0.0042	-0.0271	-0.0568	-0.0878	-0.1201
	Mz+	0.1050	0.0818	0.0573	0.0316	0.0090	-0.0038	-0.0117	-0.0203	-0.0296
314/315		0.000 m	0.374 m	0.748 m	1.122 m	1.496 m	1.870 m	2.244 m	2.618 m	2.992 m
		Envolvente (Acero Conformado)								
	N-	-0.0292	-0.0272	-0.0252	-0.0231	-0.0211	-0.0199	-0.0187	-0.0175	-0.0163
	N+	0.0359	0.0371	0.0383	0.0395	0.0408	0.0428	0.0449	0.0469	0.0489
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.0942	-0.0707	-0.0471	-0.0236	0.0000	-0.0393	-0.0785	-0.1178	-0.1571
	Tz+	0.1571	0.1178	0.0785	0.0393	0.0000	0.0236	0.0471	0.0707	0.0942
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0511	-0.0881	-0.1098	-0.1175	-0.1098	-0.0881	-0.0511	0.0000
	My+	0.0000	0.0307	0.0529	0.0659	0.0705	0.0659	0.0529	0.0307	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
314/319		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-0.2410	-0.2410	-0.2410	-0.2410	-0.2410	-0.2410	-0.2410	-0.2410	-0.2410
	N+	1.0173	1.0173	1.0173	1.0173	1.0173	1.0173	1.0173	1.0173	1.0173
	Ty-	-0.1310	-0.1302	-0.1295	-0.1288	-0.1280	-0.1273	-0.1265	-0.1258	-0.1250
	Ty+	0.0937	0.0950	0.0963	0.0975	0.0988	0.1000	0.1013	0.1026	0.1038
	Tz-	-0.2737	-0.2737	-0.2737	-0.2737	-0.2737	-0.2737	-0.2737	-0.2737	-0.2737
	Tz+	0.4407	0.4407	0.4407	0.4407	0.4407	0.4407	0.4407	0.4407	0.4407
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.2018	-0.2567	-0.3116	-0.3665	-0.4214	-0.4763	-0.5313	-0.5863	-0.6413
	My+	0.1468	0.1808	0.2148	0.2488	0.2828	0.3169	0.3509	0.3849	0.4189
	Mz-	-0.0502	-0.0613	-0.0725	-0.0845	-0.0966	-0.1089	-0.1214	-0.1340	-0.1468
	Mz+	0.0714	0.0870	0.1025	0.1184	0.1344	0.1503	0.1661	0.1819	0.1975
315/321		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456
	N+	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257
	Ty-	0.0626	0.0686	0.0747	0.0807	0.0868	0.0928	0.0989	0.1049	0.1110
	Ty+	0.3576	0.3678	0.3780	0.3882	0.3984	0.4086	0.4188	0.4290	0.4392
	Tz-	-0.7667	-0.7667	-0.7667	-0.7667	-0.7667	-0.7667	-0.7667	-0.7667	-0.7667
	Tz+	1.2378	1.2378	1.2378	1.2378	1.2378	1.2378	1.2378	1.2378	1.2378
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-7.1395	-7.0436	-6.9478	-6.8520	-6.7561	-6.6603	-6.5645	-6.4686	-6.3728
	My+	11.6197	11.4650	11.3102	11.1555	11.0008	10.8460	10.6913	10.5366	10.3818
	Mz-	-0.1706	-0.2159	-0.2625	-0.3104	-0.3596	-0.4100	-0.4617	-0.5147	-0.5689
	Mz+	-0.0414	-0.0496	-0.0585	-0.0682	-0.0787	-0.0899	-0.1019	-0.1147	-0.1281
316/317		0.000 m	0.374 m	0.748 m	1.122 m	1.496 m	1.870 m	2.244 m	2.618 m	2.992 m
		Envolvente (Acero Conformado)								
	N-	-0.0276	-0.0256	-0.0235	-0.0221	-0.0209	-0.0197	-0.0185	-0.0173	-0.0161
	N+	0.0219	0.0232	0.0244	0.0262	0.0282	0.0302	0.0322	0.0343	0.0363
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.0898	-0.0673	-0.0449	-0.0224	0.0000	-0.0224	-0.0449	-0.0673	-0.0898
	Tz+	0.0898	0.0673	0.0449	0.0224	0.0000	0.0224	0.0449	0.0673	0.0898
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0292	-0.0503	-0.0628	-0.0671	-0.0628	-0.0503	-0.0292	0.0000
	My+	0.0000	0.0292	0.0503	0.0628	0.0671	0.0628	0.0503	0.0292	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
316/353		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-0.8854	-0.8854	-0.8854	-0.8854	-0.8854	-0.8854	-0.8854	-0.8854	-0.8854
	N+	1.3536	1.3536	1.3536	1.3536	1.3536	1.3536	1.3536	1.3536	1.3536
	Ty-	-0.0811	-0.0804	-0.0796	-0.0789	-0.0781	-0.0774	-0.0766	-0.0759	-0.0751
	Ty+	0.0888	0.0901	0.0913	0.0926	0.0938	0.0951	0.0964	0.0976	0.0989
	Tz-	-0.2628	-0.2628	-0.2628	-0.2628	-0.2628	-0.2628	-0.2628	-0.2628	-0.2628
	Tz+	0.2748	0.2748	0.2748	0.2748	0.2748	0.2748	0.2748	0.2748	0.2748
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.1599	-0.1941	-0.2283	-0.2625	-0.2968	-0.3312	-0.3656	-0.3999	-0.4343
	My+	0.1407	0.1733	0.2060	0.2388	0.2717	0.3045	0.3374	0.3702	0.4031
	Mz-	-0.0477	-0.0585	-0.0693	-0.0808	-0.0925	-0.1042	-0.1162	-0.1283	-0.1406
	Mz+	0.0557	0.0654	0.0749	0.0848	0.0946	0.1043	0.1139	0.1234	0.1328
317/356		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367
	N+	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172
	Ty-	0.0618	0.0678	0.0739	0.0799	0.0860	0.0920	0.0981	0.1041	0.1101
	Ty+	0.2996	0.3098	0.3200	0.3302	0.3404	0.3506	0.3608	0.3710	0.3812
	Tz-	-0.7153	-0.7153	-0.7153	-0.7153	-0.7153	-0.7153	-0.7153	-0.7153	-0.7153

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas**

	Tz+	0.7157	0.7157	0.7157	0.7157	0.7157	0.7157	0.7157	0.7157	0.7157
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-6.6194	-6.5300	-6.4405	-6.3511	-6.2617	-6.1723	-6.0829	-5.9935	-5.9040
	My+	6.6219	6.5325	6.4430	6.3536	6.2641	6.1746	6.0852	5.9957	5.9062
	Mz-	-0.1201	-0.1582	-0.1976	-0.2382	-0.2801	-0.3233	-0.3678	-0.4135	-0.4605
	Mz+	-0.0296	-0.0377	-0.0466	-0.0562	-0.0666	-0.0777	-0.0896	-0.1022	-0.1156
318/319		0.000 m	0.603 m	1.205 m	1.808 m	2.410 m	3.013 m	3.615 m	4.218 m	4.820 m
		Envolvente (Acero laminado)								
	N-	-2.9514	-2.9297	-2.9080	-2.8862	-2.8645	-2.8428	-2.8211	-2.7994	-2.7777
	N+	1.7852	1.7980	1.8109	1.8238	1.8366	1.8495	1.8624	1.8752	1.8881
	Ty-	-0.0169	-0.0169	-0.0169	-0.0169	-0.0169	-0.0169	-0.0169	-0.0169	-0.0169
	Ty+	0.0672	0.0672	0.0672	0.0672	0.0672	0.0672	0.0672	0.0672	0.0672
	Tz-	-1.2217	-0.9958	-0.7698	-0.5439	-0.3180	-0.1909	-0.2611	-0.6226	-0.9841
	Tz+	2.0136	1.6521	1.2906	0.9291	0.5676	0.2061	0.2396	0.4655	0.6915
	Mt-	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002
	Mt+	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005
	My-	-1.3287	-0.6634	-0.1870	-0.4817	-0.8968	-1.1255	-1.1451	-0.9382	-0.5222
	My+	2.2134	1.1135	0.2227	0.3044	0.5266	0.6474	0.6375	0.4982	0.5030
	Mz-	-0.0277	-0.0175	-0.0073	-0.0014	-0.0328	-0.0733	-0.1138	-0.1543	-0.1948
	Mz+	0.1291	0.0886	0.0481	0.0106	0.0130	0.0232	0.0334	0.0436	0.0538
319/320		0.000 m	0.136 m	0.273 m	0.409 m	0.545 m	0.682 m	0.818 m	0.954 m	1.091 m
		Envolvente (Acero laminado)								
	N-	-3.0172	-3.0123	-3.0074	-3.0025	-2.9976	-2.9927	-2.9877	-2.9828	-2.9779
	N+	2.0881	2.0911	2.0940	2.0969	2.0998	2.1027	2.1056	2.1085	2.1114
	Ty-	-0.1788	-0.1788	-0.1788	-0.1788	-0.1788	-0.1788	-0.1788	-0.1788	-0.1788
	Ty+	0.0494	0.0494	0.0494	0.0494	0.0494	0.0494	0.0494	0.0494	0.0494
	Tz-	-1.9228	-1.9371	-1.9514	-1.9657	-1.9800	-1.9944	-2.0087	-2.0230	-2.0373
	Tz+	1.2690	1.2772	1.2854	1.2936	1.3018	1.3099	1.3181	1.3263	1.3345
	Mt-	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002
	Mt+	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005
	My-	-0.5222	-0.3030	-0.4226	-0.5985	-0.7754	-0.9535	-1.1326	-1.3129	-1.4943
	My+	0.5030	0.5288	0.5546	0.6151	0.8204	1.0914	1.3642	1.6391	1.9159
	Mz-	-0.1948	-0.1704	-0.1460	-0.1216	-0.0973	-0.0729	-0.0485	-0.0241	-0.0001
	Mz+	0.0538	0.0470	0.0403	0.0336	0.0268	0.0201	0.0133	0.0066	0.0002
319/364		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-0.1705	-0.1705	-0.1705	-0.1705	-0.1705	-0.1705	-0.1705	-0.1705	-0.1705
	N+	1.2264	1.2264	1.2264	1.2264	1.2264	1.2264	1.2264	1.2264	1.2264
	Ty-	-0.1148	-0.1135	-0.1123	-0.1110	-0.1097	-0.1085	-0.1072	-0.1060	-0.1047
	Ty+	0.1437	0.1444	0.1452	0.1459	0.1467	0.1474	0.1482	0.1489	0.1497
	Tz-	-0.4995	-0.4995	-0.4995	-0.4995	-0.4995	-0.4995	-0.4995	-0.4995	-0.4995
	Tz+	0.3054	0.3054	0.3054	0.3054	0.3054	0.3054	0.3054	0.3054	0.3054
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.6413	-0.5789	-0.5164	-0.4540	-0.3916	-0.3291	-0.2667	-0.2042	-0.1418
	My+	0.4189	0.3807	0.3426	0.3044	0.2662	0.2280	0.1899	0.1517	0.1135
	Mz-	-0.1468	-0.1326	-0.1186	-0.1047	-0.0909	-0.0773	-0.0640	-0.0514	-0.0389
	Mz+	0.1975	0.1795	0.1614	0.1433	0.1250	0.1066	0.0883	0.0704	0.0523
320/321		0.000 m	0.238 m	0.475 m	0.713 m	0.950 m	1.188 m	1.426 m	1.663 m	1.901 m
		Envolvente (Acero Conformado)								
	N-	-0.9630	-0.9617	-0.9604	-0.9591	-0.9579	-0.9566	-0.9553	-0.9540	-0.9527
	N+	-0.2428	-0.2421	-0.2413	-0.2405	-0.2398	-0.2390	-0.2383	-0.2375	-0.2367
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas**

	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.0599	-0.0449	-0.0299	-0.0150	0.0000	-0.0249	-0.0499	-0.0748	-0.0998
	Tz+	0.0998	0.0748	0.0499	0.0249	0.0000	0.0150	0.0299	0.0449	0.0599
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0206	-0.0356	-0.0443	-0.0474	-0.0443	-0.0356	-0.0206	0.0000
	My+	0.0000	0.0124	0.0213	0.0266	0.0285	0.0266	0.0213	0.0124	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
320/322		0.000 m	0.066 m	0.132 m	0.198 m	0.264 m	0.330 m	0.396 m	0.462 m	0.528 m
		Envolvente (Acero laminado)								
	N-	-2.1670	-2.1669	-2.1667	-2.1666	-2.1665	-2.1664	-2.1663	-2.1662	-2.1660
	N+	1.5867	1.5868	1.5869	1.5869	1.5870	1.5871	1.5872	1.5872	1.5873
	Ty-	-0.0734	-0.0734	-0.0734	-0.0734	-0.0734	-0.0734	-0.0734	-0.0734	-0.0734
	Ty+	0.1563	0.1563	0.1563	0.1563	0.1563	0.1563	0.1563	0.1563	0.1563
	Tz-	-1.9210	-1.9193	-1.9176	-1.9160	-1.9143	-1.9126	-1.9110	-1.9093	-1.9076
	Tz+	2.2529	2.2539	2.2549	2.2559	2.2569	2.2579	2.2589	2.2598	2.2608
	Mt-	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001
	Mt+	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
	My-	-1.9159	-1.7931	-1.6703	-1.5477	-1.4251	-1.3027	-1.1808	-1.0835	-1.0181
	My+	1.4943	1.3456	1.1968	1.0480	0.8991	0.7502	0.6015	0.4765	0.3848
	Mz-	-0.0002	-0.0098	-0.0201	-0.0304	-0.0407	-0.0511	-0.0614	-0.0717	-0.0820
	Mz+	0.0005	0.0046	0.0094	0.0143	0.0191	0.0240	0.0288	0.0337	0.0385
320/361		0.000 m	0.093 m	0.186 m	0.280 m	0.373 m	0.466 m	0.559 m	0.652 m	0.746 m
		Envolvente (Acero laminado)								
	N-	-0.3116	-0.3116	-0.3115	-0.3115	-0.3115	-0.3115	-0.3115	-0.3115	-0.3115
	N+	0.2918	0.2918	0.2918	0.2919	0.2919	0.2919	0.2919	0.2919	0.2919
	Ty-	-0.0004	-0.0001	0.0001	0.0003	0.0005	0.0007	0.0008	0.0010	0.0012
	Ty+	0.0004	0.0006	0.0009	0.0013	0.0016	0.0019	0.0022	0.0025	0.0028
	Tz-	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005
	Tz+	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	0.0000	0.0000	-0.0001	-0.0001	-0.0001	-0.0001	-0.0002	-0.0002
	My+	0.0000	0.0000	0.0001	0.0001	0.0002	0.0002	0.0003	0.0003	0.0003
	Mz-	0.0000	0.0000	-0.0001	-0.0002	-0.0004	-0.0005	-0.0007	-0.0009	-0.0012
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0001	-0.0002	-0.0003	-0.0004
321/365		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456
	N+	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257
	Ty-	-0.5135	-0.5033	-0.4931	-0.4829	-0.4727	-0.4625	-0.4523	-0.4421	-0.4319
	Ty+	-0.1258	-0.1197	-0.1137	-0.1076	-0.1016	-0.0955	-0.0895	-0.0835	-0.0774
	Tz-	-0.8265	-0.8265	-0.8265	-0.8265	-0.8265	-0.8265	-0.8265	-0.8265	-0.8265
	Tz+	1.3376	1.3376	1.3376	1.3376	1.3376	1.3376	1.3376	1.3376	1.3376
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-6.3728	-6.2695	-6.1662	-6.0629	-5.9595	-5.8562	-5.7529	-5.6496	-5.5463
	My+	10.3818	10.2146	10.0474	9.8802	9.7130	9.5458	9.3786	9.2114	9.0442
	Mz-	-0.5689	-0.5054	-0.4431	-0.3821	-0.3224	-0.2639	-0.2067	-0.1508	-0.0962
	Mz+	-0.1281	-0.1128	-0.0982	-0.0844	-0.0713	-0.0590	-0.0474	-0.0366	-0.0266
322/323		0.000 m	0.169 m	0.337 m	0.506 m	0.675 m	0.843 m	1.012 m	1.180 m	1.349 m
		Envolvente (Acero laminado)								
	N-	-2.7258	-2.7255	-2.7252	-2.7249	-2.7246	-2.7243	-2.7240	-2.7237	-2.7234

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas**

	N+	1.6641	1.6643	1.6644	1.6646	1.6648	1.6650	1.6651	1.6653	1.6655
	Ty-	-0.0750	-0.0750	-0.0750	-0.0750	-0.0750	-0.0750	-0.0750	-0.0750	-0.0750
	Ty+	0.0352	0.0352	0.0352	0.0352	0.0352	0.0352	0.0352	0.0352	0.0352
	Tz-	-0.9101	-0.9058	-0.9016	-0.8973	-0.8931	-0.8888	-0.8845	-0.8803	-0.8760
	Tz+	0.6731	0.6756	0.6781	0.6807	0.6832	0.6857	0.6882	0.6908	0.6933
	Mt-	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001
	Mt+	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
	My-	-1.0181	-0.9289	-0.8402	-0.7519	-0.6641	-0.5766	-0.4896	-0.5021	-0.6188
	My+	0.3848	0.3351	0.3920	0.5036	0.6144	0.7245	0.8339	0.9426	1.0506
	Mz-	-0.0820	-0.0694	-0.0567	-0.0440	-0.0314	-0.0187	-0.0069	-0.0063	-0.0102
	Mz+	0.0385	0.0326	0.0266	0.0207	0.0148	0.0088	0.0029	0.0066	0.0192
322/361		0.000 m	0.066 m	0.132 m	0.197 m	0.263 m	0.329 m	0.395 m	0.461 m	0.527 m
	Envolvente (Acero laminado)									
	N-	-1.0092	-1.0092	-1.0092	-1.0092	-1.0092	-1.0092	-1.0092	-1.0092	-1.0092
	N+	2.1455	2.1455	2.1455	2.1455	2.1455	2.1455	2.1455	2.1455	2.1455
	Ty-	-0.3134	-0.3134	-0.3134	-0.3134	-0.3134	-0.3134	-0.3134	-0.3134	-0.3134
	Ty+	0.6808	0.6808	0.6808	0.6808	0.6808	0.6808	0.6808	0.6808	0.6808
	Tz-	-0.4702	-0.4607	-0.4512	-0.4417	-0.4323	-0.4228	-0.4133	-0.4038	-0.3943
	Tz+	0.9175	0.9001	0.8826	0.8652	0.8477	0.8302	0.8128	0.7953	0.7779
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.5247	-0.4965	-0.4689	-0.4418	-0.4152	-0.3925	-0.3704	-0.3487	-0.3273
	My+	0.8121	0.7523	0.6936	0.6361	0.5797	0.5245	0.4704	0.4175	0.3657
	Mz-	-0.1082	-0.0971	-0.0960	-0.1092	-0.1253	-0.1546	-0.1924	-0.2359	-0.2793
	Mz+	0.1935	0.1546	0.1257	0.1110	0.0964	0.0818	0.0926	0.1133	0.1339
323/324		0.000 m	0.169 m	0.337 m	0.506 m	0.675 m	0.843 m	1.012 m	1.180 m	1.349 m
	Envolvente (Acero laminado)									
	N-	-2.7149	-2.7146	-2.7143	-2.7140	-2.7137	-2.7134	-2.7131	-2.7128	-2.7125
	N+	1.6354	1.6356	1.6357	1.6359	1.6361	1.6363	1.6364	1.6366	1.6368
	Ty-	-0.0119	-0.0119	-0.0119	-0.0119	-0.0119	-0.0119	-0.0119	-0.0119	-0.0119
	Ty+	0.0167	0.0167	0.0167	0.0167	0.0167	0.0167	0.0167	0.0167	0.0167
	Tz-	-0.3458	-0.3433	-0.3408	-0.3382	-0.3357	-0.3332	-0.3307	-0.3281	-0.3256
	Tz+	0.0930	0.0972	0.1015	0.1058	0.1100	0.1143	0.1185	0.1228	0.1271
	Mt-	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001
	Mt+	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
	My-	-0.6188	-0.6277	-0.6370	-0.6467	-0.6568	-0.6674	-0.6784	-0.6898	-0.7017
	My+	1.0506	1.0375	1.0237	1.0092	0.9939	0.9780	0.9613	0.9439	0.9258
	Mz-	-0.0102	-0.0082	-0.0063	-0.0049	-0.0036	-0.0023	-0.0009	-0.0004	-0.0033
	Mz+	0.0192	0.0164	0.0136	0.0108	0.0080	0.0052	0.0031	0.0038	0.0058
323/373		0.000 m	0.234 m	0.468 m	0.702 m	0.936 m	1.170 m	1.404 m	1.638 m	1.872 m
	Envolvente (Acero Conformado)									
	N-	-0.0217	-0.0217	-0.0217	-0.0217	-0.0217	-0.0217	-0.0217	-0.0217	-0.0217
	N+	0.0717	0.0717	0.0717	0.0717	0.0717	0.0717	0.0717	0.0717	0.0717
	Ty-	-0.0139	-0.0139	-0.0139	-0.0139	-0.0139	-0.0139	-0.0139	-0.0139	-0.0139
	Ty+	0.0324	0.0324	0.0324	0.0324	0.0324	0.0324	0.0324	0.0324	0.0324
	Tz-	-0.3770	-0.3520	-0.3270	-0.3020	-0.2770	-0.2520	-0.2271	-0.2021	-0.1798
	Tz+	0.3225	0.3009	0.2793	0.2577	0.2361	0.2145	0.1930	0.1714	0.1498
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.3459	-0.2715	-0.2121	-0.1680	-0.1296	-0.0990	-0.0785	-0.1170	-0.1538
	My+	0.3068	0.2340	0.1660	0.1137	0.0928	0.1407	0.1928	0.2389	0.2793
	Mz-	-0.0337	-0.0373	-0.0409	-0.0445	-0.0481	-0.0517	-0.0553	-0.0589	-0.0625
	Mz+	0.0463	0.0408	0.0352	0.0296	0.0241	0.0195	0.0217	0.0246	0.0274
324/325		0.000 m	0.169 m	0.337 m	0.506 m	0.675 m	0.843 m	1.012 m	1.180 m	1.349 m



## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

		Envolvente (Acero laminado)								
	N-	-2.6746	-2.6743	-2.6740	-2.6737	-2.6734	-2.6731	-2.6728	-2.6725	-2.6722
	N+	1.6142	1.6143	1.6145	1.6147	1.6149	1.6150	1.6152	1.6154	1.6156
	Ty-	-0.0019	-0.0019	-0.0019	-0.0019	-0.0019	-0.0019	-0.0019	-0.0019	-0.0019
	Ty+	0.0126	0.0126	0.0126	0.0126	0.0126	0.0126	0.0126	0.0126	0.0126
	Tz-	-0.5561	-0.5536	-0.5510	-0.5485	-0.5460	-0.5435	-0.5409	-0.5384	-0.5359
	Tz+	0.8167	0.8210	0.8252	0.8295	0.8338	0.8380	0.8423	0.8465	0.8508
	Mt-	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001
	Mt+	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
	My-	-0.7017	-0.6081	-0.5150	-0.4223	-0.3300	-0.2381	-0.1467	-0.0857	-0.1991
	My+	0.9258	0.7877	0.6489	0.5093	0.3691	0.2281	0.0953	0.0401	0.0454
	Mz-	-0.0033	-0.0029	-0.0026	-0.0026	-0.0038	-0.0057	-0.0077	-0.0096	-0.0116
	Mz+	0.0058	0.0037	0.0016	0.0013	0.0012	0.0010	0.0009	0.0007	0.0006
324/384		0.000 m	0.348 m	0.695 m	1.043 m	1.391 m	1.739 m	2.086 m	2.434 m	2.782 m
		Envolvente (Acero Conformado)								
	N-	-0.0532	-0.0532	-0.0532	-0.0532	-0.0532	-0.0532	-0.0532	-0.0532	-0.0532
	N+	0.1859	0.1859	0.1859	0.1859	0.1859	0.1859	0.1859	0.1859	0.1859
	Ty-	-0.0243	-0.0243	-0.0243	-0.0243	-0.0243	-0.0243	-0.0243	-0.0243	-0.0243
	Ty+	0.0186	0.0186	0.0186	0.0186	0.0186	0.0186	0.0186	0.0186	0.0186
	Tz-	-0.3745	-0.3374	-0.3003	-0.2631	-0.2260	-0.1889	-0.1674	-0.1512	-0.1349
	Tz+	0.3112	0.2791	0.2470	0.2149	0.1828	0.1508	0.1187	0.0866	0.0545
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.3287	-0.2269	-0.1595	-0.1069	-0.1054	-0.1632	-0.2103	-0.2457	-0.2705
	My+	0.2382	0.1358	0.0599	0.1258	0.2053	0.2714	0.3251	0.3654	0.3932
	Mz-	-0.0451	-0.0431	-0.0410	-0.0390	-0.0369	-0.0349	-0.0328	-0.0329	-0.0348
	Mz+	0.0298	0.0268	0.0238	0.0219	0.0283	0.0356	0.0430	0.0503	0.0576
325/326		0.000 m	0.169 m	0.337 m	0.506 m	0.675 m	0.843 m	1.012 m	1.180 m	1.349 m
		Envolvente (Acero laminado)								
	N-	-2.6445	-2.6442	-2.6439	-2.6436	-2.6433	-2.6430	-2.6427	-2.6424	-2.6421
	N+	1.5943	1.5945	1.5946	1.5948	1.5950	1.5952	1.5953	1.5955	1.5957
	Ty-	-0.0206	-0.0206	-0.0206	-0.0206	-0.0206	-0.0206	-0.0206	-0.0206	-0.0206
	Ty+	0.0042	0.0042	0.0042	0.0042	0.0042	0.0042	0.0042	0.0042	0.0042
	Tz-	-1.1937	-1.1912	-1.1887	-1.1861	-1.1836	-1.1811	-1.1786	-1.1760	-1.1735
	Tz+	1.6036	1.6078	1.6121	1.6163	1.6206	1.6249	1.6291	1.6334	1.6376
	Mt-	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001
	Mt+	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
	My-	-0.1991	-0.4698	-0.7413	-1.0136	-1.2865	-1.5602	-1.8345	-2.1096	-2.3854
	My+	0.0454	0.2360	0.4367	0.6369	0.8367	1.0361	1.2351	1.4336	1.6317
	Mz-	-0.0116	-0.0083	-0.0053	-0.0024	-0.0022	-0.0029	-0.0036	-0.0043	-0.0050
	Mz+	0.0006	0.0003	0.0012	0.0022	0.0039	0.0065	0.0093	0.0128	0.0162
325/372		0.000 m	0.179 m	0.359 m	0.538 m	0.718 m	0.897 m	1.077 m	1.256 m	1.436 m
		Envolvente (Acero Conformado)								
	N-	-0.0582	-0.0582	-0.0582	-0.0582	-0.0582	-0.0582	-0.0582	-0.0582	-0.0582
	N+	0.0381	0.0381	0.0381	0.0381	0.0381	0.0381	0.0381	0.0381	0.0381
	Ty-	-0.0224	-0.0224	-0.0224	-0.0224	-0.0224	-0.0224	-0.0224	-0.0224	-0.0224
	Ty+	0.0165	0.0165	0.0165	0.0165	0.0165	0.0165	0.0165	0.0165	0.0165
	Tz-	-0.3863	-0.3672	-0.3480	-0.3288	-0.3097	-0.2905	-0.2713	-0.2522	-0.2330
	Tz+	0.3324	0.3158	0.2993	0.2827	0.2661	0.2496	0.2330	0.2165	0.1999
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.3620	-0.2944	-0.2302	-0.1695	-0.1227	-0.0857	-0.0573	-0.0313	-0.0450
	My+	0.3608	0.3027	0.2474	0.1953	0.1459	0.1001	0.0672	0.0702	0.1120
	Mz-	-0.0261	-0.0224	-0.0199	-0.0186	-0.0185	-0.0183	-0.0182	-0.0181	-0.0179

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	Mz+	0.0283	0.0256	0.0229	0.0202	0.0175	0.0149	0.0122	0.0119	0.0158
326/330		0.000 m	0.011 m	0.023 m	0.034 m	0.045 m	0.056 m	0.068 m	0.079 m	0.090 m
		Envolvente (Acero laminado)								
	N-	-2.6236	-2.6236	-2.6235	-2.6235	-2.6235	-2.6235	-2.6235	-2.6234	-2.6234
	N+	1.5605	1.5606	1.5606	1.5606	1.5606	1.5606	1.5606	1.5606	1.5606
	Ty-	-0.3691	-0.3691	-0.3691	-0.3691	-0.3691	-0.3691	-0.3691	-0.3691	-0.3691
	Ty+	0.4304	0.4304	0.4304	0.4304	0.4304	0.4304	0.4304	0.4304	0.4304
	Tz-	-1.8685	-1.8683	-1.8681	-1.8680	-1.8678	-1.8676	-1.8675	-1.8673	-1.8671
	Tz+	2.4390	2.4393	2.4396	2.4399	2.4402	2.4405	2.4408	2.4410	2.4413
	Mt-	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001
	Mt+	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
	My-	-2.3854	-2.4130	-2.4405	-2.4681	-2.4956	-2.5232	-2.5507	-2.5783	-2.6059
	My+	1.6317	1.6528	1.6739	1.6950	1.7161	1.7372	1.7583	1.7794	1.8005
	Mz-	-0.0050	-0.0020	-0.0028	-0.0077	-0.0125	-0.0174	-0.0223	-0.0271	-0.0320
Mz+	0.0162	0.0177	0.0207	0.0249	0.0291	0.0332	0.0374	0.0416	0.0457	
326/359		0.000 m	0.011 m	0.023 m	0.034 m	0.045 m	0.056 m	0.068 m	0.079 m	0.090 m
		Envolvente (Acero Conformado)								
	N-	-0.1982	-0.1982	-0.1982	-0.1982	-0.1982	-0.1982	-0.1982	-0.1982	-0.1982
	N+	0.1716	0.1716	0.1716	0.1716	0.1716	0.1716	0.1716	0.1716	0.1716
	Ty-	-0.2453	-0.2453	-0.2453	-0.2453	-0.2453	-0.2453	-0.2453	-0.2453	-0.2453
	Ty+	0.1958	0.1958	0.1958	0.1958	0.1958	0.1958	0.1958	0.1958	0.1958
	Tz-	-0.4238	-0.4236	-0.4233	-0.4231	-0.4229	-0.4227	-0.4224	-0.4222	-0.4220
	Tz+	0.3463	0.3464	0.3466	0.3467	0.3468	0.3470	0.3471	0.3472	0.3474
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.5004	-0.4957	-0.4910	-0.4862	-0.4815	-0.4768	-0.4720	-0.4673	-0.4626
	My+	0.4589	0.4550	0.4511	0.4473	0.4434	0.4396	0.4357	0.4318	0.4280
	Mz-	-0.0328	-0.0311	-0.0299	-0.0294	-0.0293	-0.0292	-0.0291	-0.0290	-0.0289
Mz+	0.0383	0.0367	0.0354	0.0343	0.0341	0.0338	0.0335	0.0333	0.0330	
327/328		0.000 m	0.369 m	0.738 m	1.106 m	1.475 m	1.844 m	2.213 m	2.582 m	2.950 m
		Envolvente (Acero laminado)								
	N-	-12.6551	-12.6137	-12.5722	-12.5308	-12.4894	-12.4480	-12.4065	-12.3651	-12.3237
	N+	1.3162	1.3408	1.3653	1.3899	1.4144	1.4390	1.4635	1.4881	1.5126
	Ty-	-0.0393	-0.0393	-0.0393	-0.0393	-0.0393	-0.0393	-0.0393	-0.0393	-0.0393
	Ty+	0.4651	0.4651	0.4651	0.4651	0.4651	0.4651	0.4651	0.4651	0.4651
	Tz-	-2.2331	-2.2331	-2.2331	-2.2331	-2.2331	-2.2331	-2.2331	-2.2331	-2.2331
	Tz+	1.3498	1.3498	1.3498	1.3498	1.3498	1.3498	1.3498	1.3498	1.3498
	Mt-	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001
	Mt+	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010
	My-	-2.7087	-1.8853	-1.0619	-0.3427	-0.5048	-0.9140	-1.4118	-1.9097	-2.4075
	My+	1.5750	1.1109	0.6711	0.3680	0.8866	1.4413	2.2649	3.0885	3.9121
	Mz-	-0.0387	-0.0243	-0.0099	0.0009	0.0071	-0.1393	-0.3109	-0.4825	-0.6540
Mz+	0.7184	0.5469	0.3758	0.2066	0.0406	0.0342	0.0487	0.0631	0.0776	
328/329		0.000 m	0.234 m	0.467 m	0.701 m	0.935 m	1.168 m	1.402 m	1.636 m	1.870 m
		Envolvente (Acero laminado)								
	N-	-7.2792	-7.2530	-7.2267	-7.2005	-7.1742	-7.1480	-7.1217	-7.0955	-7.0692
	N+	4.1372	4.1528	4.1683	4.1839	4.1994	4.2150	4.2305	4.2461	4.2617
	Ty-	-0.3817	-0.3817	-0.3817	-0.3817	-0.3817	-0.3817	-0.3817	-0.3817	-0.3817
	Ty+	0.0083	0.0083	0.0083	0.0083	0.0083	0.0083	0.0083	0.0083	0.0083
	Tz-	-5.4562	-5.4562	-5.4562	-5.4562	-5.4562	-5.4562	-5.4562	-5.4562	-5.4562
	Tz+	2.3230	2.3230	2.3230	2.3230	2.3230	2.3230	2.3230	2.3230	2.3230
	Mt-	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010
	Mt+	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004
	My-	-6.6371	-5.3621	-4.0870	-2.8648	-1.8892	-1.3703	-1.4330	-1.9295	-2.4462

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	My+	2.2070	1.6642	1.1213	0.5784	0.0356	-0.0168	1.0132	2.2882	3.5633
	Mz-	-0.5946	-0.5054	-0.4162	-0.3270	-0.2386	-0.1510	-0.0634	-0.0260	-0.0280
	Mz+	-0.0125	-0.0144	-0.0163	-0.0183	-0.0192	-0.0100	-0.0008	0.0297	0.1189
328/335		0.000 m	0.625 m	1.250 m	1.875 m	2.500 m	3.125 m	3.750 m	4.375 m	5.000 m
		Envolvente (Acero laminado)								
	N-	-4.5575	-4.5575	-4.5575	-4.5575	-4.5575	-4.5575	-4.5575	-4.5575	-4.5575
	N+	6.7979	6.7979	6.7979	6.7979	6.7979	6.7979	6.7979	6.7979	6.7979
	Ty-	-0.0008	-0.0008	-0.0008	-0.0008	-0.0008	-0.0008	-0.0008	-0.0008	-0.0008
	Ty+	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006
	Tz-	-6.7451	-5.0638	-3.3824	-1.7011	-0.1534	0.5171	1.1801	1.8431	2.5061
	Tz+	-2.4512	-1.7882	-1.1251	-0.4621	0.2009	1.7886	3.4700	5.1513	6.8326
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-5.6437	-1.9745	-0.1008	0.6037	0.9104	0.7861	0.2640	-1.9557	-5.6797
	My+	-1.4035	-0.0870	1.1825	2.5159	2.9952	2.3818	0.7595	-0.6890	-2.0399
	Mz-	-0.0041	-0.0036	-0.0032	-0.0035	-0.0037	-0.0040	-0.0043	-0.0046	-0.0048
	Mz+	0.0019	0.0016	0.0014	0.0012	0.0009	0.0007	0.0004	0.0002	0.0000
328/453		0.000 m	0.750 m	1.500 m	2.250 m	3.000 m	3.750 m	4.500 m	5.250 m	6.000 m
		Envolvente (Acero laminado)								
	N-	-0.0152	-0.0152	-0.0152	-0.0152	-0.0152	-0.0152	-0.0152	-0.0152	-0.0152
	N+	0.8340	0.8340	0.8340	0.8340	0.8340	0.8340	0.8340	0.8340	0.8340
	Ty-	-0.0009	-0.0009	-0.0009	-0.0009	-0.0009	-0.0009	-0.0009	-0.0009	-0.0009
	Ty+	0.0147	0.0147	0.0147	0.0147	0.0147	0.0147	0.0147	0.0147	0.0147
	Tz-	-0.2010	-0.1512	-0.1014	-0.0517	-0.0022	0.0272	0.0567	0.0862	0.1157
	Tz+	-0.0622	-0.0328	-0.0033	0.0262	0.0560	0.1057	0.1555	0.2053	0.2550
	Mt-	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005
	Mt+	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
	My-	-0.1507	-0.0190	0.0433	0.0759	0.0864	0.0493	-0.0256	-0.1305	-0.3031
	My+	0.0935	0.1293	0.1743	0.1885	0.1654	0.1371	0.0824	-0.0017	-0.0775
	Mz-	-0.0024	-0.0073	-0.0180	-0.0286	-0.0394	-0.0504	-0.0614	-0.0724	-0.0834
	Mz+	0.0046	0.0032	0.0019	0.0006	0.0003	0.0010	0.0016	0.0023	0.0030
329/330		0.000 m	0.189 m	0.378 m	0.566 m	0.755 m	0.944 m	1.133 m	1.322 m	1.510 m
		Envolvente (Acero laminado)								
	N-	-6.9874	-6.9662	-6.9450	-6.9238	-6.9026	-6.8814	-6.8602	-6.8390	-6.8178
	N+	4.2571	4.2696	4.2822	4.2948	4.3073	4.3199	4.3325	4.3450	4.3576
	Ty-	-0.0190	-0.0190	-0.0190	-0.0190	-0.0190	-0.0190	-0.0190	-0.0190	-0.0190
	Ty+	0.0790	0.0790	0.0790	0.0790	0.0790	0.0790	0.0790	0.0790	0.0790
	Tz-	-5.4562	-5.4562	-5.4562	-5.4562	-5.4562	-5.4562	-5.4562	-5.4562	-5.4562
	Tz+	2.3230	2.3230	2.3230	2.3230	2.3230	2.3230	2.3230	2.3230	2.3230
	Mt-	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010
	Mt+	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004
	My-	-2.4462	-2.8637	-3.2812	-3.6986	-4.1161	-4.5335	-4.9510	-5.3685	-5.7859
	My+	3.5633	4.5934	5.6234	6.6535	7.6836	8.7137	9.7437	10.7738	11.8039
	Mz-	-0.0280	-0.0244	-0.0208	-0.0172	-0.0136	-0.0100	-0.0064	-0.0028	-0.0011
	Mz+	0.1189	0.1040	0.0891	0.0742	0.0593	0.0443	0.0294	0.0145	0.0008
329/391		0.000 m	0.387 m	0.773 m	1.160 m	1.547 m	1.933 m	2.320 m	2.707 m	3.094 m
		Envolvente (Acero laminado)								
	N-	-0.4760	-0.4757	-0.4754	-0.4751	-0.4748	-0.4744	-0.4741	-0.4738	-0.4735
	N+	0.0276	0.0278	0.0280	0.0282	0.0284	0.0286	0.0288	0.0289	0.0291
	Ty-	-0.0037	-0.0025	-0.0013	0.0000	0.0007	0.0015	0.0022	0.0030	0.0037
	Ty+	-0.0022	-0.0015	-0.0007	0.0000	0.0012	0.0025	0.0037	0.0050	0.0062
	Tz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

## Metal 3D

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	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz-	0.0000	0.0007	0.0011	0.0013	0.0011	0.0007	0.0000	-0.0017	-0.0039
	Mz+	0.0000	0.0012	0.0019	0.0022	0.0019	0.0012	0.0000	-0.0010	-0.0023
330/331		0.000 m	0.198 m	0.396 m	0.595 m	0.793 m	0.991 m	1.189 m	1.387 m	1.585 m
		Envolvente (Acero laminado)								
	N-	-10.4819	-10.4801	-10.4784	-10.4768	-10.4751	-10.4678	-10.4662	-10.4647	-10.4632
	N+	4.5737	4.5748	4.5758	4.5768	4.5777	4.5752	4.5761	4.5770	4.5779
	Ty-	-0.0222	-0.0222	-0.0222	-0.0222	-0.0222	-0.0222	-0.0222	-0.0222	-0.0222
	Ty+	0.0355	0.0355	0.0355	0.0355	0.0355	0.0355	0.0355	0.0355	0.0355
	Tz-	-3.6075	-3.5917	-3.5762	-3.5610	-3.5461	-3.5483	-3.5339	-3.5198	-3.5059
	Tz+	2.1423	2.1516	2.1608	2.1698	2.1787	2.1948	2.2033	2.2117	2.2199
	Mt-	-0.0024	-0.0024	-0.0024	-0.0024	-0.0024	-0.0024	-0.0024	-0.0024	-0.0024
	Mt+	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004
	My-	-12.8507	-12.1368	-11.4259	-10.7182	-10.0134	-9.3082	-8.6059	-7.9064	-7.2097
	My+	6.8767	6.4509	6.0232	5.5938	5.1625	4.7281	4.2920	3.8541	3.4147
	Mz-	-0.0315	-0.0272	-0.0228	-0.0184	-0.0140	-0.0096	-0.0070	-0.0069	-0.0115
	Mz+	0.0449	0.0379	0.0308	0.0238	0.0167	0.0097	0.0042	0.0018	0.0036
359/330		0.000 m	0.016 m	0.032 m	0.048 m	0.064 m	0.080 m	0.096 m	0.112 m	0.128 m
		Envolvente (Acero laminado)								
	N-	-2.1098	-2.1098	-2.1098	-2.1098	-2.1098	-2.1098	-2.1098	-2.1098	-2.1098
	N+	1.0573	1.0573	1.0573	1.0573	1.0573	1.0573	1.0573	1.0573	1.0573
	Ty-	-0.0142	-0.0141	-0.0141	-0.0140	-0.0140	-0.0139	-0.0139	-0.0138	-0.0138
	Ty+	0.0003	0.0003	0.0003	0.0004	0.0004	0.0004	0.0005	0.0005	0.0005
	Tz-	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005
	Tz+	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0001	-0.0001	-0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz-	-0.0018	-0.0016	-0.0013	-0.0011	-0.0009	-0.0007	-0.0004	-0.0002	0.0000
	Mz+	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
330/362		0.000 m	0.231 m	0.462 m	0.693 m	0.924 m	1.155 m	1.386 m	1.617 m	1.848 m
		Envolvente (Acero laminado)								
	N-	-0.9599	-0.9599	-0.9599	-0.9598	-0.9598	-0.9598	-0.9597	-0.9597	-0.9597
	N+	2.0590	2.0590	2.0591	2.0591	2.0592	2.0592	2.0593	2.0593	2.0594
	Ty-	-0.0024	-0.0017	-0.0009	-0.0001	0.0003	0.0008	0.0012	0.0017	0.0022
	Ty+	-0.0013	-0.0009	-0.0004	0.0000	0.0008	0.0016	0.0023	0.0031	0.0039
	Tz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz-	0.0000	0.0003	0.0004	0.0004	0.0004	0.0002	-0.0001	-0.0007	-0.0015
	Mz+	0.0000	0.0005	0.0008	0.0009	0.0008	0.0006	0.0002	-0.0002	-0.0006
391/330		0.000 m	0.387 m	0.773 m	1.160 m	1.547 m	1.933 m	2.320 m	2.707 m	3.094 m
		Envolvente (Acero laminado)								
	N-	-0.0094	-0.0092	-0.0090	-0.0088	-0.0086	-0.0085	-0.0083	-0.0081	-0.0079
	N+	0.6032	0.6035	0.6039	0.6042	0.6045	0.6048	0.6051	0.6054	0.6057
	Ty-	-0.0062	-0.0050	-0.0037	-0.0025	-0.0012	0.0000	0.0007	0.0015	0.0022
	Ty+	-0.0037	-0.0030	-0.0022	-0.0015	-0.0007	0.0000	0.0013	0.0025	0.0037
	Tz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas**

	Tz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz-	-0.0039	-0.0017	0.0000	0.0007	0.0011	0.0013	0.0011	0.0007	0.0000
	Mz+	-0.0023	-0.0010	0.0000	0.0012	0.0019	0.0022	0.0019	0.0012	0.0000
331/332		0.000 m	0.209 m	0.419 m	0.628 m	0.838 m	1.047 m	1.257 m	1.466 m	1.676 m
		Envolvente (Acero laminado)								
	N-	-10.3906	-10.3891	-10.3876	-10.3825	-10.3811	-10.4001	-10.3990	-10.3978	-10.3967
	N+	4.5223	4.5232	4.5241	4.5228	4.5237	4.5364	4.5370	4.5377	4.5384
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044
	Tz-	-2.6984	-2.6841	-2.6700	-2.6704	-2.6569	-2.5649	-2.5548	-2.5447	-2.5346
	Tz+	1.5153	1.5238	1.5321	1.5464	1.5544	1.5260	1.5320	1.5380	1.5440
	Mt-	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012
	Mt+	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005
	My-	-7.2121	-6.6481	-6.0870	-5.5264	-4.9681	-4.4227	-3.8859	-3.3575	-2.8372
	My+	3.4164	3.0978	2.7775	2.4545	2.1295	1.8073	1.4868	1.1650	0.8419
	Mz-	-0.0116	-0.0120	-0.0125	-0.0130	-0.0134	-0.0140	-0.0147	-0.0154	-0.0161
	Mz+	0.0037	0.0030	0.0024	0.0018	0.0011	0.0006	0.0002	-0.0003	-0.0006
331/362		0.000 m	0.119 m	0.237 m	0.356 m	0.474 m	0.593 m	0.712 m	0.830 m	0.949 m
		Envolvente (Acero Conformado)								
	N-	-0.0641	-0.0641	-0.0641	-0.0641	-0.0641	-0.0641	-0.0641	-0.0641	-0.0641
	N+	0.0427	0.0427	0.0427	0.0427	0.0427	0.0427	0.0427	0.0427	0.0427
	Ty-	-0.0221	-0.0221	-0.0221	-0.0221	-0.0221	-0.0221	-0.0221	-0.0221	-0.0221
	Ty+	0.0388	0.0388	0.0388	0.0388	0.0388	0.0388	0.0388	0.0388	0.0388
	Tz-	-0.4165	-0.4038	-0.3912	-0.3785	-0.3658	-0.3531	-0.3405	-0.3278	-0.3151
	Tz+	0.3543	0.3433	0.3324	0.3214	0.3105	0.2995	0.2886	0.2776	0.2667
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.5363	-0.4877	-0.4405	-0.3978	-0.3596	-0.3227	-0.2870	-0.2526	-0.2198
	My+	0.4931	0.4518	0.4117	0.3729	0.3354	0.2993	0.2643	0.2308	0.1985
	Mz-	-0.0429	-0.0405	-0.0385	-0.0365	-0.0346	-0.0326	-0.0306	-0.0287	-0.0267
	Mz+	0.0572	0.0529	0.0486	0.0443	0.0399	0.0357	0.0317	0.0278	0.0238
332/333		0.000 m	0.209 m	0.419 m	0.628 m	0.838 m	1.047 m	1.257 m	1.466 m	1.676 m
		Envolvente (Acero laminado)								
	N-	-10.2464	-10.2457	-10.2450	-10.2443	-10.2436	-10.2428	-10.2421	-10.2414	-10.2407
	N+	4.4455	4.4459	4.4463	4.4468	4.4472	4.4476	4.4480	4.4485	4.4489
	Ty-	-0.0285	-0.0285	-0.0285	-0.0285	-0.0285	-0.0285	-0.0285	-0.0285	-0.0285
	Ty+	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	Tz-	-2.1876	-2.1774	-2.1673	-2.1571	-2.1469	-2.1368	-2.1266	-2.1165	-2.1063
	Tz+	1.0403	1.0463	1.0523	1.0584	1.0644	1.0704	1.0764	1.0825	1.0885
	Mt-	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012
	Mt+	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008
	My-	-2.8372	-2.3923	-1.9495	-1.5088	-1.0703	-0.6834	-0.6011	-0.7144	-0.9418
	My+	0.8419	0.6234	0.4036	0.1825	-0.0301	-0.0479	0.0990	0.3725	0.7792
	Mz-	-0.0161	-0.0102	-0.0047	-0.0013	-0.0016	-0.0018	-0.0021	-0.0023	-0.0025
	Mz+	-0.0006	0.0002	0.0013	0.0027	0.0080	0.0140	0.0200	0.0260	0.0319
332/375		0.000 m	0.244 m	0.488 m	0.732 m	0.976 m	1.220 m	1.464 m	1.708 m	1.952 m
		Envolvente (Acero Conformado)								
	N-	-0.0887	-0.0887	-0.0887	-0.0887	-0.0887	-0.0887	-0.0887	-0.0887	-0.0887
	N+	0.0391	0.0391	0.0391	0.0391	0.0391	0.0391	0.0391	0.0391	0.0391
	Ty-	-0.0199	-0.0199	-0.0199	-0.0199	-0.0199	-0.0199	-0.0199	-0.0199	-0.0199

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas**

	Ty+	0.0291	0.0291	0.0291	0.0291	0.0291	0.0291	0.0291	0.0291	0.0291
	Tz-	-0.3974	-0.3714	-0.3453	-0.3193	-0.2932	-0.2672	-0.2411	-0.2150	-0.1930
	Tz+	0.3458	0.3232	0.3007	0.2782	0.2557	0.2332	0.2107	0.1882	0.1657
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.4481	-0.3664	-0.2898	-0.2314	-0.1760	-0.1322	-0.1035	-0.1432	-0.1792
	My+	0.4421	0.3606	0.2844	0.2138	0.1496	0.1231	0.1193	0.1670	0.2123
	Mz-	-0.0460	-0.0419	-0.0379	-0.0338	-0.0297	-0.0271	-0.0254	-0.0260	-0.0275
	Mz+	0.0540	0.0479	0.0418	0.0357	0.0297	0.0236	0.0222	0.0232	0.0243
333/336		0.000 m	0.209 m	0.419 m	0.628 m	0.838 m	1.047 m	1.257 m	1.466 m	1.676 m
		Envolvente (Acero laminado)								
	N-	-10.2065	-10.2058	-10.2050	-10.2043	-10.2036	-10.2029	-10.2022	-10.2015	-10.2008
	N+	4.4297	4.4302	4.4306	4.4310	4.4314	4.4318	4.4323	4.4327	4.4331
	Ty-	-0.0027	-0.0027	-0.0027	-0.0027	-0.0027	-0.0027	-0.0027	-0.0027	-0.0027
	Ty+	0.0278	0.0278	0.0278	0.0278	0.0278	0.0278	0.0278	0.0278	0.0278
	Tz-	-1.3922	-1.3820	-1.3719	-1.3617	-1.3516	-1.3414	-1.3312	-1.3211	-1.3109
	Tz+	0.4337	0.4398	0.4458	0.4518	0.4578	0.4639	0.4699	0.4759	0.4819
	Mt-	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012
	Mt+	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008
	My-	-0.9418	-1.0333	-1.1260	-1.2200	-1.3153	-1.4118	-1.5096	-1.6087	-1.7090
	My+	0.7792	1.0697	1.3582	1.6445	1.9287	2.2107	2.4907	2.7684	3.0441
	Mz-	-0.0025	-0.0020	-0.0014	-0.0008	-0.0003	0.0003	-0.0030	-0.0089	-0.0147
	Mz+	0.0319	0.0261	0.0203	0.0145	0.0092	0.0049	0.0010	0.0014	0.0020
333/387		0.000 m	0.369 m	0.739 m	1.108 m	1.478 m	1.847 m	2.216 m	2.586 m	2.955 m
		Envolvente (Acero Conformado)								
	N-	-0.1955	-0.1955	-0.1955	-0.1955	-0.1955	-0.1955	-0.1955	-0.1955	-0.1955
	N+	0.1616	0.1616	0.1616	0.1616	0.1616	0.1616	0.1616	0.1616	0.1616
	Ty-	-0.0234	-0.0234	-0.0234	-0.0234	-0.0234	-0.0234	-0.0234	-0.0234	-0.0234
	Ty+	0.0249	0.0249	0.0249	0.0249	0.0249	0.0249	0.0249	0.0249	0.0249
	Tz-	-0.3592	-0.3198	-0.2803	-0.2409	-0.2015	-0.1692	-0.1519	-0.1346	-0.1173
	Tz+	0.3222	0.2882	0.2541	0.2200	0.1859	0.1518	0.1178	0.0837	0.0496
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.2567	-0.1732	-0.1111	-0.1145	-0.1788	-0.2300	-0.2692	-0.2952	-0.3092
	My+	0.3325	0.2266	0.1800	0.1963	0.2723	0.3337	0.3811	0.4133	0.4316
	Mz-	-0.0545	-0.0542	-0.0576	-0.0611	-0.0646	-0.0681	-0.0716	-0.0750	-0.0785
	Mz+	0.0377	0.0358	0.0390	0.0423	0.0455	0.0488	0.0520	0.0553	0.0585
334/335		0.000 m	0.369 m	0.738 m	1.106 m	1.475 m	1.844 m	2.213 m	2.582 m	2.950 m
		Envolvente (Acero laminado)								
	N-	-13.6572	-13.6470	-13.6368	-13.6267	-13.6165	-13.6064	-13.5962	-13.5860	-13.5759
	N+	-5.1487	-5.1427	-5.1367	-5.1307	-5.1246	-5.1186	-5.1126	-5.1066	-5.1006
	Ty-	-0.0234	-0.0234	-0.0234	-0.0234	-0.0234	-0.0234	-0.0234	-0.0234	-0.0234
	Ty+	0.0179	0.0179	0.0179	0.0179	0.0179	0.0179	0.0179	0.0179	0.0179
	Tz-	-0.0018	-0.0018	-0.0018	-0.0018	-0.0018	-0.0018	-0.0018	-0.0018	-0.0018
	Tz+	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0054	-0.0047	-0.0040	-0.0033	-0.0027	-0.0020	-0.0013	-0.0006	0.0000
	My+	0.0027	0.0024	0.0020	0.0017	0.0013	0.0010	0.0006	0.0003	0.0000
	Mz-	-0.0360	-0.0274	-0.0188	-0.0102	-0.0024	-0.0064	-0.0130	-0.0196	-0.0262
	Mz+	0.0275	0.0209	0.0144	0.0078	0.0022	0.0078	0.0159	0.0243	0.0329
335/340		0.000 m	0.625 m	1.250 m	1.875 m	2.500 m	3.125 m	3.750 m	4.375 m	5.000 m
		Envolvente (Acero laminado)								
	N-	-4.5808	-4.5808	-4.5808	-4.5808	-4.5808	-4.5808	-4.5808	-4.5808	-4.5808

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas**

	N+	6.8114	6.8114	6.8114	6.8114	6.8114	6.8114	6.8114	6.8114	6.8114
	Ty-	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012
	Ty+	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
	Tz-	-6.7432	-5.0619	-3.3805	-1.6992	-0.0614	0.6016	1.2646	1.9276	2.5907
	Tz+	-2.5944	-1.9314	-1.2684	-0.6054	0.0653	1.7070	3.3883	5.0697	6.7510
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-5.6718	-2.0037	0.1569	0.8085	1.0624	0.8653	0.2247	-2.0015	-5.6743
	My+	-2.0351	-0.6291	0.7370	2.2762	2.8066	2.2604	0.7144	-0.6752	-2.0821
	Mz-	-0.0048	-0.0041	-0.0034	-0.0027	-0.0020	-0.0013	-0.0006	-0.0006	-0.0007
	Mz+	0.0000	0.0000	0.0001	0.0002	0.0003	0.0004	0.0004	0.0005	0.0011
336/337		0.000 m	0.209 m	0.419 m	0.628 m	0.838 m	1.047 m	1.257 m	1.466 m	1.676 m
	Envolvente (Acero laminado)									
	N-	-10.1493	-10.1486	-10.1479	-10.1472	-10.1465	-10.1458	-10.1451	-10.1443	-10.1436
	N+	4.4065	4.4069	4.4074	4.4078	4.4082	4.4086	4.4090	4.4095	4.4099
	Ty-	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009
	Ty+	0.0066	0.0066	0.0066	0.0066	0.0066	0.0066	0.0066	0.0066	0.0066
	Tz-	-0.6591	-0.6489	-0.6388	-0.6286	-0.6185	-0.6083	-0.5981	-0.5880	-0.5778
	Tz+	-0.1012	-0.0952	-0.0891	-0.0831	-0.0771	-0.0711	-0.0650	-0.0590	-0.0530
	Mt-	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012
	Mt+	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008
	My-	-1.7090	-1.6780	-1.6482	-1.6196	-1.5924	-1.5664	-1.5416	-1.5286	-1.5168
	My+	3.0441	3.1811	3.3160	3.4487	3.5794	3.7078	3.8342	3.9584	4.0805
	Mz-	-0.0147	-0.0154	-0.0160	-0.0167	-0.0174	-0.0180	-0.0187	-0.0194	-0.0200
	Mz+	0.0020	0.0016	0.0012	0.0007	0.0003	-0.0001	-0.0005	-0.0009	-0.0013
336/382		0.000 m	0.255 m	0.510 m	0.766 m	1.021 m	1.276 m	1.531 m	1.787 m	2.042 m
	Envolvente (Acero Conformado)									
	N-	-0.0704	-0.0704	-0.0704	-0.0704	-0.0704	-0.0704	-0.0704	-0.0704	-0.0704
	N+	0.0189	0.0189	0.0189	0.0189	0.0189	0.0189	0.0189	0.0189	0.0189
	Ty-	-0.0201	-0.0201	-0.0201	-0.0201	-0.0201	-0.0201	-0.0201	-0.0201	-0.0201
	Ty+	0.0146	0.0146	0.0146	0.0146	0.0146	0.0146	0.0146	0.0146	0.0146
	Tz-	-0.3296	-0.3023	-0.2751	-0.2478	-0.2206	-0.1933	-0.1660	-0.1494	-0.1374
	Tz+	0.3142	0.2906	0.2671	0.2435	0.2200	0.1964	0.1729	0.1493	0.1258
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.1137	-0.0745	-0.0472	-0.0899	-0.1430	-0.1898	-0.2309	-0.2657	-0.2947
	My+	0.2784	0.2456	0.2237	0.2535	0.3108	0.3609	0.4043	0.4404	0.4699
	Mz-	-0.0853	-0.0841	-0.0829	-0.0817	-0.0805	-0.0793	-0.0780	-0.0768	-0.0756
	Mz+	0.0453	0.0453	0.0453	0.0453	0.0453	0.0453	0.0453	0.0453	0.0453
337/338		0.000 m	0.209 m	0.419 m	0.628 m	0.838 m	1.047 m	1.257 m	1.466 m	1.676 m
	Envolvente (Acero laminado)									
	N-	-10.0818	-10.0811	-10.0804	-10.0797	-10.0790	-10.0782	-10.0775	-10.0768	-10.0761
	N+	4.3816	4.3820	4.3824	4.3828	4.3832	4.3837	4.3841	4.3845	4.3849
	Ty-	-0.0645	-0.0645	-0.0645	-0.0645	-0.0645	-0.0645	-0.0645	-0.0645	-0.0645
	Ty+	0.0107	0.0107	0.0107	0.0107	0.0107	0.0107	0.0107	0.0107	0.0107
	Tz-	-0.6345	-0.6285	-0.6225	-0.6165	-0.6104	-0.6044	-0.5984	-0.5924	-0.5864
	Tz+	0.0363	0.0464	0.0566	0.0668	0.0769	0.0871	0.0973	0.1074	0.1176
	Mt-	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012
	Mt+	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008
	My-	-1.5168	-1.3846	-1.2535	-1.1254	-1.0045	-0.8847	-0.7663	-0.6491	-0.5332
	My+	4.0805	4.0732	4.0638	4.0523	4.0386	4.0228	4.0049	3.9848	3.9626
	Mz-	-0.0200	-0.0125	-0.0110	-0.0100	-0.0103	-0.0125	-0.0148	-0.0170	-0.0192
	Mz+	-0.0013	0.0013	0.0137	0.0262	0.0388	0.0513	0.0639	0.0772	0.0907
337/370		0.000 m	0.130 m	0.260 m	0.390 m	0.519 m	0.649 m	0.779 m	0.909 m	1.039 m

## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

		Envolvente (Acero Conformado)								
	N-	-0.0646	-0.0646	-0.0646	-0.0646	-0.0646	-0.0646	-0.0646	-0.0646	-0.0646
	N+	-0.0102	-0.0102	-0.0102	-0.0102	-0.0102	-0.0102	-0.0102	-0.0102	-0.0102
	Ty-	-0.0204	-0.0204	-0.0204	-0.0204	-0.0204	-0.0204	-0.0204	-0.0204	-0.0204
	Ty+	0.0180	0.0180	0.0180	0.0180	0.0180	0.0180	0.0180	0.0180	0.0180
	Tz-	-0.3081	-0.2942	-0.2803	-0.2665	-0.2526	-0.2387	-0.2249	-0.2110	-0.1971
	Tz+	0.2901	0.2782	0.2662	0.2542	0.2422	0.2302	0.2182	0.2141	0.2177
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0127	-0.0015	0.0092	-0.0026	-0.0349	-0.0655	-0.0947	-0.1222	-0.1482
	My+	0.2623	0.2595	0.2597	0.2736	0.2858	0.3128	0.3424	0.3701	0.3961
	Mz-	-0.1086	-0.1062	-0.1038	-0.1014	-0.0991	-0.0967	-0.0943	-0.0920	-0.0896
	Mz+	0.0497	0.0485	0.0473	0.0462	0.0450	0.0439	0.0427	0.0415	0.0404
338/341		0.000 m	0.007 m	0.015 m	0.022 m	0.030 m	0.037 m	0.045 m	0.052 m	0.060 m
		Envolvente (Acero laminado)								
	N-	-10.1208	-10.1208	-10.1207	-10.1207	-10.1207	-10.1207	-10.1206	-10.1206	-10.1206
	N+	4.9976	4.9976	4.9976	4.9976	4.9976	4.9976	4.9976	4.9977	4.9977
	Ty-	-0.4040	-0.4040	-0.4040	-0.4040	-0.4040	-0.4040	-0.4040	-0.4040	-0.4040
	Ty+	1.6538	1.6538	1.6538	1.6538	1.6538	1.6538	1.6538	1.6538	1.6538
	Tz-	-0.2695	-0.2693	-0.2691	-0.2689	-0.2687	-0.2685	-0.2683	-0.2680	-0.2678
	Tz+	0.7657	0.7660	0.7664	0.7667	0.7671	0.7675	0.7678	0.7682	0.7686
	Mt-	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012
	Mt+	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008
	My-	-0.5332	-0.5313	-0.5294	-0.5275	-0.5256	-0.5238	-0.5219	-0.5200	-0.5181
	My+	3.9626	3.9569	3.9511	3.9454	3.9396	3.9339	3.9281	3.9224	3.9166
	Mz-	-0.0192	-0.0162	-0.0132	-0.0102	-0.0071	-0.0041	-0.0011	0.0008	-0.0102
	Mz+	0.0907	0.0788	0.0669	0.0550	0.0431	0.0312	0.0203	0.0108	0.0071
338/357		0.000 m	0.004 m	0.009 m	0.013 m	0.018 m	0.022 m	0.027 m	0.031 m	0.036 m
		Envolvente (Acero Conformado)								
	N-	-0.9390	-0.9390	-0.9390	-0.9390	-0.9390	-0.9390	-0.9390	-0.9390	-0.9390
	N+	0.9697	0.9697	0.9697	0.9697	0.9697	0.9697	0.9697	0.9697	0.9697
	Ty-	-0.6965	-0.6965	-0.6965	-0.6965	-0.6965	-0.6965	-0.6965	-0.6965	-0.6965
	Ty+	0.4315	0.4315	0.4315	0.4315	0.4315	0.4315	0.4315	0.4315	0.4315
	Tz-	-0.3796	-0.3792	-0.3789	-0.3785	-0.3781	-0.3778	-0.3774	-0.3771	-0.3767
	Tz+	-0.0866	-0.0865	-0.0865	-0.0864	-0.0864	-0.0863	-0.0863	-0.0862	-0.0862
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.4191	-0.4183	-0.4175	-0.4168	-0.4160	-0.4152	-0.4145	-0.4137	-0.4129
	My+	0.1765	0.1779	0.1793	0.1807	0.1821	0.1835	0.1849	0.1863	0.1877
	Mz-	-0.1234	-0.1226	-0.1218	-0.1210	-0.1202	-0.1194	-0.1186	-0.1178	-0.1170
	Mz+	0.0587	0.0592	0.0597	0.0602	0.0607	0.0612	0.0616	0.0621	0.0626
339/340		0.000 m	0.369 m	0.738 m	1.106 m	1.475 m	1.844 m	2.213 m	2.582 m	2.950 m
		Envolvente (Acero laminado)								
	N-	-13.6042	-13.5940	-13.5838	-13.5737	-13.5635	-13.5533	-13.5432	-13.5330	-13.5229
	N+	-5.2173	-5.2113	-5.2053	-5.1993	-5.1933	-5.1872	-5.1812	-5.1752	-5.1692
	Ty-	-0.0285	-0.0285	-0.0285	-0.0285	-0.0285	-0.0285	-0.0285	-0.0285	-0.0285
	Ty+	0.0235	0.0235	0.0235	0.0235	0.0235	0.0235	0.0235	0.0235	0.0235
	Tz-	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001
	Tz+	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0002	-0.0002	-0.0002	-0.0001	-0.0001	-0.0001	-0.0001	0.0000	0.0000
	My+	0.0045	0.0039	0.0034	0.0028	0.0022	0.0017	0.0011	0.0006	0.0000
	Mz-	-0.0430	-0.0324	-0.0219	-0.0114	-0.0009	-0.0077	-0.0164	-0.0251	-0.0338



## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

	Mz+	0.0357	0.0270	0.0183	0.0097	0.0010	0.0096	0.0201	0.0306	0.0411	
340/347		0.000 m	0.625 m	1.250 m	1.875 m	2.500 m	3.125 m	3.750 m	4.375 m	5.000 m	
		Envolvente (Acero laminado)									
	N-	-4.6093	-4.6093	-4.6093	-4.6093	-4.6093	-4.6093	-4.6093	-4.6093	-4.6093	-4.6093
	N+	6.8330	6.8330	6.8330	6.8330	6.8330	6.8330	6.8330	6.8330	6.8330	6.8330
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
	Tz-	-6.7720	-5.0907	-3.4094	-1.7280	-0.0923	0.5823	1.2453	1.9083	2.5713	
	Tz+	-2.5733	-1.9102	-1.2472	-0.5842	0.0788	1.6991	3.3804	5.0617	6.7431	
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-5.6498	-1.9673	0.2606	0.8286	0.9948	0.7301	0.0676	-2.0060	-5.6740	
	My+	-2.1105	-0.7127	0.7136	2.2980	2.8736	2.3564	0.8303	-0.5115	-1.9031	
	Mz-	-0.0007	-0.0008	-0.0010	-0.0011	-0.0013	-0.0014	-0.0016	-0.0017	-0.0018	
Mz+	0.0011	0.0009	0.0007	0.0006	0.0007	0.0007	0.0007	0.0007	0.0007		
342/341		0.000 m	0.007 m	0.015 m	0.022 m	0.030 m	0.037 m	0.045 m	0.052 m	0.060 m	
		Envolvente (Acero laminado)									
	N-	-8.9787	-8.9786	-8.9786	-8.9786	-8.9786	-8.9785	-8.9785	-8.9785	-8.9785	
	N+	3.7896	3.7896	3.7896	3.7896	3.7896	3.7896	3.7896	3.7897	3.7897	
	Ty-	-0.8525	-0.8525	-0.8525	-0.8525	-0.8525	-0.8525	-0.8525	-0.8525	-0.8525	
	Ty+	0.7879	0.7879	0.7879	0.7879	0.7879	0.7879	0.7879	0.7879	0.7879	
	Tz-	-0.3882	-0.3880	-0.3878	-0.3876	-0.3873	-0.3871	-0.3869	-0.3867	-0.3865	
	Tz+	0.8478	0.8482	0.8485	0.8489	0.8492	0.8496	0.8500	0.8503	0.8507	
	Mt-	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006	
	Mt+	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	
	My-	-0.5413	-0.5384	-0.5355	-0.5326	-0.5297	-0.5268	-0.5239	-0.5210	-0.5181	
	My+	3.9675	3.9612	3.9548	3.9485	3.9421	3.9357	3.9294	3.9230	3.9166	
	Mz-	-0.0521	-0.0457	-0.0393	-0.0329	-0.0265	-0.0201	-0.0144	-0.0104	-0.0072	
Mz+	0.0401	0.0342	0.0283	0.0224	0.0165	0.0106	0.0053	0.0051	0.0103		
357/341		0.000 m	0.009 m	0.017 m	0.026 m	0.035 m	0.044 m	0.052 m	0.061 m	0.070 m	
		Envolvente (Acero laminado)									
	N-	-2.2707	-2.2707	-2.2707	-2.2707	-2.2707	-2.2707	-2.2707	-2.2707	-2.2707	
	N+	0.7812	0.7812	0.7812	0.7812	0.7812	0.7812	0.7812	0.7812	0.7812	
	Ty-	-0.0145	-0.0145	-0.0145	-0.0145	-0.0144	-0.0144	-0.0144	-0.0143	-0.0143	
	Ty+	-0.0038	-0.0038	-0.0037	-0.0037	-0.0037	-0.0037	-0.0037	-0.0037	-0.0036	
	Tz-	-0.0026	-0.0026	-0.0026	-0.0026	-0.0026	-0.0026	-0.0026	-0.0026	-0.0026	
	Tz+	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
	My-	-0.0002	-0.0002	-0.0001	-0.0001	-0.0001	-0.0001	0.0000	0.0000	0.0000	
	My+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
	Mz-	-0.0010	-0.0009	-0.0008	-0.0006	-0.0005	-0.0004	-0.0003	-0.0001	0.0000	
Mz+	-0.0003	-0.0002	-0.0002	-0.0002	-0.0001	-0.0001	-0.0001	0.0000	0.0000		
358/341		0.000 m	0.009 m	0.017 m	0.026 m	0.035 m	0.044 m	0.052 m	0.061 m	0.070 m	
		Envolvente (Acero laminado)									
	N-	-3.4287	-3.4287	-3.4287	-3.4287	-3.4287	-3.4287	-3.4287	-3.4287	-3.4286	
	N+	2.2962	2.2962	2.2962	2.2962	2.2962	2.2962	2.2962	2.2962	2.2962	
	Ty-	-0.0122	-0.0122	-0.0122	-0.0121	-0.0121	-0.0121	-0.0120	-0.0120	-0.0120	
	Ty+	-0.0027	-0.0027	-0.0027	-0.0027	-0.0026	-0.0026	-0.0026	-0.0026	-0.0026	
	Tz-	-0.0015	-0.0015	-0.0015	-0.0015	-0.0015	-0.0015	-0.0015	-0.0015	-0.0015	
	Tz+	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
	My-	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	0.0000	0.0000	0.0000	0.0000	

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas**

	My+	0.0001	0.0001	0.0001	0.0001	0.0001	0.0000	0.0000	0.0000	0.0000
	Mz-	-0.0008	-0.0007	-0.0006	-0.0005	-0.0004	-0.0003	-0.0002	-0.0001	0.0000
	Mz+	-0.0002	-0.0002	-0.0001	-0.0001	-0.0001	-0.0001	0.0000	0.0000	0.0000
343/342		0.000 m	0.197 m	0.393 m	0.590 m	0.786 m	0.983 m	1.180 m	1.376 m	1.573 m
		Envolvente (Acero laminado)								
	N-	-8.4553	-8.4547	-8.4540	-8.4533	-8.4527	-8.4520	-8.4513	-8.4507	-8.4500
	N+	3.6557	3.6560	3.6564	3.6568	3.6572	3.6576	3.6580	3.6584	3.6588
	Ty-	-0.0238	-0.0238	-0.0238	-0.0238	-0.0238	-0.0238	-0.0238	-0.0238	-0.0238
	Ty+	0.0367	0.0367	0.0367	0.0367	0.0367	0.0367	0.0367	0.0367	0.0367
	Tz-	-0.7462	-0.7406	-0.7349	-0.7293	-0.7236	-0.7180	-0.7123	-0.7067	-0.7010
	Tz+	0.1788	0.1883	0.1978	0.2074	0.2169	0.2265	0.2360	0.2455	0.2551
	Mt-	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006
	Mt+	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
	My-	-1.6539	-1.5109	-1.3691	-1.2283	-1.0887	-0.9502	-0.8128	-0.6765	-0.5413
	My+	4.2069	4.1836	4.1583	4.1312	4.1022	4.0714	4.0386	4.0040	3.9675
	Mz-	-0.0091	-0.0118	-0.0146	-0.0181	-0.0237	-0.0304	-0.0376	-0.0449	-0.0521
	Mz+	0.0111	0.0074	0.0121	0.0167	0.0214	0.0261	0.0307	0.0354	0.0401
342/358		0.000 m	0.004 m	0.009 m	0.013 m	0.018 m	0.022 m	0.027 m	0.031 m	0.036 m
		Envolvente (Acero Conformado)								
	N-	-1.9645	-1.9645	-1.9645	-1.9645	-1.9645	-1.9645	-1.9645	-1.9645	-1.9645
	N+	0.5012	0.5012	0.5012	0.5012	0.5012	0.5012	0.5012	0.5012	0.5012
	Ty-	-0.7294	-0.7294	-0.7294	-0.7294	-0.7294	-0.7294	-0.7294	-0.7294	-0.7294
	Ty+	0.3849	0.3849	0.3849	0.3849	0.3849	0.3849	0.3849	0.3849	0.3849
	Tz-	-0.3157	-0.3153	-0.3150	-0.3146	-0.3142	-0.3139	-0.3135	-0.3132	-0.3128
	Tz+	-0.0707	-0.0706	-0.0706	-0.0705	-0.0704	-0.0704	-0.0703	-0.0703	-0.0702
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.4198	-0.4191	-0.4183	-0.4176	-0.4168	-0.4160	-0.4153	-0.4145	-0.4138
	My+	0.1765	0.1776	0.1788	0.1799	0.1811	0.1822	0.1834	0.1845	0.1856
	Mz-	-0.1289	-0.1261	-0.1232	-0.1203	-0.1175	-0.1146	-0.1118	-0.1089	-0.1061
	Mz+	0.0611	0.0607	0.0602	0.0598	0.0593	0.0589	0.0585	0.0580	0.0576
344/343		0.000 m	0.197 m	0.393 m	0.590 m	0.786 m	0.983 m	1.180 m	1.376 m	1.573 m
		Envolvente (Acero laminado)								
	N-	-8.4858	-8.4851	-8.4844	-8.4838	-8.4831	-8.4824	-8.4818	-8.4811	-8.4804
	N+	3.6731	3.6734	3.6738	3.6742	3.6746	3.6750	3.6754	3.6758	3.6762
	Ty-	-0.0048	-0.0048	-0.0048	-0.0048	-0.0048	-0.0048	-0.0048	-0.0048	-0.0048
	Ty+	0.0259	0.0259	0.0259	0.0259	0.0259	0.0259	0.0259	0.0259	0.0259
	Tz-	-0.5526	-0.5430	-0.5335	-0.5240	-0.5144	-0.5049	-0.4953	-0.4858	-0.4763
	Tz+	-0.1477	-0.1420	-0.1364	-0.1307	-0.1250	-0.1194	-0.1137	-0.1081	-0.1024
	Mt-	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006
	Mt+	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
	My-	-1.9338	-1.8931	-1.8534	-1.8149	-1.7783	-1.7455	-1.7139	-1.6833	-1.6539
	My+	3.4259	3.5226	3.6173	3.7153	3.8174	3.9176	4.0159	4.1124	4.2069
	Mz-	-0.0074	-0.0064	-0.0055	-0.0045	-0.0036	-0.0027	-0.0030	-0.0052	-0.0091
	Mz+	0.0464	0.0413	0.0362	0.0311	0.0260	0.0211	0.0171	0.0140	0.0111
343/363		0.000 m	0.122 m	0.244 m	0.366 m	0.489 m	0.611 m	0.733 m	0.855 m	0.977 m
		Envolvente (Acero Conformado)								
	N-	-0.0942	-0.0942	-0.0942	-0.0942	-0.0942	-0.0942	-0.0942	-0.0942	-0.0942
	N+	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600
	Ty-	-0.0237	-0.0237	-0.0237	-0.0237	-0.0237	-0.0237	-0.0237	-0.0237	-0.0237
	Ty+	0.0303	0.0303	0.0303	0.0303	0.0303	0.0303	0.0303	0.0303	0.0303
	Tz-	-0.3017	-0.2887	-0.2757	-0.2626	-0.2496	-0.2365	-0.2235	-0.2104	-0.1974
	Tz+	0.2911	0.2798	0.2686	0.2573	0.2460	0.2348	0.2235	0.2122	0.2009
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas**

	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0390	0.0486	0.0273	-0.0045	-0.0350	-0.0641	-0.0918	-0.1181	-0.1431
	My+	0.1857	0.2080	0.2422	0.2747	0.3056	0.3350	0.3628	0.3889	0.4135
	Mz-	-0.1112	-0.1086	-0.1061	-0.1036	-0.1010	-0.0996	-0.0996	-0.0997	-0.0997
	Mz+	0.0519	0.0506	0.0492	0.0478	0.0464	0.0450	0.0436	0.0422	0.0408
345/344		0.000 m	0.197 m	0.393 m	0.590 m	0.786 m	0.983 m	1.180 m	1.376 m	1.573 m
		Envolvente (Acero laminado)								
	N-	-8.5296	-8.5290	-8.5283	-8.5276	-8.5270	-8.5263	-8.5256	-8.5250	-8.5243
	N+	3.7034	3.7038	3.7042	3.7046	3.7050	3.7054	3.7058	3.7062	3.7066
	Ty-	-0.0760	-0.0760	-0.0760	-0.0760	-0.0760	-0.0760	-0.0760	-0.0760	-0.0760
	Ty+	0.0110	0.0110	0.0110	0.0110	0.0110	0.0110	0.0110	0.0110	0.0110
	Tz-	-1.2405	-1.2310	-1.2214	-1.2119	-1.2023	-1.1928	-1.1833	-1.1737	-1.1642
	Tz+	0.3300	0.3357	0.3413	0.3470	0.3526	0.3583	0.3639	0.3696	0.3752
	Mt-	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006
	Mt+	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
	My-	-1.3907	-1.4547	-1.5198	-1.5860	-1.6534	-1.7218	-1.7914	-1.8620	-1.9338
	My+	1.6022	1.8367	2.0694	2.3002	2.5291	2.7561	2.9812	3.2045	3.4259
	Mz-	-0.0731	-0.0581	-0.0432	-0.0283	-0.0133	-0.0009	-0.0031	-0.0052	-0.0074
	Mz+	0.0099	0.0077	0.0056	0.0034	0.0013	0.0033	0.0165	0.0315	0.0464
344/374		0.000 m	0.240 m	0.480 m	0.719 m	0.959 m	1.199 m	1.439 m	1.679 m	1.919 m
		Envolvente (Acero Conformado)								
	N-	-0.1535	-0.1535	-0.1535	-0.1535	-0.1535	-0.1535	-0.1535	-0.1535	-0.1535
	N+	0.0439	0.0439	0.0439	0.0439	0.0439	0.0439	0.0439	0.0439	0.0439
	Ty-	-0.0126	-0.0126	-0.0126	-0.0126	-0.0126	-0.0126	-0.0126	-0.0126	-0.0126
	Ty+	0.0190	0.0190	0.0190	0.0190	0.0190	0.0190	0.0190	0.0190	0.0190
	Tz-	-0.3162	-0.2906	-0.2650	-0.2394	-0.2138	-0.1882	-0.1625	-0.1418	-0.1306
	Tz+	0.2879	0.2658	0.2437	0.2215	0.1994	0.1773	0.1552	0.1330	0.1109
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0118	-0.0713	-0.1258	-0.1753	-0.2193	-0.2581	-0.2915	-0.3197
	My+	0.1236	0.1801	0.2431	0.3021	0.3551	0.4017	0.4424	0.4768	0.5052
	Mz-	-0.0889	-0.0887	-0.0885	-0.0885	-0.0905	-0.0928	-0.0950	-0.0973	-0.0995
	Mz+	0.0484	0.0487	0.0490	0.0493	0.0495	0.0500	0.0524	0.0551	0.0579
348/345		0.000 m	0.197 m	0.393 m	0.590 m	0.786 m	0.983 m	1.180 m	1.376 m	1.573 m
		Envolvente (Acero laminado)								
	N-	-8.6004	-8.5997	-8.5991	-8.5984	-8.5977	-8.5970	-8.5964	-8.5957	-8.5950
	N+	3.7428	3.7432	3.7436	3.7440	3.7444	3.7448	3.7452	3.7456	3.7460
	Ty-	-0.0072	-0.0072	-0.0072	-0.0072	-0.0072	-0.0072	-0.0072	-0.0072	-0.0072
	Ty+	0.0623	0.0623	0.0623	0.0623	0.0623	0.0623	0.0623	0.0623	0.0623
	Tz-	-1.9729	-1.9633	-1.9538	-1.9442	-1.9347	-1.9252	-1.9156	-1.9061	-1.8966
	Tz+	0.8457	0.8514	0.8570	0.8627	0.8683	0.8740	0.8796	0.8853	0.8909
	Mt-	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006
	Mt+	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
	My-	-1.5360	-1.1491	-0.7640	-0.6750	-0.6990	-0.8702	-1.0426	-1.2161	-1.3907
	My+	-0.0174	-0.1820	-0.1826	-0.0714	0.1168	0.4910	0.8633	1.2337	1.6022
	Mz-	-0.0015	0.0000	-0.0020	-0.0119	-0.0241	-0.0363	-0.0486	-0.0608	-0.0731
	Mz+	0.0249	0.0126	0.0015	0.0028	0.0042	0.0056	0.0071	0.0085	0.0099
345/385		0.000 m	0.357 m	0.715 m	1.072 m	1.430 m	1.787 m	2.145 m	2.502 m	2.860 m
		Envolvente (Acero Conformado)								
	N-	-0.0978	-0.0978	-0.0978	-0.0978	-0.0978	-0.0978	-0.0978	-0.0978	-0.0978
	N+	0.5776	0.5776	0.5776	0.5776	0.5776	0.5776	0.5776	0.5776	0.5776
	Ty-	-0.0176	-0.0176	-0.0176	-0.0176	-0.0176	-0.0176	-0.0176	-0.0176	-0.0176
	Ty+	0.0288	0.0288	0.0288	0.0288	0.0288	0.0288	0.0288	0.0288	0.0288
	Tz-	-0.3414	-0.3032	-0.2650	-0.2269	-0.1887	-0.1552	-0.1385	-0.1218	-0.1050

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas**

	Tz+	0.2753	0.2423	0.2093	0.1763	0.1433	0.1104	0.0774	0.0444	0.0114
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0938	-0.0559	-0.1151	-0.1808	-0.2351	-0.2771	-0.3078	-0.3263	-0.3335
	My+	0.1063	0.1066	0.1872	0.2676	0.3394	0.3971	0.4416	0.4720	0.4892
	Mz-	-0.0540	-0.0616	-0.0692	-0.0791	-0.0890	-0.0989	-0.1088	-0.1187	-0.1286
	Mz+	0.0396	0.0429	0.0462	0.0505	0.0568	0.0631	0.0694	0.0757	0.0820
346/347		0.000 m	0.369 m	0.738 m	1.106 m	1.475 m	1.844 m	2.213 m	2.582 m	2.950 m
		Envolvente (Acero laminado)								
	N-	-13.6655	-13.6553	-13.6452	-13.6350	-13.6248	-13.6147	-13.6045	-13.5944	-13.5842
	N+	-4.9495	-4.9434	-4.9374	-4.9314	-4.9254	-4.9193	-4.9133	-4.9073	-4.9013
	Ty-	-0.0433	-0.0433	-0.0433	-0.0433	-0.0433	-0.0433	-0.0433	-0.0433	-0.0433
	Ty+	0.0399	0.0399	0.0399	0.0399	0.0399	0.0399	0.0399	0.0399	0.0399
	Tz-	-0.0031	-0.0031	-0.0031	-0.0031	-0.0031	-0.0031	-0.0031	-0.0031	-0.0031
	Tz+	0.0045	0.0045	0.0045	0.0045	0.0045	0.0045	0.0045	0.0045	0.0045
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0092	-0.0081	-0.0069	-0.0057	-0.0046	-0.0034	-0.0023	-0.0011	-0.0001
	My+	0.0132	0.0116	0.0099	0.0082	0.0066	0.0049	0.0032	0.0015	0.0001
	Mz-	-0.0594	-0.0435	-0.0275	-0.0115	-0.0050	-0.0195	-0.0340	-0.0486	-0.0633
	Mz+	0.0543	0.0396	0.0249	0.0102	0.0045	0.0204	0.0364	0.0524	0.0684
347/352		0.000 m	0.625 m	1.250 m	1.875 m	2.500 m	3.125 m	3.750 m	4.375 m	5.000 m
		Envolvente (Acero laminado)								
	N-	-4.6526	-4.6526	-4.6526	-4.6526	-4.6526	-4.6526	-4.6526	-4.6526	-4.6526
	N+	6.8722	6.8722	6.8722	6.8722	6.8722	6.8722	6.8722	6.8722	6.8722
	Ty-	-0.0029	-0.0029	-0.0029	-0.0029	-0.0029	-0.0029	-0.0029	-0.0029	-0.0029
	Ty+	0.0049	0.0049	0.0049	0.0049	0.0049	0.0049	0.0049	0.0049	0.0049
	Tz-	-6.8411	-5.1598	-3.4784	-1.8191	-0.3610	0.3020	0.9650	1.6280	2.2910
	Tz+	-2.3300	-1.6670	-1.0039	-0.3409	0.3621	1.8609	3.5423	5.2236	6.9050
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
	My-	-5.6916	-1.9623	0.2347	0.6467	0.6609	0.2441	-0.5705	-2.5774	-6.2700
	My+	-1.8490	-0.6082	0.7581	2.3857	3.0045	2.6659	1.4510	0.4360	-0.7804
	Mz-	-0.0019	-0.0035	-0.0066	-0.0096	-0.0126	-0.0157	-0.0187	-0.0218	-0.0248
	Mz+	0.0007	0.0004	0.0018	0.0036	0.0054	0.0072	0.0091	0.0109	0.0127
349/348		0.000 m	0.197 m	0.393 m	0.590 m	0.786 m	0.983 m	1.180 m	1.376 m	1.573 m
		Envolvente (Acero laminado)								
	N-	-8.7442	-8.7429	-9.0165	-8.6493	-8.6486	-8.6479	-8.6473	-8.6466	-8.6459
	N+	3.8264	3.8272	3.9837	3.7800	3.7804	3.7808	3.7812	3.7816	3.7820
	Ty-	-0.0051	-0.0051	-0.0051	-0.0051	-0.0051	-0.0051	-0.0051	-0.0051	-0.0051
	Ty+	0.0089	0.0089	0.0089	0.0089	0.0089	0.0089	0.0089	0.0089	0.0089
	Tz-	-2.4728	-2.4600	-1.0681	-2.7460	-2.7364	-2.7269	-2.7174	-2.7078	-2.6983
	Tz+	1.2856	1.2932	0.7748	1.4397	1.4453	1.4510	1.4566	1.4623	1.4679
	Mt-	-0.0002	-0.0002	-0.0016	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006
	Mt+	0.0006	0.0006	0.0060	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
	My-	-5.4383	-4.9531	-4.7320	-4.2123	-3.6733	-3.1359	-2.6011	-2.0679	-1.5360
	My+	2.0719	1.8183	1.6775	1.4037	1.1202	0.8357	0.5497	0.2652	-0.0174
	Mz-	-0.0095	-0.0085	-0.0073	-0.0065	-0.0055	-0.0045	-0.0035	-0.0025	-0.0015
	Mz+	0.0367	0.0352	0.0332	0.0323	0.0308	0.0293	0.0278	0.0264	0.0249
348/383		0.000 m	0.275 m	0.550 m	0.825 m	1.099 m	1.374 m	1.649 m	1.924 m	2.199 m
		Envolvente (Acero Conformado)								
	N-	-0.0567	-0.0567	-0.0567	-0.0567	-0.0567	-0.0567	-0.0567	-0.0567	-0.0567
	N+	0.0333	0.0333	0.0333	0.0333	0.0333	0.0333	0.0333	0.0333	0.0333
	Ty-	-0.0106	-0.0106	-0.0106	-0.0106	-0.0106	-0.0106	-0.0106	-0.0106	-0.0106

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas**

	Ty+	0.0051	0.0051	0.0051	0.0051	0.0051	0.0051	0.0051	0.0051	0.0051
	Tz-	-0.3728	-0.3434	-0.3141	-0.2847	-0.2554	-0.2260	-0.1967	-0.1719	-0.1591
	Tz+	0.3100	0.2847	0.2593	0.2339	0.2086	0.1832	0.1579	0.1325	0.1071
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.2778	-0.1795	-0.1048	-0.0778	-0.1145	-0.1615	-0.2061	-0.2436	-0.2743
	My+	0.2197	0.1381	0.0632	0.0535	0.1070	0.1632	0.2198	0.2679	0.3083
	Mz-	-0.0292	-0.0281	-0.0270	-0.0259	-0.0248	-0.0237	-0.0226	-0.0222	-0.0218
	Mz+	0.0250	0.0249	0.0249	0.0248	0.0261	0.0283	0.0306	0.0329	0.0351
350/349		0.000 m	0.197 m	0.393 m	0.590 m	0.786 m	0.983 m	1.180 m	1.376 m	1.573 m
		Envolvente (Acero laminado)								
	N-	-8.8384	-8.8367	-8.8351	-8.8336	-8.8320	-8.8244	-8.8230	-8.8216	-8.8202
	N+	3.8855	3.8865	3.8874	3.8884	3.8893	3.8866	3.8875	3.8883	3.8892
	Ty-	-0.0565	-0.0565	-0.0565	-0.0565	-0.0565	-0.0565	-0.0565	-0.0565	-0.0565
	Ty+	0.0668	0.0668	0.0668	0.0668	0.0668	0.0668	0.0668	0.0668	0.0668
	Tz-	-3.3394	-3.3245	-3.3099	-3.2955	-3.2814	-3.2840	-3.2704	-3.2571	-3.2440
	Tz+	1.8622	1.8710	1.8797	1.8883	1.8966	1.9121	1.9201	1.9280	1.9357
	Mt-	-0.0020	-0.0020	-0.0020	-0.0020	-0.0020	-0.0022	-0.0022	-0.0022	-0.0022
	Mt+	0.0023	0.0023	0.0023	0.0023	0.0023	0.0024	0.0024	0.0024	0.0024
	My-	-10.6147	-9.9592	-9.3066	-8.6568	-8.0099	-7.3625	-6.7177	-6.0757	-5.4362
	My+	5.0603	4.6930	4.3241	3.9534	3.5811	3.2057	2.8288	2.4503	2.0702
	Mz-	-0.0911	-0.0800	-0.0688	-0.0577	-0.0466	-0.0355	-0.0244	-0.0137	-0.0095
	Mz+	0.1420	0.1288	0.1157	0.1025	0.0894	0.0762	0.0631	0.0500	0.0368
349/371		0.000 m	0.157 m	0.314 m	0.472 m	0.629 m	0.786 m	0.943 m	1.100 m	1.257 m
		Envolvente (Acero Conformado)								
	N-	-0.0248	-0.0248	-0.0248	-0.0248	-0.0248	-0.0248	-0.0248	-0.0248	-0.0248
	N+	0.0095	0.0095	0.0095	0.0095	0.0095	0.0095	0.0095	0.0095	0.0095
	Ty-	-0.0187	-0.0187	-0.0187	-0.0187	-0.0187	-0.0187	-0.0187	-0.0187	-0.0187
	Ty+	0.0076	0.0076	0.0076	0.0076	0.0076	0.0076	0.0076	0.0076	0.0076
	Tz-	-0.3979	-0.3811	-0.3643	-0.3475	-0.3307	-0.3140	-0.2972	-0.2804	-0.2636
	Tz+	0.3271	0.3126	0.2981	0.2836	0.2691	0.2546	0.2401	0.2256	0.2111
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.4336	-0.3724	-0.3138	-0.2579	-0.2046	-0.1539	-0.1103	-0.0738	-0.0545
	My+	0.3259	0.2757	0.2276	0.1820	0.1385	0.0974	0.0585	0.0219	0.0082
	Mz-	-0.0096	-0.0073	-0.0051	-0.0029	-0.0014	-0.0002	0.0010	0.0005	-0.0007
	Mz+	0.0165	0.0165	0.0167	0.0168	0.0169	0.0178	0.0187	0.0197	0.0206
355/350		0.000 m	0.066 m	0.132 m	0.198 m	0.264 m	0.330 m	0.396 m	0.462 m	0.528 m
		Envolvente (Acero laminado)								
	N-	-7.4817	-7.4811	-7.4805	-7.4799	-7.4793	-7.4767	-7.4761	-7.4756	-7.4750
	N+	3.4592	3.4595	3.4598	3.4602	3.4605	3.4592	3.4596	3.4599	3.4602
	Ty-	-0.2748	-0.2748	-0.2748	-0.2748	-0.2748	-0.2748	-0.2748	-0.2748	-0.2748
	Ty+	0.1759	0.1759	0.1759	0.1759	0.1759	0.1759	0.1759	0.1759	0.1759
	Tz-	-4.5114	-4.5062	-4.5009	-4.4957	-4.4905	-4.4888	-4.4837	-4.4786	-4.4735
	Tz+	3.4827	3.4858	3.4889	3.4920	3.4951	3.4998	3.5028	3.5058	3.5088
	Mt-	-0.0224	-0.0224	-0.0224	-0.0224	-0.0224	-0.0223	-0.0223	-0.0223	-0.0223
	Mt+	0.0342	0.0342	0.0342	0.0342	0.0342	0.0342	0.0342	0.0342	0.0342
	My-	-13.1300	-12.8331	-12.5366	-12.2404	-11.9446	-11.6489	-11.3535	-11.0585	-10.7638
	My+	6.9593	6.7292	6.4989	6.2684	6.0376	5.8066	5.5754	5.3439	5.1123
	Mz-	-0.0048	-0.0088	-0.0204	-0.0320	-0.0436	-0.0553	-0.0669	-0.0785	-0.0901
	Mz+	0.0028	0.0135	0.0316	0.0498	0.0679	0.0861	0.1042	0.1224	0.1405
350/360		0.000 m	0.039 m	0.079 m	0.118 m	0.158 m	0.197 m	0.237 m	0.276 m	0.316 m
		Envolvente (Acero laminado)								
	N-	-1.0264	-1.0264	-1.0264	-1.0264	-1.0264	-1.0264	-1.0264	-1.0264	-1.0264

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas**

	N+	1.9322	1.9322	1.9322	1.9322	1.9322	1.9322	1.9322	1.9322	1.9322
	Ty-	-1.4675	-1.4675	-1.4675	-1.4675	-1.4675	-1.4675	-1.4675	-1.4675	-1.4675
	Ty+	0.6003	0.6003	0.6003	0.6003	0.6003	0.6003	0.6003	0.6003	0.6003
	Tz-	-0.4542	-0.4485	-0.4428	-0.4371	-0.4314	-0.4258	-0.4201	-0.4144	-0.4087
	Tz+	0.9103	0.8998	0.8893	0.8788	0.8684	0.8579	0.8474	0.8369	0.8265
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.6731	-0.6553	-0.6377	-0.6203	-0.6032	-0.5862	-0.5695	-0.5531	-0.5368
	My+	0.9494	0.9136	0.8783	0.8434	0.8088	0.7748	0.7411	0.7078	0.6750
	Mz-	-0.1572	-0.1195	-0.1080	-0.1064	-0.1292	-0.1529	-0.1767	-0.2004	-0.2241
	Mz+	0.0715	0.0923	0.1131	0.1392	0.1898	0.2413	0.2927	0.3442	0.3956
351/352		0.000 m	0.369 m	0.738 m	1.106 m	1.475 m	1.844 m	2.213 m	2.582 m	2.950 m
	Envolvente (Acero laminado)									
	N-	-12.2876	-12.2462	-12.2048	-12.1633	-12.1219	-12.0805	-12.0390	-11.9976	-11.9562
	N+	0.4202	0.4448	0.4693	0.4939	0.5185	0.5430	0.5676	0.5921	0.6167
	Ty-	-0.0866	-0.0866	-0.0866	-0.0866	-0.0866	-0.0866	-0.0866	-0.0866	-0.0866
	Ty+	0.1515	0.1515	0.1515	0.1515	0.1515	0.1515	0.1515	0.1515	0.1515
	Tz-	-1.0416	-0.8203	-0.6563	-0.5236	-0.4629	-0.4629	-0.4729	-0.5559	-0.6389
	Tz+	1.3167	1.3167	1.3167	1.3167	1.3167	1.3167	1.3167	1.3167	1.3916
	Mt-	-0.0019	-0.0019	-0.0019	-0.0019	-0.0019	-0.0019	-0.0019	-0.0019	-0.0019
	Mt+	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006
	My-	-1.5131	-1.2805	-1.1774	-1.1592	-1.2194	-1.5477	-1.9752	-2.4300	-2.9156
	My+	1.8353	1.4195	1.1717	1.1416	1.1988	1.2879	1.4063	1.5659	1.7856
	Mz-	-0.0964	-0.0645	-0.0325	-0.0021	0.0027	-0.0253	-0.0812	-0.1371	-0.1930
	Mz+	0.2541	0.1982	0.1423	0.0877	0.0457	0.0632	0.0952	0.1271	0.1590
352/353		0.000 m	0.234 m	0.467 m	0.701 m	0.935 m	1.168 m	1.402 m	1.636 m	1.870 m
	Envolvente (Acero laminado)									
	N-	-6.2572	-6.2310	-6.2047	-6.1785	-6.1522	-6.1260	-6.0997	-6.0735	-6.0472
	N+	3.1316	3.1471	3.1627	3.1783	3.1938	3.2094	3.2249	3.2405	3.2560
	Ty-	-0.2672	-0.2672	-0.2672	-0.2672	-0.2672	-0.2672	-0.2672	-0.2672	-0.2672
	Ty+	0.1319	0.1319	0.1319	0.1319	0.1319	0.1319	0.1319	0.1319	0.1319
	Tz-	-3.4931	-3.3528	-3.2126	-3.0724	-2.9322	-2.7920	-2.6766	-2.6766	-2.6766
	Tz+	6.3558	6.3558	6.3558	6.3558	6.3558	6.3558	6.3558	6.3558	6.3558
	Mt-	-0.0034	-0.0034	-0.0034	-0.0034	-0.0034	-0.0034	-0.0034	-0.0034	-0.0034
	Mt+	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019
	My-	-1.6656	-1.0401	-0.4146	0.2109	0.5380	-0.6390	-2.0490	-3.5343	-5.0195
	My+	6.8626	5.3773	3.8921	2.5851	2.2206	2.3416	2.8051	3.4078	3.9790
	Mz-	-0.1664	-0.1867	-0.2176	-0.2484	-0.2792	-0.3100	-0.3409	-0.3717	-0.4025
	Mz+	0.1706	0.1928	0.2150	0.2463	0.2932	0.3402	0.3964	0.4589	0.5213
352/534		0.000 m	0.750 m	1.500 m	2.250 m	3.000 m	3.750 m	4.500 m	5.250 m	6.000 m
	Envolvente (Acero laminado)									
	N-	-0.0435	-0.0435	-0.0435	-0.0435	-0.0435	-0.0435	-0.0435	-0.0435	-0.0435
	N+	0.3806	0.3806	0.3806	0.3806	0.3806	0.3806	0.3806	0.3806	0.3806
	Ty-	-0.0206	-0.0206	-0.0206	-0.0206	-0.0206	-0.0206	-0.0206	-0.0206	-0.0206
	Ty+	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038
	Tz-	-0.2150	-0.1652	-0.1155	-0.0657	-0.0267	0.0027	0.0322	0.0617	0.0912
	Tz+	-0.0301	-0.0006	0.0289	0.0583	0.0986	0.1484	0.1981	0.2479	0.2976
	Mt-	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005
	Mt+	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008
	My-	-0.1981	-0.0703	0.0050	0.0583	0.0795	0.0026	-0.0965	-0.2515	-0.4560
	My+	0.1661	0.1924	0.2117	0.1937	0.1613	0.1416	0.0976	0.0500	-0.0073
	Mz-	-0.0233	-0.0079	-0.0044	-0.0023	-0.0002	-0.0027	-0.0056	-0.0084	-0.0112
	Mz+	0.0114	0.0086	0.0100	0.0243	0.0387	0.0539	0.0694	0.0848	0.1003
353/354		0.000 m	0.176 m	0.352 m	0.529 m	0.705 m	0.881 m	1.057 m	1.234 m	1.410 m

## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

		Envolvente (Acero laminado)								
	N-	-6.1176	-6.0978	-6.0780	-6.0582	-6.0384	-6.0186	-5.9988	-5.9790	-5.9592
	N+	3.2985	3.3103	3.3220	3.3337	3.3455	3.3572	3.3689	3.3807	3.3924
	Ty-	-0.2642	-0.2642	-0.2642	-0.2642	-0.2642	-0.2642	-0.2642	-0.2642	-0.2642
	Ty+	0.3457	0.3457	0.3457	0.3457	0.3457	0.3457	0.3457	0.3457	0.3457
	Tz-	-2.6757	-2.6757	-2.6757	-2.6757	-2.6757	-2.6757	-2.6757	-2.6757	-2.6757
	Tz+	6.0545	6.0545	6.0545	6.0545	6.0545	6.0545	6.0545	6.0545	6.0545
	Mt-	-0.0034	-0.0034	-0.0034	-0.0034	-0.0034	-0.0034	-0.0034	-0.0034	-0.0034
	Mt+	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019
	My-	-5.0195	-6.0780	-7.1354	-8.1916	-9.2468	-10.3008	-11.3537	-12.4055	-13.4562
	My+	3.9790	4.2983	4.6158	4.9313	5.2451	5.6962	6.1678	6.6393	7.1109
	Mz-	-0.4025	-0.3560	-0.3094	-0.2628	-0.2163	-0.1697	-0.1231	-0.0766	-0.0300
	Mz+	0.5213	0.4604	0.3994	0.3385	0.2776	0.2166	0.1557	0.0948	0.0343
353/366		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-0.3063	-0.3063	-0.3063	-0.3063	-0.3063	-0.3063	-0.3063	-0.3063	-0.3063
	N+	0.5811	0.5811	0.5811	0.5811	0.5811	0.5811	0.5811	0.5811	0.5811
	Ty-	-0.1097	-0.1084	-0.1072	-0.1059	-0.1047	-0.1034	-0.1021	-0.1009	-0.0996
	Ty+	0.0830	0.0838	0.0845	0.0853	0.0860	0.0868	0.0875	0.0883	0.0890
	Tz-	-0.2966	-0.2966	-0.2966	-0.2966	-0.2966	-0.2966	-0.2966	-0.2966	-0.2966
	Tz+	0.2914	0.2914	0.2914	0.2914	0.2914	0.2914	0.2914	0.2914	0.2914
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.4343	-0.3972	-0.3601	-0.3231	-0.2860	-0.2489	-0.2118	-0.1748	-0.1377
	My+	0.4031	0.3667	0.3303	0.2938	0.2574	0.2210	0.1846	0.1481	0.1117
	Mz-	-0.1406	-0.1270	-0.1136	-0.1004	-0.0873	-0.0744	-0.0621	-0.0500	-0.0380
	Mz+	0.1328	0.1225	0.1120	0.1015	0.0909	0.0802	0.0698	0.0594	0.0489
353/367		0.000 m	0.129 m	0.258 m	0.387 m	0.516 m	0.644 m	0.773 m	0.902 m	1.031 m
		Envolvente (Acero laminado)								
	N-	-0.1887	-0.1886	-0.1886	-0.1886	-0.1886	-0.1886	-0.1886	-0.1886	-0.1886
	N+	0.1677	0.1678	0.1678	0.1678	0.1678	0.1678	0.1678	0.1678	0.1678
	Ty-	-0.0001	-0.0001	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0001
	Ty+	-0.0001	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0001	0.0002
	Tz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
354/355		0.000 m	0.013 m	0.025 m	0.038 m	0.050 m	0.063 m	0.075 m	0.088 m	0.100 m
		Envolvente (Acero laminado)								
	N-	-5.9651	-5.9637	-5.9623	-5.9609	-5.9595	-5.9581	-5.9567	-5.9553	-5.9539
	N+	3.4095	3.4103	3.4112	3.4120	3.4128	3.4137	3.4145	3.4153	3.4162
	Ty-	-0.3019	-0.3019	-0.3019	-0.3019	-0.3019	-0.3019	-0.3019	-0.3019	-0.3019
	Ty+	0.3426	0.3426	0.3426	0.3426	0.3426	0.3426	0.3426	0.3426	0.3426
	Tz-	-2.6757	-2.6757	-2.6757	-2.6757	-2.6757	-2.6757	-2.6757	-2.6757	-2.6757
	Tz+	6.0545	6.0545	6.0545	6.0545	6.0545	6.0545	6.0545	6.0545	6.0545
	Mt-	-0.0034	-0.0034	-0.0034	-0.0034	-0.0034	-0.0034	-0.0034	-0.0034	-0.0034
	Mt+	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019
	My-	-13.4562	-13.5310	-13.6057	-13.6805	-13.7552	-13.8300	-13.9047	-13.9795	-14.0542
	My+	7.1109	7.1445	7.1781	7.2116	7.2452	7.2788	7.3124	7.3460	7.3795
	Mz-	-0.0300	-0.0262	-0.0224	-0.0186	-0.0148	-0.0111	-0.0073	-0.0035	-0.0005

## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

	Mz+	0.0343	0.0300	0.0257	0.0214	0.0171	0.0128	0.0086	0.0044	0.0005
368/354		0.000 m	0.128 m	0.257 m	0.385 m	0.514 m	0.642 m	0.770 m	0.899 m	1.027 m
		Envolvente (Acero laminado)								
	N-	-0.0581	-0.0581	-0.0581	-0.0581	-0.0581	-0.0581	-0.0581	-0.0580	-0.0580
	N+	0.0744	0.0744	0.0744	0.0744	0.0744	0.0744	0.0745	0.0745	0.0745
	Ty-	-0.0002	-0.0001	-0.0001	-0.0001	0.0000	0.0000	0.0000	0.0000	0.0001
	Ty+	-0.0001	-0.0001	-0.0001	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001
	Tz-	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003
	Tz+	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0003	-0.0003	-0.0002	-0.0002	-0.0002	-0.0001	-0.0001	0.0000	0.0000
	My+	0.0003	0.0003	0.0002	0.0002	0.0002	0.0001	0.0001	0.0000	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
355/356		0.000 m	0.185 m	0.370 m	0.556 m	0.741 m	0.926 m	1.111 m	1.296 m	1.481 m
		Envolvente (Acero Conformado)								
	N-	-0.8018	-0.8007	-0.7997	-0.7987	-0.7977	-0.7967	-0.7957	-0.7947	-0.7937
	N+	-0.2387	-0.2381	-0.2375	-0.2369	-0.2363	-0.2357	-0.2351	-0.2345	-0.2339
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.0444	-0.0333	-0.0222	-0.0111	0.0000	-0.0111	-0.0222	-0.0333	-0.0444
	Tz+	0.0444	0.0333	0.0222	0.0111	0.0000	0.0111	0.0222	0.0333	0.0444
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0072	-0.0123	-0.0154	-0.0165	-0.0154	-0.0123	-0.0072	0.0000
	My+	0.0000	0.0072	0.0123	0.0154	0.0165	0.0154	0.0123	0.0072	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
355/360		0.000 m	0.077 m	0.154 m	0.231 m	0.308 m	0.385 m	0.461 m	0.538 m	0.615 m
		Envolvente (Acero laminado)								
	N-	-0.9316	-0.9316	-0.9316	-0.9316	-0.9316	-0.9316	-0.9315	-0.9315	-0.9315
	N+	1.1894	1.1894	1.1894	1.1894	1.1894	1.1895	1.1895	1.1895	1.1895
	Ty-	-0.0002	0.0000	0.0002	0.0003	0.0005	0.0006	0.0008	0.0009	0.0011
	Ty+	0.0006	0.0009	0.0011	0.0014	0.0016	0.0019	0.0022	0.0024	0.0027
	Tz-	-0.0007	-0.0007	-0.0007	-0.0007	-0.0007	-0.0007	-0.0007	-0.0007	-0.0007
	Tz+	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0001	-0.0002	-0.0003	-0.0003	-0.0004	-0.0005	-0.0006	-0.0007
	My+	0.0000	0.0001	0.0001	0.0002	0.0002	0.0003	0.0003	0.0004	0.0005
	Mz-	0.0000	-0.0001	-0.0001	-0.0002	-0.0003	-0.0005	-0.0006	-0.0008	-0.0010
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0001	-0.0001	-0.0002	-0.0003
356/369		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367	-0.0367
	N+	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172	0.0172
	Ty-	-0.4125	-0.4023	-0.3921	-0.3819	-0.3717	-0.3615	-0.3513	-0.3411	-0.3309
	Ty+	-0.1238	-0.1177	-0.1117	-0.1056	-0.0996	-0.0935	-0.0875	-0.0814	-0.0754
	Tz-	-0.7598	-0.7598	-0.7598	-0.7598	-0.7598	-0.7598	-0.7598	-0.7598	-0.7598
	Tz+	0.7601	0.7601	0.7601	0.7601	0.7601	0.7601	0.7601	0.7601	0.7601
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-5.9040	-5.8091	-5.7141	-5.6191	-5.5241	-5.4292	-5.3342	-5.2392	-5.1443



## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

	My+	5.9062	5.8112	5.7162	5.6212	5.5262	5.4312	5.3361	5.2411	5.1461
	Mz-	-0.4605	-0.4096	-0.3599	-0.3115	-0.2644	-0.2186	-0.1740	-0.1308	-0.0888
	Mz+	-0.1156	-0.1005	-0.0861	-0.0726	-0.0597	-0.0477	-0.0364	-0.0258	-0.0160
370/357		0.000 m	0.244 m	0.488 m	0.732 m	0.977 m	1.221 m	1.465 m	1.709 m	1.953 m
		Envolvente (Acero laminado)								
	N-	-2.0791	-2.0790	-2.0790	-2.0789	-2.0789	-2.0788	-2.0788	-2.0787	-2.0787
	N+	0.9244	0.9245	0.9245	0.9245	0.9246	0.9246	0.9246	0.9246	0.9247
	Ty-	-0.0034	-0.0026	-0.0017	-0.0009	-0.0001	0.0004	0.0009	0.0013	0.0018
	Ty+	-0.0019	-0.0015	-0.0010	-0.0005	0.0000	0.0008	0.0016	0.0024	0.0032
	Tz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz+	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	0.0000	0.0000	-0.0001	-0.0001	-0.0001	-0.0001	-0.0002	-0.0002
	My+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz-	-0.0011	-0.0004	0.0000	0.0002	0.0003	0.0002	0.0000	-0.0003	-0.0010
	Mz+	-0.0004	0.0000	0.0004	0.0007	0.0009	0.0008	0.0005	0.0001	-0.0003
357/426		0.000 m	0.741 m	1.482 m	2.223 m	2.964 m	3.705 m	4.446 m	5.187 m	5.928 m
		Envolvente (Acero Conformado)								
	N-	-0.9144	-0.9144	-0.9144	-0.9144	-0.9144	-0.9144	-0.9144	-0.9144	-0.9144
	N+	0.6467	0.6467	0.6467	0.6467	0.6467	0.6467	0.6467	0.6467	0.6467
	Ty-	-0.0145	-0.0145	-0.0145	-0.0145	-0.0145	-0.0145	-0.0145	-0.0145	-0.0145
	Ty+	0.0127	0.0127	0.0127	0.0127	0.0127	0.0127	0.0127	0.0127	0.0127
	Tz-	-0.3334	-0.2543	-0.1844	-0.1497	-0.1206	-0.0491	-0.0285	-0.0080	0.0126
	Tz+	-0.0740	-0.0535	-0.0329	-0.0124	0.0298	0.1265	0.1952	0.2810	0.3668
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.4129	-0.3083	-0.2184	-0.1443	-0.0847	-0.0411	-0.0120	0.0012	-0.0002
	My+	0.1877	0.3696	0.4977	0.5744	0.5900	0.5394	0.4279	0.2502	0.0114
	Mz-	-0.1170	-0.1062	-0.0955	-0.0847	-0.0740	-0.0642	-0.0545	-0.0447	-0.0350
	Mz+	0.0626	0.0532	0.0438	0.0344	0.0250	0.0156	0.0062	-0.0032	-0.0080
363/358		0.000 m	0.229 m	0.458 m	0.687 m	0.916 m	1.146 m	1.375 m	1.604 m	1.833 m
		Envolvente (Acero laminado)								
	N-	-3.5247	-3.5246	-3.5246	-3.5245	-3.5245	-3.5244	-3.5244	-3.5243	-3.5243
	N+	1.9068	1.9068	1.9069	1.9069	1.9069	1.9070	1.9070	1.9070	1.9070
	Ty-	-0.0032	-0.0024	-0.0016	-0.0009	-0.0001	0.0004	0.0008	0.0013	0.0017
	Ty+	-0.0018	-0.0014	-0.0009	-0.0005	0.0000	0.0007	0.0015	0.0022	0.0030
	Tz-	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001
	Tz+	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0001	0.0000	0.0000	0.0000	0.0000	-0.0001	-0.0001	-0.0001	-0.0001
	My+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0001	0.0001
	Mz-	-0.0010	-0.0004	0.0000	0.0001	0.0002	0.0002	0.0000	-0.0003	-0.0008
	Mz+	-0.0003	0.0000	0.0004	0.0007	0.0008	0.0008	0.0005	0.0002	-0.0002
358/427		0.000 m	0.741 m	1.482 m	2.223 m	2.964 m	3.705 m	4.446 m	5.187 m	5.928 m
		Envolvente (Acero Conformado)								
	N-	-1.6422	-1.6422	-1.6422	-1.6422	-1.6422	-1.6422	-1.6422	-1.6422	-1.6422
	N+	0.4719	0.4719	0.4719	0.4719	0.4719	0.4719	0.4719	0.4719	0.4719
	Ty-	-0.0108	-0.0108	-0.0108	-0.0108	-0.0108	-0.0108	-0.0108	-0.0108	-0.0108
	Ty+	0.0109	0.0109	0.0109	0.0109	0.0109	0.0109	0.0109	0.0109	0.0109
	Tz-	-0.3346	-0.2555	-0.1854	-0.1505	-0.1213	-0.0494	-0.0289	-0.0084	0.0122
	Tz+	-0.0743	-0.0538	-0.0332	-0.0127	0.0286	0.1257	0.1943	0.2801	0.3659
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas**

	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.4138	-0.3089	-0.2187	-0.1443	-0.0845	-0.0405	-0.0112	0.0023	0.0012
	My+	0.1856	0.3685	0.4995	0.5768	0.5930	0.5431	0.4322	0.2551	0.0170
	Mz-	-0.1061	-0.0980	-0.0900	-0.0820	-0.0748	-0.0678	-0.0608	-0.0538	-0.0468
	Mz+	0.0576	0.0495	0.0414	0.0333	0.0252	0.0171	0.0090	0.0012	-0.0048
372/359		0.000 m	0.238 m	0.476 m	0.715 m	0.953 m	1.191 m	1.429 m	1.667 m	1.906 m
		Envolvente (Acero laminado)								
	N-	-1.7458	-1.7457	-1.7457	-1.7456	-1.7456	-1.7456	-1.7455	-1.7455	-1.7454
	N+	0.7655	0.7656	0.7656	0.7656	0.7656	0.7656	0.7657	0.7657	0.7657
	Ty-	-0.0035	-0.0027	-0.0019	-0.0011	-0.0004	0.0001	0.0005	0.0010	0.0015
	Ty+	-0.0015	-0.0010	-0.0006	-0.0001	0.0004	0.0012	0.0020	0.0028	0.0036
	Tz-	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001
	Tz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001
	My+	0.0001	0.0001	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz-	-0.0013	-0.0005	0.0000	0.0000	0.0000	-0.0001	-0.0004	-0.0010	-0.0018
	Mz+	-0.0005	-0.0002	0.0002	0.0005	0.0007	0.0007	0.0005	0.0003	0.0001
359/425		0.000 m	0.727 m	1.455 m	2.182 m	2.910 m	3.637 m	4.365 m	5.092 m	5.820 m
		Envolvente (Acero Conformado)								
	N-	-0.1019	-0.1019	-0.1019	-0.1019	-0.1019	-0.1019	-0.1019	-0.1019	-0.1019
	N+	0.2041	0.2041	0.2041	0.2041	0.2041	0.2041	0.2041	0.2041	0.2041
	Ty-	-0.0121	-0.0121	-0.0121	-0.0121	-0.0121	-0.0121	-0.0121	-0.0121	-0.0121
	Ty+	0.0140	0.0140	0.0140	0.0140	0.0140	0.0140	0.0140	0.0140	0.0140
	Tz-	-0.3933	-0.3156	-0.2379	-0.1758	-0.1418	-0.0184	-0.0677	-0.1348	-0.2019
	Tz+	0.3444	0.2773	0.2101	0.1430	0.0759	0.0581	0.0834	0.1576	0.2353
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.4626	-0.2071	-0.0483	-0.1378	-0.2116	-0.2346	-0.2108	-0.1362	-0.0146
	My+	0.4280	0.2028	0.0403	0.1671	0.2546	0.2768	0.2481	0.1606	0.0188
	Mz-	-0.0289	-0.0201	-0.0115	-0.0089	-0.0163	-0.0244	-0.0331	-0.0432	-0.0534
	Mz+	0.0330	0.0228	0.0128	0.0078	0.0132	0.0205	0.0278	0.0352	0.0425
360/371		0.000 m	0.229 m	0.458 m	0.687 m	0.916 m	1.146 m	1.375 m	1.604 m	1.833 m
		Envolvente (Acero laminado)								
	N-	-1.7337	-1.7337	-1.7337	-1.7336	-1.7336	-1.7336	-1.7336	-1.7335	-1.7335
	N+	3.0762	3.0763	3.0763	3.0764	3.0764	3.0764	3.0765	3.0765	3.0766
	Ty-	-0.0030	-0.0023	-0.0015	-0.0007	0.0000	0.0004	0.0009	0.0013	0.0018
	Ty+	-0.0016	-0.0012	-0.0007	-0.0003	0.0002	0.0010	0.0017	0.0025	0.0032
	Tz-	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005
	Tz+	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0007	-0.0006	-0.0005	-0.0004	-0.0002	-0.0001	0.0000	-0.0001	-0.0002
	My+	0.0005	0.0004	0.0003	0.0002	0.0002	0.0001	0.0000	0.0001	0.0002
	Mz-	-0.0010	-0.0004	0.0000	0.0001	0.0002	0.0001	0.0000	-0.0005	-0.0011
	Mz+	-0.0003	0.0000	0.0003	0.0005	0.0006	0.0004	0.0001	-0.0002	-0.0006
360/424		0.000 m	0.671 m	1.342 m	2.013 m	2.684 m	3.355 m	4.026 m	4.697 m	5.368 m
		Envolvente (Acero laminado)								
	N-	-0.6135	-0.6135	-0.6135	-0.6135	-0.6135	-0.6135	-0.6135	-0.6135	-0.6135
	N+	0.9598	0.9598	0.9598	0.9598	0.9598	0.9598	0.9598	0.9598	0.9598
	Ty-	-0.0857	-0.0857	-0.0857	-0.0857	-0.0857	-0.0857	-0.0857	-0.0857	-0.0857
	Ty+	0.1543	0.1543	0.1543	0.1543	0.1543	0.1543	0.1543	0.1543	0.1543
	Tz-	-0.5087	-0.4121	-0.3154	-0.2331	-0.1768	-0.0495	-0.1934	-0.3714	-0.5494

## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

	Tz+	0.8743	0.6964	0.5184	0.3404	0.1625	0.0512	0.0940	0.1757	0.2723
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.5368	-0.2292	-0.2596	-0.5453	-0.7164	-0.7633	-0.6956	-0.5038	-0.1972
	My+	0.6750	0.1504	0.0816	0.2315	0.3487	0.3834	0.3641	0.2773	0.1283
	Mz-	-0.2241	-0.1666	-0.1091	-0.0516	-0.0307	-0.1273	-0.2281	-0.3294	-0.4329
	Mz+	0.3956	0.2921	0.1885	0.0850	0.0142	0.0634	0.1209	0.1784	0.2359
361/373		0.000 m	0.238 m	0.476 m	0.715 m	0.953 m	1.191 m	1.429 m	1.667 m	1.906 m
		Envolvente (Acero laminado)								
	N-	-0.6589	-0.6588	-0.6588	-0.6588	-0.6588	-0.6588	-0.6587	-0.6587	-0.6587
	N+	1.3906	1.3907	1.3907	1.3908	1.3908	1.3908	1.3909	1.3909	1.3910
	Ty-	-0.0033	-0.0025	-0.0017	-0.0009	-0.0001	0.0003	0.0008	0.0013	0.0017
	Ty+	-0.0015	-0.0011	-0.0006	-0.0001	0.0004	0.0012	0.0020	0.0027	0.0035
	Tz-	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002
	Tz+	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0002	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001
	My+	0.0003	0.0003	0.0003	0.0003	0.0002	0.0002	0.0002	0.0002	0.0002
	Mz-	-0.0012	-0.0005	-0.0002	0.0000	0.0001	0.0001	-0.0002	-0.0006	-0.0014
	Mz+	-0.0004	0.0000	0.0004	0.0007	0.0008	0.0007	0.0004	0.0000	-0.0003
361/423		0.000 m	0.618 m	1.237 m	1.855 m	2.473 m	3.092 m	3.710 m	4.328 m	4.947 m
		Envolvente (Acero laminado)								
	N-	-0.6398	-0.6398	-0.6398	-0.6398	-0.6398	-0.6398	-0.6398	-0.6398	-0.6398
	N+	1.3690	1.3690	1.3690	1.3690	1.3690	1.3690	1.3690	1.3690	1.3690
	Ty-	-0.1157	-0.1157	-0.1157	-0.1157	-0.1157	-0.1157	-0.1157	-0.1157	-0.1157
	Ty+	0.0557	0.0557	0.0557	0.0557	0.0557	0.0557	0.0557	0.0557	0.0557
	Tz-	-0.4423	-0.3532	-0.2642	-0.2064	-0.1545	-0.0478	-0.1915	-0.3555	-0.5195
	Tz+	0.7925	0.6285	0.4645	0.3005	0.1365	0.0703	0.1206	0.2023	0.2913
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.3273	-0.1615	-0.4115	-0.6460	-0.7832	-0.8149	-0.7492	-0.5781	-0.3096
	My+	0.3657	0.1122	0.2911	0.4127	0.4814	0.4929	0.4515	0.3529	0.2014
	Mz-	-0.2793	-0.2077	-0.1362	-0.0651	-0.0156	-0.0382	-0.0726	-0.1071	-0.1415
	Mz+	0.1339	0.0995	0.0651	0.0306	0.0087	0.0785	0.1501	0.2217	0.2932
362/375		0.000 m	0.244 m	0.488 m	0.732 m	0.977 m	1.221 m	1.465 m	1.709 m	1.953 m
		Envolvente (Acero laminado)								
	N-	-0.9356	-0.9356	-0.9356	-0.9355	-0.9355	-0.9355	-0.9354	-0.9354	-0.9354
	N+	2.0266	2.0266	2.0267	2.0267	2.0268	2.0268	2.0269	2.0269	2.0270
	Ty-	-0.0035	-0.0027	-0.0019	-0.0011	-0.0003	0.0003	0.0007	0.0012	0.0017
	Ty+	-0.0019	-0.0014	-0.0009	-0.0004	0.0000	0.0008	0.0016	0.0024	0.0032
	Tz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0001
	Mz-	-0.0015	-0.0007	-0.0002	0.0001	0.0002	0.0002	0.0000	-0.0004	-0.0011
	Mz+	-0.0006	-0.0002	0.0001	0.0003	0.0005	0.0004	0.0001	-0.0002	-0.0005
362/422		0.000 m	0.513 m	1.026 m	1.538 m	2.051 m	2.564 m	3.077 m	3.589 m	4.102 m
		Envolvente (Acero Conformado)								
	N-	-0.0711	-0.0711	-0.0711	-0.0711	-0.0711	-0.0711	-0.0711	-0.0711	-0.0711
	N+	0.0303	0.0303	0.0303	0.0303	0.0303	0.0303	0.0303	0.0303	0.0303
	Ty-	-0.0194	-0.0194	-0.0194	-0.0194	-0.0194	-0.0194	-0.0194	-0.0194	-0.0194

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas**

	Ty+	0.0188	0.0188	0.0188	0.0188	0.0188	0.0188	0.0188	0.0188	0.0188
	Tz-	-0.3075	-0.2527	-0.1979	-0.1734	-0.1494	-0.0406	-0.0360	-0.0834	-0.1307
	Tz+	0.2706	0.2232	0.1759	0.1286	0.0813	0.0701	0.0632	0.0919	0.1452
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.2198	-0.1143	-0.1221	-0.1881	-0.2307	-0.2482	-0.2423	-0.2112	-0.1568
	My+	0.1985	0.0853	0.1282	0.2076	0.2601	0.2833	0.2797	0.2468	0.1869
	Mz-	-0.0267	-0.0173	-0.0121	-0.0182	-0.0275	-0.0368	-0.0461	-0.0554	-0.0647
	Mz+	0.0238	0.0160	0.0124	0.0184	0.0256	0.0328	0.0401	0.0473	0.0545
374/363		0.000 m	0.229 m	0.458 m	0.687 m	0.916 m	1.146 m	1.375 m	1.604 m	1.833 m
		Envolvente (Acero laminado)								
	N-	-3.5178	-3.5177	-3.5177	-3.5177	-3.5176	-3.5176	-3.5175	-3.5175	-3.5174
	N+	1.9019	1.9019	1.9019	1.9019	1.9020	1.9020	1.9020	1.9020	1.9021
	Ty-	-0.0031	-0.0024	-0.0016	-0.0009	-0.0001	0.0004	0.0008	0.0013	0.0017
	Ty+	-0.0018	-0.0014	-0.0009	-0.0005	0.0000	0.0007	0.0015	0.0023	0.0030
	Tz-	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001
	Tz+	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0001	-0.0001	-0.0001	-0.0001	0.0000	0.0000	0.0000	0.0000	-0.0001
	My+	0.0001	0.0001	0.0001	0.0001	0.0001	0.0000	0.0000	0.0000	0.0000
	Mz-	-0.0010	-0.0004	-0.0001	0.0001	0.0001	0.0001	-0.0001	-0.0004	-0.0010
	Mz+	-0.0005	-0.0001	0.0003	0.0005	0.0007	0.0006	0.0003	0.0000	-0.0003
363/421		0.000 m	0.506 m	1.011 m	1.517 m	2.023 m	2.528 m	3.034 m	3.540 m	4.046 m
		Envolvente (Acero Conformado)								
	N-	-0.0960	-0.0960	-0.0960	-0.0960	-0.0960	-0.0960	-0.0960	-0.0960	-0.0960
	N+	0.0501	0.0501	0.0501	0.0501	0.0501	0.0501	0.0501	0.0501	0.0501
	Ty-	-0.0071	-0.0071	-0.0071	-0.0071	-0.0071	-0.0071	-0.0071	-0.0071	-0.0071
	Ty+	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003
	Tz-	-0.1925	-0.1398	-0.1113	-0.0876	-0.0682	-0.0299	-0.0765	-0.1232	-0.1698
	Tz+	0.2043	0.1577	0.1110	0.0643	0.0310	0.1142	0.1378	0.1900	0.2440
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.1431	-0.2337	-0.3016	-0.3450	-0.3658	-0.3620	-0.3356	-0.2846	-0.2110
	My+	0.4135	0.4944	0.5491	0.5754	0.5754	0.5471	0.4926	0.4096	0.3004
	Mz-	-0.0997	-0.0970	-0.0942	-0.0915	-0.0887	-0.0860	-0.0833	-0.0820	-0.0807
	Mz+	0.0408	0.0435	0.0461	0.0488	0.0516	0.0545	0.0574	0.0602	0.0631
364/365		0.000 m	0.374 m	0.748 m	1.122 m	1.496 m	1.870 m	2.244 m	2.618 m	2.992 m
		Envolvente (Acero Conformado)								
	N-	-0.0292	-0.0272	-0.0251	-0.0231	-0.0211	-0.0199	-0.0187	-0.0175	-0.0163
	N+	0.0360	0.0372	0.0384	0.0396	0.0408	0.0429	0.0449	0.0469	0.0490
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.0942	-0.0707	-0.0471	-0.0236	0.0000	-0.0393	-0.0785	-0.1178	-0.1571
	Tz+	0.1571	0.1178	0.0785	0.0393	0.0000	0.0236	0.0471	0.0707	0.0942
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0511	-0.0881	-0.1098	-0.1175	-0.1098	-0.0881	-0.0511	0.0000
	My+	0.0000	0.0307	0.0529	0.0659	0.0705	0.0659	0.0529	0.0307	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
364/376		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-0.1705	-0.1705	-0.1705	-0.1705	-0.1705	-0.1705	-0.1705	-0.1705	-0.1705

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas**

	N+	1.2264	1.2264	1.2264	1.2264	1.2264	1.2264	1.2264	1.2264	1.2264
	Ty-	-0.0759	-0.0746	-0.0734	-0.0724	-0.0716	-0.0709	-0.0701	-0.0694	-0.0686
	Ty+	0.1141	0.1148	0.1156	0.1166	0.1178	0.1191	0.1204	0.1216	0.1229
	Tz-	-0.3425	-0.3425	-0.3425	-0.3425	-0.3425	-0.3425	-0.3425	-0.3425	-0.3425
	Tz+	0.2112	0.2112	0.2112	0.2112	0.2112	0.2112	0.2112	0.2112	0.2112
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.1418	-0.0990	-0.0562	-0.0134	-0.0050	-0.0210	-0.0474	-0.0737	-0.1000
	My+	0.1135	0.0871	0.0607	0.0343	0.0321	0.0748	0.1176	0.1603	0.2030
	Mz-	-0.0389	-0.0296	-0.0204	-0.0113	-0.0074	-0.0220	-0.0367	-0.0516	-0.0665
	Mz+	0.0523	0.0382	0.0238	0.0094	0.0045	0.0085	0.0171	0.0255	0.0338
365/377		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
	Envolvente (Acero laminado)									
	N-	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456
	N+	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257
	Ty-	-0.3831	-0.3729	-0.3627	-0.3525	-0.3423	-0.3321	-0.3219	-0.3117	-0.3015
	Ty+	-0.0936	-0.0876	-0.0815	-0.0755	-0.0694	-0.0634	-0.0573	-0.0513	-0.0453
	Tz-	-0.9208	-0.9208	-0.9208	-0.9208	-0.9208	-0.9208	-0.9208	-0.9208	-0.9208
	Tz+	1.4947	1.4947	1.4947	1.4947	1.4947	1.4947	1.4947	1.4947	1.4947
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-5.5463	-5.4312	-5.3161	-5.2010	-5.0859	-4.9708	-4.8557	-4.7406	-4.6255
	My+	9.0442	8.8573	8.6705	8.4837	8.2968	8.1100	7.9232	7.7363	7.5495
	Mz-	-0.0962	-0.0490	-0.0061	0.0047	0.0138	0.0221	0.0296	0.0364	0.0424
	Mz+	-0.0266	-0.0152	-0.0008	0.0422	0.0856	0.1277	0.1686	0.2082	0.2466
366/367		0.000 m	0.031 m	0.063 m	0.094 m	0.126 m	0.157 m	0.189 m	0.220 m	0.252 m
	Envolvente (Acero Conformado)									
	N-	-0.0272	-0.0270	-0.0268	-0.0266	-0.0265	-0.0263	-0.0261	-0.0260	-0.0258
	N+	0.0219	0.0220	0.0221	0.0222	0.0223	0.0224	0.0225	0.0226	0.0227
	Ty-	-0.0339	-0.0339	-0.0339	-0.0339	-0.0339	-0.0339	-0.0339	-0.0339	-0.0339
	Ty+	0.0366	0.0366	0.0366	0.0366	0.0366	0.0366	0.0366	0.0366	0.0366
	Tz-	-0.0893	-0.0874	-0.0855	-0.0836	-0.0818	-0.0799	-0.0780	-0.0761	-0.0742
	Tz+	0.0893	0.0874	0.0855	0.0836	0.0818	0.0799	0.0780	0.0761	0.0742
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0028	-0.0055	-0.0082	-0.0108	-0.0133	-0.0158	-0.0182	-0.0206
	My+	0.0000	0.0028	0.0055	0.0082	0.0108	0.0133	0.0158	0.0182	0.0206
	Mz-	0.0000	-0.0012	-0.0023	-0.0035	-0.0046	-0.0058	-0.0069	-0.0081	-0.0092
	Mz+	0.0000	0.0011	0.0021	0.0032	0.0043	0.0053	0.0064	0.0075	0.0085
366/378		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
	Envolvente (Acero Conformado)									
	N-	-0.3423	-0.3423	-0.3423	-0.3423	-0.3423	-0.3423	-0.3423	-0.3423	-0.3423
	N+	0.6112	0.6112	0.6112	0.6112	0.6112	0.6112	0.6112	0.6112	0.6112
	Ty-	-0.0729	-0.0717	-0.0704	-0.0692	-0.0684	-0.0677	-0.0669	-0.0662	-0.0654
	Ty+	0.0676	0.0683	0.0691	0.0698	0.0711	0.0723	0.0736	0.0749	0.0761
	Tz-	-0.2073	-0.2073	-0.2073	-0.2073	-0.2073	-0.2073	-0.2073	-0.2073	-0.2073
	Tz+	0.2021	0.2021	0.2021	0.2021	0.2021	0.2021	0.2021	0.2021	0.2021
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.1377	-0.1118	-0.0859	-0.0600	-0.0341	-0.0176	-0.0427	-0.0679	-0.0931
	My+	0.1117	0.0865	0.0612	0.0359	0.0107	-0.0019	0.0206	0.0465	0.0723
	Mz-	-0.0380	-0.0291	-0.0203	-0.0116	-0.0030	0.0017	-0.0053	-0.0143	-0.0234
	Mz+	0.0489	0.0405	0.0320	0.0234	0.0146	0.0075	0.0157	0.0237	0.0316
367/368		0.000 m	0.115 m	0.231 m	0.346 m	0.462 m	0.577 m	0.692 m	0.808 m	0.923 m

## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

		Envolvente (Acero Conformado)								
	N-	-0.0285	-0.0279	-0.0272	-0.0266	-0.0261	-0.0257	-0.0254	-0.0250	-0.0246
	N+	0.0261	0.0264	0.0268	0.0272	0.0277	0.0283	0.0289	0.0295	0.0302
	Ty-	-0.0209	-0.0209	-0.0209	-0.0209	-0.0209	-0.0209	-0.0209	-0.0209	-0.0209
	Ty+	0.0240	0.0240	0.0240	0.0240	0.0240	0.0240	0.0240	0.0240	0.0240
	Tz-	-0.0742	-0.0673	-0.0604	-0.0534	-0.0465	-0.0396	-0.0327	-0.0257	-0.0188
	Tz+	0.0742	0.0673	0.0604	0.0534	0.0465	0.0396	0.0327	0.0257	0.0188
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0206	-0.0287	-0.0361	-0.0427	-0.0484	-0.0534	-0.0576	-0.0609	-0.0635
	My+	0.0206	0.0287	0.0361	0.0427	0.0484	0.0534	0.0576	0.0609	0.0635
	Mz-	-0.0092	-0.0119	-0.0146	-0.0174	-0.0201	-0.0229	-0.0257	-0.0284	-0.0312
	Mz+	0.0085	0.0108	0.0132	0.0156	0.0180	0.0205	0.0229	0.0253	0.0277
367/379		0.000 m	0.129 m	0.258 m	0.387 m	0.516 m	0.644 m	0.773 m	0.902 m	1.031 m
		Envolvente (Acero laminado)								
	N-	-0.1719	-0.1719	-0.1719	-0.1719	-0.1719	-0.1719	-0.1719	-0.1719	-0.1719
	N+	0.1507	0.1507	0.1507	0.1507	0.1507	0.1507	0.1507	0.1507	0.1507
	Ty-	-0.0002	-0.0001	-0.0001	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001
	Ty+	-0.0001	-0.0001	-0.0001	0.0000	0.0000	0.0000	0.0001	0.0001	0.0001
	Tz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
368/369		0.000 m	0.227 m	0.454 m	0.681 m	0.908 m	1.135 m	1.363 m	1.590 m	1.817 m
		Envolvente (Acero Conformado)								
	N-	-0.0159	-0.0152	-0.0145	-0.0137	-0.0130	-0.0123	-0.0115	-0.0108	-0.0101
	N+	0.0232	0.0245	0.0257	0.0269	0.0281	0.0294	0.0306	0.0318	0.0331
	Ty-	-0.0172	-0.0172	-0.0172	-0.0172	-0.0172	-0.0172	-0.0172	-0.0172	-0.0172
	Ty+	0.0152	0.0152	0.0152	0.0152	0.0152	0.0152	0.0152	0.0152	0.0152
	Tz-	-0.0195	-0.0059	-0.0077	-0.0213	-0.0350	-0.0486	-0.0622	-0.0758	-0.0895
	Tz+	0.0195	0.0059	0.0077	0.0213	0.0350	0.0486	0.0622	0.0758	0.0895
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0635	-0.0664	-0.0662	-0.0628	-0.0565	-0.0470	-0.0344	-0.0187	0.0000
	My+	0.0635	0.0663	0.0662	0.0628	0.0565	0.0470	0.0344	0.0187	0.0000
	Mz-	-0.0312	-0.0273	-0.0234	-0.0195	-0.0156	-0.0117	-0.0078	-0.0039	0.0000
	Mz+	0.0277	0.0242	0.0208	0.0173	0.0138	0.0104	0.0069	0.0035	0.0000
380/368		0.000 m	0.128 m	0.257 m	0.385 m	0.514 m	0.642 m	0.770 m	0.899 m	1.027 m
		Envolvente (Acero laminado)								
	N-	-0.0472	-0.0472	-0.0472	-0.0472	-0.0472	-0.0472	-0.0472	-0.0472	-0.0472
	N+	0.0750	0.0751	0.0751	0.0751	0.0751	0.0751	0.0751	0.0751	0.0751
	Ty-	-0.0001	-0.0001	-0.0001	0.0000	0.0000	0.0000	0.0001	0.0001	0.0001
	Ty+	-0.0001	-0.0001	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0002
	Tz-	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004
	Tz+	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0001	-0.0001	0.0000	-0.0001	-0.0001	-0.0002	-0.0002	-0.0003	-0.0003
	My+	0.0001	0.0000	0.0000	0.0001	0.0001	0.0002	0.0002	0.0003	0.0003
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

## Metal 3D

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	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
369/381		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m	
		Envolvente (Acero laminado)									
	N-	-0.0517	-0.0517	-0.0517	-0.0517	-0.0517	-0.0517	-0.0517	-0.0517	-0.0517	-0.0517
	N+	0.0303	0.0303	0.0303	0.0303	0.0303	0.0303	0.0303	0.0303	0.0303	0.0303
	Ty-	-0.2986	-0.2884	-0.2782	-0.2680	-0.2578	-0.2476	-0.2374	-0.2272	-0.2170	-0.2170
	Ty+	-0.0848	-0.0787	-0.0727	-0.0667	-0.0606	-0.0546	-0.0485	-0.0425	-0.0364	-0.0364
	Tz-	-0.8492	-0.8492	-0.8492	-0.8492	-0.8492	-0.8492	-0.8492	-0.8492	-0.8492	-0.8492
	Tz+	0.8496	0.8496	0.8496	0.8496	0.8496	0.8496	0.8496	0.8496	0.8496	0.8496
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-5.1443	-5.0381	-4.9320	-4.8258	-4.7196	-4.6135	-4.5073	-4.4012	-4.2950	-4.2950
	My+	5.1461	5.0399	4.9337	4.8275	4.7213	4.6151	4.5089	4.4027	4.2965	4.2965
	Mz-	-0.0888	-0.0521	-0.0167	0.0082	0.0196	0.0273	0.0340	0.0397	0.0446	0.0446
Mz+	-0.0160	-0.0058	0.0037	0.0214	0.0514	0.0828	0.1128	0.1417	0.1692	0.1692	
382/370		0.000 m	0.244 m	0.488 m	0.732 m	0.977 m	1.221 m	1.465 m	1.709 m	1.953 m	
		Envolvente (Acero laminado)									
	N-	-2.0600	-2.0599	-2.0599	-2.0598	-2.0598	-2.0597	-2.0597	-2.0596	-2.0596	-2.0596
	N+	0.9076	0.9076	0.9076	0.9076	0.9077	0.9077	0.9077	0.9078	0.9078	0.9078
	Ty-	-0.0033	-0.0025	-0.0017	-0.0009	-0.0001	0.0004	0.0009	0.0014	0.0018	0.0018
	Ty+	-0.0019	-0.0014	-0.0009	-0.0005	0.0000	0.0008	0.0016	0.0024	0.0033	0.0033
	Tz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My+	0.0001	0.0001	0.0001	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz-	-0.0011	-0.0004	0.0000	0.0002	0.0002	0.0002	0.0000	-0.0004	-0.0011	-0.0011
Mz+	-0.0006	-0.0002	0.0002	0.0005	0.0007	0.0006	0.0003	0.0000	-0.0004	-0.0004	
370/414		0.000 m	0.490 m	0.981 m	1.471 m	1.961 m	2.451 m	2.942 m	3.432 m	3.922 m	
		Envolvente (Acero Conformado)									
	N-	-0.0608	-0.0608	-0.0608	-0.0608	-0.0608	-0.0608	-0.0608	-0.0608	-0.0608	-0.0608
	N+	-0.0042	-0.0042	-0.0042	-0.0042	-0.0042	-0.0042	-0.0042	-0.0042	-0.0042	-0.0042
	Ty-	-0.0095	-0.0095	-0.0095	-0.0095	-0.0095	-0.0095	-0.0095	-0.0095	-0.0095	-0.0095
	Ty+	0.0030	0.0030	0.0030	0.0030	0.0030	0.0030	0.0030	0.0030	0.0030	0.0030
	Tz-	-0.1903	-0.1406	-0.1144	-0.0915	-0.0729	-0.0290	-0.0742	-0.1195	-0.1647	-0.1647
	Tz+	0.2216	0.1764	0.1311	0.0859	0.0544	0.1094	0.1324	0.1812	0.2336	0.2336
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.1482	-0.2334	-0.2972	-0.3380	-0.3575	-0.3540	-0.3291	-0.2812	-0.2120	-0.2120
	My+	0.3961	0.4736	0.5265	0.5526	0.5541	0.5289	0.4791	0.4026	0.3014	0.3014
	Mz-	-0.0896	-0.0887	-0.0877	-0.0868	-0.0859	-0.0849	-0.0840	-0.0831	-0.0829	-0.0829
Mz+	0.0404	0.0431	0.0458	0.0485	0.0512	0.0539	0.0566	0.0593	0.0620	0.0620	
371/383		0.000 m	0.229 m	0.458 m	0.687 m	0.916 m	1.146 m	1.375 m	1.604 m	1.833 m	
		Envolvente (Acero laminado)									
	N-	-1.7464	-1.7464	-1.7464	-1.7463	-1.7463	-1.7463	-1.7463	-1.7462	-1.7462	-1.7462
	N+	3.1285	3.1286	3.1286	3.1287	3.1287	3.1287	3.1288	3.1288	3.1289	3.1289
	Ty-	-0.0033	-0.0025	-0.0018	-0.0010	-0.0002	0.0003	0.0007	0.0012	0.0016	0.0016
	Ty+	-0.0017	-0.0012	-0.0008	-0.0003	0.0001	0.0008	0.0016	0.0023	0.0031	0.0031
	Tz-	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002
	Tz+	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0002	-0.0001	-0.0001	0.0000	-0.0001	-0.0002	-0.0003	-0.0003	-0.0004	-0.0004

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	My+	0.0002	0.0001	0.0000	0.0000	0.0000	0.0001	0.0001	0.0002	0.0002
	Mz-	-0.0011	-0.0004	0.0000	0.0001	0.0001	0.0001	-0.0001	-0.0005	-0.0011
	Mz+	-0.0006	-0.0002	0.0001	0.0004	0.0005	0.0005	0.0003	0.0000	-0.0003
371/413		0.000 m	0.436 m	0.871 m	1.307 m	1.743 m	2.178 m	2.614 m	3.050 m	3.485 m
		Envolvente (Acero Conformado)								
	N-	-0.0288	-0.0288	-0.0288	-0.0288	-0.0288	-0.0288	-0.0288	-0.0288	-0.0288
	N+	0.0050	0.0050	0.0050	0.0050	0.0050	0.0050	0.0050	0.0050	0.0050
	Ty-	-0.0193	-0.0193	-0.0193	-0.0193	-0.0193	-0.0193	-0.0193	-0.0193	-0.0193
	Ty+	0.0331	0.0331	0.0331	0.0331	0.0331	0.0331	0.0331	0.0331	0.0331
	Tz-	-0.2605	-0.2140	-0.1763	-0.1559	-0.1355	-0.0279	-0.0287	-0.0689	-0.1091
	Tz+	0.2166	0.1764	0.1362	0.0960	0.0558	0.0553	0.0572	0.0776	0.1136
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0545	-0.1152	-0.1819	-0.2303	-0.2619	-0.2753	-0.2719	-0.2503	-0.2119
	My+	0.0082	0.0943	0.1770	0.2385	0.2807	0.3017	0.3033	0.2837	0.2448
	Mz-	-0.0007	0.0005	-0.0100	-0.0233	-0.0377	-0.0521	-0.0665	-0.0810	-0.0954
	Mz+	0.0206	0.0131	0.0195	0.0276	0.0357	0.0438	0.0519	0.0600	0.0681
384/372		0.000 m	0.238 m	0.476 m	0.715 m	0.953 m	1.191 m	1.429 m	1.667 m	1.906 m
		Envolvente (Acero laminado)								
	N-	-1.7196	-1.7196	-1.7195	-1.7195	-1.7195	-1.7194	-1.7194	-1.7193	-1.7193
	N+	0.7448	0.7448	0.7449	0.7449	0.7449	0.7449	0.7449	0.7450	0.7450
	Ty-	-0.0032	-0.0024	-0.0016	-0.0008	-0.0001	0.0004	0.0009	0.0014	0.0018
	Ty+	-0.0016	-0.0011	-0.0006	-0.0002	0.0003	0.0011	0.0019	0.0027	0.0035
	Tz-	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002
	Tz+	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0003	-0.0002	-0.0002	-0.0001	-0.0001	-0.0001	0.0000	-0.0001	-0.0001
	My+	0.0005	0.0004	0.0004	0.0003	0.0002	0.0001	0.0001	0.0000	0.0001
	Mz-	-0.0011	-0.0005	-0.0001	0.0001	0.0001	0.0001	-0.0001	-0.0005	-0.0013
	Mz+	-0.0002	0.0001	0.0005	0.0007	0.0008	0.0006	0.0003	-0.0001	-0.0005
372/412		0.000 m	0.391 m	0.782 m	1.173 m	1.564 m	1.955 m	2.346 m	2.737 m	3.128 m
		Envolvente (Acero Conformado)								
	N-	-0.0687	-0.0687	-0.0687	-0.0687	-0.0687	-0.0687	-0.0687	-0.0687	-0.0687
	N+	0.0199	0.0199	0.0199	0.0199	0.0199	0.0199	0.0199	0.0199	0.0199
	Ty-	-0.0173	-0.0173	-0.0173	-0.0173	-0.0173	-0.0173	-0.0173	-0.0173	-0.0173
	Ty+	0.0209	0.0209	0.0209	0.0209	0.0209	0.0209	0.0209	0.0209	0.0209
	Tz-	-0.2260	-0.1843	-0.1606	-0.1423	-0.0590	-0.0193	-0.0179	-0.0540	-0.0901
	Tz+	0.2033	0.1672	0.1311	0.0950	0.0970	0.0672	0.0689	0.0872	0.1143
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0450	-0.1153	-0.1720	-0.2141	-0.2426	-0.2565	-0.2568	-0.2425	-0.2146
	My+	0.1120	0.1894	0.2512	0.2959	0.3250	0.3371	0.3336	0.3130	0.2768
	Mz-	-0.0179	-0.0250	-0.0320	-0.0390	-0.0461	-0.0531	-0.0601	-0.0677	-0.0758
	Mz+	0.0158	0.0203	0.0247	0.0292	0.0336	0.0381	0.0432	0.0500	0.0568
373/390		0.000 m	0.200 m	0.399 m	0.599 m	0.798 m	0.998 m	1.197 m	1.397 m	1.597 m
		Envolvente (Acero laminado)								
	N-	-0.6626	-0.6626	-0.6625	-0.6625	-0.6625	-0.6625	-0.6625	-0.6624	-0.6624
	N+	1.4126	1.4126	1.4126	1.4127	1.4127	1.4127	1.4128	1.4128	1.4128
	Ty-	-0.0035	-0.0028	-0.0022	-0.0015	-0.0008	-0.0002	0.0002	0.0006	0.0009
	Ty+	-0.0019	-0.0015	-0.0011	-0.0007	-0.0003	0.0001	0.0008	0.0015	0.0021
	Tz-	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003
	Tz+	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000



## Metal 3D

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	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0001	0.0000	-0.0001	-0.0002	-0.0003	-0.0004	-0.0005	-0.0006	-0.0007
	My+	0.0002	0.0001	0.0000	0.0001	0.0001	0.0002	0.0003	0.0003	0.0004
	Mz-	-0.0014	-0.0007	-0.0003	0.0000	0.0001	0.0001	0.0001	0.0000	-0.0003
	Mz+	-0.0003	0.0000	0.0003	0.0006	0.0008	0.0008	0.0007	0.0005	0.0002
373/411		0.000 m	0.282 m	0.564 m	0.846 m	1.128 m	1.409 m	1.691 m	1.973 m	2.255 m
		Envolvente (Acero Conformado)								
	N-	-0.0189	-0.0189	-0.0189	-0.0189	-0.0189	-0.0189	-0.0189	-0.0189	-0.0189
	N+	0.0478	0.0478	0.0478	0.0478	0.0478	0.0478	0.0478	0.0478	0.0478
	Ty-	-0.0187	-0.0187	-0.0187	-0.0187	-0.0187	-0.0187	-0.0187	-0.0187	-0.0187
	Ty+	0.0058	0.0058	0.0058	0.0058	0.0058	0.0058	0.0058	0.0058	0.0058
	Tz-	-0.1748	-0.1616	-0.1484	-0.1352	-0.1220	-0.0332	-0.0221	-0.0323	-0.0583
	Tz+	0.1544	0.1283	0.1023	0.0763	0.0503	0.0742	0.0723	0.0855	0.0987
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.1538	-0.1923	-0.2236	-0.2474	-0.2641	-0.2732	-0.2752	-0.2696	-0.2570
	My+	0.2793	0.3185	0.3494	0.3716	0.3856	0.3908	0.3879	0.3761	0.3562
	Mz-	-0.0625	-0.0625	-0.0625	-0.0626	-0.0626	-0.0626	-0.0626	-0.0627	-0.0627
	Mz+	0.0274	0.0302	0.0329	0.0364	0.0416	0.0468	0.0520	0.0572	0.0623
385/374		0.000 m	0.229 m	0.458 m	0.687 m	0.916 m	1.146 m	1.375 m	1.604 m	1.833 m
		Envolvente (Acero laminado)								
	N-	-3.5015	-3.5014	-3.5014	-3.5013	-3.5013	-3.5013	-3.5012	-3.5012	-3.5011
	N+	1.8960	1.8960	1.8961	1.8961	1.8961	1.8962	1.8962	1.8962	1.8962
	Ty-	-0.0033	-0.0025	-0.0017	-0.0010	-0.0002	0.0003	0.0007	0.0012	0.0016
	Ty+	-0.0017	-0.0012	-0.0008	-0.0003	0.0001	0.0009	0.0016	0.0024	0.0031
	Tz-	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004
	Tz+	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0007	-0.0006	-0.0005	-0.0004	-0.0003	-0.0002	-0.0001	0.0000	-0.0001
	My+	0.0004	0.0003	0.0003	0.0002	0.0001	0.0001	0.0000	0.0000	0.0001
	Mz-	-0.0012	-0.0006	-0.0001	0.0001	0.0002	0.0002	0.0000	-0.0004	-0.0010
	Mz+	-0.0004	-0.0001	0.0001	0.0004	0.0004	0.0004	0.0001	-0.0001	-0.0005
374/410		0.000 m	0.270 m	0.541 m	0.811 m	1.081 m	1.352 m	1.622 m	1.892 m	2.163 m
		Envolvente (Acero Conformado)								
	N-	-0.1689	-0.1689	-0.1689	-0.1689	-0.1689	-0.1689	-0.1689	-0.1689	-0.1689
	N+	0.0389	0.0389	0.0389	0.0389	0.0389	0.0389	0.0389	0.0389	0.0389
	Ty-	-0.0111	-0.0111	-0.0111	-0.0111	-0.0111	-0.0111	-0.0111	-0.0111	-0.0111
	Ty+	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026
	Tz-	-0.1246	-0.1120	-0.0993	-0.0867	-0.0757	-0.0150	-0.0400	-0.0649	-0.0899
	Tz+	0.1152	0.0902	0.0653	0.0404	0.0211	0.0958	0.1085	0.1212	0.1338
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.3197	-0.3459	-0.3656	-0.3782	-0.3844	-0.3836	-0.3763	-0.3620	-0.3412
	My+	0.5052	0.5278	0.5428	0.5497	0.5491	0.5404	0.5242	0.4999	0.4681
	Mz-	-0.0995	-0.0982	-0.0968	-0.0955	-0.0942	-0.0929	-0.0915	-0.0906	-0.0911
	Mz+	0.0579	0.0596	0.0614	0.0631	0.0648	0.0666	0.0683	0.0700	0.0718
375/387		0.000 m	0.244 m	0.488 m	0.732 m	0.977 m	1.221 m	1.465 m	1.709 m	1.953 m
		Envolvente (Acero laminado)								
	N-	-0.9198	-0.9197	-0.9197	-0.9197	-0.9196	-0.9196	-0.9196	-0.9196	-0.9195
	N+	2.0075	2.0076	2.0076	2.0077	2.0077	2.0078	2.0078	2.0079	2.0079
	Ty-	-0.0034	-0.0026	-0.0017	-0.0009	-0.0001	0.0004	0.0009	0.0013	0.0018
	Ty+	-0.0018	-0.0014	-0.0009	-0.0004	0.0001	0.0009	0.0017	0.0025	0.0033
	Tz-	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001

## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

	Tz+	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	0.0000	0.0000	0.0000	-0.0001	-0.0001	-0.0002	-0.0002	-0.0002
	My+	0.0001	0.0000	0.0000	0.0000	0.0001	0.0001	0.0001	0.0001	0.0002
	Mz-	-0.0011	-0.0004	0.0000	0.0001	0.0002	0.0001	-0.0001	-0.0005	-0.0012
	Mz+	-0.0005	-0.0001	0.0003	0.0007	0.0008	0.0007	0.0005	0.0001	-0.0003
375/409		0.000 m	0.262 m	0.524 m	0.786 m	1.048 m	1.310 m	1.572 m	1.834 m	2.096 m
		Envolvente (Acero Conformado)								
	N-	-0.0956	-0.0956	-0.0956	-0.0956	-0.0956	-0.0956	-0.0956	-0.0956	-0.0956
	N+	0.0309	0.0309	0.0309	0.0309	0.0309	0.0309	0.0309	0.0309	0.0309
	Ty-	-0.0239	-0.0239	-0.0239	-0.0239	-0.0239	-0.0239	-0.0239	-0.0239	-0.0239
	Ty+	0.0222	0.0222	0.0222	0.0222	0.0222	0.0222	0.0222	0.0222	0.0222
	Tz-	-0.1870	-0.1747	-0.1625	-0.1502	-0.1380	-0.0508	-0.0300	-0.0302	-0.0544
	Tz+	0.1692	0.1450	0.1208	0.0967	0.0725	0.0866	0.0691	0.0666	0.0788
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.1792	-0.2124	-0.2394	-0.2599	-0.2742	-0.2820	-0.2838	-0.2789	-0.2679
	My+	0.2123	0.2517	0.2840	0.3087	0.3264	0.3364	0.3394	0.3348	0.3231
	Mz-	-0.0275	-0.0333	-0.0392	-0.0450	-0.0508	-0.0566	-0.0625	-0.0683	-0.0741
	Mz+	0.0243	0.0290	0.0337	0.0384	0.0431	0.0478	0.0525	0.0572	0.0619
376/377		0.000 m	0.374 m	0.748 m	1.122 m	1.496 m	1.870 m	2.244 m	2.618 m	2.992 m
		Envolvente (Acero Conformado)								
	N-	-0.0261	-0.0249	-0.0237	-0.0225	-0.0213	-0.0201	-0.0189	-0.0177	-0.0165
	N+	0.0706	0.0726	0.0747	0.0767	0.0787	0.0807	0.0828	0.0848	0.0868
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.0942	-0.0707	-0.0471	-0.0236	0.0000	-0.0393	-0.0785	-0.1178	-0.1571
	Tz+	0.1571	0.1178	0.0785	0.0393	0.0000	0.0236	0.0471	0.0707	0.0942
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0511	-0.0881	-0.1098	-0.1175	-0.1098	-0.0881	-0.0511	0.0000
	My+	0.0000	0.0307	0.0529	0.0659	0.0705	0.0659	0.0529	0.0307	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
376/388		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-0.1705	-0.1705	-0.1705	-0.1705	-0.1705	-0.1705	-0.1705	-0.1705	-0.1705
	N+	1.2264	1.2264	1.2264	1.2264	1.2264	1.2264	1.2264	1.2264	1.2264
	Ty-	-0.0457	-0.0445	-0.0432	-0.0420	-0.0407	-0.0394	-0.0382	-0.0373	-0.0366
	Ty+	0.0555	0.0563	0.0570	0.0578	0.0585	0.0593	0.0600	0.0611	0.0624
	Tz-	-0.1854	-0.1854	-0.1854	-0.1854	-0.1854	-0.1854	-0.1854	-0.1854	-0.1854
	Tz+	0.1169	0.1169	0.1169	0.1169	0.1169	0.1169	0.1169	0.1169	0.1169
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.1000	-0.1145	-0.1291	-0.1436	-0.1582	-0.1727	-0.1873	-0.2018	-0.2164
	My+	0.2030	0.2261	0.2492	0.2723	0.2955	0.3186	0.3417	0.3648	0.3879
	Mz-	-0.0665	-0.0734	-0.0805	-0.0877	-0.0949	-0.1023	-0.1097	-0.1172	-0.1249
	Mz+	0.0338	0.0394	0.0449	0.0502	0.0554	0.0604	0.0652	0.0699	0.0744
377/389		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456
	N+	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257
	Ty-	-0.2149	-0.2047	-0.1945	-0.1843	-0.1741	-0.1639	-0.1537	-0.1435	-0.1333

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas**

	Ty+	-0.0615	-0.0555	-0.0494	-0.0434	-0.0374	-0.0313	-0.0253	-0.0192	-0.0132
	Tz-	-1.0150	-1.0150	-1.0150	-1.0150	-1.0150	-1.0150	-1.0150	-1.0150	-1.0150
	Tz+	1.6518	1.6518	1.6518	1.6518	1.6518	1.6518	1.6518	1.6518	1.6518
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-4.6255	-4.4986	-4.3717	-4.2449	-4.1180	-3.9911	-3.8642	-3.7374	-3.6105
	My+	7.5495	7.3430	7.1365	6.9301	6.7236	6.5171	6.3107	6.1042	5.8977
	Mz-	0.0424	0.0498	0.0564	0.0622	0.0673	0.0716	0.0751	0.0779	0.0800
	Mz+	0.2466	0.2728	0.2977	0.3213	0.3437	0.3648	0.3846	0.4032	0.4204
378/379		0.000 m	0.063 m	0.126 m	0.189 m	0.252 m	0.315 m	0.378 m	0.441 m	0.503 m
	Envolvente (Acero Conformado)									
	N-	-0.0250	-0.0248	-0.0246	-0.0244	-0.0242	-0.0240	-0.0238	-0.0236	-0.0234
	N+	0.0447	0.0450	0.0454	0.0457	0.0461	0.0464	0.0467	0.0471	0.0474
	Ty-	-0.0268	-0.0268	-0.0268	-0.0268	-0.0268	-0.0268	-0.0268	-0.0268	-0.0268
	Ty+	0.0340	0.0340	0.0340	0.0340	0.0340	0.0340	0.0340	0.0340	0.0340
	Tz-	-0.0901	-0.0863	-0.0826	-0.0788	-0.0750	-0.0712	-0.0675	-0.0637	-0.0599
	Tz+	0.0901	0.0863	0.0826	0.0788	0.0750	0.0712	0.0674	0.0637	0.0599
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0055	-0.0109	-0.0159	-0.0208	-0.0254	-0.0297	-0.0339	-0.0378
	My+	0.0000	0.0055	0.0109	0.0159	0.0208	0.0254	0.0297	0.0339	0.0378
	Mz-	0.0000	-0.0021	-0.0043	-0.0064	-0.0086	-0.0107	-0.0128	-0.0150	-0.0171
	Mz+	0.0000	0.0017	0.0034	0.0051	0.0067	0.0084	0.0101	0.0118	0.0135
378/394		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
	Envolvente (Acero Conformado)									
	N-	-0.3733	-0.3733	-0.3733	-0.3733	-0.3733	-0.3733	-0.3733	-0.3733	-0.3733
	N+	0.6350	0.6350	0.6350	0.6350	0.6350	0.6350	0.6350	0.6350	0.6350
	Ty-	-0.0430	-0.0418	-0.0405	-0.0392	-0.0380	-0.0367	-0.0359	-0.0352	-0.0344
	Ty+	0.0340	0.0348	0.0355	0.0363	0.0370	0.0378	0.0390	0.0402	0.0415
	Tz-	-0.1172	-0.1172	-0.1172	-0.1172	-0.1172	-0.1172	-0.1172	-0.1172	-0.1172
	Tz+	0.1120	0.1120	0.1120	0.1120	0.1120	0.1120	0.1120	0.1120	0.1120
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0931	-0.1070	-0.1209	-0.1348	-0.1487	-0.1626	-0.1765	-0.1904	-0.2044
	My+	0.0723	0.0869	0.1014	0.1160	0.1305	0.1451	0.1597	0.1742	0.1888
	Mz-	-0.0234	-0.0277	-0.0320	-0.0365	-0.0411	-0.0457	-0.0505	-0.0553	-0.0602
	Mz+	0.0316	0.0369	0.0420	0.0470	0.0518	0.0564	0.0609	0.0653	0.0694
379/380		0.000 m	0.055 m	0.109 m	0.164 m	0.218 m	0.273 m	0.327 m	0.382 m	0.437 m
	Envolvente (Acero Conformado)									
	N-	-0.0239	-0.0237	-0.0235	-0.0234	-0.0232	-0.0230	-0.0228	-0.0227	-0.0225
	N+	0.0459	0.0462	0.0465	0.0468	0.0471	0.0474	0.0477	0.0480	0.0483
	Ty-	-0.0354	-0.0354	-0.0354	-0.0354	-0.0354	-0.0354	-0.0354	-0.0354	-0.0354
	Ty+	0.0329	0.0329	0.0329	0.0329	0.0329	0.0329	0.0329	0.0329	0.0329
	Tz-	-0.0599	-0.0567	-0.0534	-0.0501	-0.0468	-0.0436	-0.0403	-0.0370	-0.0337
	Tz+	0.0599	0.0567	0.0534	0.0501	0.0468	0.0436	0.0403	0.0370	0.0337
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0378	-0.0409	-0.0439	-0.0468	-0.0494	-0.0519	-0.0542	-0.0563	-0.0582
	My+	0.0378	0.0409	0.0439	0.0468	0.0494	0.0519	0.0542	0.0563	0.0582
	Mz-	-0.0171	-0.0189	-0.0207	-0.0225	-0.0243	-0.0261	-0.0279	-0.0297	-0.0315
	Mz+	0.0135	0.0154	0.0173	0.0193	0.0212	0.0231	0.0251	0.0270	0.0289
379/386		0.000 m	0.116 m	0.231 m	0.347 m	0.462 m	0.578 m	0.694 m	0.809 m	0.925 m
	Envolvente (Acero laminado)									
	N-	-0.1693	-0.1693	-0.1693	-0.1693	-0.1693	-0.1693	-0.1693	-0.1693	-0.1692

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE** Adrián Freijomil Aradas

	N+	0.1580	0.1580	0.1580	0.1580	0.1580	0.1580	0.1580	0.1580	0.1580
	Ty-	-0.0001	-0.0001	-0.0001	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001
	Ty+	-0.0001	-0.0001	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0001
	Tz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
380/381		0.000 m	0.256 m	0.513 m	0.769 m	1.026 m	1.282 m	1.539 m	1.795 m	2.052 m
		Envolvente (Acero Conformado)								
	N-	-0.0124	-0.0116	-0.0108	-0.0099	-0.0091	-0.0083	-0.0075	-0.0066	-0.0058
	N+	0.0384	0.0398	0.0412	0.0426	0.0440	0.0454	0.0467	0.0481	0.0495
	Ty-	-0.0153	-0.0153	-0.0153	-0.0153	-0.0153	-0.0153	-0.0153	-0.0153	-0.0153
	Ty+	0.0141	0.0141	0.0141	0.0141	0.0141	0.0141	0.0141	0.0141	0.0141
	Tz-	-0.0332	-0.0178	-0.0024	-0.0130	-0.0284	-0.0438	-0.0591	-0.0745	-0.0899
	Tz+	0.0332	0.0178	0.0024	0.0130	0.0284	0.0438	0.0591	0.0745	0.0899
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0582	-0.0647	-0.0673	-0.0659	-0.0607	-0.0513	-0.0382	-0.0210	0.0000
	My+	0.0582	0.0647	0.0673	0.0659	0.0607	0.0513	0.0382	0.0210	0.0000
	Mz-	-0.0315	-0.0276	-0.0236	-0.0197	-0.0157	-0.0118	-0.0079	-0.0039	0.0000
	Mz+	0.0289	0.0253	0.0217	0.0181	0.0145	0.0108	0.0072	0.0036	0.0000
386/380		0.000 m	0.115 m	0.230 m	0.345 m	0.461 m	0.576 m	0.691 m	0.806 m	0.921 m
		Envolvente (Acero laminado)								
	N-	-0.0654	-0.0654	-0.0654	-0.0654	-0.0654	-0.0654	-0.0654	-0.0654	-0.0654
	N+	0.1190	0.1190	0.1190	0.1190	0.1190	0.1190	0.1190	0.1190	0.1190
	Ty-	-0.0001	-0.0001	-0.0001	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001
	Ty+	-0.0001	-0.0001	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0001
	Tz-	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001
	Tz+	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0001	-0.0001	-0.0001	-0.0001
	My+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0001	0.0001
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
381/397		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-0.0653	-0.0653	-0.0653	-0.0653	-0.0653	-0.0653	-0.0653	-0.0653	-0.0653
	N+	0.0427	0.0427	0.0427	0.0427	0.0427	0.0427	0.0427	0.0427	0.0427
	Ty-	-0.1699	-0.1597	-0.1495	-0.1393	-0.1291	-0.1189	-0.1087	-0.0985	-0.0883
	Ty+	-0.0398	-0.0338	-0.0277	-0.0217	-0.0156	-0.0096	-0.0035	0.0025	0.0086
	Tz-	-0.9392	-0.9392	-0.9392	-0.9392	-0.9392	-0.9392	-0.9392	-0.9392	-0.9392
	Tz+	0.9395	0.9395	0.9395	0.9395	0.9395	0.9395	0.9395	0.9395	0.9395
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-4.2950	-4.1776	-4.0602	-3.9428	-3.8254	-3.7081	-3.5907	-3.4733	-3.3559
	My+	4.2965	4.1791	4.0616	3.9442	3.8267	3.7093	3.5919	3.4744	3.3570
	Mz-	0.0446	0.0492	0.0530	0.0561	0.0585	0.0600	0.0609	0.0609	0.0602
	Mz+	0.1692	0.1896	0.2089	0.2270	0.2438	0.2592	0.2735	0.2864	0.2981
392/382		0.000 m	0.233 m	0.466 m	0.700 m	0.933 m	1.166 m	1.399 m	1.632 m	1.865 m

## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

		Envolvente (Acero laminado)								
	N-	-2.0395	-2.0394	-2.0394	-2.0393	-2.0393	-2.0392	-2.0392	-2.0391	-2.0391
	N+	0.8905	0.8905	0.8905	0.8906	0.8906	0.8906	0.8907	0.8907	0.8907
	Ty-	-0.0031	-0.0024	-0.0016	-0.0008	-0.0001	0.0004	0.0009	0.0013	0.0018
	Ty+	-0.0017	-0.0012	-0.0007	-0.0003	0.0002	0.0010	0.0017	0.0025	0.0033
	Tz-	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002
	Tz+	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0002	-0.0002	-0.0002	-0.0001	-0.0001	0.0000	0.0000	0.0000	-0.0001
	My+	0.0002	0.0002	0.0001	0.0001	0.0001	0.0000	0.0000	0.0000	0.0001
	Mz-	-0.0011	-0.0005	0.0000	0.0001	0.0002	0.0002	0.0000	-0.0005	-0.0011
	Mz+	-0.0004	0.0000	0.0002	0.0005	0.0005	0.0004	0.0001	-0.0002	-0.0006
382/402		0.000 m	0.240 m	0.479 m	0.719 m	0.958 m	1.198 m	1.437 m	1.677 m	1.916 m
		Envolvente (Acero Conformado)								
	N-	-0.0720	-0.0720	-0.0720	-0.0720	-0.0720	-0.0720	-0.0720	-0.0720	-0.0720
	N+	0.0082	0.0082	0.0082	0.0082	0.0082	0.0082	0.0082	0.0082	0.0082
	Ty-	-0.0145	-0.0145	-0.0145	-0.0145	-0.0145	-0.0145	-0.0145	-0.0145	-0.0145
	Ty+	0.0149	0.0149	0.0149	0.0149	0.0149	0.0149	0.0149	0.0149	0.0149
	Tz-	-0.1306	-0.1194	-0.1082	-0.0970	-0.0872	-0.0105	-0.0282	-0.0503	-0.0724
	Tz+	0.1299	0.1078	0.0857	0.0636	0.0465	0.0925	0.0973	0.1085	0.1198
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.2947	-0.3169	-0.3341	-0.3457	-0.3523	-0.3534	-0.3494	-0.3398	-0.3252
	My+	0.4699	0.4892	0.5025	0.5095	0.5107	0.5054	0.4943	0.4768	0.4534
	Mz-	-0.0756	-0.0787	-0.0817	-0.0848	-0.0878	-0.0909	-0.0939	-0.0970	-0.1000
	Mz+	0.0453	0.0488	0.0523	0.0558	0.0592	0.0627	0.0662	0.0697	0.0732
383/393		0.000 m	0.195 m	0.390 m	0.585 m	0.780 m	0.975 m	1.170 m	1.365 m	1.560 m
		Envolvente (Acero laminado)								
	N-	-1.7696	-1.7696	-1.7696	-1.7695	-1.7695	-1.7695	-1.7695	-1.7694	-1.7694
	N+	3.1941	3.1942	3.1942	3.1942	3.1943	3.1943	3.1944	3.1944	3.1944
	Ty-	-0.0031	-0.0025	-0.0018	-0.0012	-0.0005	0.0001	0.0004	0.0008	0.0012
	Ty+	-0.0018	-0.0014	-0.0010	-0.0006	-0.0002	0.0002	0.0009	0.0015	0.0022
	Tz-	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010
	Tz+	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0004	-0.0002	0.0000	-0.0001	-0.0002	-0.0003	-0.0004	-0.0004	-0.0005
	My+	0.0002	0.0001	0.0000	0.0002	0.0003	0.0005	0.0007	0.0009	0.0011
	Mz-	-0.0011	-0.0006	-0.0002	0.0000	0.0001	0.0001	0.0000	-0.0001	-0.0003
	Mz+	-0.0003	0.0000	0.0003	0.0006	0.0008	0.0008	0.0007	0.0005	0.0001
383/401		0.000 m	0.200 m	0.401 m	0.601 m	0.801 m	1.002 m	1.202 m	1.402 m	1.603 m
		Envolvente (Acero Conformado)								
	N-	-0.0692	-0.0692	-0.0692	-0.0692	-0.0692	-0.0692	-0.0692	-0.0692	-0.0692
	N+	0.0014	0.0014	0.0014	0.0014	0.0014	0.0014	0.0014	0.0014	0.0014
	Ty-	-0.0320	-0.0320	-0.0320	-0.0320	-0.0320	-0.0320	-0.0320	-0.0320	-0.0320
	Ty+	0.0543	0.0543	0.0543	0.0543	0.0543	0.0543	0.0543	0.0543	0.0543
	Tz-	-0.1557	-0.1464	-0.1370	-0.1276	-0.1182	-0.0289	-0.0109	-0.0256	-0.0441
	Tz+	0.1132	0.0947	0.0762	0.0577	0.0392	0.0647	0.0588	0.0660	0.0754
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.2743	-0.2931	-0.3085	-0.3199	-0.3278	-0.3319	-0.3324	-0.3290	-0.3221
	My+	0.3083	0.3321	0.3517	0.3669	0.3780	0.3846	0.3871	0.3852	0.3791
	Mz-	-0.0218	-0.0327	-0.0436	-0.0545	-0.0654	-0.0762	-0.0871	-0.0980	-0.1089

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	Mz+	0.0351	0.0407	0.0462	0.0518	0.0573	0.0628	0.0684	0.0739	0.0795
390/384		0.000 m	0.039 m	0.077 m	0.116 m	0.155 m	0.193 m	0.232 m	0.270 m	0.309 m
		Envolvente (Acero laminado)								
	N-	-1.4056	-1.4056	-1.4056	-1.4056	-1.4055	-1.4055	-1.4055	-1.4055	-1.4055
	N+	0.6407	0.6407	0.6407	0.6407	0.6407	0.6407	0.6407	0.6408	0.6408
	Ty-	0.0006	0.0007	0.0008	0.0009	0.0009	0.0010	0.0011	0.0012	0.0013
	Ty+	0.0023	0.0024	0.0025	0.0027	0.0028	0.0029	0.0031	0.0032	0.0033
	Tz-	-0.0041	-0.0041	-0.0041	-0.0041	-0.0041	-0.0041	-0.0041	-0.0041	-0.0041
	Tz+	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0008	-0.0006	-0.0004	-0.0003	-0.0001	0.0000	-0.0001	-0.0002	-0.0003
	My+	0.0003	0.0003	0.0002	0.0001	0.0000	0.0000	0.0002	0.0003	0.0005
	Mz-	-0.0004	-0.0005	-0.0005	-0.0006	-0.0007	-0.0008	-0.0009	-0.0010	-0.0011
Mz+	0.0002	0.0002	0.0001	0.0001	0.0000	0.0000	-0.0001	-0.0002	-0.0002	
384/400		0.000 m	0.055 m	0.109 m	0.164 m	0.218 m	0.273 m	0.327 m	0.382 m	0.437 m
		Envolvente (Acero Conformado)								
	N-	-0.0847	-0.0847	-0.0847	-0.0847	-0.0847	-0.0847	-0.0847	-0.0847	-0.0847
	N+	0.0219	0.0219	0.0219	0.0219	0.0219	0.0219	0.0219	0.0219	0.0219
	Ty-	-0.0552	-0.0552	-0.0552	-0.0552	-0.0552	-0.0552	-0.0552	-0.0552	-0.0552
	Ty+	0.2299	0.2299	0.2299	0.2299	0.2299	0.2299	0.2299	0.2299	0.2299
	Tz-	-0.1239	-0.1214	-0.1188	-0.1163	-0.1137	-0.0451	-0.0404	-0.0365	-0.0338
	Tz+	0.0598	0.0548	0.0497	0.0447	0.0397	0.0836	0.0812	0.0798	0.0785
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.2705	-0.2736	-0.2765	-0.2790	-0.2813	-0.2834	-0.2851	-0.2866	-0.2878
	My+	0.3932	0.3952	0.3970	0.3983	0.3994	0.4001	0.4006	0.4007	0.4005
	Mz-	-0.0348	-0.0427	-0.0520	-0.0636	-0.0752	-0.0869	-0.0985	-0.1101	-0.1217
Mz+	0.0576	0.0576	0.0576	0.0576	0.0576	0.0576	0.0576	0.0576	0.0576	
393/385		0.000 m	0.034 m	0.068 m	0.102 m	0.136 m	0.170 m	0.205 m	0.239 m	0.273 m
		Envolvente (Acero laminado)								
	N-	-3.2105	-3.2105	-3.2105	-3.2105	-3.2105	-3.2105	-3.2105	-3.2105	-3.2105
	N+	1.7652	1.7652	1.7652	1.7652	1.7652	1.7652	1.7652	1.7652	1.7652
	Ty-	0.0010	0.0011	0.0012	0.0012	0.0013	0.0014	0.0014	0.0015	0.0016
	Ty+	0.0025	0.0026	0.0027	0.0028	0.0029	0.0031	0.0032	0.0033	0.0034
	Tz-	-0.0034	-0.0034	-0.0034	-0.0034	-0.0034	-0.0034	-0.0034	-0.0034	-0.0034
	Tz+	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0005	-0.0004	-0.0003	-0.0002	-0.0001	0.0000	-0.0002	-0.0004	-0.0007
	My+	0.0011	0.0009	0.0007	0.0004	0.0002	0.0001	0.0002	0.0003	0.0004
	Mz-	-0.0004	-0.0005	-0.0006	-0.0007	-0.0008	-0.0009	-0.0010	-0.0011	-0.0012
Mz+	-0.0001	-0.0001	-0.0002	-0.0002	-0.0002	-0.0003	-0.0003	-0.0004	-0.0004	
385/399		0.000 m	0.035 m	0.070 m	0.105 m	0.140 m	0.175 m	0.210 m	0.245 m	0.280 m
		Envolvente (Acero Conformado)								
	N-	-0.0274	-0.0274	-0.0274	-0.0274	-0.0274	-0.0274	-0.0274	-0.0274	-0.0274
	N+	0.4189	0.4189	0.4189	0.4189	0.4189	0.4189	0.4189	0.4189	0.4189
	Ty-	-0.2232	-0.2232	-0.2232	-0.2232	-0.2232	-0.2232	-0.2232	-0.2232	-0.2232
	Ty+	0.0927	0.0927	0.0927	0.0927	0.0927	0.0927	0.0927	0.0927	0.0927
	Tz-	-0.0887	-0.0871	-0.0854	-0.0838	-0.0822	0.0011	0.0020	0.0030	0.0040
	Tz+	0.0150	0.0160	0.0169	0.0179	0.0189	0.0808	0.0824	0.0841	0.0857
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.3335	-0.3334	-0.3334	-0.3334	-0.3335	-0.3336	-0.3337	-0.3339	-0.3340

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	My+	0.4892	0.4893	0.4893	0.4891	0.4888	0.4884	0.4878	0.4871	0.4863
	Mz-	-0.1286	-0.1210	-0.1133	-0.1057	-0.0981	-0.0905	-0.0829	-0.0753	-0.0676
	Mz+	0.0820	0.0787	0.0755	0.0722	0.0690	0.0658	0.0625	0.0593	0.0560
395/386		0.000 m	0.013 m	0.026 m	0.040 m	0.053 m	0.066 m	0.079 m	0.093 m	0.106 m
		Envolvente (Acero laminado)								
	N-	-0.0659	-0.0659	-0.0659	-0.0659	-0.0659	-0.0659	-0.0659	-0.0659	-0.0659
	N+	0.1186	0.1186	0.1186	0.1186	0.1186	0.1186	0.1186	0.1186	0.1186
	Ty-	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002
	Tz+	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
386/396		0.000 m	0.013 m	0.027 m	0.040 m	0.053 m	0.066 m	0.080 m	0.093 m	0.106 m
		Envolvente (Acero laminado)								
	N-	-0.1691	-0.1691	-0.1691	-0.1691	-0.1691	-0.1691	-0.1691	-0.1691	-0.1691
	N+	0.1587	0.1587	0.1587	0.1587	0.1587	0.1587	0.1587	0.1587	0.1587
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
	Tz-	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003
	Tz+	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
387/392		0.000 m	0.011 m	0.022 m	0.033 m	0.044 m	0.055 m	0.066 m	0.077 m	0.088 m
		Envolvente (Acero laminado)								
	N-	-0.8284	-0.8284	-0.8284	-0.8284	-0.8284	-0.8284	-0.8284	-0.8284	-0.8284
	N+	1.8421	1.8421	1.8421	1.8421	1.8421	1.8421	1.8421	1.8421	1.8421
	Ty-	-0.0033	-0.0033	-0.0033	-0.0032	-0.0032	-0.0032	-0.0031	-0.0031	-0.0030
	Ty+	-0.0015	-0.0015	-0.0015	-0.0015	-0.0014	-0.0014	-0.0014	-0.0014	-0.0014
	Tz-	-0.0048	-0.0048	-0.0048	-0.0048	-0.0048	-0.0048	-0.0048	-0.0048	-0.0048
	Tz+	0.0042	0.0042	0.0042	0.0042	0.0042	0.0042	0.0042	0.0042	0.0042
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0002	-0.0002	-0.0001	-0.0001	0.0000	-0.0001	-0.0001	-0.0002	-0.0002
	My+	0.0002	0.0001	0.0001	0.0000	0.0000	0.0000	0.0001	0.0001	0.0002
	Mz-	-0.0012	-0.0012	-0.0011	-0.0011	-0.0011	-0.0010	-0.0010	-0.0010	-0.0010
	Mz+	-0.0003	-0.0003	-0.0003	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0001
387/398		0.000 m	0.011 m	0.022 m	0.034 m	0.045 m	0.056 m	0.067 m	0.079 m	0.090 m
		Envolvente (Acero Conformado)								
	N-	-0.1130	-0.1130	-0.1130	-0.1130	-0.1130	-0.1130	-0.1130	-0.1130	-0.1130
	N+	0.0845	0.0845	0.0845	0.0845	0.0845	0.0845	0.0845	0.0845	0.0845
	Ty-	-0.1061	-0.1061	-0.1061	-0.1061	-0.1061	-0.1061	-0.1061	-0.1061	-0.1061
	Ty+	0.1530	0.1530	0.1530	0.1530	0.1530	0.1530	0.1530	0.1530	0.1530
	Tz-	-0.1111	-0.1108	-0.1106	-0.1104	-0.1102	-0.0429	-0.0422	-0.0415	-0.0408
	Tz+	0.0558	0.0560	0.0561	0.0562	0.0564	0.1027	0.1028	0.1030	0.1031
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas**

	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.3092	-0.3094	-0.3096	-0.3098	-0.3100	-0.3102	-0.3105	-0.3107	-0.3109
	My+	0.4316	0.4317	0.4318	0.4319	0.4321	0.4321	0.4322	0.4323	0.4324
	Mz-	-0.0785	-0.0802	-0.0820	-0.0837	-0.0854	-0.0871	-0.0888	-0.0906	-0.0923
	Mz+	0.0585	0.0595	0.0605	0.0615	0.0625	0.0635	0.0645	0.0655	0.0665
388/389		0.000 m	0.374 m	0.748 m	1.122 m	1.496 m	1.870 m	2.244 m	2.618 m	2.992 m
		Envolvente (Acero Conformado)								
	N-	-0.0260	-0.0248	-0.0236	-0.0224	-0.0212	-0.0200	-0.0188	-0.0176	-0.0164
	N+	0.0574	0.0594	0.0614	0.0634	0.0655	0.0675	0.0695	0.0716	0.0736
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.0942	-0.0707	-0.0471	-0.0236	0.0000	-0.0393	-0.0785	-0.1178	-0.1571
	Tz+	0.1571	0.1178	0.0785	0.0393	0.0000	0.0236	0.0471	0.0707	0.0942
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0511	-0.0881	-0.1098	-0.1175	-0.1098	-0.0881	-0.0511	0.0000
	My+	0.0000	0.0307	0.0529	0.0659	0.0705	0.0659	0.0529	0.0307	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
388/403		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-0.1705	-0.1705	-0.1705	-0.1705	-0.1705	-0.1705	-0.1705	-0.1705	-0.1705
	N+	1.2264	1.2264	1.2264	1.2264	1.2264	1.2264	1.2264	1.2264	1.2264
	Ty-	-0.0125	-0.0113	-0.0100	-0.0088	-0.0077	-0.0070	-0.0062	-0.0055	-0.0047
	Ty+	0.0069	0.0077	0.0084	0.0092	0.0102	0.0114	0.0127	0.0139	0.0152
	Tz-	-0.0284	-0.0284	-0.0284	-0.0284	-0.0284	-0.0284	-0.0284	-0.0284	-0.0284
	Tz+	0.0227	0.0227	0.0227	0.0227	0.0227	0.0227	0.0227	0.0227	0.0227
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.2164	-0.2191	-0.2219	-0.2247	-0.2274	-0.2302	-0.2330	-0.2357	-0.2385
	My+	0.3879	0.3913	0.3948	0.3983	0.4018	0.4052	0.4087	0.4122	0.4156
	Mz-	-0.1249	-0.1258	-0.1267	-0.1278	-0.1290	-0.1303	-0.1316	-0.1331	-0.1346
	Mz+	0.0744	0.0759	0.0772	0.0784	0.0793	0.0802	0.0809	0.0814	0.0818
389/404		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456
	N+	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257
	Ty-	-0.0597	-0.0495	-0.0393	-0.0291	-0.0189	-0.0087	-0.0013	0.0047	0.0108
	Ty+	-0.0296	-0.0235	-0.0175	-0.0114	-0.0054	0.0007	0.0095	0.0197	0.0299
	Tz-	-1.1093	-1.1093	-1.1093	-1.1093	-1.1093	-1.1093	-1.1093	-1.1093	-1.1093
	Tz+	1.8088	1.8088	1.8088	1.8088	1.8088	1.8088	1.8088	1.8088	1.8088
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-3.6105	-3.4718	-3.3332	-3.1945	-3.0559	-2.9172	-2.7785	-2.6399	-2.5012
	My+	5.8977	5.6716	5.4455	5.2194	4.9933	4.7672	4.5411	4.3150	4.0889
	Mz-	0.0800	0.0833	0.0859	0.0877	0.0888	0.0891	0.0886	0.0874	0.0854
	Mz+	0.4204	0.4273	0.4328	0.4371	0.4401	0.4418	0.4422	0.4414	0.4393
390/400		0.000 m	0.039 m	0.077 m	0.116 m	0.155 m	0.193 m	0.232 m	0.270 m	0.309 m
		Envolvente (Acero laminado)								
	N-	-0.6647	-0.6647	-0.6647	-0.6647	-0.6647	-0.6647	-0.6647	-0.6647	-0.6647
	N+	1.4169	1.4169	1.4169	1.4169	1.4169	1.4169	1.4169	1.4169	1.4169
	Ty-	0.0002	0.0003	0.0003	0.0004	0.0005	0.0006	0.0006	0.0007	0.0008
	Ty+	0.0028	0.0029	0.0031	0.0032	0.0033	0.0034	0.0036	0.0037	0.0038
	Tz-	-0.0039	-0.0039	-0.0039	-0.0039	-0.0039	-0.0039	-0.0039	-0.0039	-0.0039



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	Tz+	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0007	-0.0006	-0.0004	-0.0003	-0.0001	0.0000	-0.0001	-0.0002	-0.0002
	My+	0.0004	0.0003	0.0002	0.0001	0.0001	0.0001	0.0002	0.0003	0.0005
	Mz-	-0.0003	-0.0003	-0.0004	-0.0005	-0.0007	-0.0008	-0.0009	-0.0010	-0.0011
	Mz+	0.0002	0.0001	0.0001	0.0000	0.0000	0.0000	0.0000	-0.0001	-0.0001
411/390		0.000 m	0.200 m	0.399 m	0.599 m	0.798 m	0.998 m	1.197 m	1.397 m	1.597 m
		Envolvente (Acero laminado)								
	N-	-1.4020	-1.4019	-1.4019	-1.4019	-1.4018	-1.4018	-1.4018	-1.4017	-1.4017
	N+	0.6382	0.6382	0.6382	0.6382	0.6383	0.6383	0.6383	0.6383	0.6383
	Ty-	-0.0037	-0.0030	-0.0023	-0.0017	-0.0010	-0.0004	0.0000	0.0004	0.0008
	Ty+	-0.0018	-0.0014	-0.0010	-0.0006	-0.0002	0.0003	0.0009	0.0016	0.0022
	Tz-	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002
	Tz+	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	0.0000	-0.0001	-0.0002	-0.0003	-0.0004	-0.0005	-0.0006	-0.0008
	My+	0.0002	0.0001	0.0001	0.0001	0.0002	0.0002	0.0002	0.0003	0.0003
	Mz-	-0.0015	-0.0008	-0.0003	0.0000	0.0001	0.0001	0.0000	-0.0001	-0.0004
	Mz+	-0.0004	-0.0001	0.0002	0.0005	0.0007	0.0007	0.0006	0.0005	0.0002
454/391		0.000 m	0.387 m	0.773 m	1.160 m	1.547 m	1.933 m	2.320 m	2.707 m	3.094 m
		Envolvente (Acero laminado)								
	N-	-0.0606	-0.0603	-0.0600	-0.0597	-0.0593	-0.0590	-0.0587	-0.0584	-0.0581
	N+	0.5715	0.5716	0.5718	0.5720	0.5722	0.5724	0.5726	0.5728	0.5730
	Ty-	-0.0037	-0.0025	-0.0013	0.0000	0.0007	0.0015	0.0022	0.0030	0.0037
	Ty+	-0.0022	-0.0015	-0.0007	0.0000	0.0012	0.0025	0.0037	0.0050	0.0062
	Tz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz-	0.0000	0.0007	0.0011	0.0013	0.0011	0.0007	0.0000	-0.0017	-0.0039
	Mz+	0.0000	0.0012	0.0019	0.0022	0.0019	0.0012	0.0000	-0.0010	-0.0023
391/455		0.000 m	0.387 m	0.773 m	1.160 m	1.547 m	1.933 m	2.320 m	2.707 m	3.094 m
		Envolvente (Acero laminado)								
	N-	-0.4239	-0.4236	-0.4233	-0.4230	-0.4227	-0.4223	-0.4220	-0.4217	-0.4214
	N+	0.0585	0.0587	0.0589	0.0591	0.0593	0.0595	0.0596	0.0598	0.0600
	Ty-	-0.0062	-0.0050	-0.0037	-0.0025	-0.0012	0.0000	0.0007	0.0015	0.0022
	Ty+	-0.0037	-0.0030	-0.0022	-0.0015	-0.0007	0.0000	0.0013	0.0025	0.0037
	Tz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz-	-0.0039	-0.0017	0.0000	0.0007	0.0011	0.0013	0.0011	0.0007	0.0000
	Mz+	-0.0023	-0.0010	0.0000	0.0012	0.0019	0.0022	0.0019	0.0012	0.0000
398/392		0.000 m	0.011 m	0.022 m	0.033 m	0.044 m	0.055 m	0.066 m	0.077 m	0.088 m
		Envolvente (Acero laminado)								
	N-	-2.0330	-2.0330	-2.0330	-2.0330	-2.0330	-2.0329	-2.0329	-2.0329	-2.0329
	N+	0.8836	0.8836	0.8836	0.8836	0.8836	0.8836	0.8836	0.8836	0.8836
	Ty-	-0.0036	-0.0036	-0.0035	-0.0035	-0.0035	-0.0034	-0.0034	-0.0034	-0.0033

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	Ty+	-0.0019	-0.0019	-0.0019	-0.0019	-0.0018	-0.0018	-0.0018	-0.0018	-0.0018
	Tz-	-0.0047	-0.0047	-0.0047	-0.0047	-0.0047	-0.0047	-0.0047	-0.0047	-0.0047
	Tz+	0.0045	0.0045	0.0045	0.0045	0.0045	0.0045	0.0045	0.0045	0.0045
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0002	-0.0002	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0002	-0.0002
	My+	0.0002	0.0001	0.0001	0.0000	0.0000	0.0001	0.0001	0.0001	0.0002
	Mz-	-0.0014	-0.0014	-0.0013	-0.0013	-0.0012	-0.0012	-0.0012	-0.0011	-0.0011
	Mz+	-0.0006	-0.0005	-0.0005	-0.0005	-0.0005	-0.0004	-0.0004	-0.0004	-0.0004
392/402		0.000 m	0.233 m	0.466 m	0.700 m	0.933 m	1.166 m	1.399 m	1.632 m	1.865 m
	Envolvente (Acero laminado)									
	N-	-0.8352	-0.8352	-0.8352	-0.8352	-0.8351	-0.8351	-0.8351	-0.8351	-0.8350
	N+	1.8488	1.8488	1.8489	1.8489	1.8490	1.8490	1.8491	1.8491	1.8492
	Ty-	-0.0030	-0.0022	-0.0015	-0.0007	0.0000	0.0005	0.0010	0.0014	0.0019
	Ty+	-0.0018	-0.0013	-0.0008	-0.0004	0.0001	0.0009	0.0017	0.0024	0.0032
	Tz-	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001
	Tz+	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0002	-0.0002	-0.0001	-0.0001	-0.0001	0.0000	0.0000	0.0000	-0.0001
	My+	0.0002	0.0001	0.0001	0.0001	0.0001	0.0000	0.0000	0.0000	0.0001
	Mz-	-0.0010	-0.0003	-0.0001	0.0001	0.0001	0.0000	-0.0002	-0.0005	-0.0012
	Mz+	-0.0001	0.0002	0.0007	0.0009	0.0010	0.0009	0.0006	0.0001	-0.0002
393/399		0.000 m	0.034 m	0.068 m	0.102 m	0.136 m	0.170 m	0.205 m	0.239 m	0.273 m
	Envolvente (Acero laminado)									
	N-	-1.7759	-1.7759	-1.7759	-1.7758	-1.7758	-1.7758	-1.7758	-1.7758	-1.7758
	N+	3.2069	3.2069	3.2069	3.2069	3.2069	3.2069	3.2069	3.2069	3.2069
	Ty-	0.0008	0.0009	0.0010	0.0010	0.0011	0.0012	0.0012	0.0013	0.0014
	Ty+	0.0023	0.0024	0.0025	0.0027	0.0028	0.0029	0.0030	0.0031	0.0032
	Tz-	-0.0034	-0.0034	-0.0034	-0.0034	-0.0034	-0.0034	-0.0034	-0.0034	-0.0034
	Tz+	0.0064	0.0064	0.0064	0.0064	0.0064	0.0064	0.0064	0.0064	0.0064
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0005	-0.0004	-0.0003	-0.0002	-0.0001	0.0000	-0.0002	-0.0004	-0.0006
	My+	0.0011	0.0009	0.0007	0.0004	0.0002	0.0001	0.0002	0.0003	0.0004
	Mz-	-0.0003	-0.0004	-0.0005	-0.0006	-0.0007	-0.0008	-0.0009	-0.0010	-0.0011
	Mz+	0.0001	0.0001	0.0001	0.0001	0.0000	0.0000	-0.0001	-0.0001	-0.0002
401/393		0.000 m	0.195 m	0.390 m	0.585 m	0.780 m	0.975 m	1.170 m	1.365 m	1.560 m
	Envolvente (Acero laminado)									
	N-	-3.1985	-3.1985	-3.1985	-3.1984	-3.1984	-3.1983	-3.1983	-3.1983	-3.1982
	N+	1.7585	1.7585	1.7586	1.7586	1.7586	1.7586	1.7586	1.7587	1.7587
	Ty-	-0.0032	-0.0026	-0.0019	-0.0013	-0.0006	0.0000	0.0004	0.0008	0.0011
	Ty+	-0.0017	-0.0014	-0.0010	-0.0006	-0.0002	0.0002	0.0009	0.0015	0.0022
	Tz-	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010
	Tz+	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0004	-0.0002	0.0000	-0.0001	-0.0002	-0.0003	-0.0003	-0.0004	-0.0005
	My+	0.0002	0.0001	0.0000	0.0001	0.0003	0.0005	0.0007	0.0009	0.0011
	Mz-	-0.0014	-0.0008	-0.0004	-0.0001	0.0000	0.0001	0.0000	-0.0001	-0.0004
	Mz+	-0.0004	-0.0001	0.0001	0.0003	0.0005	0.0005	0.0004	0.0001	-0.0001
394/395		0.000 m	0.088 m	0.176 m	0.264 m	0.352 m	0.441 m	0.529 m	0.617 m	0.705 m
	Envolvente (Acero Conformado)									
	N-	-0.0237	-0.0234	-0.0231	-0.0229	-0.0226	-0.0223	-0.0220	-0.0217	-0.0214

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	N+	0.0378	0.0382	0.0387	0.0392	0.0397	0.0401	0.0406	0.0411	0.0416
	Ty-	-0.0407	-0.0407	-0.0407	-0.0407	-0.0407	-0.0407	-0.0407	-0.0407	-0.0407
	Ty+	0.0385	0.0385	0.0385	0.0385	0.0385	0.0385	0.0385	0.0385	0.0385
	Tz-	-0.0896	-0.0844	-0.0791	-0.0738	-0.0685	-0.0632	-0.0579	-0.0526	-0.0473
	Tz+	0.0896	0.0844	0.0791	0.0738	0.0685	0.0632	0.0579	0.0526	0.0473
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0077	-0.0149	-0.0216	-0.0279	-0.0337	-0.0390	-0.0439	-0.0483
	My+	0.0000	0.0077	0.0149	0.0216	0.0279	0.0337	0.0390	0.0439	0.0483
	Mz-	0.0000	-0.0034	-0.0068	-0.0102	-0.0136	-0.0170	-0.0204	-0.0238	-0.0271
	Mz+	0.0000	0.0036	0.0072	0.0108	0.0144	0.0179	0.0215	0.0251	0.0287
394/405		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-0.4093	-0.4093	-0.4093	-0.4093	-0.4093	-0.4093	-0.4093	-0.4093	-0.4093
	N+	0.6733	0.6733	0.6733	0.6733	0.6733	0.6733	0.6733	0.6733	0.6733
	Ty-	-0.0128	-0.0115	-0.0103	-0.0090	-0.0078	-0.0070	-0.0063	-0.0055	-0.0048
	Ty+	0.0058	0.0066	0.0073	0.0081	0.0088	0.0100	0.0113	0.0126	0.0138
	Tz-	-0.0275	-0.0275	-0.0275	-0.0275	-0.0275	-0.0275	-0.0275	-0.0275	-0.0275
	Tz+	0.0223	0.0223	0.0223	0.0223	0.0223	0.0223	0.0223	0.0223	0.0223
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.2044	-0.2071	-0.2098	-0.2125	-0.2152	-0.2179	-0.2206	-0.2233	-0.2260
	My+	0.1888	0.1921	0.1955	0.1988	0.2022	0.2055	0.2089	0.2123	0.2156
	Mz-	-0.0602	-0.0610	-0.0619	-0.0628	-0.0638	-0.0650	-0.0662	-0.0675	-0.0689
	Mz+	0.0694	0.0709	0.0723	0.0735	0.0745	0.0754	0.0761	0.0767	0.0771
395/396		0.000 m	0.006 m	0.013 m	0.019 m	0.025 m	0.031 m	0.038 m	0.044 m	0.050 m
		Envolvente (Acero Conformado)								
	N-	-0.0281	-0.0281	-0.0280	-0.0280	-0.0280	-0.0279	-0.0279	-0.0279	-0.0278
	N+	0.0181	0.0181	0.0181	0.0181	0.0182	0.0182	0.0182	0.0182	0.0182
	Ty-	0.0281	0.0281	0.0281	0.0281	0.0281	0.0281	0.0281	0.0281	0.0281
	Ty+	0.0999	0.0999	0.0999	0.0999	0.0999	0.0999	0.0999	0.0999	0.0999
	Tz-	-0.0472	-0.0468	-0.0464	-0.0461	-0.0457	-0.0453	-0.0449	-0.0446	-0.0442
	Tz+	0.0472	0.0468	0.0464	0.0461	0.0457	0.0453	0.0449	0.0446	0.0442
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0483	-0.0486	-0.0489	-0.0492	-0.0495	-0.0497	-0.0500	-0.0503	-0.0506
	My+	0.0483	0.0486	0.0489	0.0492	0.0495	0.0497	0.0500	0.0503	0.0506
	Mz-	-0.0271	-0.0276	-0.0282	-0.0287	-0.0293	-0.0299	-0.0304	-0.0310	-0.0316
	Mz+	0.0287	0.0284	0.0281	0.0279	0.0277	0.0274	0.0272	0.0270	0.0267
406/395		0.000 m	0.128 m	0.257 m	0.385 m	0.514 m	0.642 m	0.770 m	0.899 m	1.027 m
		Envolvente (Acero laminado)								
	N-	-0.1894	-0.1894	-0.1893	-0.1893	-0.1893	-0.1893	-0.1893	-0.1893	-0.1893
	N+	0.1089	0.1089	0.1089	0.1089	0.1089	0.1089	0.1089	0.1089	0.1089
	Ty-	-0.0002	-0.0001	-0.0001	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001
	Ty+	-0.0001	-0.0001	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0001
	Tz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
396/397		0.000 m	0.280 m	0.559 m	0.839 m	1.118 m	1.398 m	1.677 m	1.957 m	2.237 m

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		Envolvente (Acero Conformado)								
	N-	-0.0537	-0.0522	-0.0507	-0.0492	-0.0477	-0.0462	-0.0446	-0.0431	-0.0416
	N+	0.0118	0.0127	0.0136	0.0145	0.0154	0.0163	0.0172	0.0181	0.0190
	Ty-	-0.0141	-0.0141	-0.0141	-0.0141	-0.0141	-0.0141	-0.0141	-0.0141	-0.0141
	Ty+	0.0119	0.0119	0.0119	0.0119	0.0119	0.0119	0.0119	0.0119	0.0119
	Tz-	-0.0445	-0.0277	-0.0109	-0.0058	-0.0226	-0.0394	-0.0562	-0.0729	-0.0897
	Tz+	0.0445	0.0277	0.0109	0.0058	0.0226	0.0394	0.0562	0.0729	0.0897
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0506	-0.0606	-0.0661	-0.0667	-0.0628	-0.0540	-0.0408	-0.0226	0.0000
	My+	0.0506	0.0606	0.0661	0.0667	0.0628	0.0540	0.0408	0.0226	0.0000
	Mz-	-0.0316	-0.0276	-0.0237	-0.0197	-0.0158	-0.0118	-0.0079	-0.0039	0.0000
	Mz+	0.0267	0.0234	0.0200	0.0167	0.0134	0.0100	0.0067	0.0033	0.0000
396/407		0.000 m	0.129 m	0.258 m	0.387 m	0.516 m	0.644 m	0.773 m	0.902 m	1.031 m
		Envolvente (Acero laminado)								
	N-	-0.1105	-0.1105	-0.1105	-0.1105	-0.1105	-0.1105	-0.1105	-0.1105	-0.1105
	N+	0.2443	0.2443	0.2443	0.2443	0.2444	0.2444	0.2444	0.2444	0.2444
	Ty-	-0.0001	-0.0001	-0.0001	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001
	Ty+	-0.0001	-0.0001	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0002
	Tz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
397/408		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-0.0777	-0.0777	-0.0777	-0.0777	-0.0777	-0.0777	-0.0777	-0.0777	-0.0777
	N+	0.0529	0.0529	0.0529	0.0529	0.0529	0.0529	0.0529	0.0529	0.0529
	Ty-	-0.0759	-0.0657	-0.0555	-0.0453	-0.0351	-0.0249	-0.0147	-0.0076	-0.0016
	Ty+	-0.0264	-0.0204	-0.0143	-0.0083	-0.0022	0.0038	0.0098	0.0190	0.0292
	Tz-	-1.0289	-1.0289	-1.0289	-1.0289	-1.0289	-1.0289	-1.0289	-1.0289	-1.0289
	Tz+	1.0292	1.0292	1.0292	1.0292	1.0292	1.0292	1.0292	1.0292	1.0292
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-3.3559	-3.2273	-3.0987	-2.9700	-2.8414	-2.7128	-2.5842	-2.4556	-2.3270
	My+	3.3570	3.2283	3.0997	2.9710	2.8424	2.7137	2.5850	2.4564	2.3277
	Mz-	0.0602	0.0632	0.0653	0.0667	0.0674	0.0673	0.0664	0.0648	0.0625
	Mz+	0.2981	0.3069	0.3145	0.3208	0.3259	0.3296	0.3321	0.3333	0.3332
409/398		0.000 m	0.244 m	0.488 m	0.732 m	0.977 m	1.221 m	1.465 m	1.709 m	1.953 m
		Envolvente (Acero laminado)								
	N-	-2.2457	-2.2457	-2.2456	-2.2456	-2.2455	-2.2455	-2.2454	-2.2454	-2.2453
	N+	1.0116	1.0116	1.0116	1.0116	1.0117	1.0117	1.0117	1.0118	1.0118
	Ty-	-0.0033	-0.0024	-0.0016	-0.0008	0.0000	0.0005	0.0009	0.0014	0.0019
	Ty+	-0.0019	-0.0014	-0.0009	-0.0004	0.0001	0.0009	0.0017	0.0025	0.0033
	Tz-	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001
	Tz+	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	0.0000	0.0000	0.0000	-0.0001	-0.0001	-0.0002	-0.0002	-0.0002
	My+	0.0001	0.0000	0.0000	0.0001	0.0001	0.0001	0.0001	0.0001	0.0002
	Mz-	-0.0014	-0.0007	-0.0002	0.0000	0.0000	0.0000	-0.0002	-0.0007	-0.0014

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	Mz+	-0.0004	0.0000	0.0003	0.0005	0.0006	0.0005	0.0002	-0.0001	-0.0006
398/471		0.000 m	0.369 m	0.739 m	1.108 m	1.478 m	1.847 m	2.216 m	2.586 m	2.955 m
		Envolvente (Acero Conformado)								
	N-	-0.0241	-0.0241	-0.0241	-0.0241	-0.0241	-0.0241	-0.0241	-0.0241	-0.0241
	N+	0.0202	0.0202	0.0202	0.0202	0.0202	0.0202	0.0202	0.0202	0.0202
	Ty-	-0.0312	-0.0312	-0.0312	-0.0312	-0.0312	-0.0312	-0.0312	-0.0312	-0.0312
	Ty+	0.0225	0.0225	0.0225	0.0225	0.0225	0.0225	0.0225	0.0225	0.0225
	Tz-	-0.0341	-0.0166	-0.0370	-0.0711	-0.1052	-0.1393	-0.1734	-0.2075	-0.2415
	Tz+	0.1049	0.0882	0.0944	0.1117	0.1463	0.1858	0.2252	0.2647	0.3041
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.3109	-0.3158	-0.3087	-0.2885	-0.2562	-0.2107	-0.1533	-0.0827	0.0000
	My+	0.4324	0.4290	0.4117	0.3792	0.3328	0.2711	0.1955	0.1048	0.0000
	Mz-	-0.0923	-0.0807	-0.0692	-0.0577	-0.0461	-0.0346	-0.0231	-0.0115	0.0000
	Mz+	0.0665	0.0582	0.0499	0.0416	0.0333	0.0249	0.0166	0.0083	0.0000
399/410		0.000 m	0.229 m	0.458 m	0.687 m	0.916 m	1.146 m	1.375 m	1.604 m	1.833 m
		Envolvente (Acero laminado)								
	N-	-1.8637	-1.8636	-1.8636	-1.8636	-1.8635	-1.8635	-1.8635	-1.8635	-1.8634
	N+	3.4371	3.4372	3.4372	3.4372	3.4373	3.4373	3.4374	3.4374	3.4375
	Ty-	-0.0031	-0.0023	-0.0015	-0.0008	0.0000	0.0004	0.0009	0.0013	0.0018
	Ty+	-0.0018	-0.0013	-0.0009	-0.0004	0.0000	0.0008	0.0015	0.0023	0.0031
	Tz-	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004
	Tz+	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0006	-0.0006	-0.0005	-0.0004	-0.0003	-0.0002	-0.0001	0.0000	-0.0001
	My+	0.0004	0.0003	0.0003	0.0002	0.0002	0.0001	0.0000	0.0000	0.0001
	Mz-	-0.0011	-0.0005	-0.0002	0.0000	0.0001	0.0000	-0.0001	-0.0004	-0.0010
	Mz+	-0.0002	0.0002	0.0006	0.0009	0.0009	0.0008	0.0006	0.0002	-0.0002
399/512		0.000 m	0.357 m	0.715 m	1.072 m	1.430 m	1.787 m	2.145 m	2.502 m	2.860 m
		Envolvente (Acero Conformado)								
	N-	-0.0605	-0.0605	-0.0605	-0.0605	-0.0605	-0.0605	-0.0605	-0.0605	-0.0605
	N+	0.3237	0.3237	0.3237	0.3237	0.3237	0.3237	0.3237	0.3237	0.3237
	Ty-	-0.0237	-0.0237	-0.0237	-0.0237	-0.0237	-0.0237	-0.0237	-0.0237	-0.0237
	Ty+	0.0196	0.0196	0.0196	0.0196	0.0196	0.0196	0.0196	0.0196	0.0196
	Tz-	0.0041	-0.0178	-0.0508	-0.0838	-0.1168	-0.1498	-0.1828	-0.2158	-0.2487
	Tz+	0.0851	0.0977	0.1145	0.1337	0.1700	0.2082	0.2464	0.2846	0.3227
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.3340	-0.3333	-0.3213	-0.2970	-0.2614	-0.2135	-0.1543	-0.0828	0.0000
	My+	0.4863	0.4730	0.4466	0.4060	0.3523	0.2844	0.2035	0.1083	0.0000
	Mz-	-0.0676	-0.0592	-0.0507	-0.0423	-0.0338	-0.0254	-0.0169	-0.0085	0.0000
	Mz+	0.0560	0.0490	0.0420	0.0350	0.0280	0.0210	0.0140	0.0070	0.0000
400/412		0.000 m	0.238 m	0.476 m	0.715 m	0.953 m	1.191 m	1.429 m	1.667 m	1.906 m
		Envolvente (Acero laminado)								
	N-	-0.7481	-0.7481	-0.7480	-0.7480	-0.7480	-0.7480	-0.7479	-0.7479	-0.7479
	N+	1.7838	1.7839	1.7839	1.7840	1.7840	1.7840	1.7841	1.7841	1.7842
	Ty-	-0.0033	-0.0025	-0.0017	-0.0009	-0.0001	0.0003	0.0008	0.0013	0.0017
	Ty+	-0.0015	-0.0010	-0.0005	-0.0001	0.0004	0.0012	0.0020	0.0028	0.0036
	Tz-	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001
	Tz+	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0002	-0.0002	-0.0002	-0.0001	-0.0001	-0.0001	0.0000	0.0000	-0.0001

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	My+	0.0005	0.0004	0.0004	0.0003	0.0002	0.0001	0.0001	0.0000	0.0000
	Mz-	-0.0011	-0.0004	0.0000	0.0002	0.0003	0.0002	0.0000	-0.0006	-0.0014
	Mz+	-0.0001	0.0002	0.0004	0.0006	0.0006	0.0004	0.0001	-0.0001	-0.0005
400/443		0.000 m	0.348 m	0.695 m	1.043 m	1.391 m	1.739 m	2.086 m	2.434 m	2.782 m
		Envolvente (Acero Conformado)								
	N-	-0.3474	-0.3474	-0.3474	-0.3474	-0.3474	-0.3474	-0.3474	-0.3474	-0.3474
	N+	0.0823	0.0823	0.0823	0.0823	0.0823	0.0823	0.0823	0.0823	0.0823
	Ty-	-0.0438	-0.0438	-0.0438	-0.0438	-0.0438	-0.0438	-0.0438	-0.0438	-0.0438
	Ty+	0.0207	0.0207	0.0207	0.0207	0.0207	0.0207	0.0207	0.0207	0.0207
	Tz-	-0.0328	-0.0177	-0.0393	-0.0714	-0.1035	-0.1355	-0.1676	-0.1997	-0.2318
	Tz+	0.0759	0.0784	0.0947	0.1110	0.1440	0.1811	0.2182	0.2554	0.2925
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.2878	-0.2906	-0.2828	-0.2633	-0.2331	-0.1914	-0.1389	-0.0748	0.0000
	My+	0.4005	0.3954	0.3778	0.3469	0.3035	0.2468	0.1776	0.0950	0.0000
	Mz-	-0.1217	-0.1065	-0.0913	-0.0761	-0.0609	-0.0457	-0.0304	-0.0152	0.0000
	Mz+	0.0576	0.0504	0.0432	0.0360	0.0288	0.0216	0.0144	0.0072	0.0000
413/401		0.000 m	0.229 m	0.458 m	0.687 m	0.916 m	1.146 m	1.375 m	1.604 m	1.833 m
		Envolvente (Acero laminado)								
	N-	-3.0764	-3.0764	-3.0763	-3.0763	-3.0762	-3.0762	-3.0761	-3.0761	-3.0760
	N+	1.6835	1.6835	1.6836	1.6836	1.6836	1.6836	1.6837	1.6837	1.6837
	Ty-	-0.0031	-0.0023	-0.0015	-0.0008	0.0000	0.0004	0.0009	0.0013	0.0018
	Ty+	-0.0017	-0.0013	-0.0008	-0.0004	0.0001	0.0008	0.0016	0.0023	0.0031
	Tz-	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002
	Tz+	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0002	-0.0001	-0.0001	0.0000	-0.0001	-0.0002	-0.0003	-0.0004	-0.0004
	My+	0.0002	0.0001	0.0001	0.0000	0.0000	0.0001	0.0001	0.0002	0.0002
	Mz-	-0.0013	-0.0007	-0.0002	-0.0001	0.0000	-0.0001	-0.0003	-0.0007	-0.0014
	Mz+	-0.0004	0.0000	0.0002	0.0005	0.0005	0.0004	0.0002	0.0000	-0.0004
401/521		0.000 m	0.275 m	0.550 m	0.825 m	1.099 m	1.374 m	1.649 m	1.924 m	2.199 m
		Envolvente (Acero Conformado)								
	N-	-0.1250	-0.1250	-0.1250	-0.1250	-0.1250	-0.1250	-0.1250	-0.1250	-0.1250
	N+	0.0271	0.0271	0.0271	0.0271	0.0271	0.0271	0.0271	0.0271	0.0271
	Ty-	-0.0495	-0.0495	-0.0495	-0.0495	-0.0495	-0.0495	-0.0495	-0.0495	-0.0495
	Ty+	0.0362	0.0362	0.0362	0.0362	0.0362	0.0362	0.0362	0.0362	0.0362
	Tz-	-0.0451	-0.0704	-0.0958	-0.1211	-0.1465	-0.1719	-0.1972	-0.2226	-0.2479
	Tz+	0.0874	0.1002	0.1137	0.1431	0.1724	0.2018	0.2311	0.2605	0.2898
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.3221	-0.3061	-0.2834	-0.2534	-0.2168	-0.1729	-0.1223	-0.0645	0.0000
	My+	0.3791	0.3598	0.3327	0.2973	0.2541	0.2025	0.1432	0.0755	0.0000
	Mz-	-0.1089	-0.0953	-0.0817	-0.0680	-0.0544	-0.0408	-0.0272	-0.0136	0.0000
	Mz+	0.0795	0.0696	0.0596	0.0497	0.0397	0.0298	0.0199	0.0099	0.0000
402/414		0.000 m	0.244 m	0.488 m	0.732 m	0.977 m	1.221 m	1.465 m	1.709 m	1.953 m
		Envolvente (Acero laminado)								
	N-	-0.8942	-0.8942	-0.8942	-0.8941	-0.8941	-0.8941	-0.8941	-0.8940	-0.8940
	N+	1.9209	1.9210	1.9210	1.9211	1.9211	1.9212	1.9212	1.9213	1.9213
	Ty-	-0.0033	-0.0024	-0.0016	-0.0008	0.0000	0.0005	0.0009	0.0014	0.0019
	Ty+	-0.0018	-0.0014	-0.0009	-0.0004	0.0001	0.0009	0.0017	0.0025	0.0033
	Tz-	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001
	Tz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE** Adrián Freijomil Aradas

	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0001	-0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My+	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
	Mz-	-0.0012	-0.0005	-0.0001	0.0001	0.0001	0.0001	-0.0001	-0.0005	-0.0012
	Mz+	-0.0002	0.0002	0.0006	0.0008	0.0009	0.0008	0.0005	0.0000	-0.0004
402/480		0.000 m	0.255 m	0.510 m	0.766 m	1.021 m	1.276 m	1.531 m	1.787 m	2.042 m
		Envolvente (Acero Conformado)								
	N-	-0.0612	-0.0612	-0.0612	-0.0612	-0.0612	-0.0612	-0.0612	-0.0612	-0.0612
	N+	0.0146	0.0146	0.0146	0.0146	0.0146	0.0146	0.0146	0.0146	0.0146
	Ty-	-0.0490	-0.0490	-0.0490	-0.0490	-0.0490	-0.0490	-0.0490	-0.0490	-0.0490
	Ty+	0.0358	0.0358	0.0358	0.0358	0.0358	0.0358	0.0358	0.0358	0.0358
	Tz-	-0.0651	-0.0886	-0.1122	-0.1357	-0.1593	-0.1828	-0.2064	-0.2299	-0.2535
	Tz+	0.1227	0.1403	0.1675	0.1948	0.2220	0.2493	0.2765	0.3038	0.3311
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.3252	-0.3055	-0.2800	-0.2482	-0.2107	-0.1669	-0.1174	-0.0616	0.0000
	My+	0.4534	0.4209	0.3818	0.3354	0.2823	0.2221	0.1551	0.0809	0.0000
	Mz-	-0.1000	-0.0875	-0.0750	-0.0625	-0.0500	-0.0375	-0.0250	-0.0125	0.0000
	Mz+	0.0732	0.0640	0.0549	0.0457	0.0366	0.0274	0.0183	0.0091	0.0000
403/404		0.000 m	0.374 m	0.748 m	1.122 m	1.496 m	1.870 m	2.244 m	2.618 m	2.992 m
		Envolvente (Acero Conformado)								
	N-	-0.0263	-0.0251	-0.0239	-0.0227	-0.0215	-0.0203	-0.0191	-0.0179	-0.0167
	N+	0.0639	0.0660	0.0680	0.0700	0.0721	0.0741	0.0761	0.0781	0.0802
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.0942	-0.0707	-0.0471	-0.0236	0.0000	-0.0393	-0.0785	-0.1178	-0.1571
	Tz+	0.1571	0.1178	0.0785	0.0393	0.0000	0.0236	0.0471	0.0707	0.0942
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0511	-0.0881	-0.1098	-0.1175	-0.1098	-0.0881	-0.0511	0.0000
	My+	0.0000	0.0307	0.0529	0.0659	0.0705	0.0659	0.0529	0.0307	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
403/415		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-0.1705	-0.1705	-0.1705	-0.1705	-0.1705	-0.1705	-0.1705	-0.1705	-0.1705
	N+	1.2264	1.2264	1.2264	1.2264	1.2264	1.2264	1.2264	1.2264	1.2264
	Ty-	-0.0487	-0.0475	-0.0462	-0.0450	-0.0437	-0.0429	-0.0421	-0.0414	-0.0406
	Ty+	0.0216	0.0224	0.0231	0.0239	0.0246	0.0258	0.0271	0.0283	0.0296
	Tz-	-0.0721	-0.0721	-0.0721	-0.0721	-0.0721	-0.0721	-0.0721	-0.0721	-0.0721
	Tz+	0.1293	0.1293	0.1293	0.1293	0.1293	0.1293	0.1293	0.1293	0.1293
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.2385	-0.2295	-0.2204	-0.2114	-0.2024	-0.1934	-0.1844	-0.1754	-0.1664
	My+	0.4156	0.3995	0.3833	0.3672	0.3510	0.3348	0.3187	0.3025	0.2864
	Mz-	-0.1346	-0.1289	-0.1232	-0.1176	-0.1121	-0.1068	-0.1015	-0.0963	-0.0912
	Mz+	0.0818	0.0792	0.0766	0.0737	0.0708	0.0677	0.0644	0.0609	0.0573
404/416		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456
	N+	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257
	Ty-	0.0020	0.0080	0.0141	0.0201	0.0262	0.0322	0.0383	0.0443	0.0504
	Ty+	0.1021	0.1123	0.1225	0.1327	0.1429	0.1531	0.1633	0.1735	0.1837
	Tz-	-1.2035	-1.2035	-1.2035	-1.2035	-1.2035	-1.2035	-1.2035	-1.2035	-1.2035

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE** Adrián Freijomil Aradas

	Tz+	1.9659	1.9659	1.9659	1.9659	1.9659	1.9659	1.9659	1.9659	1.9659
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-2.5012	-2.3508	-2.2004	-2.0499	-1.8995	-1.7490	-1.5986	-1.4482	-1.2977
	My+	4.0889	3.8431	3.5974	3.3517	3.1059	2.8602	2.6144	2.3687	2.1230
	Mz-	0.0854	0.0848	0.0834	0.0813	0.0784	0.0747	0.0703	0.0651	0.0592
	Mz+	0.4393	0.4259	0.4112	0.3953	0.3780	0.3595	0.3398	0.3188	0.2965
405/406		0.000 m	0.059 m	0.117 m	0.176 m	0.235 m	0.294 m	0.352 m	0.411 m	0.470 m
		Envolvente (Acero Conformado)								
	N-	-0.0250	-0.0248	-0.0246	-0.0244	-0.0242	-0.0240	-0.0238	-0.0236	-0.0235
	N+	0.0400	0.0403	0.0406	0.0409	0.0413	0.0416	0.0419	0.0422	0.0425
	Ty-	-0.0409	-0.0409	-0.0409	-0.0409	-0.0409	-0.0409	-0.0409	-0.0409	-0.0409
	Ty+	0.0285	0.0285	0.0285	0.0285	0.0285	0.0285	0.0285	0.0285	0.0285
	Tz-	-0.0898	-0.0863	-0.0827	-0.0792	-0.0757	-0.0722	-0.0686	-0.0651	-0.0616
	Tz+	0.0898	0.0863	0.0827	0.0792	0.0757	0.0722	0.0687	0.0651	0.0616
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0052	-0.0101	-0.0149	-0.0194	-0.0238	-0.0279	-0.0319	-0.0356
	My+	0.0000	0.0052	0.0101	0.0149	0.0194	0.0238	0.0279	0.0319	0.0356
	Mz-	0.0000	-0.0017	-0.0033	-0.0050	-0.0067	-0.0084	-0.0100	-0.0117	-0.0134
	Mz+	0.0000	0.0024	0.0048	0.0072	0.0096	0.0120	0.0144	0.0168	0.0192
405/417		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-0.4378	-0.4378	-0.4378	-0.4378	-0.4378	-0.4378	-0.4378	-0.4378	-0.4378
	N+	0.7142	0.7142	0.7142	0.7142	0.7142	0.7142	0.7142	0.7142	0.7142
	Ty-	-0.0262	-0.0249	-0.0236	-0.0224	-0.0212	-0.0205	-0.0197	-0.0190	-0.0182
	Ty+	0.0202	0.0210	0.0217	0.0224	0.0233	0.0246	0.0258	0.0271	0.0283
	Tz-	-0.0682	-0.0682	-0.0682	-0.0682	-0.0682	-0.0682	-0.0682	-0.0682	-0.0682
	Tz+	0.0630	0.0630	0.0630	0.0630	0.0630	0.0630	0.0630	0.0630	0.0630
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.2260	-0.2175	-0.2090	-0.2004	-0.1919	-0.1834	-0.1749	-0.1664	-0.1578
	My+	0.2156	0.2077	0.1999	0.1920	0.1841	0.1763	0.1684	0.1605	0.1527
	Mz-	-0.0689	-0.0660	-0.0631	-0.0603	-0.0576	-0.0550	-0.0525	-0.0501	-0.0478
	Mz+	0.0771	0.0747	0.0722	0.0696	0.0668	0.0638	0.0607	0.0574	0.0539
406/407		0.000 m	0.067 m	0.134 m	0.201 m	0.268 m	0.336 m	0.403 m	0.470 m	0.537 m
		Envolvente (Acero Conformado)								
	N-	-0.0243	-0.0241	-0.0239	-0.0236	-0.0234	-0.0232	-0.0230	-0.0228	-0.0226
	N+	0.0356	0.0359	0.0363	0.0367	0.0370	0.0374	0.0377	0.0381	0.0385
	Ty-	-0.0173	-0.0173	-0.0173	-0.0173	-0.0173	-0.0173	-0.0173	-0.0173	-0.0173
	Ty+	0.0403	0.0403	0.0403	0.0403	0.0403	0.0403	0.0403	0.0403	0.0403
	Tz-	-0.0616	-0.0576	-0.0535	-0.0495	-0.0455	-0.0414	-0.0374	-0.0334	-0.0294
	Tz+	0.0616	0.0576	0.0535	0.0495	0.0455	0.0414	0.0374	0.0334	0.0294
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0356	-0.0396	-0.0433	-0.0468	-0.0499	-0.0529	-0.0555	-0.0579	-0.0600
	My+	0.0356	0.0396	0.0433	0.0468	0.0499	0.0529	0.0555	0.0579	0.0600
	Mz-	-0.0134	-0.0153	-0.0176	-0.0198	-0.0224	-0.0251	-0.0278	-0.0305	-0.0332
	Mz+	0.0192	0.0196	0.0203	0.0210	0.0220	0.0232	0.0244	0.0255	0.0267
418/406		0.000 m	0.128 m	0.257 m	0.385 m	0.514 m	0.642 m	0.770 m	0.899 m	1.027 m
		Envolvente (Acero laminado)								
	N-	-0.2270	-0.2270	-0.2270	-0.2270	-0.2269	-0.2269	-0.2269	-0.2269	-0.2269
	N+	0.1102	0.1102	0.1102	0.1102	0.1102	0.1102	0.1102	0.1102	0.1102
	Ty-	-0.0001	-0.0001	-0.0001	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001



## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE** Adrián Freijomil Aradas

	Ty+	-0.0001	-0.0001	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0002
	Tz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
407/408		0.000 m	0.248 m	0.496 m	0.744 m	0.992 m	1.241 m	1.489 m	1.737 m	1.985 m
		Envolvente (Acero Conformado)								
	N-	-0.0347	-0.0339	-0.0331	-0.0323	-0.0315	-0.0307	-0.0299	-0.0291	-0.0283
	N+	0.0445	0.0459	0.0472	0.0485	0.0499	0.0512	0.0526	0.0539	0.0553
	Ty-	-0.0167	-0.0167	-0.0167	-0.0167	-0.0167	-0.0167	-0.0167	-0.0167	-0.0167
	Ty+	0.0134	0.0134	0.0134	0.0134	0.0134	0.0134	0.0134	0.0134	0.0134
	Tz-	-0.0293	-0.0144	-0.0005	-0.0153	-0.0302	-0.0451	-0.0600	-0.0749	-0.0898
	Tz+	0.0293	0.0144	0.0005	0.0153	0.0302	0.0451	0.0600	0.0749	0.0898
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0600	-0.0653	-0.0672	-0.0651	-0.0595	-0.0501	-0.0372	-0.0204	0.0000
	My+	0.0600	0.0653	0.0672	0.0651	0.0595	0.0501	0.0372	0.0204	0.0000
	Mz-	-0.0332	-0.0290	-0.0249	-0.0207	-0.0166	-0.0124	-0.0083	-0.0041	0.0000
	Mz+	0.0267	0.0233	0.0200	0.0167	0.0133	0.0100	0.0067	0.0033	0.0000
407/419		0.000 m	0.129 m	0.258 m	0.387 m	0.516 m	0.644 m	0.773 m	0.902 m	1.031 m
		Envolvente (Acero laminado)								
	N-	-0.0679	-0.0679	-0.0679	-0.0679	-0.0679	-0.0679	-0.0678	-0.0678	-0.0678
	N+	0.2495	0.2496	0.2496	0.2496	0.2496	0.2496	0.2496	0.2496	0.2496
	Ty-	-0.0001	-0.0001	-0.0001	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001
	Ty+	-0.0001	-0.0001	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0002
	Tz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
408/420		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-0.0937	-0.0937	-0.0937	-0.0937	-0.0937	-0.0937	-0.0937	-0.0937	-0.0937
	N+	0.0657	0.0657	0.0657	0.0657	0.0657	0.0657	0.0657	0.0657	0.0657
	Ty-	-0.0064	-0.0004	0.0057	0.0117	0.0178	0.0238	0.0299	0.0359	0.0420
	Ty+	0.0610	0.0712	0.0814	0.0916	0.1018	0.1120	0.1222	0.1324	0.1426
	Tz-	-1.1186	-1.1186	-1.1186	-1.1186	-1.1186	-1.1186	-1.1186	-1.1186	-1.1186
	Tz+	1.1190	1.1190	1.1190	1.1190	1.1190	1.1190	1.1190	1.1190	1.1190
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-2.3270	-2.1872	-2.0473	-1.9075	-1.7677	-1.6279	-1.4880	-1.3482	-1.2084
	My+	2.3277	2.1879	2.0480	1.9081	1.7682	1.6284	1.4885	1.3486	1.2087
	Mz-	0.0625	0.0629	0.0626	0.0615	0.0596	0.0570	0.0537	0.0496	0.0447
	Mz+	0.3332	0.3249	0.3154	0.3046	0.2925	0.2792	0.2645	0.2486	0.2314
422/409		0.000 m	0.244 m	0.488 m	0.732 m	0.977 m	1.221 m	1.465 m	1.709 m	1.953 m
		Envolvente (Acero laminado)								
	N-	-2.3162	-2.3161	-2.3161	-2.3160	-2.3160	-2.3159	-2.3159	-2.3158	-2.3158

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE** Adrián Freijomil Aradas

	N+	1.0696	1.0697	1.0697	1.0697	1.0697	1.0698	1.0698	1.0698	1.0699
	Ty-	-0.0034	-0.0026	-0.0018	-0.0009	-0.0001	0.0004	0.0009	0.0013	0.0018
	Ty+	-0.0019	-0.0014	-0.0010	-0.0005	0.0000	0.0008	0.0016	0.0024	0.0032
	Tz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001
	Mz-	-0.0015	-0.0008	-0.0003	0.0000	0.0000	0.0000	-0.0002	-0.0007	-0.0014
	Mz+	-0.0006	-0.0002	0.0001	0.0004	0.0006	0.0005	0.0002	0.0000	-0.0004
409/467		0.000 m	0.244 m	0.488 m	0.732 m	0.976 m	1.220 m	1.464 m	1.708 m	1.952 m
		Envolvente (Acero Conformado)								
	N-	-0.0780	-0.0780	-0.0780	-0.0780	-0.0780	-0.0780	-0.0780	-0.0780	-0.0780
	N+	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009
	Ty-	-0.0380	-0.0380	-0.0380	-0.0380	-0.0380	-0.0380	-0.0380	-0.0380	-0.0380
	Ty+	0.0317	0.0317	0.0317	0.0317	0.0317	0.0317	0.0317	0.0317	0.0317
	Tz-	-0.0472	-0.0697	-0.0922	-0.1147	-0.1373	-0.1598	-0.1823	-0.2048	-0.2273
	Tz+	0.0819	0.0933	0.1134	0.1395	0.1655	0.1916	0.2177	0.2437	0.2698
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.2679	-0.2536	-0.2339	-0.2085	-0.1779	-0.1416	-0.0999	-0.0526	0.0000
	My+	0.3231	0.3049	0.2805	0.2495	0.2124	0.1687	0.1189	0.0625	0.0000
	Mz-	-0.0741	-0.0649	-0.0556	-0.0463	-0.0371	-0.0278	-0.0185	-0.0093	0.0000
	Mz+	0.0619	0.0542	0.0464	0.0387	0.0310	0.0232	0.0155	0.0077	0.0000
410/421		0.000 m	0.229 m	0.458 m	0.687 m	0.916 m	1.146 m	1.375 m	1.604 m	1.833 m
		Envolvente (Acero laminado)								
	N-	-1.8122	-1.8122	-1.8122	-1.8122	-1.8121	-1.8121	-1.8121	-1.8121	-1.8120
	N+	3.3885	3.3885	3.3886	3.3886	3.3887	3.3887	3.3887	3.3888	3.3888
	Ty-	-0.0031	-0.0023	-0.0015	-0.0008	0.0000	0.0004	0.0009	0.0013	0.0018
	Ty+	-0.0017	-0.0013	-0.0008	-0.0004	0.0001	0.0009	0.0016	0.0024	0.0032
	Tz-	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001
	Tz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0001	-0.0001	-0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My+	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
	Mz-	-0.0010	-0.0004	-0.0001	0.0001	0.0001	0.0001	-0.0001	-0.0004	-0.0010
	Mz+	-0.0002	0.0002	0.0005	0.0008	0.0008	0.0007	0.0004	0.0000	-0.0003
410/508		0.000 m	0.240 m	0.480 m	0.719 m	0.959 m	1.199 m	1.439 m	1.679 m	1.919 m
		Envolvente (Acero Conformado)								
	N-	-0.1518	-0.1518	-0.1518	-0.1518	-0.1518	-0.1518	-0.1518	-0.1518	-0.1518
	N+	0.0114	0.0114	0.0114	0.0114	0.0114	0.0114	0.0114	0.0114	0.0114
	Ty-	-0.0475	-0.0475	-0.0475	-0.0475	-0.0475	-0.0475	-0.0475	-0.0475	-0.0475
	Ty+	0.0374	0.0374	0.0374	0.0374	0.0374	0.0374	0.0374	0.0374	0.0374
	Tz-	-0.0893	-0.1115	-0.1336	-0.1557	-0.1778	-0.2000	-0.2221	-0.2442	-0.2664
	Tz+	0.1421	0.1672	0.1928	0.2184	0.2440	0.2696	0.2952	0.3208	0.3464
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.3412	-0.3170	-0.2877	-0.2529	-0.2131	-0.1676	-0.1171	-0.0611	0.0000
	My+	0.4681	0.4310	0.3880	0.3385	0.2832	0.2215	0.1539	0.0799	0.0000
	Mz-	-0.0911	-0.0797	-0.0683	-0.0569	-0.0455	-0.0341	-0.0228	-0.0114	0.0000
	Mz+	0.0718	0.0628	0.0538	0.0449	0.0359	0.0269	0.0179	0.0090	0.0000
423/411		0.000 m	0.238 m	0.476 m	0.715 m	0.953 m	1.191 m	1.429 m	1.667 m	1.906 m

## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

		Envolvente (Acero laminado)								
	N-	-1.4492	-1.4492	-1.4492	-1.4491	-1.4491	-1.4491	-1.4490	-1.4490	-1.4489
	N+	0.6894	0.6894	0.6894	0.6894	0.6895	0.6895	0.6895	0.6895	0.6896
	Ty-	-0.0033	-0.0025	-0.0017	-0.0009	-0.0002	0.0003	0.0008	0.0013	0.0017
	Ty+	-0.0014	-0.0009	-0.0004	0.0000	0.0005	0.0013	0.0021	0.0029	0.0037
	Tz-	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002
	Tz+	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0002	-0.0002	-0.0002	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	0.0000
	My+	0.0004	0.0004	0.0003	0.0003	0.0003	0.0002	0.0002	0.0002	0.0002
	Mz-	-0.0011	-0.0004	0.0000	0.0002	0.0003	0.0001	-0.0002	-0.0007	-0.0015
	Mz+	-0.0001	0.0001	0.0004	0.0006	0.0006	0.0005	0.0002	-0.0001	-0.0004
411/436		0.000 m	0.234 m	0.468 m	0.702 m	0.936 m	1.170 m	1.404 m	1.638 m	1.872 m
		Envolvente (Acero Conformado)								
	N-	-0.0549	-0.0549	-0.0549	-0.0549	-0.0549	-0.0549	-0.0549	-0.0549	-0.0549
	N+	0.0779	0.0779	0.0779	0.0779	0.0779	0.0779	0.0779	0.0779	0.0779
	Ty-	-0.0335	-0.0335	-0.0335	-0.0335	-0.0335	-0.0335	-0.0335	-0.0335	-0.0335
	Ty+	0.0333	0.0333	0.0333	0.0333	0.0333	0.0333	0.0333	0.0333	0.0333
	Tz-	-0.0509	-0.0725	-0.0941	-0.1157	-0.1373	-0.1589	-0.1804	-0.2020	-0.2236
	Tz+	0.1029	0.1160	0.1402	0.1652	0.1902	0.2152	0.2402	0.2652	0.2902
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.2570	-0.2425	-0.2231	-0.1984	-0.1689	-0.1342	-0.0946	-0.0497	0.0000
	My+	0.3562	0.3320	0.3022	0.2664	0.2249	0.1773	0.1241	0.0649	0.0000
	Mz-	-0.0627	-0.0549	-0.0470	-0.0392	-0.0314	-0.0235	-0.0157	-0.0078	0.0000
	Mz+	0.0623	0.0545	0.0467	0.0390	0.0312	0.0234	0.0156	0.0078	0.0000
412/425		0.000 m	0.238 m	0.476 m	0.715 m	0.953 m	1.191 m	1.429 m	1.667 m	1.906 m
		Envolvente (Acero laminado)								
	N-	-0.8285	-0.8285	-0.8285	-0.8285	-0.8284	-0.8284	-0.8284	-0.8284	-0.8284
	N+	1.8822	1.8823	1.8823	1.8824	1.8824	1.8824	1.8825	1.8825	1.8825
	Ty-	-0.0034	-0.0026	-0.0019	-0.0011	-0.0003	0.0002	0.0007	0.0012	0.0016
	Ty+	-0.0018	-0.0014	-0.0009	-0.0004	0.0000	0.0008	0.0016	0.0024	0.0032
	Tz-	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001
	Tz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001
	My+	0.0000	0.0000	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0002
	Mz-	-0.0014	-0.0006	-0.0001	0.0001	0.0002	0.0002	0.0001	-0.0003	-0.0010
	Mz+	-0.0005	-0.0001	0.0002	0.0005	0.0006	0.0005	0.0002	-0.0001	-0.0005
412/447		0.000 m	0.179 m	0.359 m	0.538 m	0.718 m	0.897 m	1.077 m	1.256 m	1.436 m
		Envolvente (Acero Conformado)								
	N-	-0.1035	-0.1035	-0.1035	-0.1035	-0.1035	-0.1035	-0.1035	-0.1035	-0.1035
	N+	0.0387	0.0387	0.0387	0.0387	0.0387	0.0387	0.0387	0.0387	0.0387
	Ty-	-0.0528	-0.0528	-0.0528	-0.0528	-0.0528	-0.0528	-0.0528	-0.0528	-0.0528
	Ty+	0.0395	0.0395	0.0395	0.0395	0.0395	0.0395	0.0395	0.0395	0.0395
	Tz-	-0.0832	-0.0998	-0.1163	-0.1329	-0.1494	-0.1660	-0.1826	-0.1991	-0.2157
	Tz+	0.1161	0.1353	0.1544	0.1736	0.1928	0.2119	0.2311	0.2503	0.2694
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.2146	-0.1981	-0.1788	-0.1563	-0.1311	-0.1027	-0.0715	-0.0372	0.0000
	My+	0.2768	0.2542	0.2283	0.1987	0.1659	0.1295	0.0898	0.0466	0.0000
	Mz-	-0.0758	-0.0664	-0.0569	-0.0474	-0.0379	-0.0284	-0.0190	-0.0095	0.0000

## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

	Mz+	0.0568	0.0497	0.0426	0.0355	0.0284	0.0213	0.0142	0.0071	0.0000
424/413		0.000 m	0.229 m	0.458 m	0.687 m	0.916 m	1.146 m	1.375 m	1.604 m	1.833 m
		Envolvente (Acero laminado)								
	N-	-2.9496	-2.9496	-2.9495	-2.9495	-2.9494	-2.9494	-2.9493	-2.9493	-2.9493
	N+	1.5989	1.5989	1.5989	1.5989	1.5990	1.5990	1.5990	1.5991	1.5991
	Ty-	-0.0030	-0.0022	-0.0015	-0.0007	0.0000	0.0004	0.0009	0.0013	0.0018
	Ty+	-0.0016	-0.0012	-0.0007	-0.0003	0.0002	0.0010	0.0018	0.0025	0.0033
	Tz-	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006
	Tz+	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0008	-0.0007	-0.0006	-0.0004	-0.0003	-0.0002	0.0000	-0.0001	-0.0002
	My+	0.0005	0.0004	0.0003	0.0002	0.0002	0.0001	0.0000	0.0001	0.0002
	Mz-	-0.0008	-0.0003	0.0000	0.0001	0.0002	0.0001	-0.0001	-0.0006	-0.0013
	Mz+	-0.0003	0.0000	0.0004	0.0006	0.0007	0.0005	0.0002	0.0000	-0.0004
413/525		0.000 m	0.157 m	0.314 m	0.472 m	0.629 m	0.786 m	0.943 m	1.100 m	1.257 m
		Envolvente (Acero Conformado)								
	N-	-0.0883	-0.0883	-0.0883	-0.0883	-0.0883	-0.0883	-0.0883	-0.0883	-0.0883
	N+	0.0478	0.0478	0.0478	0.0478	0.0478	0.0478	0.0478	0.0478	0.0478
	Ty-	-0.0759	-0.0759	-0.0759	-0.0759	-0.0759	-0.0759	-0.0759	-0.0759	-0.0759
	Ty+	0.0542	0.0542	0.0542	0.0542	0.0542	0.0542	0.0542	0.0542	0.0542
	Tz-	-0.1105	-0.1250	-0.1395	-0.1540	-0.1685	-0.1830	-0.1975	-0.2120	-0.2265
	Tz+	0.1275	0.1443	0.1611	0.1779	0.1947	0.2115	0.2282	0.2450	0.2618
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.2119	-0.1933	-0.1726	-0.1495	-0.1242	-0.0965	-0.0666	-0.0344	0.0000
	My+	0.2448	0.2234	0.1994	0.1727	0.1435	0.1115	0.0770	0.0398	0.0000
	Mz-	-0.0954	-0.0835	-0.0715	-0.0596	-0.0477	-0.0358	-0.0238	-0.0119	0.0000
	Mz+	0.0681	0.0596	0.0511	0.0426	0.0340	0.0255	0.0170	0.0085	0.0000
414/426		0.000 m	0.244 m	0.488 m	0.732 m	0.977 m	1.221 m	1.465 m	1.709 m	1.953 m
		Envolvente (Acero laminado)								
	N-	-0.9703	-0.9703	-0.9703	-0.9703	-0.9702	-0.9702	-0.9702	-0.9701	-0.9701
	N+	2.0112	2.0113	2.0113	2.0114	2.0114	2.0115	2.0115	2.0116	2.0116
	Ty-	-0.0034	-0.0026	-0.0018	-0.0010	-0.0002	0.0003	0.0008	0.0013	0.0017
	Ty+	-0.0018	-0.0014	-0.0009	-0.0004	0.0001	0.0009	0.0017	0.0025	0.0033
	Tz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz+	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	0.0000	0.0000	-0.0001	-0.0002	-0.0003	-0.0004	-0.0005	-0.0005
	My+	0.0001	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz-	-0.0012	-0.0004	0.0000	0.0002	0.0003	0.0003	0.0001	-0.0003	-0.0010
	Mz+	-0.0004	0.0000	0.0004	0.0006	0.0007	0.0006	0.0003	0.0000	-0.0004
414/487		0.000 m	0.130 m	0.260 m	0.390 m	0.519 m	0.649 m	0.779 m	0.909 m	1.039 m
		Envolvente (Acero Conformado)								
	N-	-0.1024	-0.1024	-0.1024	-0.1024	-0.1024	-0.1024	-0.1024	-0.1024	-0.1024
	N+	0.0348	0.0348	0.0348	0.0348	0.0348	0.0348	0.0348	0.0348	0.0348
	Ty-	-0.0798	-0.0798	-0.0798	-0.0798	-0.0798	-0.0798	-0.0798	-0.0798	-0.0798
	Ty+	0.0597	0.0597	0.0597	0.0597	0.0597	0.0597	0.0597	0.0597	0.0597
	Tz-	-0.1561	-0.1681	-0.1801	-0.1921	-0.2040	-0.2160	-0.2280	-0.2400	-0.2520
	Tz+	0.2347	0.2485	0.2624	0.2763	0.2901	0.3040	0.3179	0.3317	0.3456
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.2120	-0.1909	-0.1683	-0.1441	-0.1184	-0.0911	-0.0623	-0.0319	0.0000

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas**

	My+	0.3014	0.2700	0.2369	0.2019	0.1651	0.1265	0.0862	0.0439	0.0000
	Mz-	-0.0829	-0.0726	-0.0622	-0.0518	-0.0415	-0.0311	-0.0207	-0.0104	0.0000
	Mz+	0.0620	0.0542	0.0465	0.0387	0.0310	0.0232	0.0155	0.0077	0.0000
415/416		0.000 m	0.374 m	0.748 m	1.122 m	1.496 m	1.870 m	2.244 m	2.618 m	2.992 m
		Envolvente (Acero Conformado)								
	N-	-0.0254	-0.0242	-0.0230	-0.0218	-0.0206	-0.0194	-0.0182	-0.0170	-0.0158
	N+	0.0561	0.0581	0.0602	0.0622	0.0642	0.0662	0.0683	0.0703	0.0723
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.0942	-0.0707	-0.0471	-0.0236	0.0000	-0.0393	-0.0785	-0.1178	-0.1571
	Tz+	0.1571	0.1178	0.0785	0.0393	0.0000	0.0236	0.0471	0.0707	0.0942
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0511	-0.0881	-0.1098	-0.1175	-0.1098	-0.0881	-0.0511	0.0000
	My+	0.0000	0.0307	0.0529	0.0659	0.0705	0.0659	0.0529	0.0307	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
415/429		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-0.1705	-0.1705	-0.1705	-0.1705	-0.1705	-0.1705	-0.1705	-0.1705	-0.1705
	N+	1.2264	1.2264	1.2264	1.2264	1.2264	1.2264	1.2264	1.2264	1.2264
	Ty-	-0.0946	-0.0934	-0.0926	-0.0919	-0.0912	-0.0904	-0.0897	-0.0889	-0.0882
	Ty+	0.0528	0.0536	0.0548	0.0561	0.0573	0.0586	0.0599	0.0611	0.0624
	Tz-	-0.1664	-0.1664	-0.1664	-0.1664	-0.1664	-0.1664	-0.1664	-0.1664	-0.1664
	Tz+	0.2864	0.2864	0.2864	0.2864	0.2864	0.2864	0.2864	0.2864	0.2864
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.1664	-0.1456	-0.1248	-0.1040	-0.0832	-0.0624	-0.0416	-0.0208	0.0000
	My+	0.2864	0.2506	0.2148	0.1790	0.1432	0.1074	0.0716	0.0358	0.0000
	Mz-	-0.0912	-0.0794	-0.0678	-0.0563	-0.0448	-0.0335	-0.0222	-0.0111	0.0000
	Mz+	0.0573	0.0507	0.0440	0.0370	0.0299	0.0227	0.0153	0.0077	0.0000
416/431		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456
	N+	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257	0.1257
	Ty-	0.0350	0.0410	0.0471	0.0531	0.0592	0.0652	0.0713	0.0773	0.0834
	Ty+	0.2557	0.2659	0.2761	0.2863	0.2965	0.3067	0.3169	0.3271	0.3373
	Tz-	-1.2977	-1.2977	-1.2977	-1.2977	-1.2977	-1.2977	-1.2977	-1.2977	-1.2977
	Tz+	2.1230	2.1230	2.1230	2.1230	2.1230	2.1230	2.1230	2.1230	2.1230
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-1.2977	-1.1355	-0.9733	-0.8111	-0.6489	-0.4866	-0.3244	-0.1622	0.0000
	My+	2.1230	1.8576	1.5922	1.3269	1.0615	0.7961	0.5307	0.2654	0.0000
	Mz-	0.0592	0.0544	0.0489	0.0427	0.0356	0.0279	0.0193	0.0100	0.0000
	Mz+	0.2965	0.2639	0.2300	0.1949	0.1584	0.1207	0.0818	0.0415	0.0000
417/418		0.000 m	0.029 m	0.059 m	0.088 m	0.117 m	0.147 m	0.176 m	0.206 m	0.235 m
		Envolvente (Acero Conformado)								
	N-	-0.0236	-0.0235	-0.0234	-0.0233	-0.0232	-0.0231	-0.0230	-0.0229	-0.0228
	N+	0.0356	0.0358	0.0359	0.0361	0.0362	0.0364	0.0366	0.0367	0.0369
	Ty-	-0.0602	-0.0602	-0.0602	-0.0602	-0.0602	-0.0602	-0.0602	-0.0602	-0.0602
	Ty+	0.0366	0.0366	0.0366	0.0366	0.0366	0.0366	0.0366	0.0366	0.0366
	Tz-	-0.0897	-0.0879	-0.0862	-0.0844	-0.0826	-0.0809	-0.0791	-0.0774	-0.0756
	Tz+	0.0897	0.0879	0.0862	0.0844	0.0826	0.0809	0.0791	0.0774	0.0756
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas**

	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0026	-0.0052	-0.0077	-0.0101	-0.0125	-0.0149	-0.0172	-0.0194
	My+	0.0000	0.0026	0.0052	0.0077	0.0101	0.0125	0.0149	0.0172	0.0194
	Mz-	0.0000	-0.0011	-0.0021	-0.0032	-0.0043	-0.0054	-0.0064	-0.0075	-0.0086
	Mz+	0.0000	0.0018	0.0035	0.0053	0.0071	0.0088	0.0106	0.0124	0.0141
417/535		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-0.4744	-0.4744	-0.4744	-0.4744	-0.4744	-0.4744	-0.4744	-0.4744	-0.4744
	N+	0.7743	0.7743	0.7743	0.7743	0.7743	0.7743	0.7743	0.7743	0.7743
	Ty-	-0.0516	-0.0503	-0.0493	-0.0486	-0.0478	-0.0471	-0.0463	-0.0456	-0.0448
	Ty+	0.0496	0.0504	0.0514	0.0527	0.0539	0.0552	0.0564	0.0577	0.0590
	Tz-	-0.1578	-0.1578	-0.1578	-0.1578	-0.1578	-0.1578	-0.1578	-0.1578	-0.1578
	Tz+	0.1527	0.1527	0.1527	0.1527	0.1527	0.1527	0.1527	0.1527	0.1527
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.1578	-0.1381	-0.1184	-0.0987	-0.0789	-0.0592	-0.0395	-0.0197	0.0000
	My+	0.1527	0.1336	0.1145	0.0954	0.0763	0.0572	0.0382	0.0191	0.0000
	Mz-	-0.0478	-0.0415	-0.0353	-0.0292	-0.0232	-0.0172	-0.0114	-0.0057	0.0000
	Mz+	0.0539	0.0477	0.0414	0.0349	0.0282	0.0214	0.0144	0.0073	0.0000
418/419		0.000 m	0.128 m	0.256 m	0.384 m	0.512 m	0.640 m	0.768 m	0.896 m	1.024 m
		Envolvente (Acero Conformado)								
	N-	-0.0204	-0.0200	-0.0196	-0.0191	-0.0187	-0.0183	-0.0179	-0.0175	-0.0171
	N+	0.0266	0.0273	0.0280	0.0287	0.0294	0.0301	0.0308	0.0314	0.0321
	Ty-	-0.0145	-0.0145	-0.0145	-0.0145	-0.0145	-0.0145	-0.0145	-0.0145	-0.0145
	Ty+	0.0264	0.0264	0.0264	0.0264	0.0264	0.0264	0.0264	0.0264	0.0264
	Tz-	-0.0756	-0.0679	-0.0603	-0.0526	-0.0449	-0.0372	-0.0296	-0.0219	-0.0142
	Tz+	0.0756	0.0679	0.0603	0.0526	0.0449	0.0372	0.0296	0.0219	0.0142
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0194	-0.0286	-0.0368	-0.0440	-0.0503	-0.0555	-0.0598	-0.0631	-0.0654
	My+	0.0194	0.0286	0.0368	0.0440	0.0503	0.0555	0.0598	0.0631	0.0654
	Mz-	-0.0086	-0.0109	-0.0133	-0.0162	-0.0195	-0.0228	-0.0262	-0.0296	-0.0330
	Mz+	0.0141	0.0149	0.0158	0.0172	0.0189	0.0208	0.0226	0.0245	0.0264
535/418		0.000 m	0.128 m	0.257 m	0.385 m	0.514 m	0.642 m	0.770 m	0.899 m	1.027 m
		Envolvente (Acero laminado)								
	N-	-0.2824	-0.2824	-0.2824	-0.2823	-0.2823	-0.2823	-0.2823	-0.2823	-0.2823
	N+	0.1291	0.1292	0.1292	0.1292	0.1292	0.1292	0.1292	0.1292	0.1292
	Ty-	-0.0002	-0.0001	-0.0001	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001
	Ty+	-0.0001	-0.0001	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0001
	Tz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
419/420		0.000 m	0.217 m	0.433 m	0.650 m	0.867 m	1.083 m	1.300 m	1.516 m	1.733 m
		Envolvente (Acero Conformado)								
	N-	-0.0270	-0.0263	-0.0256	-0.0249	-0.0242	-0.0235	-0.0228	-0.0221	-0.0215
	N+	0.0387	0.0399	0.0410	0.0422	0.0434	0.0446	0.0457	0.0469	0.0481
	Ty-	-0.0190	-0.0190	-0.0190	-0.0190	-0.0190	-0.0190	-0.0190	-0.0190	-0.0190
	Ty+	0.0152	0.0152	0.0152	0.0152	0.0152	0.0152	0.0152	0.0152	0.0152
	Tz-	-0.0143	-0.0026	-0.0117	-0.0247	-0.0377	-0.0507	-0.0637	-0.0767	-0.0897

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas**

	Tz+	0.0143	0.0026	0.0117	0.0247	0.0377	0.0507	0.0637	0.0767	0.0897
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0654	-0.0670	-0.0659	-0.0619	-0.0552	-0.0456	-0.0332	-0.0180	0.0000
	My+	0.0654	0.0670	0.0659	0.0619	0.0552	0.0456	0.0332	0.0180	0.0000
	Mz-	-0.0330	-0.0288	-0.0247	-0.0206	-0.0165	-0.0124	-0.0082	-0.0041	0.0000
	Mz+	0.0264	0.0231	0.0198	0.0165	0.0132	0.0099	0.0066	0.0033	0.0000
419/536		0.000 m	0.129 m	0.258 m	0.387 m	0.516 m	0.644 m	0.773 m	0.902 m	1.031 m
		Envolvente (Acero laminado)								
	N-	-0.0698	-0.0698	-0.0698	-0.0698	-0.0698	-0.0698	-0.0698	-0.0698	-0.0698
	N+	0.2714	0.2714	0.2714	0.2714	0.2714	0.2714	0.2714	0.2714	0.2714
	Ty-	-0.0002	-0.0001	-0.0001	-0.0001	0.0000	0.0000	0.0000	0.0000	0.0001
	Ty+	-0.0001	-0.0001	-0.0001	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001
	Tz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
420/537		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-0.1127	-0.1127	-0.1127	-0.1127	-0.1127	-0.1127	-0.1127	-0.1127	-0.1127
	N+	0.0809	0.0809	0.0809	0.0809	0.0809	0.0809	0.0809	0.0809	0.0809
	Ty-	0.0205	0.0266	0.0326	0.0386	0.0447	0.0507	0.0568	0.0628	0.0689
	Ty+	0.1906	0.2008	0.2110	0.2212	0.2314	0.2416	0.2518	0.2620	0.2722
	Tz-	-1.2084	-1.2084	-1.2084	-1.2084	-1.2084	-1.2084	-1.2084	-1.2084	-1.2084
	Tz+	1.2087	1.2087	1.2087	1.2087	1.2087	1.2087	1.2087	1.2087	1.2087
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-1.2084	-1.0573	-0.9063	-0.7552	-0.6042	-0.4531	-0.3021	-0.1510	0.0000
	My+	1.2087	1.0576	0.9065	0.7555	0.6044	0.4533	0.3022	0.1511	0.0000
	Mz-	0.0447	0.0417	0.0380	0.0336	0.0284	0.0224	0.0157	0.0082	0.0000
	Mz+	0.2314	0.2070	0.1812	0.1542	0.1259	0.0964	0.0655	0.0334	0.0000
421/427		0.000 m	0.229 m	0.458 m	0.687 m	0.916 m	1.146 m	1.375 m	1.604 m	1.833 m
		Envolvente (Acero laminado)								
	N-	-1.7303	-1.7302	-1.7302	-1.7302	-1.7302	-1.7301	-1.7301	-1.7301	-1.7300
	N+	3.3018	3.3018	3.3019	3.3019	3.3020	3.3020	3.3020	3.3021	3.3021
	Ty-	-0.0033	-0.0025	-0.0017	-0.0010	-0.0002	0.0002	0.0007	0.0011	0.0016
	Ty+	-0.0017	-0.0013	-0.0008	-0.0004	0.0001	0.0009	0.0016	0.0024	0.0032
	Tz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz+	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	0.0000	0.0000	-0.0001	-0.0001	-0.0002	-0.0002	-0.0002	-0.0003
	My+	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz-	-0.0010	-0.0004	0.0000	0.0002	0.0003	0.0003	0.0001	-0.0003	-0.0009
	Mz+	-0.0003	0.0000	0.0003	0.0006	0.0006	0.0006	0.0004	0.0001	-0.0002
421/501		0.000 m	0.122 m	0.244 m	0.366 m	0.489 m	0.611 m	0.733 m	0.855 m	0.977 m
		Envolvente (Acero Conformado)								
	N-	-0.0579	-0.0579	-0.0579	-0.0579	-0.0579	-0.0579	-0.0579	-0.0579	-0.0579
	N+	0.0089	0.0089	0.0089	0.0089	0.0089	0.0089	0.0089	0.0089	0.0089
	Ty-	-0.0826	-0.0826	-0.0826	-0.0826	-0.0826	-0.0826	-0.0826	-0.0826	-0.0826

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE** Adrián Freijomil Aradas

	Ty+	0.0646	0.0646	0.0646	0.0646	0.0646	0.0646	0.0646	0.0646	0.0646
	Tz-	-0.1709	-0.1821	-0.1934	-0.2047	-0.2159	-0.2272	-0.2385	-0.2497	-0.2610
	Tz+	0.2553	0.2683	0.2814	0.2944	0.3074	0.3205	0.3335	0.3466	0.3596
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.2110	-0.1894	-0.1665	-0.1422	-0.1165	-0.0894	-0.0610	-0.0312	0.0000
	My+	0.3004	0.2684	0.2349	0.1997	0.1630	0.1246	0.0847	0.0431	0.0000
	Mz-	-0.0807	-0.0706	-0.0605	-0.0504	-0.0404	-0.0303	-0.0202	-0.0101	0.0000
	Mz+	0.0631	0.0552	0.0473	0.0394	0.0316	0.0237	0.0158	0.0079	0.0000
455/422		0.000 m	0.231 m	0.462 m	0.693 m	0.924 m	1.155 m	1.386 m	1.617 m	1.848 m
		Envolvente (Acero laminado)								
	N-	-2.4169	-2.4169	-2.4168	-2.4168	-2.4167	-2.4167	-2.4166	-2.4166	-2.4165
	N+	1.1533	1.1533	1.1533	1.1534	1.1534	1.1534	1.1534	1.1535	1.1535
	Ty-	-0.0024	-0.0017	-0.0009	-0.0001	0.0003	0.0008	0.0012	0.0017	0.0021
	Ty+	-0.0013	-0.0009	-0.0004	0.0000	0.0008	0.0016	0.0023	0.0031	0.0039
	Tz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz-	0.0000	0.0003	0.0004	0.0004	0.0004	0.0002	-0.0001	-0.0007	-0.0015
	Mz+	0.0000	0.0005	0.0008	0.0009	0.0008	0.0006	0.0002	-0.0002	-0.0006
422/460		0.000 m	0.119 m	0.237 m	0.356 m	0.474 m	0.593 m	0.712 m	0.830 m	0.949 m
		Envolvente (Acero Conformado)								
	N-	-0.0416	-0.0416	-0.0416	-0.0416	-0.0416	-0.0416	-0.0416	-0.0416	-0.0416
	N+	0.0129	0.0129	0.0129	0.0129	0.0129	0.0129	0.0129	0.0129	0.0129
	Ty-	-0.0682	-0.0682	-0.0682	-0.0682	-0.0682	-0.0682	-0.0682	-0.0682	-0.0682
	Ty+	0.0575	0.0575	0.0575	0.0575	0.0575	0.0575	0.0575	0.0575	0.0575
	Tz-	-0.1215	-0.1324	-0.1434	-0.1543	-0.1653	-0.1762	-0.1872	-0.1981	-0.2090
	Tz+	0.1463	0.1590	0.1716	0.1843	0.1970	0.2096	0.2223	0.2350	0.2476
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.1568	-0.1417	-0.1254	-0.1077	-0.0888	-0.0685	-0.0470	-0.0241	0.0000
	My+	0.1869	0.1688	0.1492	0.1281	0.1055	0.0813	0.0557	0.0286	0.0000
	Mz-	-0.0647	-0.0566	-0.0485	-0.0404	-0.0323	-0.0243	-0.0162	-0.0081	0.0000
	Mz+	0.0545	0.0477	0.0409	0.0341	0.0273	0.0205	0.0136	0.0068	0.0000
430/423		0.000 m	0.093 m	0.186 m	0.280 m	0.373 m	0.466 m	0.559 m	0.652 m	0.746 m
		Envolvente (Acero laminado)								
	N-	-0.5046	-0.5046	-0.5046	-0.5046	-0.5045	-0.5045	-0.5045	-0.5045	-0.5045
	N+	0.2306	0.2306	0.2306	0.2306	0.2307	0.2307	0.2307	0.2307	0.2307
	Ty-	-0.0006	-0.0004	-0.0002	0.0000	0.0002	0.0004	0.0005	0.0007	0.0009
	Ty+	0.0003	0.0006	0.0009	0.0012	0.0015	0.0018	0.0021	0.0024	0.0027
	Tz-	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006
	Tz+	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	0.0000	-0.0001	-0.0001	-0.0001	-0.0001	-0.0002	-0.0002	-0.0002
	My+	0.0000	0.0001	0.0001	0.0002	0.0002	0.0003	0.0003	0.0004	0.0004
	Mz-	0.0000	0.0000	-0.0001	-0.0002	-0.0003	-0.0005	-0.0007	-0.0009	-0.0011
	Mz+	0.0000	0.0000	0.0001	0.0001	0.0001	0.0000	0.0000	-0.0001	-0.0001
423/432		0.000 m	0.066 m	0.132 m	0.197 m	0.263 m	0.329 m	0.395 m	0.461 m	0.527 m
		Envolvente (Acero laminado)								
	N-	-0.3290	-0.3290	-0.3290	-0.3290	-0.3290	-0.3290	-0.3290	-0.3290	-0.3290



## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE** Adrián Freijomil Aradas

	N+	0.6953	0.6953	0.6953	0.6953	0.6953	0.6953	0.6953	0.6953	0.6953
	Ty-	-0.2687	-0.2687	-0.2687	-0.2687	-0.2687	-0.2687	-0.2687	-0.2687	-0.2687
	Ty+	0.5568	0.5568	0.5568	0.5568	0.5568	0.5568	0.5568	0.5568	0.5568
	Tz-	-0.5180	-0.5355	-0.5530	-0.5704	-0.5879	-0.6053	-0.6228	-0.6402	-0.6577
	Tz+	0.3444	0.3539	0.3634	0.3729	0.3824	0.3918	0.4013	0.4108	0.4203
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.3096	-0.2749	-0.2391	-0.2021	-0.1640	-0.1247	-0.0843	-0.0427	0.0000
	My+	0.2014	0.1784	0.1548	0.1305	0.1057	0.0802	0.0541	0.0273	0.0000
	Mz-	-0.1415	-0.1238	-0.1061	-0.0884	-0.0707	-0.0531	-0.0354	-0.0177	0.0000
	Mz+	0.2932	0.2566	0.2199	0.1833	0.1466	0.1100	0.0733	0.0367	0.0000
424/532		0.000 m	0.039 m	0.079 m	0.118 m	0.158 m	0.197 m	0.237 m	0.276 m	0.316 m
	Envolvente (Acero laminado)									
	N-	-0.1129	-0.1129	-0.1129	-0.1129	-0.1129	-0.1129	-0.1129	-0.1129	-0.1129
	N+	0.0728	0.0728	0.0728	0.0728	0.0728	0.0728	0.0728	0.0728	0.0728
	Ty-	-1.3699	-1.3699	-1.3699	-1.3699	-1.3699	-1.3699	-1.3699	-1.3699	-1.3699
	Ty+	0.7465	0.7465	0.7465	0.7465	0.7465	0.7465	0.7465	0.7465	0.7465
	Tz-	-0.5822	-0.5927	-0.6032	-0.6137	-0.6241	-0.6346	-0.6451	-0.6556	-0.6660
	Tz+	0.3833	0.3890	0.3947	0.4003	0.4060	0.4117	0.4174	0.4231	0.4288
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.1972	-0.1740	-0.1504	-0.1264	-0.1019	-0.0771	-0.0518	-0.0261	0.0000
	My+	0.1283	0.1130	0.0976	0.0819	0.0659	0.0498	0.0334	0.0168	0.0000
	Mz-	-0.4329	-0.3788	-0.3246	-0.2705	-0.2164	-0.1623	-0.1082	-0.0541	0.0000
	Mz+	0.2359	0.2064	0.1769	0.1474	0.1179	0.0885	0.0590	0.0295	0.0000
536/424		0.000 m	0.077 m	0.154 m	0.231 m	0.308 m	0.385 m	0.461 m	0.538 m	0.615 m
	Envolvente (Acero laminado)									
	N-	-1.1838	-1.1838	-1.1838	-1.1838	-1.1838	-1.1838	-1.1837	-1.1837	-1.1837
	N+	0.6260	0.6260	0.6261	0.6261	0.6261	0.6261	0.6261	0.6261	0.6261
	Ty-	-0.0001	0.0000	0.0002	0.0003	0.0005	0.0006	0.0008	0.0009	0.0011
	Ty+	0.0003	0.0006	0.0009	0.0011	0.0014	0.0016	0.0019	0.0021	0.0024
	Tz-	-0.0008	-0.0008	-0.0008	-0.0008	-0.0008	-0.0008	-0.0008	-0.0008	-0.0008
	Tz+	0.0014	0.0014	0.0014	0.0014	0.0014	0.0014	0.0014	0.0014	0.0014
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0001	-0.0002	-0.0003	-0.0004	-0.0005	-0.0006	-0.0007	-0.0008
	My+	0.0000	0.0001	0.0001	0.0002	0.0002	0.0003	0.0004	0.0004	0.0005
	Mz-	0.0000	0.0000	-0.0001	-0.0002	-0.0003	-0.0004	-0.0005	-0.0007	-0.0008
	Mz+	0.0000	0.0000	0.0000	0.0000	-0.0001	-0.0001	-0.0002	-0.0002	-0.0003
425/451		0.000 m	0.011 m	0.023 m	0.034 m	0.045 m	0.056 m	0.068 m	0.079 m	0.090 m
	Envolvente (Acero Conformado)									
	N-	-0.6370	-0.6370	-0.6370	-0.6370	-0.6370	-0.6370	-0.6370	-0.6370	-0.6370
	N+	0.4876	0.4876	0.4876	0.4876	0.4876	0.4876	0.4876	0.4876	0.4876
	Ty-	-0.5925	-0.5925	-0.5925	-0.5925	-0.5925	-0.5925	-0.5925	-0.5925	-0.5925
	Ty+	0.4711	0.4711	0.4711	0.4711	0.4711	0.4711	0.4711	0.4711	0.4711
	Tz-	-0.1629	-0.1628	-0.1627	-0.1625	-0.1624	-0.1623	-0.1621	-0.1620	-0.1619
	Tz+	0.2074	0.2076	0.2079	0.2081	0.2083	0.2085	0.2088	0.2090	0.2092
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0146	-0.0128	-0.0110	-0.0091	-0.0073	-0.0055	-0.0036	-0.0018	0.0000
	My+	0.0188	0.0164	0.0141	0.0118	0.0094	0.0071	0.0047	0.0024	0.0000
	Mz-	-0.0534	-0.0467	-0.0400	-0.0334	-0.0267	-0.0200	-0.0133	-0.0067	0.0000
	Mz+	0.0425	0.0371	0.0318	0.0265	0.0212	0.0159	0.0106	0.0053	0.0000
425/455		0.000 m	0.016 m	0.032 m	0.048 m	0.064 m	0.080 m	0.096 m	0.112 m	0.128 m

## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

		Envolvente (Acero laminado)								
	N-	-1.5089	-1.5089	-1.5089	-1.5089	-1.5089	-1.5089	-1.5089	-1.5089	-1.5089
	N+	2.6617	2.6617	2.6617	2.6617	2.6617	2.6617	2.6617	2.6617	2.6617
	Ty-	-0.0077	-0.0076	-0.0076	-0.0075	-0.0075	-0.0074	-0.0074	-0.0073	-0.0073
	Ty+	-0.0037	-0.0037	-0.0037	-0.0036	-0.0036	-0.0036	-0.0035	-0.0035	-0.0035
	Tz-	-0.0011	-0.0011	-0.0011	-0.0011	-0.0011	-0.0011	-0.0011	-0.0011	-0.0011
	Tz+	0.0014	0.0014	0.0014	0.0014	0.0014	0.0014	0.0014	0.0014	0.0014
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	0.0000	0.0000	0.0000
	My+	0.0002	0.0002	0.0001	0.0001	0.0001	0.0001	0.0000	0.0000	0.0000
	Mz-	-0.0010	-0.0008	-0.0007	-0.0006	-0.0005	-0.0004	-0.0002	-0.0001	0.0000
	Mz+	-0.0005	-0.0004	-0.0003	-0.0003	-0.0002	-0.0002	-0.0001	-0.0001	0.0000
426/491		0.000 m	0.004 m	0.009 m	0.013 m	0.018 m	0.022 m	0.027 m	0.031 m	0.036 m
		Envolvente (Acero Conformado)								
	N-	-1.4308	-1.4308	-1.4308	-1.4308	-1.4308	-1.4308	-1.4308	-1.4308	-1.4308
	N+	0.4283	0.4283	0.4283	0.4283	0.4283	0.4283	0.4283	0.4283	0.4283
	Ty-	-0.9749	-0.9749	-0.9749	-0.9749	-0.9749	-0.9749	-0.9749	-0.9749	-0.9749
	Ty+	-0.2219	-0.2219	-0.2219	-0.2219	-0.2219	-0.2219	-0.2219	-0.2219	-0.2219
	Tz-	-0.0053	-0.0053	-0.0052	-0.0052	-0.0051	-0.0051	-0.0050	-0.0050	-0.0049
	Tz+	0.3171	0.3174	0.3178	0.3181	0.3185	0.3189	0.3192	0.3196	0.3199
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0002	-0.0002	-0.0001	-0.0001	-0.0001	-0.0001	0.0000	0.0000	0.0000
	My+	0.0114	0.0100	0.0086	0.0072	0.0057	0.0043	0.0029	0.0014	0.0000
	Mz-	-0.0350	-0.0306	-0.0262	-0.0219	-0.0175	-0.0131	-0.0087	-0.0044	0.0000
	Mz+	-0.0080	-0.0070	-0.0060	-0.0050	-0.0040	-0.0030	-0.0020	-0.0010	0.0000
426/495		0.000 m	0.009 m	0.017 m	0.026 m	0.035 m	0.044 m	0.052 m	0.061 m	0.070 m
		Envolvente (Acero laminado)								
	N-	-0.5441	-0.5441	-0.5441	-0.5441	-0.5441	-0.5441	-0.5441	-0.5441	-0.5441
	N+	2.9982	2.9982	2.9982	2.9982	2.9982	2.9982	2.9982	2.9982	2.9982
	Ty-	-0.0145	-0.0145	-0.0145	-0.0145	-0.0144	-0.0144	-0.0144	-0.0143	-0.0143
	Ty+	-0.0056	-0.0056	-0.0055	-0.0055	-0.0055	-0.0055	-0.0055	-0.0054	-0.0054
	Tz-	-0.0077	-0.0077	-0.0077	-0.0077	-0.0077	-0.0077	-0.0077	-0.0077	-0.0077
	Tz+	-0.0007	-0.0007	-0.0007	-0.0007	-0.0007	-0.0007	-0.0007	-0.0007	-0.0007
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0005	-0.0005	-0.0004	-0.0003	-0.0003	-0.0002	-0.0001	-0.0001	0.0000
	My+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz-	-0.0010	-0.0009	-0.0008	-0.0006	-0.0005	-0.0004	-0.0003	-0.0001	0.0000
	Mz+	-0.0004	-0.0003	-0.0003	-0.0002	-0.0002	-0.0001	-0.0001	0.0000	0.0000
427/495		0.000 m	0.009 m	0.017 m	0.026 m	0.035 m	0.044 m	0.052 m	0.061 m	0.070 m
		Envolvente (Acero laminado)								
	N-	-1.8954	-1.8954	-1.8954	-1.8954	-1.8954	-1.8954	-1.8954	-1.8954	-1.8954
	N+	1.7906	1.7906	1.7906	1.7906	1.7906	1.7906	1.7906	1.7906	1.7906
	Ty-	-0.0131	-0.0130	-0.0130	-0.0130	-0.0129	-0.0129	-0.0129	-0.0129	-0.0128
	Ty+	-0.0036	-0.0036	-0.0036	-0.0036	-0.0036	-0.0035	-0.0035	-0.0035	-0.0035
	Tz-	-0.0042	-0.0042	-0.0042	-0.0042	-0.0042	-0.0042	-0.0042	-0.0042	-0.0042
	Tz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0003	-0.0003	-0.0002	-0.0002	-0.0001	-0.0001	-0.0001	0.0000	0.0000
	My+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz-	-0.0009	-0.0008	-0.0007	-0.0006	-0.0005	-0.0003	-0.0002	-0.0001	0.0000

## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

	Mz+	-0.0002	-0.0002	-0.0002	-0.0002	-0.0001	-0.0001	-0.0001	0.0000	0.0000
427/497		0.000 m	0.004 m	0.009 m	0.013 m	0.018 m	0.022 m	0.027 m	0.031 m	0.036 m
		Envolvente (Acero Conformado)								
	N-	-0.8996	-0.8996	-0.8996	-0.8996	-0.8996	-0.8996	-0.8996	-0.8996	-0.8996
	N+	0.5707	0.5707	0.5707	0.5707	0.5707	0.5707	0.5707	0.5707	0.5707
	Ty-	-1.3038	-1.3038	-1.3038	-1.3038	-1.3038	-1.3038	-1.3038	-1.3038	-1.3038
	Ty+	-0.1344	-0.1344	-0.1344	-0.1344	-0.1344	-0.1344	-0.1344	-0.1344	-0.1344
	Tz-	0.0325	0.0325	0.0326	0.0326	0.0327	0.0327	0.0328	0.0328	0.0329
	Tz+	0.4722	0.4726	0.4729	0.4733	0.4736	0.4740	0.4744	0.4747	0.4751
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0012	0.0010	0.0009	0.0007	0.0006	0.0004	0.0003	0.0001	0.0000
	My+	0.0170	0.0149	0.0128	0.0106	0.0085	0.0064	0.0043	0.0021	0.0000
	Mz-	-0.0468	-0.0409	-0.0351	-0.0292	-0.0234	-0.0175	-0.0117	-0.0058	0.0000
Mz+	-0.0048	-0.0042	-0.0036	-0.0030	-0.0024	-0.0018	-0.0012	-0.0006	0.0000	
428/429		0.000 m	0.603 m	1.205 m	1.808 m	2.410 m	3.013 m	3.615 m	4.218 m	4.820 m
		Envolvente (Acero laminado)								
	N-	-1.6374	-1.6157	-1.5940	-1.5723	-1.5506	-1.5289	-1.5072	-1.4855	-1.4638
	N+	0.3685	0.3814	0.3942	0.4071	0.4200	0.4328	0.4457	0.4586	0.4714
	Ty-	-0.0194	-0.0194	-0.0194	-0.0194	-0.0194	-0.1476	-0.4187	-0.6899	-0.9610
	Ty+	1.2188	0.9477	0.6766	0.4054	0.1343	0.0240	0.0240	0.0240	0.0240
	Tz-	-0.5111	-0.3981	-0.2852	-0.1722	-0.0592	-0.1051	-0.2858	-0.4666	-0.6473
	Tz+	0.8070	0.6263	0.4455	0.2648	0.0840	0.0621	0.1751	0.2881	0.4010
	Mt-	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003
	Mt+	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006
	My-	-0.4658	-0.1932	-0.0348	-0.2425	-0.3491	-0.3431	-0.2325	-0.0538	-0.2059
	My+	0.7246	0.2950	0.0187	0.1507	0.2214	0.2217	0.1567	0.0612	0.3451
	Mz-	-0.0315	-0.0199	-0.0364	-0.3546	-0.5204	-0.5164	-0.3556	-0.0824	-0.0698
Mz+	1.1101	0.4607	0.0170	0.0060	0.0152	0.0269	0.0386	0.0671	0.4972	
429/430		0.000 m	0.136 m	0.273 m	0.409 m	0.545 m	0.682 m	0.818 m	0.954 m	1.091 m
		Envolvente (Acero laminado)								
	N-	-1.5161	-1.5112	-1.5063	-1.5014	-1.4964	-1.4915	-1.4866	-1.4817	-1.4768
	N+	0.5036	0.5065	0.5094	0.5123	0.5152	0.5182	0.5211	0.5240	0.5269
	Ty-	-0.0645	-0.0645	-0.0645	-0.0645	-0.0645	-0.0645	-0.0645	-0.0645	-0.0645
	Ty+	0.5371	0.5166	0.4962	0.4757	0.4553	0.4348	0.4144	0.3939	0.3735
	Tz-	-0.2934	-0.2934	-0.2934	-0.2934	-0.2934	-0.2934	-0.2934	-0.2934	-0.2934
	Tz+	0.1660	0.1660	0.1660	0.1660	0.1660	0.1660	0.1660	0.1660	0.1660
	Mt-	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003
	Mt+	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006
	My-	-0.2059	-0.1878	-0.1807	-0.1817	-0.1832	-0.1853	-0.1879	-0.1912	-0.1949
	My+	0.3451	0.3255	0.3193	0.3158	0.3124	0.3090	0.3056	0.3021	0.3035
	Mz-	-0.0698	-0.0610	-0.0522	-0.0434	-0.0346	-0.0258	-0.0170	-0.0082	-0.0008
Mz+	0.4972	0.4254	0.3563	0.2901	0.2266	0.1660	0.1080	0.0530	0.0010	
429/433		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-1.0997	-1.0997	-1.0997	-1.0997	-1.0997	-1.0997	-1.0997	-1.0997	-1.0997
	N+	0.7089	0.7089	0.7089	0.7089	0.7089	0.7089	0.7089	0.7089	0.7089
	Ty-	-0.0140	-0.0128	-0.0115	-0.0103	-0.0090	-0.0077	-0.0065	-0.0052	-0.0040
	Ty+	0.0871	0.0878	0.0886	0.0893	0.0900	0.0908	0.0915	0.0923	0.0930
	Tz-	-0.2787	-0.2787	-0.2787	-0.2787	-0.2787	-0.2787	-0.2787	-0.2787	-0.2787
	Tz+	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0017	-0.0034	-0.0051	-0.0068	-0.0085	-0.0102	-0.0119	-0.0136

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE** Adrián Freijomil Aradas

	My+	0.0000	0.0348	0.0697	0.1045	0.1394	0.1742	0.2090	0.2439	0.2787
	Mz-	0.0000	-0.0109	-0.0220	-0.0331	-0.0443	-0.0556	-0.0670	-0.0785	-0.0900
	Mz+	0.0000	0.0017	0.0032	0.0046	0.0058	0.0068	0.0077	0.0084	0.0090
430/431		0.000 m	0.238 m	0.475 m	0.713 m	0.950 m	1.188 m	1.426 m	1.663 m	1.901 m
		Envolvente (Acero Conformado)								
	N-	-0.5633	-0.5620	-0.5608	-0.5595	-0.5582	-0.5569	-0.5556	-0.5543	-0.5530
	N+	-0.0360	-0.0353	-0.0345	-0.0337	-0.0330	-0.0322	-0.0314	-0.0307	-0.0299
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0356	-0.0713	-0.1069	-0.1426
	Ty+	0.1426	0.1069	0.0713	0.0356	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.0285	-0.0214	-0.0143	-0.0071	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0071	0.0143	0.0214	0.0285
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My+	0.0000	0.0059	0.0102	0.0127	0.0136	0.0127	0.0102	0.0059	0.0000
	Mz-	0.0000	-0.0295	-0.0508	-0.0633	-0.0678	-0.0633	-0.0508	-0.0295	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
430/432		0.000 m	0.066 m	0.132 m	0.198 m	0.264 m	0.330 m	0.396 m	0.462 m	0.528 m
		Envolvente (Acero laminado)								
	N-	-0.2286	-0.2285	-0.2284	-0.2283	-0.2282	-0.2281	-0.2279	-0.2278	-0.2277
	N+	0.3105	0.3106	0.3107	0.3108	0.3108	0.3109	0.3110	0.3110	0.3111
	Ty-	-0.1356	-0.1356	-0.1356	-0.1356	-0.1356	-0.1356	-0.1356	-0.1356	-0.1356
	Ty+	0.2924	0.2924	0.2924	0.2924	0.2924	0.2924	0.2924	0.2924	0.2924
	Tz-	-0.9218	-0.9201	-0.9184	-0.9168	-0.9151	-0.9134	-0.9118	-0.9101	-0.9084
	Tz+	0.5577	0.5587	0.5597	0.5607	0.5617	0.5627	0.5637	0.5647	0.5656
	Mt-	-0.0007	-0.0007	-0.0007	-0.0007	-0.0007	-0.0007	-0.0007	-0.0007	-0.0007
	Mt+	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010
	My-	-0.3035	-0.2427	-0.1856	-0.1326	-0.0828	-0.0332	-0.0271	-0.0643	-0.1016
	My+	0.1949	0.1581	0.1212	0.0842	0.0472	0.0221	0.0744	0.1327	0.1909
	Mz-	-0.0003	-0.0186	-0.0379	-0.0572	-0.0765	-0.0958	-0.1151	-0.1344	-0.1537
	Mz+	0.0007	0.0086	0.0176	0.0265	0.0355	0.0444	0.0533	0.0623	0.0712
431/435		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-2.1230	-2.1230	-2.1230	-2.1230	-2.1230	-2.1230	-2.1230	-2.1230	-2.1230
	N+	1.3262	1.3262	1.3262	1.3262	1.3262	1.3262	1.3262	1.3262	1.3262
	Ty-	-0.2363	-0.2261	-0.2159	-0.2057	-0.1955	-0.1853	-0.1751	-0.1649	-0.1547
	Ty+	0.0535	0.0596	0.0656	0.0717	0.0777	0.0837	0.0898	0.0958	0.1019
	Tz-	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456	-0.0456
	Tz+	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0001	-0.0001	-0.0002	-0.0002	-0.0003	-0.0003	-0.0004	-0.0005
	My+	0.0000	0.0057	0.0114	0.0171	0.0228	0.0285	0.0342	0.0399	0.0456
	Mz-	0.0000	-0.0071	-0.0149	-0.0235	-0.0328	-0.0429	-0.0537	-0.0653	-0.0777
	Mz+	0.0000	0.0289	0.0565	0.0829	0.1080	0.1318	0.1543	0.1756	0.1955
432/434		0.000 m	0.059 m	0.119 m	0.178 m	0.237 m	0.297 m	0.356 m	0.415 m	0.475 m
		Envolvente (Acero laminado)								
	N-	-0.4674	-0.4673	-0.4673	-0.4672	-0.4671	-0.4671	-0.4670	-0.4670	-0.4669
	N+	0.6334	0.6335	0.6336	0.6337	0.6338	0.6339	0.6340	0.6341	0.6342
	Ty-	-0.4029	-0.4029	-0.4029	-0.4029	-0.4029	-0.4029	-0.4029	-0.4029	-0.4029
	Ty+	0.2307	0.2307	0.2307	0.2307	0.2307	0.2307	0.2307	0.2307	0.2307
	Tz-	-0.5522	-0.5507	-0.5492	-0.5477	-0.5462	-0.5447	-0.5432	-0.5417	-0.5402
	Tz+	-0.0888	-0.0880	-0.0871	-0.0862	-0.0853	-0.0844	-0.0835	-0.0826	-0.0817
	Mt-	-0.0007	-0.0007	-0.0007	-0.0007	-0.0007	-0.0007	-0.0007	-0.0007	-0.0007

## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

	Mt+	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010
	My-	-0.1016	-0.0964	-0.0912	-0.0860	-0.0809	-0.0759	-0.0709	-0.0660	-0.0611
	My+	0.1909	0.2205	0.2500	0.2794	0.3097	0.3420	0.3742	0.4063	0.4384
	Mz-	-0.1537	-0.1298	-0.1059	-0.0820	-0.0581	-0.0409	-0.0399	-0.0470	-0.0603
	Mz+	0.0712	0.0606	0.0500	0.0393	0.0287	0.0180	0.0074	0.0136	0.0375
433/434		0.000 m	0.145 m	0.290 m	0.435 m	0.580 m	0.725 m	0.871 m	1.016 m	1.161 m
		Envolvente (Acero Conformado)								
	N-	-0.0040	-0.0025	-0.0011	0.0003	0.0017	0.0032	0.0046	0.0060	0.0075
	N+	0.1453	0.1477	0.1502	0.1526	0.1550	0.1574	0.1598	0.1622	0.1646
	Ty-	-0.1571	-0.1571	-0.1571	-0.1571	-0.1571	-0.1571	-0.1571	-0.1571	-0.1571
	Ty+	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013
	Tz-	-0.0152	-0.0152	-0.0152	-0.0152	-0.0152	-0.0152	-0.0152	-0.0152	-0.0152
	Tz+	0.4357	0.4575	0.4792	0.5010	0.5228	0.5445	0.5663	0.5881	0.6098
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0649	-0.1328	-0.2039	-0.2781	-0.3556	-0.4361	-0.5200	-0.6068
	My+	0.0000	0.0022	0.0044	0.0066	0.0088	0.0110	0.0132	0.0155	0.0177
	Mz-	0.0000	-0.0002	-0.0004	-0.0006	-0.0008	-0.0010	-0.0012	-0.0014	-0.0016
	Mz+	0.0000	0.0228	0.0456	0.0684	0.0912	0.1139	0.1367	0.1595	0.1823
433/437		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-0.9447	-0.9447	-0.9447	-0.9447	-0.9447	-0.9447	-0.9447	-0.9447	-0.9447
	N+	0.7266	0.7266	0.7266	0.7266	0.7266	0.7266	0.7266	0.7266	0.7266
	Ty-	-0.0525	-0.0513	-0.0502	-0.0495	-0.0487	-0.0480	-0.0472	-0.0465	-0.0457
	Ty+	0.0002	0.0010	0.0019	0.0032	0.0044	0.0057	0.0070	0.0082	0.0095
	Tz-	-0.0016	-0.0016	-0.0016	-0.0016	-0.0016	-0.0016	-0.0016	-0.0016	-0.0016
	Tz+	0.1570	0.1570	0.1570	0.1570	0.1570	0.1570	0.1570	0.1570	0.1570
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0136	-0.0134	-0.0132	-0.0131	-0.0129	-0.0127	-0.0125	-0.0123	-0.0121
	My+	0.2787	0.2591	0.2395	0.2199	0.2002	0.1806	0.1610	0.1414	0.1217
	Mz-	-0.0900	-0.0836	-0.0773	-0.0711	-0.0649	-0.0589	-0.0530	-0.0471	-0.0413
	Mz+	0.0090	0.0090	0.0088	0.0085	0.0080	0.0074	0.0066	0.0057	0.0046
434/435		0.000 m	0.229 m	0.458 m	0.687 m	0.915 m	1.144 m	1.373 m	1.602 m	1.831 m
		Envolvente (Acero Conformado)								
	N-	-0.1732	-0.1710	-0.1687	-0.1665	-0.1642	-0.1620	-0.1597	-0.1575	-0.1552
	N+	0.1382	0.1420	0.1458	0.1496	0.1534	0.1572	0.1610	0.1648	0.1686
	Ty-	-0.0205	-0.0205	-0.0205	-0.0205	-0.0205	-0.0205	-0.0205	-0.0205	-0.0205
	Ty+	0.0635	0.0635	0.0635	0.0635	0.0635	0.0635	0.0635	0.0635	0.0635
	Tz-	-0.2760	-0.2417	-0.2074	-0.1730	-0.1387	-0.1044	-0.0700	-0.0370	-0.0314
	Tz+	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.2539	-0.1949	-0.1433	-0.0999	-0.0641	-0.0365	-0.0163	-0.0072	0.0000
	My+	0.0006	0.0005	0.0004	0.0004	0.0003	0.0002	0.0001	0.0001	0.0000
	Mz-	-0.0375	-0.0328	-0.0281	-0.0235	-0.0188	-0.0141	-0.0094	-0.0047	0.0000
	Mz+	0.1162	0.1017	0.0872	0.0726	0.0581	0.0436	0.0291	0.0145	0.0000
434/436		0.000 m	0.109 m	0.219 m	0.328 m	0.437 m	0.547 m	0.656 m	0.765 m	0.875 m
		Envolvente (Acero laminado)								
	N-	-0.7641	-0.7639	-0.7637	-0.7635	-0.7633	-0.7632	-0.7630	-0.7628	-0.7626
	N+	0.1952	0.1953	0.1954	0.1955	0.1957	0.1958	0.1959	0.1960	0.1961
	Ty-	-0.0026	-0.0026	-0.0026	-0.0026	-0.0026	-0.0026	-0.0026	-0.0026	-0.0026
	Ty+	0.0037	0.0037	0.0037	0.0037	0.0037	0.0037	0.0037	0.0037	0.0037
	Tz-	-0.5068	-0.5040	-0.5013	-0.4985	-0.4957	-0.4930	-0.4902	-0.4874	-0.4847

## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

	Tz+	0.1313	0.1330	0.1346	0.1363	0.1379	0.1395	0.1412	0.1428	0.1444
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.2474	-0.1921	-0.1372	-0.0826	-0.0282	-0.0075	-0.0229	-0.0384	-0.0541
	My+	0.0665	0.0521	0.0374	0.0226	0.0076	0.0258	0.0796	0.1330	0.1862
	Mz-	-0.0008	-0.0006	-0.0003	0.0000	-0.0004	-0.0008	-0.0012	-0.0016	-0.0020
	Mz+	0.0012	0.0008	0.0004	0.0000	0.0003	0.0006	0.0008	0.0011	0.0014
435/439		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
	Envolvente (Acero laminado)									
	N-	-2.0596	-2.0596	-2.0596	-2.0596	-2.0596	-2.0596	-2.0596	-2.0596	-2.0596
	N+	1.3058	1.3058	1.3058	1.3058	1.3058	1.3058	1.3058	1.3058	1.3058
	Ty-	-0.0588	-0.0486	-0.0412	-0.0352	-0.0291	-0.0231	-0.0171	-0.0110	-0.0050
	Ty+	0.0194	0.0254	0.0343	0.0445	0.0547	0.0649	0.0751	0.0853	0.0955
	Tz-	-0.0158	-0.0158	-0.0158	-0.0158	-0.0158	-0.0158	-0.0158	-0.0158	-0.0158
	Tz+	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005	-0.0006	-0.0006	-0.0006	-0.0006
	My+	0.0456	0.0473	0.0491	0.0509	0.0527	0.0544	0.0562	0.0580	0.0598
	Mz-	-0.0777	-0.0714	-0.0659	-0.0611	-0.0571	-0.0538	-0.0513	-0.0496	-0.0486
	Mz+	0.1955	0.1932	0.1901	0.1862	0.1810	0.1746	0.1669	0.1579	0.1476
436/438		0.000 m	0.016 m	0.032 m	0.048 m	0.064 m	0.080 m	0.096 m	0.112 m	0.128 m
	Envolvente (Acero laminado)									
	N-	-0.7757	-0.7757	-0.7757	-0.7757	-0.7756	-0.7756	-0.7756	-0.7755	-0.7755
	N+	0.2137	0.2137	0.2138	0.2138	0.2138	0.2138	0.2138	0.2138	0.2139
	Ty-	-0.0743	-0.0743	-0.0743	-0.0743	-0.0743	-0.0743	-0.0743	-0.0743	-0.0743
	Ty+	0.0523	0.0523	0.0523	0.0523	0.0523	0.0523	0.0523	0.0523	0.0523
	Tz-	-0.2985	-0.2980	-0.2976	-0.2972	-0.2968	-0.2964	-0.2960	-0.2956	-0.2952
	Tz+	-0.0810	-0.0807	-0.0805	-0.0803	-0.0800	-0.0798	-0.0795	-0.0793	-0.0791
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0541	-0.0528	-0.0515	-0.0502	-0.0489	-0.0477	-0.0464	-0.0451	-0.0439
	My+	0.1862	0.1892	0.1923	0.1954	0.1984	0.2015	0.2045	0.2076	0.2106
	Mz-	-0.0020	-0.0008	-0.0003	-0.0011	-0.0019	-0.0028	-0.0036	-0.0044	-0.0053
	Mz+	0.0014	0.0006	0.0004	0.0016	0.0027	0.0039	0.0051	0.0063	0.0075
437/438		0.000 m	0.154 m	0.308 m	0.461 m	0.615 m	0.769 m	0.923 m	1.077 m	1.231 m
	Envolvente (Acero Conformado)									
	N-	-0.0121	-0.0106	-0.0091	-0.0076	-0.0061	-0.0046	-0.0030	-0.0015	0.0000
	N+	0.0147	0.0173	0.0198	0.0224	0.0250	0.0275	0.0301	0.0326	0.0352
	Ty-	-0.0149	-0.0149	-0.0149	-0.0149	-0.0149	-0.0149	-0.0149	-0.0149	-0.0149
	Ty+	0.0174	0.0174	0.0174	0.0174	0.0174	0.0174	0.0174	0.0174	0.0174
	Tz-	-0.0691	-0.0460	-0.0229	-0.0154	-0.0154	-0.0154	-0.0154	-0.0154	-0.0154
	Tz+	0.0001	0.0001	0.0001	0.0028	0.0238	0.0469	0.0700	0.0931	0.1161
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	0.0000	0.0000	-0.0001	-0.0001	-0.0001	-0.0007	-0.0133	-0.0293
	My+	0.0000	0.0088	0.0142	0.0158	0.0141	0.0118	0.0142	0.0166	0.0189
	Mz-	0.0000	-0.0027	-0.0053	-0.0080	-0.0107	-0.0134	-0.0160	-0.0187	-0.0214
	Mz+	0.0000	0.0023	0.0046	0.0069	0.0092	0.0115	0.0137	0.0160	0.0183
437/440		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
	Envolvente (Acero Conformado)									
	N-	-0.9325	-0.9325	-0.9325	-0.9325	-0.9325	-0.9325	-0.9325	-0.9325	-0.9325
	N+	0.7107	0.7107	0.7107	0.7107	0.7107	0.7107	0.7107	0.7107	0.7107
	Ty-	-0.0358	-0.0345	-0.0332	-0.0320	-0.0307	-0.0299	-0.0291	-0.0284	-0.0276

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE** Adrián Freijomil Aradas

	Ty+	-0.0031	-0.0023	-0.0016	-0.0009	-0.0001	0.0010	0.0023	0.0036	0.0048
	Tz-	-0.0027	-0.0027	-0.0027	-0.0027	-0.0027	-0.0027	-0.0027	-0.0027	-0.0027
	Tz+	0.0885	0.0885	0.0885	0.0885	0.0885	0.0885	0.0885	0.0885	0.0885
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0121	-0.0117	-0.0114	-0.0111	-0.0107	-0.0104	-0.0100	-0.0097	-0.0094
	My+	0.1217	0.1107	0.0996	0.0886	0.0775	0.0664	0.0554	0.0443	0.0332
	Mz-	-0.0413	-0.0372	-0.0331	-0.0292	-0.0253	-0.0215	-0.0178	-0.0142	-0.0107
	Mz+	0.0046	0.0051	0.0056	0.0058	0.0059	0.0059	0.0057	0.0053	0.0048
438/439		0.000 m	0.220 m	0.440 m	0.660 m	0.881 m	1.101 m	1.321 m	1.541 m	1.761 m
		Envolvente (Acero Conformado)								
	N-	-0.1640	-0.1603	-0.1567	-0.1530	-0.1494	-0.1457	-0.1420	-0.1384	-0.1347
	N+	-0.0491	-0.0469	-0.0447	-0.0426	-0.0404	-0.0382	-0.0361	-0.0339	-0.0317
	Ty-	-0.0275	-0.0275	-0.0275	-0.0275	-0.0275	-0.0275	-0.0275	-0.0275	-0.0275
	Ty+	0.0654	0.0654	0.0654	0.0654	0.0654	0.0654	0.0654	0.0654	0.0654
	Tz-	-0.2616	-0.2286	-0.1956	-0.1626	-0.1296	-0.0965	-0.0635	-0.0305	-0.0189
	Tz+	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0026
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.2281	-0.1743	-0.1275	-0.0882	-0.0559	-0.0312	-0.0134	-0.0042	0.0000
	My+	0.0003	0.0003	0.0003	0.0002	0.0002	0.0001	0.0001	0.0000	0.0000
	Mz-	-0.0484	-0.0423	-0.0363	-0.0302	-0.0242	-0.0181	-0.0121	-0.0060	0.0000
	Mz+	0.1152	0.1008	0.0864	0.0720	0.0576	0.0432	0.0288	0.0144	0.0000
438/441		0.000 m	0.125 m	0.251 m	0.376 m	0.501 m	0.627 m	0.752 m	0.877 m	1.002 m
		Envolvente (Acero laminado)								
	N-	-0.1636	-0.1633	-0.1631	-0.1629	-0.1627	-0.1625	-0.1622	-0.1620	-0.1618
	N+	0.0063	0.0064	0.0065	0.0067	0.0068	0.0069	0.0071	0.0072	0.0073
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.1132	-0.1100	-0.1069	-0.1037	-0.1005	-0.0974	-0.0942	-0.0910	-0.0879
	Tz+	-0.0033	-0.0014	0.0005	0.0023	0.0042	0.0061	0.0080	0.0098	0.0117
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0525	-0.0385	-0.0249	-0.0117	0.0006	0.0000	-0.0009	-0.0020	-0.0034
	My+	0.0009	0.0012	0.0012	0.0010	0.0011	0.0135	0.0255	0.0371	0.0483
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
439/442		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-1.9942	-1.9942	-1.9942	-1.9942	-1.9942	-1.9942	-1.9942	-1.9942	-1.9942
	N+	1.2784	1.2784	1.2784	1.2784	1.2784	1.2784	1.2784	1.2784	1.2784
	Ty-	-0.0820	-0.0718	-0.0616	-0.0525	-0.0464	-0.0404	-0.0343	-0.0283	-0.0222
	Ty+	-0.0062	-0.0001	0.0059	0.0130	0.0232	0.0334	0.0436	0.0538	0.0640
	Tz-	-0.0183	-0.0183	-0.0183	-0.0183	-0.0183	-0.0183	-0.0183	-0.0183	-0.0183
	Tz+	0.0048	0.0048	0.0048	0.0048	0.0048	0.0048	0.0048	0.0048	0.0048
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006
	My+	0.0598	0.0592	0.0586	0.0580	0.0574	0.0568	0.0562	0.0556	0.0550
	Mz-	-0.0486	-0.0443	-0.0409	-0.0382	-0.0362	-0.0351	-0.0346	-0.0349	-0.0360
	Mz+	0.1476	0.1492	0.1495	0.1485	0.1462	0.1427	0.1379	0.1318	0.1245
440/441		0.000 m	0.163 m	0.325 m	0.488 m	0.650 m	0.813 m	0.975 m	1.138 m	1.301 m
		Envolvente (Acero Conformado)								
	N-	-0.0216	-0.0200	-0.0184	-0.0168	-0.0152	-0.0136	-0.0120	-0.0104	-0.0088

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE** Adrián Freijomil Aradas

	N+	0.0075	0.0102	0.0129	0.0156	0.0183	0.0210	0.0237	0.0264	0.0291
	Ty-	-0.0052	-0.0052	-0.0052	-0.0052	-0.0052	-0.0052	-0.0052	-0.0052	-0.0052
	Ty+	0.0166	0.0166	0.0166	0.0166	0.0166	0.0166	0.0166	0.0166	0.0166
	Tz-	-0.0755	-0.0584	-0.0414	-0.0251	-0.0224	-0.0224	-0.0224	-0.0224	-0.0224
	Tz+	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004	0.0105	0.0276	0.0447	0.0618
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	0.0001	0.0001	0.0002	0.0003	0.0004	0.0004	0.0005	0.0006
	My+	0.0000	0.0108	0.0190	0.0243	0.0269	0.0266	0.0237	0.0255	0.0292
	Mz-	0.0000	-0.0027	-0.0054	-0.0081	-0.0108	-0.0135	-0.0162	-0.0189	-0.0216
	Mz+	0.0000	0.0008	0.0017	0.0025	0.0034	0.0042	0.0051	0.0059	0.0068
440/444		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-0.9301	-0.9301	-0.9301	-0.9301	-0.9301	-0.9301	-0.9301	-0.9301	-0.9301
	N+	0.6953	0.6953	0.6953	0.6953	0.6953	0.6953	0.6953	0.6953	0.6953
	Ty-	-0.0078	-0.0065	-0.0053	-0.0044	-0.0037	-0.0029	-0.0022	-0.0015	-0.0007
	Ty+	-0.0006	0.0002	0.0009	0.0021	0.0033	0.0046	0.0059	0.0071	0.0084
	Tz-	-0.0036	-0.0036	-0.0036	-0.0036	-0.0036	-0.0036	-0.0036	-0.0036	-0.0036
	Tz+	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0094	-0.0089	-0.0085	-0.0080	-0.0076	-0.0071	-0.0067	-0.0063	-0.0058
	My+	0.0332	0.0315	0.0298	0.0281	0.0264	0.0247	0.0230	0.0213	0.0196
	Mz-	-0.0107	-0.0099	-0.0092	-0.0086	-0.0081	-0.0077	-0.0074	-0.0072	-0.0070
	Mz+	0.0048	0.0049	0.0049	0.0047	0.0044	0.0039	0.0032	0.0024	0.0014
441/442		0.000 m	0.211 m	0.423 m	0.634 m	0.846 m	1.057 m	1.268 m	1.480 m	1.691 m
		Envolvente (Acero Conformado)								
	N-	-0.1276	-0.1241	-0.1206	-0.1171	-0.1136	-0.1100	-0.1065	-0.1030	-0.0995
	N+	-0.0009	0.0012	0.0033	0.0054	0.0075	0.0095	0.0116	0.0137	0.0158
	Ty-	-0.0345	-0.0345	-0.0345	-0.0345	-0.0345	-0.0345	-0.0345	-0.0345	-0.0345
	Ty+	0.0682	0.0682	0.0682	0.0682	0.0682	0.0682	0.0682	0.0682	0.0682
	Tz-	-0.2002	-0.1780	-0.1558	-0.1336	-0.1114	-0.0892	-0.0670	-0.0448	-0.0226
	Tz+	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.1883	-0.1485	-0.1131	-0.0826	-0.0566	-0.0355	-0.0189	-0.0072	0.0000
	My+	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0000	0.0000	0.0000
	Mz-	-0.0583	-0.0510	-0.0437	-0.0365	-0.0292	-0.0219	-0.0146	-0.0073	0.0000
	Mz+	0.1153	0.1009	0.0865	0.0721	0.0577	0.0432	0.0288	0.0144	0.0000
441/443		0.000 m	0.027 m	0.055 m	0.082 m	0.109 m	0.137 m	0.164 m	0.191 m	0.219 m
		Envolvente (Acero laminado)								
	N-	-0.1579	-0.1579	-0.1578	-0.1578	-0.1578	-0.1577	-0.1577	-0.1577	-0.1577
	N+	0.5372	0.5372	0.5373	0.5373	0.5374	0.5374	0.5375	0.5375	0.5376
	Ty-	-0.3040	-0.3040	-0.3040	-0.3040	-0.3040	-0.3040	-0.3040	-0.3040	-0.3040
	Ty+	0.0720	0.0720	0.0720	0.0720	0.0720	0.0720	0.0720	0.0720	0.0720
	Tz-	-0.0683	-0.0678	-0.0674	-0.0670	-0.0666	-0.0662	-0.0658	-0.0654	-0.0650
	Tz+	0.1283	0.1290	0.1297	0.1304	0.1311	0.1318	0.1325	0.1331	0.1338
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0217	-0.0242	-0.0268	-0.0294	-0.0320	-0.0346	-0.0373	-0.0399	-0.0426
	My+	0.1244	0.1228	0.1211	0.1194	0.1177	0.1160	0.1143	0.1125	0.1108
	Mz-	-0.0460	-0.0377	-0.0294	-0.0210	-0.0127	-0.0044	-0.0009	-0.0029	-0.0049
	Mz+	0.0109	0.0089	0.0070	0.0050	0.0030	0.0010	0.0039	0.0122	0.0205
442/446		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m



## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

		Envolvente (Acero laminado)								
	N-	-1.9261	-1.9261	-1.9261	-1.9261	-1.9261	-1.9261	-1.9261	-1.9261	-1.9261
	N+	1.2440	1.2440	1.2440	1.2440	1.2440	1.2440	1.2440	1.2440	1.2440
	Ty-	-0.0449	-0.0347	-0.0245	-0.0143	-0.0068	-0.0007	0.0053	0.0114	0.0174
	Ty+	-0.0002	0.0059	0.0119	0.0180	0.0267	0.0369	0.0471	0.0573	0.0675
	Tz-	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001
	Tz+	0.0133	0.0133	0.0133	0.0133	0.0133	0.0133	0.0133	0.0133	0.0133
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0006	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005	-0.0004	-0.0004
	My+	0.0550	0.0533	0.0517	0.0500	0.0491	0.0486	0.0480	0.0475	0.0470
	Mz-	-0.0360	-0.0327	-0.0301	-0.0283	-0.0272	-0.0269	-0.0273	-0.0285	-0.0304
	Mz+	0.1245	0.1270	0.1282	0.1282	0.1269	0.1243	0.1204	0.1153	0.1089
443/445		0.000 m	0.098 m	0.196 m	0.294 m	0.392 m	0.490 m	0.588 m	0.686 m	0.784 m
		Envolvente (Acero laminado)								
	N-	-0.1532	-0.1531	-0.1530	-0.1529	-0.1528	-0.1527	-0.1526	-0.1525	-0.1524
	N+	0.5143	0.5145	0.5146	0.5148	0.5150	0.5152	0.5153	0.5155	0.5157
	Ty-	-0.0103	-0.0103	-0.0103	-0.0103	-0.0103	-0.0103	-0.0103	-0.0103	-0.0103
	Ty+	0.0433	0.0433	0.0433	0.0433	0.0433	0.0433	0.0433	0.0433	0.0433
	Tz-	-0.1354	-0.1340	-0.1325	-0.1310	-0.1296	-0.1281	-0.1266	-0.1252	-0.1237
	Tz+	0.3599	0.3624	0.3649	0.3673	0.3698	0.3723	0.3748	0.3772	0.3797
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0426	-0.0294	-0.0163	-0.0034	-0.0322	-0.0686	-0.1051	-0.1420	-0.1791
	My+	0.1108	0.0754	0.0398	0.0043	0.0093	0.0220	0.0344	0.0468	0.0589
	Mz-	-0.0049	-0.0039	-0.0029	-0.0018	-0.0008	-0.0007	-0.0049	-0.0092	-0.0134
	Mz+	0.0205	0.0163	0.0120	0.0078	0.0036	0.0002	0.0012	0.0022	0.0032
444/445		0.000 m	0.171 m	0.343 m	0.514 m	0.685 m	0.857 m	1.028 m	1.199 m	1.370 m
		Envolvente (Acero Conformado)								
	N-	0.0013	0.0030	0.0047	0.0064	0.0080	0.0097	0.0114	0.0131	0.0148
	N+	0.0169	0.0197	0.0226	0.0254	0.0283	0.0311	0.0340	0.0368	0.0397
	Ty-	-0.0246	-0.0246	-0.0246	-0.0246	-0.0246	-0.0246	-0.0246	-0.0246	-0.0246
	Ty+	0.0106	0.0106	0.0106	0.0106	0.0106	0.0106	0.0106	0.0106	0.0106
	Tz-	-0.0092	-0.0092	-0.0092	-0.0092	-0.0092	-0.0092	-0.0092	-0.0092	-0.0092
	Tz+	0.0028	0.0208	0.0388	0.0568	0.0748	0.0928	0.1108	0.1288	0.1467
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0021	-0.0071	-0.0154	-0.0266	-0.0410	-0.0584	-0.0790	-0.1025
	My+	0.0000	0.0016	0.0032	0.0047	0.0063	0.0079	0.0095	0.0111	0.0127
	Mz-	0.0000	-0.0018	-0.0036	-0.0055	-0.0073	-0.0091	-0.0109	-0.0128	-0.0146
	Mz+	0.0000	0.0042	0.0084	0.0127	0.0169	0.0211	0.0253	0.0295	0.0337
444/448		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-0.9074	-0.9074	-0.9074	-0.9074	-0.9074	-0.9074	-0.9074	-0.9074	-0.9074
	N+	0.6865	0.6865	0.6865	0.6865	0.6865	0.6865	0.6865	0.6865	0.6865
	Ty-	-0.0140	-0.0127	-0.0114	-0.0102	-0.0089	-0.0077	-0.0070	-0.0062	-0.0055
	Ty+	-0.0016	-0.0008	-0.0001	0.0006	0.0014	0.0022	0.0035	0.0047	0.0060
	Tz-	-0.0089	-0.0089	-0.0089	-0.0089	-0.0089	-0.0089	-0.0089	-0.0089	-0.0089
	Tz+	0.0165	0.0165	0.0165	0.0165	0.0165	0.0165	0.0165	0.0165	0.0165
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0058	-0.0047	-0.0036	-0.0025	-0.0013	-0.0006	-0.0003	-0.0002	-0.0004
	My+	0.0196	0.0176	0.0155	0.0135	0.0114	0.0096	0.0080	0.0063	0.0047
	Mz-	-0.0070	-0.0057	-0.0045	-0.0033	-0.0022	-0.0013	-0.0012	-0.0016	-0.0021

## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

	Mz+	0.0014	0.0022	0.0027	0.0032	0.0034	0.0036	0.0035	0.0033	0.0030
445/446		0.000 m	0.203 m	0.405 m	0.608 m	0.811 m	1.013 m	1.216 m	1.419 m	1.621 m
		Envolvente (Acero Conformado)								
	N-	-0.1023	-0.0989	-0.0956	-0.0922	-0.0888	-0.0855	-0.0821	-0.0787	-0.0754
	N+	-0.0204	-0.0184	-0.0164	-0.0144	-0.0124	-0.0104	-0.0084	-0.0064	-0.0044
	Ty-	-0.0414	-0.0414	-0.0414	-0.0414	-0.0414	-0.0414	-0.0414	-0.0414	-0.0414
	Ty+	0.0723	0.0723	0.0723	0.0723	0.0723	0.0723	0.0723	0.0723	0.0723
	Tz-	-0.1901	-0.1688	-0.1475	-0.1263	-0.1050	-0.0837	-0.0624	-0.0412	-0.0199
	Tz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.1702	-0.1339	-0.1018	-0.0741	-0.0506	-0.0316	-0.0167	-0.0063	0.0000
	My+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz-	-0.0672	-0.0588	-0.0504	-0.0420	-0.0336	-0.0252	-0.0168	-0.0084	0.0000
	Mz+	0.1173	0.1026	0.0880	0.0733	0.0586	0.0440	0.0293	0.0147	0.0000
445/447		0.000 m	0.071 m	0.141 m	0.212 m	0.283 m	0.353 m	0.424 m	0.495 m	0.565 m
		Envolvente (Acero laminado)								
	N-	-0.2721	-0.2720	-0.2719	-0.2719	-0.2718	-0.2717	-0.2716	-0.2716	-0.2715
	N+	0.9666	0.9667	0.9668	0.9669	0.9671	0.9672	0.9673	0.9674	0.9676
	Ty-	-0.0420	-0.0420	-0.0420	-0.0420	-0.0420	-0.0420	-0.0420	-0.0420	-0.0420
	Ty+	0.0157	0.0157	0.0157	0.0157	0.0157	0.0157	0.0157	0.0157	0.0157
	Tz-	-0.0794	-0.0783	-0.0773	-0.0762	-0.0752	-0.0741	-0.0730	-0.0720	-0.0709
	Tz+	0.4634	0.4651	0.4669	0.4687	0.4705	0.4723	0.4741	0.4759	0.4776
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0580	-0.0524	-0.0469	-0.0415	-0.0362	-0.0309	-0.0257	-0.0206	-0.0305
	My+	0.2624	0.2296	0.1967	0.1636	0.1304	0.0971	0.0636	0.0301	0.0004
	Mz-	-0.0112	-0.0082	-0.0052	-0.0023	-0.0003	-0.0014	-0.0025	-0.0036	-0.0047
	Mz+	0.0042	0.0031	0.0020	0.0008	0.0007	0.0037	0.0066	0.0096	0.0126
446/450		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-1.8538	-1.8538	-1.8538	-1.8538	-1.8538	-1.8538	-1.8538	-1.8538	-1.8538
	N+	1.2026	1.2026	1.2026	1.2026	1.2026	1.2026	1.2026	1.2026	1.2026
	Ty-	-0.0175	-0.0100	-0.0039	0.0021	0.0082	0.0142	0.0203	0.0263	0.0323
	Ty+	0.0204	0.0291	0.0393	0.0495	0.0597	0.0699	0.0801	0.0903	0.1005
	Tz-	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001
	Tz+	0.0242	0.0242	0.0242	0.0242	0.0242	0.0242	0.0242	0.0242	0.0242
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0004	-0.0004	-0.0004	-0.0004	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003
	My+	0.0470	0.0439	0.0409	0.0379	0.0349	0.0326	0.0308	0.0290	0.0272
	Mz-	-0.0304	-0.0325	-0.0353	-0.0389	-0.0432	-0.0483	-0.0541	-0.0607	-0.0681
	Mz+	0.1089	0.1079	0.1061	0.1029	0.0985	0.0929	0.0859	0.0777	0.0682
447/449		0.000 m	0.055 m	0.109 m	0.164 m	0.218 m	0.273 m	0.328 m	0.382 m	0.437 m
		Envolvente (Acero laminado)								
	N-	-0.2508	-0.2508	-0.2507	-0.2506	-0.2506	-0.2505	-0.2505	-0.2504	-0.2504
	N+	0.9348	0.9349	0.9350	0.9351	0.9352	0.9353	0.9354	0.9355	0.9356
	Ty-	-0.0230	-0.0230	-0.0230	-0.0230	-0.0230	-0.0230	-0.0230	-0.0230	-0.0230
	Ty+	0.0616	0.0616	0.0616	0.0616	0.0616	0.0616	0.0616	0.0616	0.0616
	Tz-	-0.2886	-0.2878	-0.2869	-0.2861	-0.2853	-0.2845	-0.2837	-0.2829	-0.2820
	Tz+	0.7500	0.7514	0.7528	0.7542	0.7556	0.7569	0.7583	0.7597	0.7611
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0305	-0.0446	-0.0857	-0.1269	-0.1681	-0.2094	-0.2508	-0.2923	-0.3338

## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

	My+	0.0004	0.0002	0.0159	0.0316	0.0472	0.0627	0.0783	0.0937	0.1092
	Mz-	-0.0047	-0.0034	-0.0022	-0.0009	-0.0009	-0.0043	-0.0076	-0.0110	-0.0143
	Mz+	0.0126	0.0092	0.0058	0.0025	0.0003	0.0016	0.0028	0.0041	0.0054
448/449		0.000 m	0.180 m	0.360 m	0.540 m	0.720 m	0.900 m	1.080 m	1.260 m	1.440 m
		Envolvente (Acero Conformado)								
	N-	-0.0154	-0.0124	-0.0094	-0.0071	-0.0054	-0.0036	-0.0018	0.0000	0.0017
	N+	0.0274	0.0292	0.0310	0.0335	0.0365	0.0395	0.0425	0.0455	0.0485
	Ty-	-0.0505	-0.0505	-0.0505	-0.0505	-0.0505	-0.0505	-0.0505	-0.0505	-0.0505
	Ty+	0.0062	0.0062	0.0062	0.0062	0.0062	0.0062	0.0062	0.0062	0.0062
	Tz-	-0.0085	-0.0085	-0.0085	-0.0085	-0.0085	-0.0085	-0.0085	-0.0085	-0.0085
	Tz+	0.0996	0.1185	0.1374	0.1563	0.1752	0.1941	0.2131	0.2320	0.2509
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0197	-0.0427	-0.0692	-0.0990	-0.1323	-0.1689	-0.2090	-0.2524
	My+	0.0000	0.0015	0.0031	0.0046	0.0061	0.0076	0.0092	0.0107	0.0122
	Mz-	0.0000	-0.0011	-0.0022	-0.0033	-0.0045	-0.0056	-0.0067	-0.0078	-0.0089
	Mz+	0.0000	0.0091	0.0182	0.0273	0.0364	0.0455	0.0546	0.0637	0.0728
448/454		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-0.8587	-0.8587	-0.8587	-0.8587	-0.8587	-0.8587	-0.8587	-0.8587	-0.8587
	N+	0.6830	0.6830	0.6830	0.6830	0.6830	0.6830	0.6830	0.6830	0.6830
	Ty-	-0.0326	-0.0318	-0.0311	-0.0303	-0.0296	-0.0288	-0.0281	-0.0273	-0.0266
	Ty+	0.0189	0.0201	0.0214	0.0227	0.0239	0.0252	0.0264	0.0277	0.0290
	Tz-	-0.0174	-0.0174	-0.0174	-0.0174	-0.0174	-0.0174	-0.0174	-0.0174	-0.0174
	Tz+	0.1160	0.1160	0.1160	0.1160	0.1160	0.1160	0.1160	0.1160	0.1160
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0004	-0.0113	-0.0258	-0.0404	-0.0549	-0.0694	-0.0839	-0.0984	-0.1129
	My+	0.0047	0.0053	0.0075	0.0097	0.0118	0.0140	0.0162	0.0184	0.0206
	Mz-	-0.0021	-0.0011	-0.0021	-0.0048	-0.0077	-0.0108	-0.0140	-0.0174	-0.0210
	Mz+	0.0030	0.0054	0.0090	0.0129	0.0166	0.0203	0.0238	0.0273	0.0307
449/450		0.000 m	0.194 m	0.388 m	0.582 m	0.776 m	0.970 m	1.163 m	1.357 m	1.551 m
		Envolvente (Acero Conformado)								
	N-	-0.2322	-0.2303	-0.2283	-0.2264	-0.2245	-0.2226	-0.2207	-0.2188	-0.2169
	N+	0.4874	0.4906	0.4938	0.4970	0.5003	0.5035	0.5067	0.5099	0.5131
	Ty-	-0.0485	-0.0485	-0.0485	-0.0485	-0.0485	-0.0485	-0.0485	-0.0485	-0.0485
	Ty+	0.0784	0.0784	0.0784	0.0784	0.0784	0.0784	0.0784	0.0784	0.0784
	Tz-	-0.1830	-0.1627	-0.1423	-0.1219	-0.1016	-0.0812	-0.0609	-0.0405	-0.0201
	Tz+	0.0033	0.0033	0.0033	0.0033	0.0033	0.0033	0.0033	0.0033	0.0033
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.1576	-0.1242	-0.0945	-0.0690	-0.0472	-0.0296	-0.0157	-0.0060	0.0000
	My+	0.0052	0.0045	0.0039	0.0032	0.0026	0.0019	0.0013	0.0006	0.0000
	Mz-	-0.0752	-0.0658	-0.0564	-0.0470	-0.0376	-0.0282	-0.0188	-0.0094	0.0000
	Mz+	0.1216	0.1064	0.0912	0.0760	0.0608	0.0456	0.0304	0.0152	0.0000
449/451		0.000 m	0.114 m	0.228 m	0.342 m	0.456 m	0.570 m	0.684 m	0.798 m	0.912 m
		Envolvente (Acero laminado)								
	N-	-2.2570	-2.2568	-2.2566	-2.2564	-2.2562	-2.2560	-2.2558	-2.2555	-2.2553
	N+	1.1816	1.1817	1.1818	1.1819	1.1820	1.1822	1.1823	1.1824	1.1825
	Ty-	-0.0942	-0.0942	-0.0942	-0.0942	-0.0942	-0.0942	-0.0942	-0.0942	-0.0942
	Ty+	0.0515	0.0515	0.0515	0.0515	0.0515	0.0515	0.0515	0.0515	0.0515
	Tz-	-0.0431	-0.0414	-0.0397	-0.0380	-0.0363	-0.0346	-0.0328	-0.0311	-0.0294
	Tz+	0.5267	0.5296	0.5325	0.5354	0.5383	0.5411	0.5440	0.5469	0.5498
	Mt-	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas**

	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0931	-0.0885	-0.0841	-0.0799	-0.0759	-0.0728	-0.0900	-0.1188	-0.1654
	My+	0.3309	0.2707	0.2101	0.1546	0.1004	0.0690	0.0428	0.0294	0.0307
	Mz-	-0.0497	-0.0389	-0.0282	-0.0203	-0.0136	-0.0152	-0.0202	-0.0261	-0.0319
	Mz+	0.0150	0.0091	0.0033	0.0048	0.0120	0.0192	0.0264	0.0336	0.0421
450/456		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-1.7754	-1.7754	-1.7754	-1.7754	-1.7754	-1.7754	-1.7754	-1.7754	-1.7754
	N+	1.1542	1.1542	1.1542	1.1542	1.1542	1.1542	1.1542	1.1542	1.1542
	Ty-	-0.1550	-0.1490	-0.1430	-0.1369	-0.1309	-0.1248	-0.1188	-0.1127	-0.1067
	Ty+	0.5942	0.6044	0.6146	0.6248	0.6350	0.6452	0.6554	0.6656	0.6758
	Tz-	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001
	Tz+	0.0443	0.0443	0.0443	0.0443	0.0443	0.0443	0.0443	0.0443	0.0443
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0003	-0.0003	-0.0002	-0.0002	-0.0002	-0.0050	-0.0105	-0.0160	-0.0216
	My+	0.0272	0.0258	0.0244	0.0230	0.0216	0.0202	0.0188	0.0174	0.0160
	Mz-	-0.0681	-0.0540	-0.0853	-0.1608	-0.2390	-0.3190	-0.4003	-0.4829	-0.5667
	Mz+	0.0682	0.0049	0.0009	0.0057	0.0097	0.0194	0.0346	0.0491	0.0628
451/455		0.000 m	0.011 m	0.023 m	0.034 m	0.045 m	0.056 m	0.068 m	0.079 m	0.090 m
		Envolvente (Acero laminado)								
	N-	-2.7798	-2.7797	-2.7797	-2.7797	-2.7797	-2.7797	-2.7796	-2.7796	-2.7796
	N+	1.6412	1.6412	1.6412	1.6412	1.6412	1.6412	1.6413	1.6413	1.6413
	Ty-	-0.4362	-0.4362	-0.4362	-0.4362	-0.4362	-0.4362	-0.4362	-0.4362	-0.4362
	Ty+	0.5739	0.5739	0.5739	0.5739	0.5739	0.5739	0.5739	0.5739	0.5739
	Tz-	-0.2238	-0.2236	-0.2234	-0.2233	-0.2231	-0.2229	-0.2228	-0.2226	-0.2224
	Tz+	0.7962	0.7964	0.7967	0.7970	0.7973	0.7976	0.7979	0.7982	0.7984
	Mt-	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.1654	-0.1711	-0.1780	-0.1870	-0.1960	-0.2050	-0.2140	-0.2231	-0.2321
	My+	0.0307	0.0327	0.0346	0.0365	0.0385	0.0404	0.0423	0.0442	0.0462
	Mz-	-0.0319	-0.0270	-0.0221	-0.0172	-0.0122	-0.0073	-0.0024	-0.0046	-0.0111
	Mz+	0.0421	0.0368	0.0315	0.0263	0.0226	0.0192	0.0158	0.0150	0.0153
452/453		0.000 m	0.369 m	0.738 m	1.106 m	1.475 m	1.844 m	2.213 m	2.582 m	2.950 m
		Envolvente (Acero laminado)								
	N-	-9.3092	-9.2677	-9.2263	-9.1849	-9.1434	-9.1020	-9.0606	-9.0191	-8.9777
	N+	-2.8495	-2.8250	-2.8004	-2.7759	-2.7513	-2.7268	-2.7022	-2.6777	-2.6531
	Ty-	0.0194	0.0194	0.0194	0.0194	0.0194	0.0194	0.0194	-0.1264	-0.3477
	Ty+	1.4379	1.2167	0.9954	0.7741	0.5528	0.3315	0.1102	0.0563	0.0563
	Tz-	-1.4983	-1.4983	-1.4983	-1.4983	-1.4983	-1.4983	-1.4983	-1.4983	-1.4983
	Tz+	-0.3797	-0.3797	-0.3797	-0.3797	-0.3797	-0.3797	-0.3797	-0.3797	-0.3797
	Mt-	-0.0031	-0.0031	-0.0031	-0.0031	-0.0031	-0.0031	-0.0031	-0.0031	-0.0031
	Mt+	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
	My-	-1.6456	-1.0930	-0.5405	-0.1236	0.1975	0.4567	0.5970	0.7371	0.8771
	My+	-0.2433	-0.1032	0.0368	0.3158	0.7447	1.2156	1.7579	2.3001	2.8424
	Mz-	0.0179	0.0107	0.0034	-0.0182	-0.2221	-0.3833	-0.4662	-0.4644	-0.3842
	Mz+	1.2468	0.7589	0.3494	0.0452	-0.0046	-0.0175	-0.0247	-0.0319	-0.0390
453/454		0.000 m	0.234 m	0.467 m	0.701 m	0.935 m	1.168 m	1.402 m	1.636 m	1.870 m
		Envolvente (Acero laminado)								
	N-	-2.6581	-2.6318	-2.6056	-2.5793	-2.5531	-2.5268	-2.5006	-2.4743	-2.4481
	N+	0.0924	0.1080	0.1235	0.1391	0.1547	0.1702	0.1858	0.2013	0.2169
	Ty-	0.0121	0.0121	0.0121	0.0014	-0.1215	-0.2617	-0.4020	-0.5422	-0.6824
	Ty+	0.4692	0.3290	0.1888	0.0707	0.0649	0.0649	0.0649	0.0649	0.0649
	Tz-	-1.1632	-1.1632	-1.1632	-1.1632	-1.1632	-1.1632	-1.1632	-1.1632	-1.1632

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas**

	Tz+	-0.4098	-0.4098	-0.4098	-0.4098	-0.4098	-0.4098	-0.4098	-0.4098	-0.4098
	Mt-	-0.0016	-0.0016	-0.0016	-0.0016	-0.0016	-0.0016	-0.0016	-0.0016	-0.0016
	Mt+	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022
	My-	-2.4435	-2.1841	-1.9247	-1.6653	-1.4059	-1.1464	-0.8870	-0.6331	-0.4029
	My+	-0.5641	-0.4470	-0.3300	-0.2130	-0.0959	0.0211	0.1381	0.2552	0.3722
	Mz-	-0.1162	-0.2018	-0.2568	-0.2788	-0.2693	-0.2258	-0.1508	-0.0473	-0.0378
	Mz+	0.0929	0.0799	0.0678	0.0568	0.0458	0.0347	0.0237	0.0181	0.1110
453/473		0.000 m	0.625 m	1.250 m	1.875 m	2.500 m	3.125 m	3.750 m	4.375 m	5.000 m
		Envolvente (Acero laminado)								
	N-	-0.4252	-0.4252	-0.4252	-0.4252	-0.4252	-0.4252	-0.4252	-0.4252	-0.4252
	N+	0.0444	0.0444	0.0444	0.0444	0.0444	0.0444	0.0444	0.0444	0.0444
	Ty-	-0.0320	-0.0320	-0.0320	-0.0320	-0.0320	-0.0320	-0.0320	-0.0320	-0.0320
	Ty+	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004
	Tz-	-6.5778	-4.8964	-3.2151	-1.5338	0.0382	0.7012	1.3642	2.0272	2.6902
	Tz+	-2.5804	-1.9174	-1.2544	-0.5914	0.1676	1.8490	3.5303	5.2117	6.8930
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
	My-	-5.0036	-1.4389	0.3923	0.9817	1.1733	0.9340	0.2929	-2.0052	-5.7669
	My+	-1.9210	-0.5238	1.1667	2.6172	3.0589	2.4076	0.7481	-0.7708	-2.2367
	Mz-	-0.0877	-0.0677	-0.0477	-0.0277	-0.0077	-0.0012	-0.0006	-0.0003	-0.0005
	Mz+	0.0014	0.0012	0.0009	0.0007	0.0005	0.0124	0.0323	0.0523	0.0723
454/455		0.000 m	0.189 m	0.378 m	0.566 m	0.755 m	0.944 m	1.133 m	1.322 m	1.510 m
		Envolvente (Acero laminado)								
	N-	-2.3748	-2.3536	-2.3324	-2.3112	-2.2900	-2.2688	-2.2476	-2.2264	-2.2052
	N+	0.2243	0.2368	0.2494	0.2620	0.2745	0.2871	0.2997	0.3122	0.3248
	Ty-	-0.0249	-0.0249	-0.0249	-0.0249	-0.0249	-0.0249	-0.0249	-0.0249	-0.0249
	Ty+	0.1527	0.1329	0.1131	0.0933	0.0734	0.0536	0.0338	0.0140	0.0101
	Tz-	-0.2868	-0.2868	-0.2868	-0.2868	-0.2868	-0.2868	-0.2868	-0.2868	-0.2868
	Tz+	0.3173	0.3173	0.3173	0.3173	0.3173	0.3173	0.3173	0.3173	0.3173
	Mt-	-0.0016	-0.0016	-0.0016	-0.0016	-0.0016	-0.0016	-0.0016	-0.0016	-0.0016
	Mt+	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022
	My-	-0.4029	-0.3487	-0.2946	-0.2404	-0.1974	-0.1725	-0.1611	-0.1539	-0.1619
	My+	0.3722	0.3177	0.2633	0.2088	0.1544	0.0999	0.0454	0.0341	0.0583
	Mz-	-0.0378	-0.0331	-0.0283	-0.0236	-0.0189	-0.0142	-0.0095	-0.0048	-0.0001
	Mz+	0.1110	0.0841	0.0608	0.0414	0.0256	0.0137	0.0054	0.0020	0.0001
454/457		0.000 m	0.126 m	0.252 m	0.378 m	0.503 m	0.629 m	0.755 m	0.881 m	1.007 m
		Envolvente (Acero Conformado)								
	N-	-1.4032	-1.4032	-1.4032	-1.4032	-1.4032	-1.4032	-1.4032	-1.4032	-1.4032
	N+	-0.2224	-0.2224	-0.2224	-0.2224	-0.2224	-0.2224	-0.2224	-0.2224	-0.2224
	Ty-	-0.0264	-0.0251	-0.0238	-0.0226	-0.0213	-0.0200	-0.0187	-0.0175	-0.0162
	Ty+	0.0442	0.0450	0.0457	0.0465	0.0472	0.0480	0.0487	0.0495	0.0502
	Tz-	-0.1643	-0.1643	-0.1643	-0.1643	-0.1643	-0.1643	-0.1643	-0.1643	-0.1643
	Tz+	0.0166	0.0166	0.0166	0.0166	0.0166	0.0166	0.0166	0.0166	0.0166
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.1129	-0.0922	-0.0715	-0.0508	-0.0301	-0.0095	-0.0026	-0.0019	-0.0011
	My+	0.0206	0.0185	0.0164	0.0143	0.0122	0.0101	0.0153	0.0348	0.0546
	Mz-	-0.0210	-0.0177	-0.0146	-0.0117	-0.0090	-0.0064	-0.0064	-0.0115	-0.0171
	Mz+	0.0307	0.0250	0.0193	0.0135	0.0076	0.0022	0.0017	0.0011	0.0007
455/456		0.000 m	0.185 m	0.370 m	0.556 m	0.741 m	0.926 m	1.111 m	1.296 m	1.481 m
		Envolvente (Acero Conformado)								
	N-	-1.2699	-1.2668	-1.2637	-1.2606	-1.2576	-1.2545	-1.2514	-1.2483	-1.2453
	N+	0.0884	0.0902	0.0921	0.0939	0.0957	0.0975	0.0993	0.1012	0.1030
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE** Adrián Freijomil Aradas

	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.0778	-0.0583	-0.0389	-0.0194	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0194	0.0389	0.0583	0.0778
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My+	0.0000	0.0125	0.0216	0.0269	0.0288	0.0269	0.0216	0.0125	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
455/458		0.000 m	0.126 m	0.252 m	0.379 m	0.505 m	0.631 m	0.757 m	0.883 m	1.009 m
	Envolvente (Acero laminado)									
	N-	-0.4790	-0.4789	-0.4789	-0.4788	-0.4787	-0.4787	-0.4786	-0.4786	-0.4785
	N+	1.0748	1.0749	1.0750	1.0751	1.0751	1.0752	1.0753	1.0754	1.0755
	Ty-	-0.0151	-0.0151	-0.0151	-0.0151	-0.0151	-0.0151	-0.0151	-0.0151	-0.0151
	Ty+	0.0295	0.0295	0.0295	0.0295	0.0295	0.0295	0.0295	0.0295	0.0295
	Tz-	-0.1695	-0.1681	-0.1667	-0.1654	-0.1640	-0.1626	-0.1612	-0.1599	-0.1585
	Tz+	0.0198	0.0206	0.0214	0.0222	0.0231	0.0239	0.0247	0.0255	0.0263
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0934	-0.0722	-0.0513	-0.0307	-0.0106	-0.0017	-0.0022	-0.0029	-0.0036
	My+	0.0207	0.0181	0.0155	0.0127	0.0098	0.0125	0.0318	0.0520	0.0721
	Mz-	-0.0096	-0.0076	-0.0057	-0.0038	-0.0019	-0.0020	-0.0057	-0.0094	-0.0131
	Mz+	0.0166	0.0129	0.0092	0.0055	0.0019	0.0001	0.0019	0.0038	0.0057
456/459		0.000 m	0.126 m	0.252 m	0.378 m	0.503 m	0.629 m	0.755 m	0.881 m	1.007 m
	Envolvente (Acero laminado)									
	N-	-1.7754	-1.7754	-1.7754	-1.7754	-1.7754	-1.7754	-1.7754	-1.7754	-1.7754
	N+	1.1542	1.1542	1.1542	1.1542	1.1542	1.1542	1.1542	1.1542	1.1542
	Ty-	-0.5695	-0.5592	-0.5490	-0.5387	-0.5284	-0.5181	-0.5079	-0.4976	-0.4873
	Ty+	0.0164	0.0225	0.0286	0.0346	0.0407	0.0468	0.0529	0.0590	0.0651
	Tz-	-0.0336	-0.0336	-0.0336	-0.0336	-0.0336	-0.0336	-0.0336	-0.0336	-0.0336
	Tz+	0.0112	0.0112	0.0112	0.0112	0.0112	0.0112	0.0112	0.0112	0.0112
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0216	-0.0173	-0.0131	-0.0089	-0.0047	-0.0004	-0.0001	-0.0001	0.0000
	My+	0.0160	0.0146	0.0132	0.0118	0.0104	0.0090	0.0076	0.0080	0.0123
	Mz-	-0.5667	-0.4957	-0.4259	-0.3575	-0.2903	-0.2245	-0.1599	-0.0966	-0.0449
	Mz+	0.0628	0.0629	0.0622	0.0607	0.0585	0.0555	0.0518	0.0473	0.0420
457/458		0.000 m	0.198 m	0.395 m	0.593 m	0.790 m	0.988 m	1.186 m	1.383 m	1.581 m
	Envolvente (Acero Conformado)									
	N-	-0.0084	-0.0055	-0.0036	-0.0016	0.0003	0.0023	0.0042	0.0061	0.0081
	N+	0.0218	0.0241	0.0274	0.0307	0.0340	0.0373	0.0406	0.0438	0.0471
	Ty-	-0.0409	-0.0409	-0.0409	-0.0409	-0.0409	-0.0409	-0.0409	-0.0409	-0.0409
	Ty+	0.0047	0.0047	0.0047	0.0047	0.0047	0.0047	0.0047	0.0047	0.0047
	Tz-	-0.0075	-0.0075	-0.0075	-0.0075	-0.0075	-0.0075	-0.0075	-0.0075	-0.0075
	Tz+	0.0704	0.0911	0.1119	0.1326	0.1534	0.1741	0.1949	0.2156	0.2364
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0160	-0.0360	-0.0603	-0.0884	-0.1209	-0.1573	-0.1979	-0.2425
	My+	0.0000	0.0015	0.0030	0.0045	0.0059	0.0074	0.0089	0.0104	0.0119
	Mz-	0.0000	-0.0009	-0.0018	-0.0028	-0.0037	-0.0046	-0.0055	-0.0064	-0.0074
	Mz+	0.0000	0.0081	0.0162	0.0242	0.0323	0.0404	0.0485	0.0565	0.0646
457/461		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
	Envolvente (Acero Conformado)									
	N-	-1.3623	-1.3623	-1.3623	-1.3623	-1.3623	-1.3623	-1.3623	-1.3623	-1.3623

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas**

	N+	-0.2229	-0.2229	-0.2229	-0.2229	-0.2229	-0.2229	-0.2229	-0.2229	-0.2229
	Ty-	-0.0078	-0.0065	-0.0053	-0.0040	-0.0028	-0.0015	-0.0005	0.0003	0.0010
	Ty+	0.0284	0.0292	0.0299	0.0307	0.0314	0.0322	0.0332	0.0344	0.0357
	Tz-	-0.0943	-0.0943	-0.0943	-0.0943	-0.0943	-0.0943	-0.0943	-0.0943	-0.0943
	Tz+	0.0091	0.0091	0.0091	0.0091	0.0091	0.0091	0.0091	0.0091	0.0091
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0011	-0.0009	-0.0006	-0.0006	-0.0008	-0.0018	-0.0029	-0.0041	-0.0052
	My+	0.0546	0.0660	0.0774	0.0888	0.1002	0.1119	0.1236	0.1354	0.1471
	Mz-	-0.0171	-0.0206	-0.0243	-0.0281	-0.0319	-0.0359	-0.0399	-0.0441	-0.0483
	Mz+	0.0007	0.0014	0.0021	0.0027	0.0031	0.0034	0.0035	0.0034	0.0032
458/459		0.000 m	0.176 m	0.353 m	0.529 m	0.705 m	0.882 m	1.058 m	1.235 m	1.411 m
		Envolvente (Acero Conformado)								
	N-	-0.0835	-0.0818	-0.0801	-0.0783	-0.0766	-0.0749	-0.0731	-0.0714	-0.0696
	N+	0.1996	0.2026	0.2055	0.2084	0.2113	0.2143	0.2172	0.2201	0.2231
	Ty-	-0.0643	-0.0643	-0.0643	-0.0643	-0.0643	-0.0643	-0.0643	-0.0643	-0.0643
	Ty+	0.0944	0.0944	0.0944	0.0944	0.0944	0.0944	0.0944	0.0944	0.0944
	Tz-	-0.1671	-0.1486	-0.1301	-0.1116	-0.0931	-0.0746	-0.0560	-0.0375	-0.0190
	Tz+	0.0051	0.0051	0.0051	0.0051	0.0051	0.0051	0.0051	0.0051	0.0051
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.1313	-0.1035	-0.0789	-0.0576	-0.0395	-0.0248	-0.0132	-0.0050	0.0000
	My+	0.0072	0.0063	0.0054	0.0045	0.0036	0.0027	0.0018	0.0009	0.0000
	Mz-	-0.0907	-0.0794	-0.0680	-0.0567	-0.0454	-0.0340	-0.0227	-0.0113	0.0000
	Mz+	0.1332	0.1166	0.0999	0.0833	0.0666	0.0500	0.0333	0.0167	0.0000
458/460		0.000 m	0.072 m	0.144 m	0.216 m	0.288 m	0.360 m	0.432 m	0.504 m	0.576 m
		Envolvente (Acero laminado)								
	N-	-0.4846	-0.4846	-0.4845	-0.4845	-0.4844	-0.4844	-0.4843	-0.4843	-0.4842
	N+	-0.0143	-0.0143	-0.0143	-0.0142	-0.0142	-0.0142	-0.0141	-0.0141	-0.0141
	Ty-	-0.0162	-0.0162	-0.0162	-0.0162	-0.0162	-0.0162	-0.0162	-0.0162	-0.0162
	Ty+	0.0050	0.0050	0.0050	0.0050	0.0050	0.0050	0.0050	0.0050	0.0050
	Tz-	-0.2216	-0.2208	-0.2200	-0.2192	-0.2184	-0.2176	-0.2169	-0.2161	-0.2153
	Tz+	0.0815	0.0820	0.0824	0.0829	0.0834	0.0838	0.0843	0.0848	0.0852
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0877	-0.0718	-0.0559	-0.0401	-0.0244	-0.0118	-0.0132	-0.0192	-0.0254
	My+	0.0227	0.0168	0.0109	0.0049	-0.0011	-0.0038	0.0084	0.0239	0.0394
	Mz-	-0.0043	-0.0032	-0.0020	-0.0008	-0.0001	-0.0005	-0.0008	-0.0012	-0.0015
	Mz+	0.0014	0.0010	0.0006	0.0003	0.0003	0.0015	0.0027	0.0038	0.0050
459/463		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-1.6811	-1.6811	-1.6811	-1.6811	-1.6811	-1.6811	-1.6811	-1.6811	-1.6811
	N+	1.0899	1.0899	1.0899	1.0899	1.0899	1.0899	1.0899	1.0899	1.0899
	Ty-	-0.2742	-0.2640	-0.2538	-0.2436	-0.2334	-0.2232	-0.2130	-0.2028	-0.1926
	Ty+	0.0226	0.0286	0.0347	0.0407	0.0467	0.0528	0.0588	0.0649	0.0709
	Tz-	-0.0146	-0.0146	-0.0146	-0.0146	-0.0146	-0.0146	-0.0146	-0.0146	-0.0146
	Tz+	0.0061	0.0061	0.0061	0.0061	0.0061	0.0061	0.0061	0.0061	0.0061
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0006	-0.0013
	My+	0.0123	0.0141	0.0159	0.0177	0.0195	0.0213	0.0231	0.0250	0.0268
	Mz-	-0.0449	-0.0294	-0.0274	-0.0262	-0.0265	-0.0293	-0.0329	-0.0372	-0.0423
	Mz+	0.0420	0.0417	0.0525	0.0665	0.0929	0.1208	0.1481	0.1741	0.1988
460/462		0.000 m	0.053 m	0.107 m	0.160 m	0.213 m	0.267 m	0.320 m	0.373 m	0.426 m

## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

		Envolvente (Acero laminado)								
	N-	-0.5290	-0.5290	-0.5290	-0.5289	-0.5289	-0.5288	-0.5288	-0.5288	-0.5287
	N+	0.0287	0.0287	0.0287	0.0287	0.0288	0.0288	0.0288	0.0288	0.0289
	Ty-	-0.0079	-0.0079	-0.0079	-0.0079	-0.0079	-0.0079	-0.0079	-0.0079	-0.0079
	Ty+	0.0254	0.0254	0.0254	0.0254	0.0254	0.0254	0.0254	0.0254	0.0254
	Tz-	-0.1361	-0.1355	-0.1349	-0.1343	-0.1338	-0.1332	-0.1326	-0.1320	-0.1314
	Tz+	0.0459	0.0462	0.0466	0.0469	0.0473	0.0476	0.0480	0.0483	0.0486
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0254	-0.0186	-0.0118	-0.0051	0.0016	0.0083	0.0149	0.0133	0.0108
	My+	0.0394	0.0374	0.0357	0.0345	0.0332	0.0343	0.0363	0.0382	0.0436
	Mz-	-0.0015	-0.0011	-0.0007	-0.0003	-0.0004	-0.0018	-0.0031	-0.0045	-0.0058
	Mz+	0.0050	0.0036	0.0023	0.0009	0.0001	0.0006	0.0010	0.0014	0.0018
461/462		0.000 m	0.206 m	0.413 m	0.619 m	0.825 m	1.032 m	1.238 m	1.444 m	1.651 m
		Envolvente (Acero Conformado)								
	N-	0.0045	0.0065	0.0085	0.0106	0.0126	0.0146	0.0166	0.0187	0.0207
	N+	0.0280	0.0314	0.0348	0.0382	0.0417	0.0451	0.0485	0.0520	0.0554
	Ty-	-0.0357	-0.0357	-0.0357	-0.0357	-0.0357	-0.0357	-0.0357	-0.0357	-0.0357
	Ty+	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	Tz-	-0.0094	-0.0094	-0.0094	-0.0094	-0.0094	-0.0094	-0.0094	-0.0094	-0.0094
	Tz+	0.0550	0.0767	0.0983	0.1200	0.1417	0.1633	0.1850	0.2067	0.2283
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0137	-0.0316	-0.0543	-0.0812	-0.1127	-0.1486	-0.1891	-0.2339
	My+	0.0000	0.0019	0.0039	0.0058	0.0078	0.0097	0.0117	0.0136	0.0155
	Mz-	0.0000	-0.0010	-0.0019	-0.0029	-0.0038	-0.0048	-0.0057	-0.0067	-0.0077
	Mz+	0.0000	0.0074	0.0147	0.0221	0.0295	0.0368	0.0442	0.0516	0.0589
461/464		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-1.3267	-1.3267	-1.3267	-1.3267	-1.3267	-1.3267	-1.3267	-1.3267	-1.3267
	N+	-0.2238	-0.2238	-0.2238	-0.2238	-0.2238	-0.2238	-0.2238	-0.2238	-0.2238
	Ty-	-0.0058	-0.0046	-0.0033	-0.0021	-0.0008	0.0001	0.0009	0.0016	0.0024
	Ty+	0.0100	0.0108	0.0115	0.0123	0.0130	0.0141	0.0153	0.0166	0.0178
	Tz-	-0.0397	-0.0397	-0.0397	-0.0397	-0.0397	-0.0397	-0.0397	-0.0397	-0.0397
	Tz+	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0052	-0.0052	-0.0051	-0.0051	-0.0050	-0.0050	-0.0049	-0.0049	-0.0049
	My+	0.1471	0.1520	0.1569	0.1617	0.1666	0.1715	0.1764	0.1814	0.1863
	Mz-	-0.0483	-0.0496	-0.0510	-0.0525	-0.0541	-0.0558	-0.0575	-0.0594	-0.0613
	Mz+	0.0032	0.0039	0.0043	0.0046	0.0048	0.0048	0.0047	0.0043	0.0039
462/463		0.000 m	0.168 m	0.335 m	0.503 m	0.670 m	0.838 m	1.006 m	1.173 m	1.341 m
		Envolvente (Acero Conformado)								
	N-	-0.0849	-0.0833	-0.0816	-0.0800	-0.0783	-0.0767	-0.0750	-0.0734	-0.0717
	N+	0.0918	0.0945	0.0973	0.1001	0.1029	0.1057	0.1085	0.1113	0.1140
	Ty-	-0.0741	-0.0741	-0.0741	-0.0741	-0.0741	-0.0741	-0.0741	-0.0741	-0.0741
	Ty+	0.1045	0.1045	0.1045	0.1045	0.1045	0.1045	0.1045	0.1045	0.1045
	Tz-	-0.1563	-0.1387	-0.1211	-0.1035	-0.0859	-0.0683	-0.0507	-0.0331	-0.0155
	Tz+	0.0039	0.0039	0.0039	0.0039	0.0039	0.0039	0.0039	0.0039	0.0039
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.1152	-0.0905	-0.0687	-0.0499	-0.0340	-0.0211	-0.0111	-0.0041	0.0000
	My+	0.0052	0.0046	0.0039	0.0033	0.0026	0.0020	0.0013	0.0007	0.0000
	Mz-	-0.0994	-0.0870	-0.0745	-0.0621	-0.0497	-0.0373	-0.0248	-0.0124	0.0000



## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

	Mz+	0.1402	0.1227	0.1051	0.0876	0.0701	0.0526	0.0350	0.0175	0.0000
462/465		0.000 m	0.125 m	0.251 m	0.376 m	0.501 m	0.627 m	0.752 m	0.877 m	1.002 m
		Envolvente (Acero laminado)								
	N-	-0.2096	-0.2095	-0.2095	-0.2094	-0.2093	-0.2092	-0.2091	-0.2090	-0.2089
	N+	-0.0257	-0.0257	-0.0256	-0.0256	-0.0255	-0.0255	-0.0254	-0.0253	-0.0253
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.0564	-0.0551	-0.0537	-0.0524	-0.0510	-0.0496	-0.0483	-0.0469	-0.0455
	Tz+	-0.0095	-0.0086	-0.0078	-0.0070	-0.0062	-0.0054	-0.0046	-0.0038	-0.0030
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0265	-0.0195	-0.0127	-0.0060	0.0003	0.0010	0.0016	0.0022	0.0026
	My+	-0.0037	-0.0025	-0.0015	-0.0006	0.0005	0.0068	0.0129	0.0189	0.0246
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
463/466		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-1.5766	-1.5766	-1.5766	-1.5766	-1.5766	-1.5766	-1.5766	-1.5766	-1.5766
	N+	1.0159	1.0159	1.0159	1.0159	1.0159	1.0159	1.0159	1.0159	1.0159
	Ty-	-0.0849	-0.0747	-0.0645	-0.0543	-0.0441	-0.0339	-0.0252	-0.0191	-0.0131
	Ty+	-0.0008	0.0053	0.0113	0.0173	0.0234	0.0294	0.0370	0.0472	0.0574
	Tz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz+	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0013	-0.0016	-0.0018	-0.0021	-0.0024	-0.0027	-0.0029	-0.0032	-0.0035
	My+	0.0268	0.0267	0.0266	0.0264	0.0263	0.0262	0.0261	0.0260	0.0258
	Mz-	-0.0423	-0.0403	-0.0390	-0.0385	-0.0387	-0.0397	-0.0415	-0.0440	-0.0472
Mz+	0.1988	0.2080	0.2160	0.2227	0.2281	0.2322	0.2351	0.2367	0.2370	
464/465		0.000 m	0.215 m	0.430 m	0.645 m	0.860 m	1.076 m	1.291 m	1.506 m	1.721 m
		Envolvente (Acero Conformado)								
	N-	0.0037	0.0058	0.0079	0.0100	0.0121	0.0143	0.0164	0.0185	0.0206
	N+	0.0797	0.0833	0.0869	0.0904	0.0940	0.0976	0.1012	0.1047	0.1083
	Ty-	-0.0771	-0.0771	-0.0771	-0.0771	-0.0771	-0.0771	-0.0771	-0.0771	-0.0771
	Ty+	0.0041	0.0041	0.0041	0.0041	0.0041	0.0041	0.0041	0.0041	0.0041
	Tz-	-0.0050	-0.0050	-0.0050	-0.0050	-0.0050	-0.0050	-0.0050	-0.0050	-0.0050
	Tz+	0.2030	0.2256	0.2482	0.2708	0.2934	0.3160	0.3386	0.3611	0.3837
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0462	-0.0971	-0.1530	-0.2136	-0.2792	-0.3495	-0.4248	-0.5049
	My+	0.0000	0.0011	0.0022	0.0032	0.0043	0.0054	0.0065	0.0076	0.0087
	Mz-	0.0000	-0.0009	-0.0018	-0.0026	-0.0035	-0.0044	-0.0053	-0.0062	-0.0071
Mz+	0.0000	0.0166	0.0331	0.0497	0.0663	0.0829	0.0994	0.1160	0.1326	
464/468		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-1.2496	-1.2496	-1.2496	-1.2496	-1.2496	-1.2496	-1.2496	-1.2496	-1.2496
	N+	-0.2241	-0.2241	-0.2241	-0.2241	-0.2241	-0.2241	-0.2241	-0.2241	-0.2241
	Ty-	-0.0619	-0.0606	-0.0593	-0.0581	-0.0573	-0.0566	-0.0558	-0.0551	-0.0543
	Ty+	-0.0011	-0.0004	0.0004	0.0011	0.0023	0.0036	0.0049	0.0061	0.0074
	Tz-	-0.0054	-0.0054	-0.0054	-0.0054	-0.0054	-0.0054	-0.0054	-0.0054	-0.0054
	Tz+	0.1637	0.1637	0.1637	0.1637	0.1637	0.1637	0.1637	0.1637	0.1637
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0049	-0.0042	-0.0035	-0.0028	-0.0022	-0.0015	-0.0008	-0.0006	-0.0006

## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

	My+	0.1863	0.1658	0.1453	0.1249	0.1044	0.0840	0.0635	0.0431	0.0229
	Mz-	-0.0613	-0.0538	-0.0465	-0.0391	-0.0319	-0.0248	-0.0178	-0.0109	-0.0040
	Mz+	0.0039	0.0041	0.0042	0.0042	0.0040	0.0036	0.0031	0.0024	0.0015
465/466		0.000 m	0.159 m	0.318 m	0.477 m	0.635 m	0.794 m	0.953 m	1.112 m	1.271 m
		Envolvente (Acero Conformado)								
	N-	-0.1357	-0.1341	-0.1325	-0.1310	-0.1294	-0.1278	-0.1263	-0.1247	-0.1231
	N+	0.1705	0.1731	0.1757	0.1784	0.1810	0.1837	0.1863	0.1889	0.1916
	Ty-	-0.0862	-0.0862	-0.0862	-0.0862	-0.0862	-0.0862	-0.0862	-0.0862	-0.0862
	Ty+	0.1180	0.1180	0.1180	0.1180	0.1180	0.1180	0.1180	0.1180	0.1180
	Tz-	-0.1476	-0.1309	-0.1142	-0.0975	-0.0809	-0.0642	-0.0475	-0.0308	-0.0141
	Tz+	0.0024	0.0024	0.0024	0.0024	0.0024	0.0024	0.0024	0.0024	0.0024
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.1028	-0.0807	-0.0612	-0.0444	-0.0302	-0.0187	-0.0098	-0.0036	0.0000
	My+	0.0030	0.0026	0.0023	0.0019	0.0015	0.0011	0.0008	0.0004	0.0000
	Mz-	-0.1096	-0.0959	-0.0822	-0.0685	-0.0548	-0.0411	-0.0274	-0.0137	0.0000
	Mz+	0.1500	0.1312	0.1125	0.0937	0.0750	0.0562	0.0375	0.0187	0.0000
465/467		0.000 m	0.031 m	0.062 m	0.093 m	0.123 m	0.154 m	0.185 m	0.216 m	0.247 m
		Envolvente (Acero laminado)								
	N-	-0.1610	-0.1610	-0.1610	-0.1610	-0.1610	-0.1610	-0.1610	-0.1609	-0.1609
	N+	0.2680	0.2680	0.2680	0.2680	0.2681	0.2681	0.2681	0.2681	0.2681
	Ty-	-0.0661	-0.0661	-0.0661	-0.0661	-0.0661	-0.0661	-0.0661	-0.0661	-0.0661
	Ty+	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008
	Tz-	-0.1731	-0.1728	-0.1724	-0.1721	-0.1718	-0.1714	-0.1711	-0.1708	-0.1704
	Tz+	0.1540	0.1542	0.1544	0.1546	0.1548	0.1550	0.1552	0.1554	0.1556
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0098	-0.0069	-0.0041	-0.0048	-0.0085	-0.0122	-0.0159	-0.0203	-0.0251
	My+	0.0183	0.0146	0.0110	0.0119	0.0156	0.0203	0.0250	0.0297	0.0348
	Mz-	-0.0109	-0.0089	-0.0068	-0.0048	-0.0027	-0.0007	0.0000	0.0000	-0.0001
	Mz+	0.0001	0.0001	0.0001	0.0001	0.0000	0.0000	0.0013	0.0034	0.0054
466/470		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-1.4586	-1.4586	-1.4586	-1.4586	-1.4586	-1.4586	-1.4586	-1.4586	-1.4586
	N+	0.9297	0.9297	0.9297	0.9297	0.9297	0.9297	0.9297	0.9297	0.9297
	Ty-	-0.0941	-0.0880	-0.0820	-0.0759	-0.0699	-0.0638	-0.0578	-0.0517	-0.0457
	Ty+	0.1942	0.2044	0.2146	0.2248	0.2350	0.2452	0.2554	0.2656	0.2758
	Tz-	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002
	Tz+	0.0151	0.0151	0.0151	0.0151	0.0151	0.0151	0.0151	0.0151	0.0151
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0035	-0.0035	-0.0034	-0.0034	-0.0034	-0.0034	-0.0033	-0.0033	-0.0033
	My+	0.0258	0.0240	0.0221	0.0202	0.0183	0.0164	0.0145	0.0126	0.0108
	Mz-	-0.0472	-0.0359	-0.0252	-0.0154	-0.0063	0.0010	0.0046	0.0044	-0.0118
	Mz+	0.2370	0.2121	0.1859	0.1584	0.1320	0.1045	0.0757	0.0502	0.0243
467/469		0.000 m	0.094 m	0.189 m	0.283 m	0.378 m	0.472 m	0.567 m	0.661 m	0.756 m
		Envolvente (Acero laminado)								
	N-	-0.1518	-0.1518	-0.1517	-0.1517	-0.1516	-0.1516	-0.1515	-0.1515	-0.1515
	N+	0.2531	0.2531	0.2532	0.2533	0.2534	0.2534	0.2535	0.2536	0.2537
	Ty-	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001
	Ty+	0.0119	0.0119	0.0119	0.0119	0.0119	0.0119	0.0119	0.0119	0.0119
	Tz-	-0.0733	-0.0727	-0.0721	-0.0715	-0.0709	-0.0703	-0.0697	-0.0691	-0.0685
	Tz+	0.1019	0.1029	0.1039	0.1049	0.1060	0.1070	0.1080	0.1091	0.1101
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0251	-0.0182	-0.0114	-0.0046	-0.0048	-0.0149	-0.0250	-0.0353	-0.0456
	My+	0.0348	0.0252	0.0155	0.0057	0.0029	0.0094	0.0157	0.0220	0.0284
	Mz-	-0.0001	-0.0001	0.0000	0.0000	0.0000	-0.0002	-0.0014	-0.0025	-0.0036
	Mz+	0.0054	0.0043	0.0032	0.0020	0.0009	0.0000	0.0000	0.0000	0.0000
468/469		0.000 m	0.224 m	0.448 m	0.672 m	0.895 m	1.119 m	1.343 m	1.567 m	1.791 m
		Envolvente (Acero Conformado)								
	N-	-0.0021	0.0002	0.0024	0.0046	0.0068	0.0090	0.0112	0.0134	0.0156
	N+	0.1499	0.1536	0.1573	0.1611	0.1648	0.1685	0.1722	0.1759	0.1797
	Ty-	-0.1558	-0.1558	-0.1558	-0.1558	-0.1558	-0.1558	-0.1558	-0.1558	-0.1558
	Ty+	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038
	Tz-	-0.0013	-0.0013	-0.0013	-0.0013	-0.0013	-0.0013	-0.0013	-0.0013	-0.0013
	Tz+	0.4843	0.5078	0.5313	0.5548	0.5783	0.6018	0.6253	0.6488	0.6723
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.1111	-0.2273	-0.3490	-0.4757	-0.6079	-0.7452	-0.8879	-1.0356
	My+	0.0000	0.0003	0.0006	0.0009	0.0012	0.0015	0.0018	0.0021	0.0024
	Mz-	0.0000	-0.0009	-0.0017	-0.0026	-0.0034	-0.0043	-0.0051	-0.0060	-0.0069
	Mz+	0.0000	0.0349	0.0698	0.1047	0.1395	0.1744	0.2093	0.2442	0.2791
468/474		0.000 m	0.124 m	0.248 m	0.372 m	0.497 m	0.621 m	0.745 m	0.869 m	0.993 m
		Envolvente (Acero Conformado)								
	N-	-1.0938	-1.0938	-1.0938	-1.0938	-1.0938	-1.0938	-1.0938	-1.0938	-1.0938
	N+	-0.2225	-0.2225	-0.2225	-0.2225	-0.2225	-0.2225	-0.2225	-0.2225	-0.2225
	Ty-	-0.2038	-0.2030	-0.2023	-0.2015	-0.2008	-0.2001	-0.1993	-0.1986	-0.1978
	Ty+	0.0090	0.0102	0.0115	0.0127	0.0140	0.0152	0.0165	0.0177	0.0190
	Tz-	-0.0007	-0.0007	-0.0007	-0.0007	-0.0007	-0.0007	-0.0007	-0.0007	-0.0007
	Tz+	0.6460	0.6460	0.6460	0.6460	0.6460	0.6460	0.6460	0.6460	0.6460
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0006	-0.0577	-0.1378	-0.2180	-0.2982	-0.3784	-0.4586	-0.5388	-0.6190
	My+	0.0229	0.0006	0.0007	0.0008	0.0009	0.0009	0.0010	0.0011	0.0012
	Mz-	-0.0040	0.0000	-0.0010	-0.0025	-0.0042	-0.0060	-0.0079	-0.0101	-0.0123
	Mz+	0.0015	0.0215	0.0464	0.0714	0.0964	0.1213	0.1461	0.1708	0.1954
469/470		0.000 m	0.150 m	0.300 m	0.450 m	0.600 m	0.751 m	0.901 m	1.051 m	1.201 m
		Envolvente (Acero Conformado)								
	N-	-0.0404	-0.0389	-0.0374	-0.0359	-0.0345	-0.0330	-0.0315	-0.0300	-0.0285
	N+	0.2340	0.2364	0.2389	0.2414	0.2439	0.2464	0.2489	0.2514	0.2539
	Ty-	-0.1015	-0.1015	-0.1015	-0.1015	-0.1015	-0.1015	-0.1015	-0.1015	-0.1015
	Ty+	0.1360	0.1360	0.1360	0.1360	0.1360	0.1360	0.1360	0.1360	0.1360
	Tz-	-0.1424	-0.1266	-0.1108	-0.0951	-0.0793	-0.0636	-0.0478	-0.0320	-0.0163
	Tz+	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0953	-0.0751	-0.0572	-0.0418	-0.0287	-0.0180	-0.0096	-0.0037	0.0000
	My+	0.0013	0.0012	0.0010	0.0008	0.0007	0.0005	0.0003	0.0002	0.0000
	Mz-	-0.1219	-0.1066	-0.0914	-0.0762	-0.0609	-0.0457	-0.0305	-0.0152	0.0000
	Mz+	0.1633	0.1429	0.1225	0.1021	0.0817	0.0613	0.0408	0.0204	0.0000
469/471		0.000 m	0.115 m	0.230 m	0.345 m	0.460 m	0.575 m	0.690 m	0.805 m	0.920 m
		Envolvente (Acero laminado)								
	N-	-0.1632	-0.1631	-0.1630	-0.1629	-0.1628	-0.1627	-0.1627	-0.1626	-0.1625
	N+	-0.0278	-0.0278	-0.0277	-0.0277	-0.0276	-0.0276	-0.0275	-0.0275	-0.0274
	Ty-	-0.0133	-0.0133	-0.0133	-0.0133	-0.0133	-0.0133	-0.0133	-0.0133	-0.0133
	Ty+	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012
	Tz-	-0.0153	-0.0145	-0.0138	-0.0130	-0.0123	-0.0116	-0.0108	-0.0101	-0.0093

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas**

	Tz+	0.0663	0.0676	0.0688	0.0701	0.0713	0.0726	0.0739	0.0751	0.0764
	Mt-	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0089	-0.0072	-0.0056	-0.0040	-0.0045	-0.0079	-0.0150	-0.0235	-0.0323
	My+	0.0334	0.0257	0.0179	0.0100	0.0030	-0.0011	0.0001	0.0013	0.0024
	Mz-	-0.0066	-0.0051	-0.0036	-0.0022	-0.0007	-0.0001	-0.0003	-0.0004	-0.0005
	Mz+	0.0006	0.0004	0.0003	0.0002	0.0000	0.0013	0.0028	0.0043	0.0058
470/476		0.000 m	0.124 m	0.248 m	0.372 m	0.497 m	0.621 m	0.745 m	0.869 m	0.993 m
		Envolvente (Acero laminado)								
	N-	-1.3227	-1.3227	-1.3227	-1.3227	-1.3227	-1.3227	-1.3227	-1.3227	-1.3227
	N+	0.8283	0.8283	0.8283	0.8283	0.8283	0.8283	0.8283	0.8283	0.8283
	Ty-	-0.0742	-0.0682	-0.0622	-0.0562	-0.0502	-0.0442	-0.0382	-0.0322	-0.0262
	Ty+	0.5099	0.5201	0.5302	0.5403	0.5504	0.5606	0.5707	0.5808	0.5910
	Tz-	-0.0013	-0.0013	-0.0013	-0.0013	-0.0013	-0.0013	-0.0013	-0.0013	-0.0013
	Tz+	0.0314	0.0314	0.0314	0.0314	0.0314	0.0314	0.0314	0.0314	0.0314
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0033	-0.0031	-0.0030	-0.0028	-0.0048	-0.0087	-0.0126	-0.0165	-0.0204
	My+	0.0108	0.0069	0.0030	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz-	-0.0118	-0.0610	-0.1222	-0.1861	-0.2513	-0.3180	-0.3882	-0.4596	-0.5324
	Mz+	0.0243	0.0315	0.0396	0.0469	0.0535	0.0594	0.0645	0.0689	0.0725
471/475		0.000 m	0.009 m	0.019 m	0.028 m	0.038 m	0.047 m	0.056 m	0.066 m	0.075 m
		Envolvente (Acero laminado)								
	N-	-0.1677	-0.1677	-0.1677	-0.1676	-0.1676	-0.1676	-0.1676	-0.1676	-0.1676
	N+	-0.0258	-0.0258	-0.0258	-0.0258	-0.0258	-0.0257	-0.0257	-0.0257	-0.0257
	Ty-	-0.0304	-0.0304	-0.0304	-0.0304	-0.0304	-0.0304	-0.0304	-0.0304	-0.0304
	Ty+	0.0111	0.0111	0.0111	0.0111	0.0111	0.0111	0.0111	0.0111	0.0111
	Tz-	-0.2481	-0.2480	-0.2480	-0.2479	-0.2478	-0.2478	-0.2477	-0.2476	-0.2476
	Tz+	0.3624	0.3625	0.3626	0.3627	0.3628	0.3629	0.3630	0.3631	0.3632
	Mt-	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0323	-0.0351	-0.0380	-0.0409	-0.0437	-0.0466	-0.0495	-0.0528	-0.0562
	My+	0.0024	0.0044	0.0063	0.0083	0.0102	0.0126	0.0149	0.0172	0.0195
	Mz-	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005
	Mz+	0.0058	0.0057	0.0057	0.0059	0.0062	0.0065	0.0068	0.0070	0.0073
472/473		0.000 m	0.369 m	0.738 m	1.106 m	1.475 m	1.844 m	2.213 m	2.582 m	2.950 m
		Envolvente (Acero laminado)								
	N-	-15.1148	-15.1015	-15.0883	-15.0750	-15.0617	-15.0484	-15.0351	-15.0218	-15.0085
	N+	-5.2139	-5.2060	-5.1982	-5.1903	-5.1824	-5.1745	-5.1667	-5.1588	-5.1509
	Ty-	-0.0174	-0.0174	-0.0174	-0.0174	-0.0174	-0.0174	-0.0174	-0.0174	-0.0174
	Ty+	0.0097	0.0097	0.0097	0.0097	0.0097	0.0097	0.0097	0.0097	0.0097
	Tz-	-1.7459	-1.5247	-1.3034	-1.0821	-0.8608	-0.6395	-0.4182	-0.1969	-0.0014
	Tz+	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0252
	Mt-	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-1.7494	-1.1479	-0.6248	-0.1865	-0.0027	-0.0027	-0.0027	-0.0027	-0.0030
	My+	0.0011	0.0009	0.0007	0.0006	0.1743	0.4490	0.6455	0.7570	0.7904
	Mz-	-0.0265	-0.0201	-0.0137	-0.0078	-0.0028	-0.0062	-0.0098	-0.0134	-0.0170
	Mz+	0.0117	0.0081	0.0046	0.0016	-0.0008	0.0056	0.0120	0.0184	0.0248
473/474		0.000 m	0.234 m	0.467 m	0.701 m	0.935 m	1.168 m	1.402 m	1.636 m	1.870 m
		Envolvente (Acero laminado)								
	N-	-1.6978	-1.6894	-1.6809	-1.6725	-1.6641	-1.6557	-1.6473	-1.6388	-1.6304
	N+	0.2333	0.2383	0.2433	0.2482	0.2532	0.2582	0.2632	0.2682	0.2732
	Ty-	-0.0015	-0.0015	-0.0015	-0.0015	-0.0015	-0.0015	-0.0015	-0.0015	-0.0015

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE** Adrián Freijomil Aradas

	Ty+	0.0280	0.0280	0.0280	0.0280	0.0280	0.0280	0.0280	0.0280	0.0280
	Tz-	-0.0251	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010
	Tz+	0.0006	0.1159	0.2561	0.3963	0.5365	0.6767	0.8169	0.9572	1.0974
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004
	My-	-0.0030	-0.0030	-0.0030	-0.0029	-0.0029	-0.0029	-0.0029	-0.0106	-0.2131
	My+	0.7903	0.7792	0.7365	0.6598	0.5517	0.4094	0.2358	0.0374	0.0024
	Mz-	-0.0020	-0.0017	-0.0013	-0.0010	-0.0006	-0.0014	-0.0076	-0.0141	-0.0207
	Mz+	0.0318	0.0253	0.0194	0.0151	0.0121	0.0097	0.0099	0.0102	0.0106
473/493		0.000 m	0.625 m	1.250 m	1.875 m	2.500 m	3.125 m	3.750 m	4.375 m	5.000 m
		Envolvente (Acero laminado)								
	N-	-0.4531	-0.4531	-0.4531	-0.4531	-0.4531	-0.4531	-0.4531	-0.4531	-0.4531
	N+	0.0535	0.0535	0.0535	0.0535	0.0535	0.0535	0.0535	0.0535	0.0535
	Ty-	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001
	Ty+	0.0176	0.0176	0.0176	0.0176	0.0176	0.0176	0.0176	0.0176	0.0176
	Tz-	-6.7634	-5.0820	-3.4007	-1.7194	-0.0380	0.6443	1.3073	1.9703	2.6333
	Tz+	-2.6658	-2.0028	-1.3397	-0.6767	-0.0137	1.6461	3.3275	5.0088	6.6901
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
	My-	-5.7295	-2.0488	0.2404	0.8653	1.0923	0.8866	0.2819	-1.9108	-5.5457
	My+	-2.2536	-0.8016	0.6303	2.2084	2.7776	2.2540	0.7216	-0.7410	-2.1729
	Mz-	-0.0005	-0.0004	-0.0004	-0.0004	-0.0003	-0.0003	-0.0003	-0.0059	-0.0170
	Mz+	0.0714	0.0603	0.0493	0.0383	0.0273	0.0162	0.0052	0.0008	0.0008
474/475		0.000 m	0.233 m	0.465 m	0.698 m	0.930 m	1.163 m	1.395 m	1.628 m	1.860 m
		Envolvente (Acero laminado)								
	N-	-1.7835	-1.7751	-1.7667	-1.7584	-1.7500	-1.7416	-1.7332	-1.7248	-1.7165
	N+	0.2757	0.2806	0.2856	0.2906	0.2955	0.3005	0.3055	0.3104	0.3154
	Ty-	-0.0219	-0.0219	-0.0219	-0.0219	-0.0219	-0.0219	-0.0219	-0.0219	-0.0219
	Ty+	0.0150	0.0150	0.0150	0.0150	0.0150	0.0150	0.0150	0.0150	0.0150
	Tz-	-0.2119	-0.1875	-0.1630	-0.1386	-0.1142	-0.0898	-0.0654	-0.0410	-0.0165
	Tz+	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004
	My-	-0.2131	-0.1668	-0.1259	-0.0909	-0.0614	-0.0378	-0.0197	-0.0074	-0.0006
	My+	0.0024	0.0021	0.0018	0.0015	0.0012	0.0009	0.0006	0.0003	0.0000
	Mz-	-0.0207	-0.0156	-0.0106	-0.0055	-0.0037	-0.0069	-0.0104	-0.0139	-0.0174
	Mz+	0.0106	0.0071	0.0036	0.0036	0.0045	0.0076	0.0110	0.0154	0.0205
474/477		0.000 m	0.126 m	0.252 m	0.378 m	0.503 m	0.629 m	0.755 m	0.881 m	1.007 m
		Envolvente (Acero Conformado)								
	N-	-1.0666	-1.0666	-1.0666	-1.0666	-1.0666	-1.0666	-1.0666	-1.0666	-1.0666
	N+	-0.2020	-0.2020	-0.2020	-0.2020	-0.2020	-0.2020	-0.2020	-0.2020	-0.2020
	Ty-	-0.0200	-0.0187	-0.0174	-0.0161	-0.0149	-0.0136	-0.0123	-0.0111	-0.0098
	Ty+	0.2036	0.2043	0.2051	0.2058	0.2066	0.2073	0.2081	0.2088	0.2096
	Tz-	-0.6632	-0.6632	-0.6632	-0.6632	-0.6632	-0.6632	-0.6632	-0.6632	-0.6632
	Tz+	0.0016	0.0016	0.0016	0.0016	0.0016	0.0016	0.0016	0.0016	0.0016
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.6190	-0.5355	-0.4520	-0.3685	-0.2850	-0.2016	-0.1181	-0.0347	-0.0011
	My+	0.0012	0.0010	0.0008	0.0006	0.0004	0.0002	0.0000	-0.0001	0.0493
	Mz-	-0.0123	-0.0099	-0.0076	-0.0055	-0.0036	-0.0018	-0.0002	0.0001	-0.0126
	Mz+	0.1954	0.1697	0.1439	0.1181	0.0921	0.0661	0.0401	0.0144	0.0026
475/476		0.000 m	0.141 m	0.283 m	0.424 m	0.566 m	0.707 m	0.849 m	0.990 m	1.131 m
		Envolvente (Acero Conformado)								
	N-	-1.2462	-1.2439	-1.2415	-1.2392	-1.2368	-1.2345	-1.2321	-1.2298	-1.2274

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE** Adrián Freijomil Aradas

	N+	0.0529	0.0543	0.0557	0.0571	0.0585	0.0599	0.0613	0.0627	0.0641
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.0594	-0.0445	-0.0297	-0.0148	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0148	0.0297	0.0445	0.0594
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My+	0.0000	0.0073	0.0126	0.0157	0.0168	0.0157	0.0126	0.0073	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
475/478		0.000 m	0.126 m	0.252 m	0.379 m	0.505 m	0.631 m	0.757 m	0.883 m	1.009 m
	Envolvente (Acero laminado)									
	N-	-0.2069	-0.2068	-0.2067	-0.2066	-0.2065	-0.2064	-0.2063	-0.2062	-0.2061
	N+	0.0043	0.0043	0.0044	0.0044	0.0045	0.0045	0.0046	0.0047	0.0047
	Ty-	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010
	Ty+	0.0147	0.0147	0.0147	0.0147	0.0147	0.0147	0.0147	0.0147	0.0147
	Tz-	-0.1452	-0.1438	-0.1425	-0.1411	-0.1397	-0.1383	-0.1370	-0.1356	-0.1342
	Tz+	0.0239	0.0247	0.0256	0.0264	0.0272	0.0280	0.0288	0.0296	0.0304
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
	My-	-0.0702	-0.0519	-0.0339	-0.0160	0.0003	-0.0005	-0.0029	-0.0059	-0.0097
	My+	0.0178	0.0147	0.0115	0.0082	0.0054	0.0199	0.0372	0.0543	0.0712
	Mz-	-0.0005	-0.0004	-0.0002	-0.0001	-0.0002	-0.0017	-0.0035	-0.0054	-0.0072
	Mz+	0.0076	0.0058	0.0039	0.0021	0.0002	0.0001	0.0003	0.0004	0.0005
476/479		0.000 m	0.126 m	0.252 m	0.378 m	0.503 m	0.629 m	0.755 m	0.881 m	1.007 m
	Envolvente (Acero laminado)									
	N-	-1.3227	-1.3227	-1.3227	-1.3227	-1.3227	-1.3227	-1.3227	-1.3227	-1.3227
	N+	0.8283	0.8283	0.8283	0.8283	0.8283	0.8283	0.8283	0.8283	0.8283
	Ty-	-0.6365	-0.6262	-0.6159	-0.6057	-0.5954	-0.5851	-0.5749	-0.5646	-0.5543
	Ty+	0.0379	0.0440	0.0500	0.0561	0.0622	0.0683	0.0744	0.0805	0.0866
	Tz-	-0.0281	-0.0281	-0.0281	-0.0281	-0.0281	-0.0281	-0.0281	-0.0281	-0.0281
	Tz+	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0204	-0.0169	-0.0133	-0.0098	-0.0063	-0.0028	-0.0010	-0.0009	-0.0007
	My+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0008	0.0044	0.0079
	Mz-	-0.5324	-0.4529	-0.3747	-0.2978	-0.2242	-0.1523	-0.0817	-0.0212	0.0081
	Mz+	0.0725	0.0673	0.0614	0.0547	0.0473	0.0391	0.0301	0.0242	0.0702
477/478		0.000 m	0.241 m	0.483 m	0.724 m	0.965 m	1.207 m	1.448 m	1.689 m	1.931 m
	Envolvente (Acero Conformado)									
	N-	-0.0035	-0.0011	0.0012	0.0036	0.0060	0.0084	0.0107	0.0131	0.0155
	N+	0.1343	0.1383	0.1423	0.1463	0.1503	0.1543	0.1583	0.1623	0.1663
	Ty-	-0.1431	-0.1431	-0.1431	-0.1431	-0.1431	-0.1431	-0.1431	-0.1431	-0.1431
	Ty+	0.0032	0.0032	0.0032	0.0032	0.0032	0.0032	0.0032	0.0032	0.0032
	Tz-	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005
	Tz+	0.4361	0.4615	0.4868	0.5121	0.5375	0.5628	0.5882	0.6135	0.6389
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.1084	-0.2227	-0.3434	-0.4700	-0.6029	-0.7416	-0.8868	-1.0378
	My+	0.0000	0.0001	0.0003	0.0004	0.0005	0.0007	0.0008	0.0009	0.0010
	Mz-	0.0000	-0.0008	-0.0015	-0.0023	-0.0031	-0.0039	-0.0046	-0.0054	-0.0062
	Mz+	0.0000	0.0345	0.0691	0.1036	0.1382	0.1727	0.2073	0.2418	0.2763
477/481		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m

## Metal 3D

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		Envolvente (Acero Conformado)								
	N-	-0.9235	-0.9235	-0.9235	-0.9235	-0.9235	-0.9235	-0.9235	-0.9235	-0.9235
	N+	-0.2013	-0.2013	-0.2013	-0.2013	-0.2013	-0.2013	-0.2013	-0.2013	-0.2013
	Ty-	-0.0064	-0.0051	-0.0039	-0.0026	-0.0014	-0.0003	0.0004	0.0012	0.0019
	Ty+	0.0754	0.0762	0.0769	0.0777	0.0784	0.0794	0.0807	0.0819	0.0832
	Tz-	-0.2282	-0.2282	-0.2282	-0.2282	-0.2282	-0.2282	-0.2282	-0.2282	-0.2282
	Tz+	0.0040	0.0040	0.0040	0.0040	0.0040	0.0040	0.0040	0.0040	0.0040
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0011	-0.0013	-0.0016	-0.0020	-0.0024	-0.0029	-0.0034	-0.0039	-0.0044
	My+	0.0493	0.0778	0.1063	0.1348	0.1633	0.1919	0.2204	0.2489	0.2774
	Mz-	-0.0126	-0.0221	-0.0317	-0.0414	-0.0511	-0.0610	-0.0709	-0.0809	-0.0911
	Mz+	0.0026	0.0034	0.0039	0.0043	0.0046	0.0047	0.0046	0.0044	0.0040
478/479		0.000 m	0.133 m	0.265 m	0.398 m	0.530 m	0.663 m	0.796 m	0.928 m	1.061 m
		Envolvente (Acero Conformado)								
	N-	-0.0660	-0.0647	-0.0634	-0.0621	-0.0607	-0.0594	-0.0581	-0.0568	-0.0555
	N+	0.2722	0.2744	0.2767	0.2789	0.2811	0.2833	0.2855	0.2877	0.2899
	Ty-	-0.1460	-0.1460	-0.1460	-0.1460	-0.1460	-0.1460	-0.1460	-0.1460	-0.1460
	Ty+	0.1867	0.1867	0.1867	0.1867	0.1867	0.1867	0.1867	0.1867	0.1867
	Tz-	-0.1275	-0.1136	-0.0996	-0.0857	-0.0718	-0.0579	-0.0439	-0.0300	-0.0161
	Tz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0762	-0.0602	-0.0460	-0.0338	-0.0233	-0.0147	-0.0080	-0.0031	0.0000
	My+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz-	-0.1549	-0.1355	-0.1162	-0.0968	-0.0774	-0.0581	-0.0387	-0.0194	0.0000
	Mz+	0.1980	0.1733	0.1485	0.1238	0.0990	0.0743	0.0495	0.0248	0.0000
478/480		0.000 m	0.074 m	0.148 m	0.222 m	0.296 m	0.370 m	0.443 m	0.517 m	0.591 m
		Envolvente (Acero laminado)								
	N-	-0.4889	-0.4888	-0.4888	-0.4887	-0.4887	-0.4886	-0.4886	-0.4885	-0.4884
	N+	0.0597	0.0597	0.0598	0.0598	0.0598	0.0599	0.0599	0.0599	0.0600
	Ty-	-0.0225	-0.0225	-0.0225	-0.0225	-0.0225	-0.0225	-0.0225	-0.0225	-0.0225
	Ty+	0.0054	0.0054	0.0054	0.0054	0.0054	0.0054	0.0054	0.0054	0.0054
	Tz-	-0.2474	-0.2466	-0.2458	-0.2450	-0.2442	-0.2434	-0.2426	-0.2417	-0.2409
	Tz+	0.1084	0.1089	0.1093	0.1098	0.1103	0.1108	0.1113	0.1117	0.1122
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0949	-0.0767	-0.0585	-0.0404	-0.0224	-0.0084	-0.0148	-0.0231	-0.0313
	My+	0.0339	0.0258	0.0178	0.0097	0.0015	-0.0005	0.0151	0.0323	0.0495
	Mz-	-0.0061	-0.0044	-0.0028	-0.0011	-0.0001	-0.0005	-0.0009	-0.0013	-0.0017
	Mz+	0.0015	0.0011	0.0007	0.0003	0.0005	0.0022	0.0039	0.0055	0.0072
479/483		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-1.1362	-1.1362	-1.1362	-1.1362	-1.1362	-1.1362	-1.1362	-1.1362	-1.1362
	N+	0.6825	0.6825	0.6825	0.6825	0.6825	0.6825	0.6825	0.6825	0.6825
	Ty-	-0.2753	-0.2651	-0.2549	-0.2447	-0.2345	-0.2243	-0.2141	-0.2039	-0.1937
	Ty+	0.0310	0.0371	0.0431	0.0492	0.0552	0.0613	0.0673	0.0733	0.0794
	Tz-	-0.0120	-0.0120	-0.0120	-0.0120	-0.0120	-0.0120	-0.0120	-0.0120	-0.0120
	Tz+	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0007	-0.0006	-0.0004	-0.0003	-0.0002	-0.0001	-0.0001	-0.0002	-0.0002
	My+	0.0079	0.0094	0.0109	0.0124	0.0139	0.0154	0.0169	0.0184	0.0199
	Mz-	0.0081	0.0056	0.0006	-0.0052	-0.0117	-0.0190	-0.0270	-0.0358	-0.0454

## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

	Mz+	0.0702	0.0996	0.1308	0.1606	0.1892	0.2165	0.2426	0.2674	0.2909
480/482		0.000 m	0.051 m	0.103 m	0.154 m	0.206 m	0.257 m	0.308 m	0.360 m	0.411 m
		Envolvente (Acero laminado)								
	N-	-0.5136	-0.5135	-0.5135	-0.5135	-0.5134	-0.5134	-0.5133	-0.5133	-0.5133
	N+	0.0780	0.0780	0.0781	0.0781	0.0781	0.0781	0.0782	0.0782	0.0782
	Ty-	-0.0093	-0.0093	-0.0093	-0.0093	-0.0093	-0.0093	-0.0093	-0.0093	-0.0093
	Ty+	0.0387	0.0387	0.0387	0.0387	0.0387	0.0387	0.0387	0.0387	0.0387
	Tz-	-0.1432	-0.1428	-0.1425	-0.1422	-0.1418	-0.1415	-0.1412	-0.1408	-0.1405
	Tz+	0.1018	0.1023	0.1029	0.1034	0.1040	0.1046	0.1051	0.1057	0.1062
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0313	-0.0240	-0.0167	-0.0093	-0.0020	0.0052	0.0104	0.0056	0.0006
	My+	0.0495	0.0452	0.0409	0.0367	0.0325	0.0301	0.0277	0.0280	0.0334
	Mz-	-0.0017	-0.0012	-0.0008	-0.0003	-0.0008	-0.0028	-0.0048	-0.0067	-0.0087
Mz+	0.0072	0.0052	0.0032	0.0012	0.0002	0.0007	0.0011	0.0016	0.0021	
481/482		0.000 m	0.250 m	0.500 m	0.750 m	1.000 m	1.251 m	1.501 m	1.751 m	2.001 m
		Envolvente (Acero Conformado)								
	N-	0.0048	0.0073	0.0097	0.0122	0.0147	0.0171	0.0196	0.0220	0.0245
	N+	0.0930	0.0971	0.1013	0.1055	0.1096	0.1138	0.1179	0.1221	0.1262
	Ty-	-0.0895	-0.0895	-0.0895	-0.0895	-0.0895	-0.0895	-0.0895	-0.0895	-0.0895
	Ty+	0.0033	0.0033	0.0033	0.0033	0.0033	0.0033	0.0033	0.0033	0.0033
	Tz-	-0.0047	-0.0047	-0.0047	-0.0047	-0.0047	-0.0047	-0.0047	-0.0047	-0.0047
	Tz+	0.2428	0.2690	0.2953	0.3215	0.3478	0.3741	0.4003	0.4266	0.4528
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0641	-0.1346	-0.2118	-0.2954	-0.3858	-0.4825	-0.5861	-0.6959
	My+	0.0000	0.0012	0.0023	0.0035	0.0047	0.0058	0.0070	0.0082	0.0093
	Mz-	0.0000	-0.0008	-0.0017	-0.0025	-0.0033	-0.0041	-0.0050	-0.0058	-0.0066
Mz+	0.0000	0.0224	0.0448	0.0672	0.0896	0.1120	0.1343	0.1567	0.1791	
481/484		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-0.8342	-0.8342	-0.8342	-0.8342	-0.8342	-0.8342	-0.8342	-0.8342	-0.8342
	N+	-0.2020	-0.2020	-0.2020	-0.2020	-0.2020	-0.2020	-0.2020	-0.2020	-0.2020
	Ty-	-0.0098	-0.0086	-0.0073	-0.0061	-0.0049	-0.0041	-0.0034	-0.0026	-0.0019
	Ty+	-0.0025	-0.0018	-0.0011	-0.0003	0.0005	0.0018	0.0030	0.0043	0.0056
	Tz-	-0.0008	-0.0008	-0.0008	-0.0008	-0.0008	-0.0008	-0.0008	-0.0008	-0.0008
	Tz+	0.0146	0.0146	0.0146	0.0146	0.0146	0.0146	0.0146	0.0146	0.0146
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0044	-0.0043	-0.0042	-0.0041	-0.0040	-0.0039	-0.0039	-0.0038	-0.0037
	My+	0.2774	0.2756	0.2738	0.2719	0.2701	0.2683	0.2665	0.2646	0.2628
	Mz-	-0.0911	-0.0901	-0.0893	-0.0886	-0.0879	-0.0873	-0.0869	-0.0865	-0.0862
Mz+	0.0040	0.0045	0.0049	0.0051	0.0052	0.0051	0.0048	0.0044	0.0038	
482/483		0.000 m	0.124 m	0.248 m	0.372 m	0.495 m	0.619 m	0.743 m	0.867 m	0.991 m
		Envolvente (Acero Conformado)								
	N-	-0.1046	-0.1034	-0.1022	-0.1009	-0.0997	-0.0985	-0.0973	-0.0961	-0.0949
	N+	0.1418	0.1439	0.1459	0.1480	0.1501	0.1521	0.1542	0.1562	0.1583
	Ty-	-0.1786	-0.1786	-0.1786	-0.1786	-0.1786	-0.1786	-0.1786	-0.1786	-0.1786
	Ty+	0.2226	0.2226	0.2226	0.2226	0.2226	0.2226	0.2226	0.2226	0.2226
	Tz-	-0.1151	-0.1021	-0.0891	-0.0760	-0.0630	-0.0500	-0.0370	-0.0240	-0.0110
	Tz+	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0625	-0.0491	-0.0372	-0.0270	-0.0183	-0.0114	-0.0060	-0.0022	0.0000



## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas**

	My+	0.0001	0.0001	0.0001	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz-	-0.1770	-0.1549	-0.1327	-0.1106	-0.0885	-0.0664	-0.0442	-0.0221	0.0000
	Mz+	0.2205	0.1930	0.1654	0.1378	0.1103	0.0827	0.0551	0.0276	0.0000
482/485		0.000 m	0.125 m	0.251 m	0.376 m	0.501 m	0.627 m	0.752 m	0.877 m	1.002 m
		Envolvente (Acero laminado)								
	N-	-0.0144	-0.0143	-0.0143	-0.0142	-0.0142	-0.0141	-0.0141	-0.0140	-0.0139
	N+	0.0336	0.0337	0.0338	0.0339	0.0340	0.0341	0.0342	0.0343	0.0344
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.0078	-0.0064	-0.0051	-0.0043	-0.0035	-0.0026	-0.0018	-0.0010	-0.0002
	Tz+	0.0040	0.0048	0.0056	0.0069	0.0083	0.0097	0.0110	0.0124	0.0137
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0023	-0.0015	-0.0008	-0.0002	0.0003	-0.0007	-0.0020	-0.0034	-0.0051
	My+	0.0032	0.0028	0.0022	0.0014	0.0005	0.0007	0.0009	0.0011	0.0012
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
483/486		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-0.9138	-0.9138	-0.9138	-0.9138	-0.9138	-0.9138	-0.9138	-0.9138	-0.9138
	N+	0.5041	0.5041	0.5041	0.5041	0.5041	0.5041	0.5041	0.5041	0.5041
	Ty-	-0.0417	-0.0315	-0.0213	-0.0111	-0.0020	0.0040	0.0101	0.0161	0.0221
	Ty+	-0.0113	-0.0053	0.0007	0.0068	0.0140	0.0242	0.0344	0.0446	0.0548
	Tz-	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010
	Tz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0001	-0.0001	-0.0001
	My+	0.0199	0.0200	0.0201	0.0202	0.0203	0.0205	0.0206	0.0207	0.0208
	Mz-	-0.0454	-0.0438	-0.0430	-0.0430	-0.0437	-0.0451	-0.0474	-0.0504	-0.0541
	Mz+	0.2909	0.2940	0.2965	0.2977	0.2977	0.2964	0.2938	0.2899	0.2848
484/485		0.000 m	0.259 m	0.518 m	0.777 m	1.035 m	1.294 m	1.553 m	1.812 m	2.071 m
		Envolvente (Acero Conformado)								
	N-	0.0041	0.0067	0.0092	0.0118	0.0143	0.0169	0.0194	0.0220	0.0245
	N+	0.0939	0.0982	0.1025	0.1068	0.1111	0.1154	0.1197	0.1240	0.1283
	Ty-	-0.0919	-0.0919	-0.0919	-0.0919	-0.0919	-0.0919	-0.0919	-0.0919	-0.0919
	Ty+	0.0033	0.0033	0.0033	0.0033	0.0033	0.0033	0.0033	0.0033	0.0033
	Tz-	-0.0048	-0.0048	-0.0048	-0.0048	-0.0048	-0.0048	-0.0048	-0.0048	-0.0048
	Tz+	0.2488	0.2760	0.3032	0.3304	0.3575	0.3847	0.4119	0.4391	0.4663
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0681	-0.1429	-0.2250	-0.3139	-0.4101	-0.5131	-0.6234	-0.7404
	My+	0.0000	0.0012	0.0025	0.0037	0.0050	0.0062	0.0074	0.0087	0.0099
	Mz-	0.0000	-0.0008	-0.0017	-0.0025	-0.0034	-0.0042	-0.0051	-0.0059	-0.0068
	Mz+	0.0000	0.0238	0.0476	0.0713	0.0951	0.1189	0.1427	0.1665	0.1903
484/488		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-0.7427	-0.7427	-0.7427	-0.7427	-0.7427	-0.7427	-0.7427	-0.7427	-0.7427
	N+	-0.2028	-0.2028	-0.2028	-0.2028	-0.2028	-0.2028	-0.2028	-0.2028	-0.2028
	Ty-	-0.0937	-0.0924	-0.0912	-0.0900	-0.0892	-0.0885	-0.0877	-0.0870	-0.0862
	Ty+	-0.0011	-0.0003	0.0004	0.0012	0.0025	0.0038	0.0050	0.0063	0.0075
	Tz-	-0.0055	-0.0055	-0.0055	-0.0055	-0.0055	-0.0055	-0.0055	-0.0055	-0.0055
	Tz+	0.2634	0.2634	0.2634	0.2634	0.2634	0.2634	0.2634	0.2634	0.2634
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0037	-0.0030	-0.0023	-0.0016	-0.0009	-0.0006	-0.0005	-0.0006	-0.0006
	My+	0.2628	0.2299	0.1970	0.1640	0.1311	0.0982	0.0655	0.0329	0.0018
	Mz-	-0.0862	-0.0747	-0.0634	-0.0521	-0.0409	-0.0298	-0.0187	-0.0078	0.0001
	Mz+	0.0038	0.0041	0.0042	0.0041	0.0039	0.0035	0.0029	0.0022	0.0037
485/486		0.000 m	0.115 m	0.230 m	0.345 m	0.460 m	0.576 m	0.691 m	0.806 m	0.921 m
		Envolvente (Acero Conformado)								
	N-	-0.1457	-0.1446	-0.1435	-0.1423	-0.1412	-0.1401	-0.1389	-0.1378	-0.1367
	N+	0.2265	0.2284	0.2303	0.2322	0.2341	0.2360	0.2379	0.2398	0.2418
	Ty-	-0.2218	-0.2218	-0.2218	-0.2218	-0.2218	-0.2218	-0.2218	-0.2218	-0.2218
	Ty+	0.2722	0.2722	0.2722	0.2722	0.2722	0.2722	0.2722	0.2722	0.2722
	Tz-	-0.1075	-0.0954	-0.0833	-0.0712	-0.0592	-0.0471	-0.0350	-0.0229	-0.0108
	Tz+	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0545	-0.0428	-0.0325	-0.0236	-0.0161	-0.0100	-0.0053	-0.0020	0.0000
	My+	0.0003	0.0002	0.0002	0.0002	0.0001	0.0001	0.0001	0.0000	0.0000
	Mz-	-0.2043	-0.1787	-0.1532	-0.1277	-0.1021	-0.0766	-0.0511	-0.0255	0.0000
	Mz+	0.2506	0.2193	0.1880	0.1567	0.1253	0.0940	0.0627	0.0313	0.0000
485/487		0.000 m	0.033 m	0.066 m	0.098 m	0.131 m	0.164 m	0.197 m	0.229 m	0.262 m
		Envolvente (Acero laminado)								
	N-	-0.1160	-0.1160	-0.1160	-0.1159	-0.1159	-0.1159	-0.1159	-0.1159	-0.1159
	N+	0.5601	0.5601	0.5602	0.5602	0.5602	0.5602	0.5603	0.5603	0.5603
	Ty-	-0.0850	-0.0850	-0.0850	-0.0850	-0.0850	-0.0850	-0.0850	-0.0850	-0.0850
	Ty+	0.0289	0.0289	0.0289	0.0289	0.0289	0.0289	0.0289	0.0289	0.0289
	Tz-	-0.1813	-0.1810	-0.1806	-0.1803	-0.1799	-0.1795	-0.1792	-0.1788	-0.1785
	Tz+	0.1851	0.1853	0.1855	0.1857	0.1859	0.1861	0.1863	0.1865	0.1868
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0002	0.0053	0.0105	0.0058	-0.0003	-0.0064	-0.0125	-0.0186	-0.0247
	My+	0.0305	0.0313	0.0322	0.0348	0.0384	0.0419	0.0469	0.0521	0.0573
	Mz-	-0.0146	-0.0118	-0.0090	-0.0062	-0.0035	-0.0007	-0.0007	-0.0017	-0.0026
	Mz+	0.0050	0.0040	0.0031	0.0021	0.0012	0.0002	0.0021	0.0049	0.0077
486/490		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-0.6419	-0.6419	-0.6419	-0.6419	-0.6419	-0.6419	-0.6419	-0.6419	-0.6419
	N+	0.2825	0.2825	0.2825	0.2825	0.2825	0.2825	0.2825	0.2825	0.2825
	Ty-	-0.1038	-0.0977	-0.0917	-0.0856	-0.0796	-0.0736	-0.0675	-0.0615	-0.0554
	Ty+	0.2879	0.2981	0.3083	0.3185	0.3287	0.3389	0.3491	0.3593	0.3695
	Tz-	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003	-0.0003
	Tz+	0.0099	0.0099	0.0099	0.0099	0.0099	0.0099	0.0099	0.0099	0.0099
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0001	-0.0001	-0.0001	0.0000	0.0000	0.0000	0.0000	-0.0001	-0.0001
	My+	0.0208	0.0196	0.0183	0.0171	0.0159	0.0147	0.0135	0.0123	0.0110
	Mz-	-0.0541	-0.0415	-0.0297	-0.0186	-0.0082	0.0013	0.0101	-0.0028	-0.0439
	Mz+	0.2848	0.2482	0.2103	0.1711	0.1307	0.0892	0.0472	0.0387	0.0412
487/489		0.000 m	0.093 m	0.185 m	0.278 m	0.370 m	0.463 m	0.555 m	0.648 m	0.740 m
		Envolvente (Acero laminado)								
	N-	-0.0739	-0.0739	-0.0739	-0.0738	-0.0738	-0.0737	-0.0737	-0.0736	-0.0736
	N+	0.5083	0.5084	0.5084	0.5085	0.5086	0.5086	0.5087	0.5088	0.5089
	Ty-	-0.0059	-0.0059	-0.0059	-0.0059	-0.0059	-0.0059	-0.0059	-0.0059	-0.0059
	Ty+	0.0174	0.0174	0.0174	0.0174	0.0174	0.0174	0.0174	0.0174	0.0174
	Tz-	-0.0688	-0.0682	-0.0676	-0.0670	-0.0664	-0.0658	-0.0652	-0.0646	-0.0640

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE** Adrián Freijomil Aradas

	Tz+	0.1868	0.1878	0.1888	0.1898	0.1908	0.1918	0.1929	0.1939	0.1949
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0247	-0.0184	-0.0121	-0.0059	-0.0133	-0.0303	-0.0481	-0.0660	-0.0840
	My+	0.0573	0.0399	0.0225	0.0057	0.0003	0.0064	0.0124	0.0184	0.0244
	Mz-	-0.0026	-0.0021	-0.0015	-0.0010	-0.0004	-0.0004	-0.0020	-0.0036	-0.0052
	Mz+	0.0077	0.0061	0.0045	0.0028	0.0012	0.0001	0.0007	0.0012	0.0018
488/489		0.000 m	0.268 m	0.535 m	0.803 m	1.070 m	1.338 m	1.606 m	1.873 m	2.141 m
		Envolvente (Acero Conformado)								
	N-	-0.0054	-0.0024	0.0002	0.0028	0.0055	0.0081	0.0108	0.0134	0.0160
	N+	0.1203	0.1244	0.1288	0.1333	0.1377	0.1422	0.1466	0.1511	0.1555
	Ty-	-0.1325	-0.1325	-0.1325	-0.1325	-0.1325	-0.1325	-0.1325	-0.1325	-0.1325
	Ty+	0.0029	0.0029	0.0029	0.0029	0.0029	0.0029	0.0029	0.0029	0.0029
	Tz-	-0.0011	-0.0011	-0.0011	-0.0011	-0.0011	-0.0011	-0.0011	-0.0011	-0.0011
	Tz+	0.3918	0.4199	0.4480	0.4761	0.5042	0.5323	0.5604	0.5885	0.6166
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.1088	-0.2247	-0.3485	-0.4795	-0.6184	-0.7644	-0.9183	-1.0794
	My+	0.0000	0.0003	0.0006	0.0009	0.0012	0.0015	0.0018	0.0021	0.0024
	Mz-	0.0000	-0.0008	-0.0015	-0.0023	-0.0031	-0.0038	-0.0046	-0.0053	-0.0061
	Mz+	0.0000	0.0355	0.0709	0.1064	0.1418	0.1773	0.2128	0.2482	0.2837
488/494		0.000 m	0.124 m	0.248 m	0.372 m	0.497 m	0.621 m	0.745 m	0.869 m	0.993 m
		Envolvente (Acero Conformado)								
	N-	-0.6458	-0.6458	-0.6458	-0.6458	-0.6458	-0.6458	-0.6458	-0.6458	-0.6458
	N+	-0.2027	-0.2027	-0.2027	-0.2027	-0.2027	-0.2027	-0.2027	-0.2027	-0.2027
	Ty-	-0.2065	-0.2058	-0.2050	-0.2043	-0.2035	-0.2028	-0.2021	-0.2013	-0.2006
	Ty+	0.0129	0.0142	0.0154	0.0167	0.0179	0.0192	0.0204	0.0217	0.0229
	Tz-	-0.0050	-0.0050	-0.0050	-0.0050	-0.0050	-0.0050	-0.0050	-0.0050	-0.0050
	Tz+	0.6549	0.6549	0.6549	0.6549	0.6549	0.6549	0.6549	0.6549	0.6549
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0006	-0.0819	-0.1632	-0.2445	-0.3258	-0.4071	-0.4884	-0.5696	-0.6509
	My+	0.0018	0.0024	0.0031	0.0037	0.0043	0.0049	0.0055	0.0062	0.0068
	Mz-	0.0001	-0.0003	-0.0022	-0.0042	-0.0063	-0.0086	-0.0111	-0.0137	-0.0164
	Mz+	0.0037	0.0286	0.0541	0.0795	0.1048	0.1300	0.1551	0.1802	0.2051
489/490		0.000 m	0.106 m	0.213 m	0.319 m	0.425 m	0.532 m	0.638 m	0.745 m	0.851 m
		Envolvente (Acero Conformado)								
	N-	-0.0183	-0.0172	-0.0162	-0.0151	-0.0141	-0.0130	-0.0120	-0.0110	-0.0099
	N+	0.1656	0.1674	0.1691	0.1709	0.1727	0.1744	0.1762	0.1780	0.1797
	Ty-	-0.2801	-0.2801	-0.2801	-0.2801	-0.2801	-0.2801	-0.2801	-0.2801	-0.2801
	Ty+	0.3424	0.3424	0.3424	0.3424	0.3424	0.3424	0.3424	0.3424	0.3424
	Tz-	-0.1100	-0.0989	-0.0877	-0.0765	-0.0654	-0.0542	-0.0430	-0.0319	-0.0207
	Tz+	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0556	-0.0445	-0.0346	-0.0259	-0.0183	-0.0120	-0.0068	-0.0028	0.0000
	My+	0.0006	0.0005	0.0004	0.0004	0.0003	0.0002	0.0001	0.0001	0.0000
	Mz-	-0.2383	-0.2085	-0.1787	-0.1490	-0.1192	-0.0894	-0.0596	-0.0298	0.0000
	Mz+	0.2914	0.2549	0.2185	0.1821	0.1457	0.1093	0.0728	0.0364	0.0000
489/491		0.000 m	0.117 m	0.234 m	0.351 m	0.468 m	0.585 m	0.702 m	0.819 m	0.935 m
		Envolvente (Acero laminado)								
	N-	-0.6345	-0.6344	-0.6343	-0.6343	-0.6342	-0.6342	-0.6341	-0.6341	-0.6340
	N+	1.3710	1.3711	1.3711	1.3712	1.3713	1.3714	1.3715	1.3716	1.3717
	Ty-	-0.0377	-0.0377	-0.0377	-0.0377	-0.0377	-0.0377	-0.0377	-0.0377	-0.0377

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE** Adrián Freijomil Aradas

	Ty+	-0.0065	-0.0065	-0.0065	-0.0065	-0.0065	-0.0065	-0.0065	-0.0065	-0.0065
	Tz-	-0.0132	-0.0125	-0.0117	-0.0110	-0.0102	-0.0094	-0.0087	-0.0079	-0.0072
	Tz+	0.1104	0.1117	0.1130	0.1143	0.1155	0.1168	0.1181	0.1194	0.1206
	Mt-	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0052	-0.0037	-0.0023	-0.0010	-0.0004	-0.0120	-0.0258	-0.0396	-0.0537
	My+	0.0544	0.0414	0.0283	0.0150	0.0028	0.0014	0.0025	0.0035	0.0043
	Mz-	-0.0123	-0.0081	-0.0040	-0.0019	-0.0003	0.0009	0.0018	0.0028	0.0037
	Mz+	-0.0016	-0.0008	0.0002	0.0028	0.0059	0.0098	0.0141	0.0185	0.0229
490/496		0.000 m	0.124 m	0.248 m	0.372 m	0.497 m	0.621 m	0.745 m	0.869 m	0.993 m
	Envolvente (Acero laminado)									
	N-	-0.2999	-0.2999	-0.2999	-0.2999	-0.2999	-0.2999	-0.2999	-0.2999	-0.2999
	N+	0.0028	0.0028	0.0028	0.0028	0.0028	0.0028	0.0028	0.0028	0.0028
	Ty-	-0.0653	-0.0593	-0.0533	-0.0473	-0.0413	-0.0353	-0.0293	-0.0233	-0.0173
	Ty+	0.5415	0.5516	0.5618	0.5719	0.5820	0.5921	0.6023	0.6124	0.6225
	Tz-	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010
	Tz+	0.0305	0.0305	0.0305	0.0305	0.0305	0.0305	0.0305	0.0305	0.0305
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0001	-0.0001	-0.0002	-0.0004	-0.0042	-0.0080	-0.0118	-0.0156	-0.0194
	My+	0.0110	0.0073	0.0036	0.0005	0.0007	0.0008	0.0009	0.0010	0.0011
	Mz-	-0.0439	-0.1100	-0.1777	-0.2480	-0.3196	-0.3925	-0.4666	-0.5420	-0.6187
	Mz+	0.0412	0.0455	0.0491	0.0519	0.0540	0.0567	0.0608	0.0640	0.0665
491/495		0.000 m	0.007 m	0.015 m	0.022 m	0.030 m	0.037 m	0.045 m	0.052 m	0.060 m
	Envolvente (Acero laminado)									
	N-	-1.0918	-1.0918	-1.0918	-1.0918	-1.0918	-1.0918	-1.0918	-1.0918	-1.0918
	N+	0.6026	0.6026	0.6026	0.6026	0.6026	0.6026	0.6026	0.6026	0.6026
	Ty-	-0.4365	-0.4365	-0.4365	-0.4365	-0.4365	-0.4365	-0.4365	-0.4365	-0.4365
	Ty+	1.3972	1.3972	1.3972	1.3972	1.3972	1.3972	1.3972	1.3972	1.3972
	Tz-	0.0126	0.0126	0.0127	0.0127	0.0128	0.0128	0.0129	0.0129	0.0129
	Tz+	0.5025	0.5026	0.5026	0.5027	0.5028	0.5029	0.5030	0.5030	0.5031
	Mt-	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0537	-0.0571	-0.0606	-0.0641	-0.0675	-0.0710	-0.0745	-0.0780	-0.0814
	My+	0.0043	0.0042	0.0042	0.0041	0.0040	0.0039	0.0038	0.0037	0.0036
	Mz-	0.0037	0.0015	-0.0050	-0.0155	-0.0259	-0.0364	-0.0468	-0.0573	-0.0677
	Mz+	0.0229	0.0142	0.0132	0.0160	0.0192	0.0224	0.0256	0.0288	0.0320
492/493		0.000 m	0.369 m	0.738 m	1.106 m	1.475 m	1.844 m	2.213 m	2.582 m	2.950 m
	Envolvente (Acero laminado)									
	N-	-15.5321	-15.5188	-15.5056	-15.4923	-15.4790	-15.4657	-15.4524	-15.4391	-15.4258
	N+	-5.2457	-5.2379	-5.2300	-5.2221	-5.2142	-5.2064	-5.1985	-5.1906	-5.1827
	Ty-	-0.0194	-0.0194	-0.0194	-0.0194	-0.0194	-0.0194	-0.0194	-0.0194	-0.0194
	Ty+	0.0054	0.0054	0.0054	0.0054	0.0054	0.0054	0.0054	0.0054	0.0054
	Tz-	-1.8215	-1.6003	-1.3790	-1.1577	-0.9364	-0.7151	-0.4938	-0.2725	-0.0513
	Tz+	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-1.8915	-1.2621	-0.7111	-0.2449	-0.0031	-0.0025	-0.0028	-0.0033	-0.0037
	My+	0.0030	0.0022	0.0015	0.0007	0.1439	0.4459	0.6703	0.8100	0.8714
	Mz-	-0.0291	-0.0219	-0.0148	-0.0076	-0.0005	-0.0021	-0.0041	-0.0061	-0.0081
	Mz+	0.0079	0.0059	0.0039	0.0019	0.0001	0.0067	0.0138	0.0210	0.0281
493/494		0.000 m	0.234 m	0.467 m	0.701 m	0.935 m	1.168 m	1.402 m	1.636 m	1.870 m
	Envolvente (Acero laminado)									
	N-	-2.5963	-2.5879	-2.5795	-2.5711	-2.5627	-2.5542	-2.5458	-2.5374	-2.5290

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE** Adrián Freijomil Aradas

	N+	0.0915	0.0965	0.1015	0.1064	0.1114	0.1164	0.1214	0.1264	0.1314
	Ty-	-0.0219	-0.0219	-0.0219	-0.0219	-0.0219	-0.0219	-0.0219	-0.0219	-0.0219
	Ty+	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009
	Tz-	-0.0146	-0.0059	-0.0059	-0.0059	-0.0059	-0.0059	-0.0059	-0.0059	-0.0059
	Tz+	0.0016	0.1287	0.2690	0.4092	0.5494	0.6896	0.8298	0.9700	1.1102
	Mt-	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
	Mt+	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
	My-	-0.0037	-0.0037	-0.0037	-0.0041	-0.0045	-0.0048	-0.0052	-0.0056	-0.1604
	My+	0.8711	0.8574	0.8124	0.7332	0.6226	0.4779	0.3018	0.0916	0.0190
	Mz-	-0.0232	-0.0181	-0.0130	-0.0080	-0.0031	-0.0003	-0.0005	-0.0007	-0.0009
	Mz+	0.0020	0.0034	0.0049	0.0064	0.0081	0.0098	0.0115	0.0133	0.0178
493/514		0.000 m	0.625 m	1.250 m	1.875 m	2.500 m	3.125 m	3.750 m	4.375 m	5.000 m
		Envolvente (Acero laminado)								
	N-	-0.4653	-0.4653	-0.4653	-0.4653	-0.4653	-0.4653	-0.4653	-0.4653	-0.4653
	N+	0.0798	0.0798	0.0798	0.0798	0.0798	0.0798	0.0798	0.0798	0.0798
	Ty-	-0.0190	-0.0190	-0.0190	-0.0190	-0.0190	-0.0190	-0.0190	-0.0190	-0.0190
	Ty+	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012
	Tz-	-6.6917	-5.0103	-3.3290	-1.6476	0.0121	0.6752	1.3382	2.0012	2.6642
	Tz+	-2.6370	-1.9740	-1.3110	-0.6480	0.0353	1.7166	3.3980	5.0793	6.7607
	Mt-	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-5.5548	-1.9190	0.2714	0.8771	1.0850	0.8619	0.2410	-2.0453	-5.7237
	My+	-2.1847	-0.7517	0.7142	2.2479	2.7728	2.2049	0.6281	-0.8029	-2.2529
	Mz-	-0.0172	-0.0054	-0.0008	-0.0015	-0.0023	-0.0030	-0.0038	-0.0045	-0.0053
	Mz+	0.0007	0.0002	0.0065	0.0184	0.0303	0.0421	0.0540	0.0659	0.0778
494/495		0.000 m	0.276 m	0.553 m	0.829 m	1.105 m	1.381 m	1.658 m	1.934 m	2.210 m
		Envolvente (Acero laminado)								
	N-	-2.7326	-2.7227	-2.7127	-2.7027	-2.6928	-2.6828	-2.6729	-2.6629	-2.6530
	N+	0.1341	0.1400	0.1459	0.1518	0.1577	0.1636	0.1695	0.1754	0.1813
	Ty-	-0.0015	-0.0015	-0.0015	-0.0015	-0.0015	-0.0015	-0.0015	-0.0015	-0.0015
	Ty+	0.0180	0.0180	0.0180	0.0180	0.0180	0.0180	0.0180	0.0180	0.0180
	Tz-	-0.1889	-0.1599	-0.1309	-0.1019	-0.0729	-0.0439	-0.0149	-0.0008	-0.0008
	Tz+	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0164	0.0455
	Mt-	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
	Mt+	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
	My-	-0.1604	-0.1124	-0.0721	-0.0401	-0.0158	-0.0048	-0.0046	-0.0044	-0.0044
	My+	0.0190	0.0178	0.0166	0.0154	0.0142	0.0130	0.0150	0.0143	0.0094
	Mz-	-0.0009	-0.0005	-0.0001	-0.0006	-0.0052	-0.0101	-0.0150	-0.0199	-0.0248
	Mz+	0.0178	0.0145	0.0113	0.0080	0.0051	0.0023	0.0016	0.0020	0.0024
494/498		0.000 m	0.126 m	0.252 m	0.378 m	0.503 m	0.629 m	0.755 m	0.881 m	1.007 m
		Envolvente (Acero Conformado)								
	N-	-0.6666	-0.6666	-0.6666	-0.6666	-0.6666	-0.6666	-0.6666	-0.6666	-0.6666
	N+	-0.2003	-0.2003	-0.2003	-0.2003	-0.2003	-0.2003	-0.2003	-0.2003	-0.2003
	Ty-	-0.0238	-0.0226	-0.0213	-0.0200	-0.0188	-0.0175	-0.0162	-0.0150	-0.0137
	Ty+	0.1961	0.1968	0.1976	0.1983	0.1991	0.1998	0.2006	0.2013	0.2021
	Tz-	-0.6443	-0.6443	-0.6443	-0.6443	-0.6443	-0.6443	-0.6443	-0.6443	-0.6443
	Tz+	0.0052	0.0052	0.0052	0.0052	0.0052	0.0052	0.0052	0.0052	0.0052
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.6509	-0.5698	-0.4887	-0.4076	-0.3266	-0.2455	-0.1644	-0.0833	-0.0022
	My+	0.0068	0.0061	0.0055	0.0048	0.0042	0.0035	0.0029	0.0022	0.0015
	Mz-	-0.0164	-0.0135	-0.0108	-0.0082	-0.0057	-0.0034	-0.0013	-0.0003	-0.0009
	Mz+	0.2051	0.1804	0.1556	0.1306	0.1056	0.0805	0.0553	0.0304	0.0060
495/496		0.000 m	0.098 m	0.195 m	0.293 m	0.391 m	0.488 m	0.586 m	0.684 m	0.781 m

## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

		Envolvente (Acero Conformado)								
	N-	-1.3477	-1.3460	-1.3444	-1.3428	-1.3412	-1.3395	-1.3379	-1.3363	-1.3347
	N+	0.0520	0.0529	0.0539	0.0549	0.0558	0.0568	0.0577	0.0587	0.0597
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.0410	-0.0308	-0.0205	-0.0103	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0103	0.0205	0.0308	0.0410
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My+	0.0000	0.0035	0.0060	0.0075	0.0080	0.0075	0.0060	0.0035	0.0000
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
497/495		0.000 m	0.007 m	0.015 m	0.022 m	0.030 m	0.037 m	0.045 m	0.052 m	0.060 m
		Envolvente (Acero laminado)								
	N-	0.1626	0.1626	0.1626	0.1626	0.1626	0.1626	0.1626	0.1626	0.1626
	N+	1.4009	1.4009	1.4009	1.4009	1.4009	1.4009	1.4009	1.4009	1.4010
	Ty-	-0.9229	-0.9229	-0.9229	-0.9229	-0.9229	-0.9229	-0.9229	-0.9229	-0.9229
	Ty+	0.5662	0.5662	0.5662	0.5662	0.5662	0.5662	0.5662	0.5662	0.5662
	Tz-	-0.0051	-0.0051	-0.0050	-0.0050	-0.0049	-0.0049	-0.0048	-0.0048	-0.0047
	Tz+	0.5015	0.5016	0.5016	0.5017	0.5018	0.5019	0.5020	0.5021	0.5021
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004
	My-	-0.0481	-0.0519	-0.0557	-0.0594	-0.0632	-0.0669	-0.0707	-0.0745	-0.0782
	My+	0.0160	0.0161	0.0161	0.0161	0.0162	0.0162	0.0163	0.0163	0.0163
	Mz-	-0.0027	-0.0029	-0.0070	-0.0112	-0.0154	-0.0195	-0.0237	-0.0279	-0.0321
	Mz+	0.0128	0.0190	0.0259	0.0328	0.0398	0.0467	0.0536	0.0605	0.0674
496/500		0.000 m	0.126 m	0.252 m	0.378 m	0.503 m	0.629 m	0.755 m	0.881 m	1.007 m
		Envolvente (Acero laminado)								
	N-	-0.2999	-0.2999	-0.2999	-0.2999	-0.2999	-0.2999	-0.2999	-0.2999	-0.2999
	N+	0.0028	0.0028	0.0028	0.0028	0.0028	0.0028	0.0028	0.0028	0.0028
	Ty-	-0.7121	-0.7019	-0.6916	-0.6813	-0.6711	-0.6608	-0.6505	-0.6402	-0.6300
	Ty+	0.0492	0.0553	0.0614	0.0675	0.0736	0.0797	0.0857	0.0918	0.0979
	Tz-	-0.0110	-0.0110	-0.0110	-0.0110	-0.0110	-0.0110	-0.0110	-0.0110	-0.0110
	Tz+	0.0029	0.0029	0.0029	0.0029	0.0029	0.0029	0.0029	0.0029	0.0029
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0194	-0.0181	-0.0167	-0.0154	-0.0141	-0.0128	-0.0115	-0.0101	-0.0088
	My+	0.0011	0.0013	0.0014	0.0015	0.0016	0.0018	0.0019	0.0020	0.0021
	Mz-	-0.6187	-0.5297	-0.4420	-0.3556	-0.2720	-0.1913	-0.1118	-0.0445	-0.0192
	Mz+	0.0665	0.0608	0.0543	0.0471	0.0391	0.0303	0.0208	0.0105	0.0571
499/497		0.000 m	0.119 m	0.237 m	0.356 m	0.475 m	0.593 m	0.712 m	0.831 m	0.949 m
		Envolvente (Acero laminado)								
	N-	-0.4381	-0.4380	-0.4379	-0.4379	-0.4378	-0.4378	-0.4377	-0.4377	-0.4376
	N+	0.5795	0.5795	0.5796	0.5797	0.5798	0.5799	0.5800	0.5801	0.5802
	Ty-	-0.0233	-0.0233	-0.0233	-0.0233	-0.0233	-0.0233	-0.0233	-0.0233	-0.0233
	Ty+	0.0062	0.0062	0.0062	0.0062	0.0062	0.0062	0.0062	0.0062	0.0062
	Tz-	-0.0377	-0.0369	-0.0362	-0.0354	-0.0346	-0.0339	-0.0331	-0.0323	-0.0316
	Tz+	0.1080	0.1093	0.1106	0.1119	0.1132	0.1145	0.1158	0.1171	0.1184
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004
	My-	-0.0169	-0.0124	-0.0081	-0.0038	-0.0005	-0.0067	-0.0203	-0.0342	-0.0481
	My+	0.0599	0.0470	0.0340	0.0208	0.0074	0.0044	0.0084	0.0122	0.0160
	Mz-	-0.0101	-0.0073	-0.0045	-0.0018	0.0002	-0.0004	-0.0012	-0.0019	-0.0027

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	Mz+	0.0032	0.0025	0.0023	0.0021	0.0026	0.0047	0.0074	0.0101	0.0128
498/499		0.000 m	0.268 m	0.535 m	0.803 m	1.070 m	1.338 m	1.606 m	1.873 m	2.141 m
		Envolvente (Acero Conformado)								
	N-	-0.0074	-0.0041	-0.0015	0.0011	0.0038	0.0064	0.0090	0.0117	0.0143
	N+	0.1175	0.1213	0.1257	0.1302	0.1346	0.1391	0.1435	0.1480	0.1524
	Ty-	-0.1315	-0.1315	-0.1315	-0.1315	-0.1315	-0.1315	-0.1315	-0.1315	-0.1315
	Ty+	0.0029	0.0029	0.0029	0.0029	0.0029	0.0029	0.0029	0.0029	0.0029
	Tz-	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006
	Tz+	0.3888	0.4169	0.4450	0.4731	0.5012	0.5293	0.5574	0.5855	0.6136
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.1080	-0.2231	-0.3461	-0.4763	-0.6143	-0.7596	-0.9127	-1.0729
	My+	0.0000	0.0002	0.0003	0.0005	0.0006	0.0008	0.0009	0.0011	0.0012
	Mz-	0.0000	-0.0008	-0.0016	-0.0023	-0.0031	-0.0039	-0.0047	-0.0054	-0.0062
Mz+	0.0000	0.0352	0.0704	0.1056	0.1407	0.1759	0.2111	0.2463	0.2815	
498/502		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-0.6629	-0.6629	-0.6629	-0.6629	-0.6629	-0.6629	-0.6629	-0.6629	-0.6629
	N+	-0.1806	-0.1806	-0.1806	-0.1806	-0.1806	-0.1806	-0.1806	-0.1806	-0.1806
	Ty-	-0.0062	-0.0050	-0.0037	-0.0025	-0.0012	-0.0001	0.0006	0.0013	0.0021
	Ty+	0.0846	0.0853	0.0861	0.0868	0.0876	0.0885	0.0898	0.0910	0.0923
	Tz-	-0.2556	-0.2556	-0.2556	-0.2556	-0.2556	-0.2556	-0.2556	-0.2556	-0.2556
	Tz+	0.0048	0.0048	0.0048	0.0048	0.0048	0.0048	0.0048	0.0048	0.0048
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0022	-0.0004	-0.0003	-0.0004	-0.0008	-0.0014	-0.0020	-0.0026	-0.0032
	My+	0.0015	0.0303	0.0619	0.0937	0.1256	0.1576	0.1895	0.2214	0.2534
	Mz-	-0.0009	-0.0060	-0.0167	-0.0275	-0.0384	-0.0494	-0.0605	-0.0716	-0.0829
Mz+	0.0060	0.0032	0.0037	0.0041	0.0043	0.0044	0.0043	0.0041	0.0037	
499/500		0.000 m	0.106 m	0.213 m	0.319 m	0.425 m	0.532 m	0.638 m	0.745 m	0.851 m
		Envolvente (Acero Conformado)								
	N-	-0.0827	-0.0817	-0.0806	-0.0796	-0.0785	-0.0775	-0.0764	-0.0754	-0.0743
	N+	0.3242	0.3259	0.3277	0.3295	0.3312	0.3330	0.3348	0.3365	0.3383
	Ty-	-0.2806	-0.2806	-0.2806	-0.2806	-0.2806	-0.2806	-0.2806	-0.2806	-0.2806
	Ty+	0.3413	0.3413	0.3413	0.3413	0.3413	0.3413	0.3413	0.3413	0.3413
	Tz-	-0.1070	-0.0958	-0.0847	-0.0735	-0.0623	-0.0511	-0.0400	-0.0288	-0.0176
	Tz+	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0530	-0.0423	-0.0326	-0.0243	-0.0170	-0.0110	-0.0061	-0.0025	0.0000
	My+	0.0002	0.0002	0.0001	0.0001	0.0001	0.0001	0.0000	0.0000	0.0000
	Mz-	-0.2387	-0.2089	-0.1790	-0.1492	-0.1194	-0.0895	-0.0597	-0.0298	0.0000
Mz+	0.2904	0.2541	0.2178	0.1815	0.1452	0.1089	0.0726	0.0363	0.0000	
501/499		0.000 m	0.078 m	0.156 m	0.234 m	0.312 m	0.390 m	0.468 m	0.545 m	0.623 m
		Envolvente (Acero laminado)								
	N-	-0.1267	-0.1267	-0.1267	-0.1266	-0.1266	-0.1265	-0.1265	-0.1265	-0.1264
	N+	0.5386	0.5386	0.5387	0.5388	0.5388	0.5389	0.5389	0.5390	0.5391
	Ty-	-0.0186	-0.0186	-0.0186	-0.0186	-0.0186	-0.0186	-0.0186	-0.0186	-0.0186
	Ty+	0.0029	0.0029	0.0029	0.0029	0.0029	0.0029	0.0029	0.0029	0.0029
	Tz-	-0.1070	-0.1065	-0.1060	-0.1055	-0.1050	-0.1045	-0.1040	-0.1035	-0.1030
	Tz+	0.2338	0.2346	0.2355	0.2363	0.2372	0.2380	0.2389	0.2397	0.2406
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0311	-0.0228	-0.0145	-0.0071	-0.0191	-0.0376	-0.0562	-0.0749	-0.0936

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	My+	0.0543	0.0360	0.0179	0.0014	0.0020	0.0101	0.0182	0.0263	0.0344
	Mz-	-0.0064	-0.0050	-0.0035	-0.0021	-0.0006	-0.0001	-0.0003	-0.0006	-0.0008
	Mz+	0.0010	0.0008	0.0005	0.0003	0.0001	0.0008	0.0023	0.0037	0.0052
500/504		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-0.2793	-0.2793	-0.2793	-0.2793	-0.2793	-0.2793	-0.2793	-0.2793	-0.2793
	N+	0.0430	0.0430	0.0430	0.0430	0.0430	0.0430	0.0430	0.0430	0.0430
	Ty-	-0.3052	-0.2950	-0.2848	-0.2746	-0.2644	-0.2542	-0.2440	-0.2338	-0.2236
	Ty+	0.0352	0.0412	0.0473	0.0533	0.0594	0.0654	0.0715	0.0775	0.0835
	Tz-	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012	-0.0012
	Tz+	0.0072	0.0072	0.0072	0.0072	0.0072	0.0072	0.0072	0.0072	0.0072
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0088	-0.0097	-0.0106	-0.0115	-0.0124	-0.0133	-0.0142	-0.0151	-0.0160
	My+	0.0021	0.0023	0.0024	0.0026	0.0027	0.0029	0.0030	0.0032	0.0033
	Mz-	-0.0192	-0.0225	-0.0266	-0.0314	-0.0370	-0.0434	-0.0505	-0.0583	-0.0670
	Mz+	0.0571	0.0929	0.1274	0.1607	0.1927	0.2234	0.2529	0.2810	0.3079
503/501		0.000 m	0.047 m	0.095 m	0.142 m	0.190 m	0.237 m	0.284 m	0.332 m	0.379 m
		Envolvente (Acero laminado)								
	N-	-0.0454	-0.0453	-0.0453	-0.0453	-0.0453	-0.0453	-0.0452	-0.0452	-0.0452
	N+	0.4337	0.4338	0.4338	0.4338	0.4339	0.4339	0.4339	0.4340	0.4340
	Ty-	-0.0060	-0.0060	-0.0060	-0.0060	-0.0060	-0.0060	-0.0060	-0.0060	-0.0060
	Ty+	0.0393	0.0393	0.0393	0.0393	0.0393	0.0393	0.0393	0.0393	0.0393
	Tz-	-0.1307	-0.1302	-0.1297	-0.1292	-0.1287	-0.1282	-0.1276	-0.1271	-0.1266
	Tz+	0.1462	0.1465	0.1468	0.1471	0.1474	0.1477	0.1480	0.1483	0.1486
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0017	0.0038	0.0092	0.0040	-0.0030	-0.0100	-0.0170	-0.0240	-0.0311
	My+	0.0301	0.0239	0.0243	0.0277	0.0318	0.0375	0.0431	0.0487	0.0543
	Mz-	-0.0013	-0.0010	-0.0007	-0.0004	-0.0002	-0.0008	-0.0027	-0.0046	-0.0064
	Mz+	0.0085	0.0066	0.0048	0.0029	0.0010	0.0001	0.0004	0.0007	0.0010
502/503		0.000 m	0.259 m	0.518 m	0.777 m	1.035 m	1.294 m	1.553 m	1.812 m	2.071 m
		Envolvente (Acero Conformado)								
	N-	0.0052	0.0078	0.0103	0.0129	0.0154	0.0180	0.0205	0.0231	0.0256
	N+	0.0933	0.0976	0.1019	0.1062	0.1105	0.1148	0.1191	0.1234	0.1277
	Ty-	-0.0902	-0.0902	-0.0902	-0.0902	-0.0902	-0.0902	-0.0902	-0.0902	-0.0902
	Ty+	0.0037	0.0037	0.0037	0.0037	0.0037	0.0037	0.0037	0.0037	0.0037
	Tz-	-0.0052	-0.0052	-0.0052	-0.0052	-0.0052	-0.0052	-0.0052	-0.0052	-0.0052
	Tz+	0.2442	0.2713	0.2985	0.3257	0.3529	0.3801	0.4072	0.4344	0.4616
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0669	-0.1405	-0.2214	-0.3091	-0.4041	-0.5058	-0.6149	-0.7307
	My+	0.0000	0.0014	0.0027	0.0041	0.0054	0.0068	0.0081	0.0095	0.0109
	Mz-	0.0000	-0.0010	-0.0019	-0.0029	-0.0038	-0.0048	-0.0057	-0.0067	-0.0076
	Mz+	0.0000	0.0234	0.0467	0.0701	0.0934	0.1168	0.1401	0.1635	0.1868
502/505		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-0.6658	-0.6658	-0.6658	-0.6658	-0.6658	-0.6658	-0.6658	-0.6658	-0.6658
	N+	-0.0907	-0.0907	-0.0907	-0.0907	-0.0907	-0.0907	-0.0907	-0.0907	-0.0907
	Ty-	-0.0053	-0.0041	-0.0028	-0.0016	-0.0003	0.0004	0.0012	0.0019	0.0027
	Ty+	0.0010	0.0018	0.0025	0.0033	0.0040	0.0053	0.0065	0.0078	0.0090
	Tz-	-0.0116	-0.0116	-0.0116	-0.0116	-0.0116	-0.0116	-0.0116	-0.0116	-0.0116
	Tz+	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000



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	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0032	-0.0032	-0.0031	-0.0031	-0.0030	-0.0030	-0.0029	-0.0028	-0.0028
	My+	0.2534	0.2548	0.2562	0.2577	0.2591	0.2605	0.2619	0.2634	0.2648
	Mz-	-0.0829	-0.0831	-0.0834	-0.0837	-0.0842	-0.0847	-0.0854	-0.0861	-0.0869
	Mz+	0.0037	0.0042	0.0046	0.0049	0.0050	0.0049	0.0047	0.0043	0.0038
503/504		0.000 m	0.115 m	0.230 m	0.345 m	0.460 m	0.576 m	0.691 m	0.806 m	0.921 m
		Envolvente (Acero Conformado)								
	N-	-0.1105	-0.1094	-0.1083	-0.1071	-0.1060	-0.1049	-0.1037	-0.1026	-0.1015
	N+	0.1744	0.1763	0.1782	0.1801	0.1820	0.1839	0.1858	0.1877	0.1897
	Ty-	-0.2233	-0.2233	-0.2233	-0.2233	-0.2233	-0.2233	-0.2233	-0.2233	-0.2233
	Ty+	0.2675	0.2675	0.2675	0.2675	0.2675	0.2675	0.2675	0.2675	0.2675
	Tz-	-0.0929	-0.0808	-0.0687	-0.0566	-0.0445	-0.0324	-0.0204	-0.0083	-0.0015
	Tz+	0.0052	0.0052	0.0052	0.0052	0.0052	0.0052	0.0052	0.0052	0.0052
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0410	-0.0310	-0.0224	-0.0152	-0.0094	-0.0050	-0.0019	-0.0003	0.0000
	My+	0.0048	0.0042	0.0036	0.0030	0.0024	0.0018	0.0012	0.0006	0.0000
	Mz-	-0.2057	-0.1800	-0.1542	-0.1285	-0.1028	-0.0771	-0.0514	-0.0257	0.0000
	Mz+	0.2463	0.2155	0.1847	0.1540	0.1232	0.0924	0.0616	0.0308	0.0000
506/503		0.000 m	0.125 m	0.251 m	0.376 m	0.501 m	0.627 m	0.752 m	0.877 m	1.002 m
		Envolvente (Acero laminado)								
	N-	-0.0666	-0.0665	-0.0664	-0.0663	-0.0662	-0.0661	-0.0660	-0.0659	-0.0658
	N+	0.0198	0.0198	0.0199	0.0199	0.0200	0.0201	0.0201	0.0202	0.0202
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.0216	-0.0202	-0.0189	-0.0175	-0.0161	-0.0148	-0.0134	-0.0123	-0.0115
	Tz+	0.0016	0.0024	0.0033	0.0041	0.0049	0.0057	0.0065	0.0075	0.0089
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0090	-0.0064	-0.0039	-0.0017	0.0003	-0.0004	-0.0012	-0.0020	-0.0030
	My+	0.0019	0.0016	0.0013	0.0008	0.0005	0.0024	0.0042	0.0057	0.0072
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
504/507		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-0.5026	-0.5026	-0.5026	-0.5026	-0.5026	-0.5026	-0.5026	-0.5026	-0.5026
	N+	0.3104	0.3104	0.3104	0.3104	0.3104	0.3104	0.3104	0.3104	0.3104
	Ty-	-0.0465	-0.0363	-0.0261	-0.0159	-0.0057	0.0010	0.0070	0.0131	0.0191
	Ty+	-0.0041	0.0019	0.0080	0.0140	0.0201	0.0297	0.0399	0.0501	0.0603
	Tz-	-0.0017	-0.0017	-0.0017	-0.0017	-0.0017	-0.0017	-0.0017	-0.0017	-0.0017
	Tz+	0.0027	0.0027	0.0027	0.0027	0.0027	0.0027	0.0027	0.0027	0.0027
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0160	-0.0163	-0.0166	-0.0169	-0.0173	-0.0176	-0.0179	-0.0182	-0.0185
	My+	0.0033	0.0033	0.0033	0.0032	0.0032	0.0031	0.0031	0.0031	0.0030
	Mz-	-0.0670	-0.0642	-0.0622	-0.0610	-0.0605	-0.0608	-0.0619	-0.0637	-0.0662
	Mz+	0.3079	0.3113	0.3136	0.3147	0.3145	0.3130	0.3102	0.3061	0.3008
505/506		0.000 m	0.250 m	0.500 m	0.750 m	1.000 m	1.251 m	1.501 m	1.751 m	2.001 m
		Envolvente (Acero Conformado)								
	N-	0.0042	0.0066	0.0091	0.0115	0.0140	0.0165	0.0189	0.0214	0.0239
	N+	0.0876	0.0918	0.0959	0.1001	0.1043	0.1084	0.1126	0.1167	0.1209
	Ty-	-0.0854	-0.0854	-0.0854	-0.0854	-0.0854	-0.0854	-0.0854	-0.0854	-0.0854
	Ty+	0.0045	0.0045	0.0045	0.0045	0.0045	0.0045	0.0045	0.0045	0.0045
	Tz-	-0.0037	-0.0037	-0.0037	-0.0037	-0.0037	-0.0037	-0.0037	-0.0037	-0.0037

## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

	Tz+	0.2301	0.2564	0.2827	0.3089	0.3352	0.3614	0.3877	0.4140	0.4402
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0610	-0.1283	-0.2024	-0.2828	-0.3700	-0.4636	-0.5640	-0.6706
	My+	0.0000	0.0009	0.0018	0.0028	0.0037	0.0046	0.0055	0.0064	0.0073
	Mz-	0.0000	-0.0011	-0.0022	-0.0034	-0.0045	-0.0056	-0.0067	-0.0079	-0.0090
	Mz+	0.0000	0.0214	0.0427	0.0641	0.0854	0.1068	0.1282	0.1495	0.1709
505/509		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-0.6693	-0.6693	-0.6693	-0.6693	-0.6693	-0.6693	-0.6693	-0.6693	-0.6693
	N+	-0.0054	-0.0054	-0.0054	-0.0054	-0.0054	-0.0054	-0.0054	-0.0054	-0.0054
	Ty-	-0.0786	-0.0773	-0.0761	-0.0748	-0.0741	-0.0733	-0.0726	-0.0718	-0.0711
	Ty+	-0.0013	-0.0006	0.0002	0.0009	0.0022	0.0034	0.0047	0.0060	0.0072
	Tz-	-0.0041	-0.0041	-0.0041	-0.0041	-0.0041	-0.0041	-0.0041	-0.0041	-0.0041
	Tz+	0.2187	0.2187	0.2187	0.2187	0.2187	0.2187	0.2187	0.2187	0.2187
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0028	-0.0023	-0.0019	-0.0016	-0.0014	-0.0013	-0.0013	-0.0013	-0.0013
	My+	0.2648	0.2374	0.2101	0.1827	0.1554	0.1281	0.1009	0.0738	0.0466
	Mz-	-0.0869	-0.0773	-0.0678	-0.0584	-0.0491	-0.0399	-0.0308	-0.0218	-0.0129
	Mz+	0.0038	0.0041	0.0042	0.0042	0.0040	0.0036	0.0031	0.0025	0.0016
506/507		0.000 m	0.124 m	0.248 m	0.372 m	0.495 m	0.619 m	0.743 m	0.867 m	0.991 m
		Envolvente (Acero Conformado)								
	N-	-0.1725	-0.1713	-0.1701	-0.1688	-0.1676	-0.1664	-0.1652	-0.1640	-0.1627
	N+	0.2446	0.2467	0.2487	0.2508	0.2529	0.2549	0.2570	0.2590	0.2611
	Ty-	-0.1820	-0.1820	-0.1820	-0.1820	-0.1820	-0.1820	-0.1820	-0.1820	-0.1820
	Ty+	0.2117	0.2117	0.2117	0.2117	0.2117	0.2117	0.2117	0.2117	0.2117
	Tz-	-0.0785	-0.0655	-0.0525	-0.0394	-0.0264	-0.0134	-0.0040	-0.0040	-0.0040
	Tz+	0.0126	0.0126	0.0126	0.0126	0.0126	0.0126	0.0126	0.0150	0.0278
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0262	-0.0173	-0.0100	-0.0043	-0.0020	-0.0015	-0.0010	-0.0005	0.0000
	My+	0.0124	0.0109	0.0093	0.0078	0.0062	0.0047	0.0037	0.0026	0.0000
	Mz-	-0.1804	-0.1578	-0.1353	-0.1127	-0.0902	-0.0676	-0.0451	-0.0225	0.0000
	Mz+	0.2097	0.1835	0.1573	0.1311	0.1049	0.0787	0.0524	0.0262	0.0000
508/506		0.000 m	0.024 m	0.048 m	0.072 m	0.096 m	0.120 m	0.143 m	0.167 m	0.191 m
		Envolvente (Acero laminado)								
	N-	-0.5175	-0.5175	-0.5175	-0.5175	-0.5174	-0.5174	-0.5174	-0.5174	-0.5174
	N+	0.0712	0.0712	0.0712	0.0712	0.0712	0.0712	0.0712	0.0713	0.0713
	Ty-	-0.1372	-0.1372	-0.1372	-0.1372	-0.1372	-0.1372	-0.1372	-0.1372	-0.1372
	Ty+	0.0103	0.0103	0.0103	0.0103	0.0103	0.0103	0.0103	0.0103	0.0103
	Tz-	-0.2034	-0.2033	-0.2031	-0.2029	-0.2028	-0.2026	-0.2025	-0.2023	-0.2022
	Tz+	0.1823	0.1825	0.1828	0.1830	0.1833	0.1836	0.1838	0.1841	0.1843
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0229	-0.0180	-0.0132	-0.0083	-0.0035	0.0014	0.0062	0.0111	0.0121
	My+	0.0616	0.0575	0.0534	0.0494	0.0464	0.0434	0.0403	0.0373	0.0343
	Mz-	-0.0073	-0.0040	-0.0007	-0.0002	-0.0004	-0.0007	-0.0009	-0.0012	-0.0014
	Mz+	0.0005	0.0003	0.0001	0.0025	0.0058	0.0091	0.0124	0.0157	0.0189
507/511		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-0.6842	-0.6842	-0.6842	-0.6842	-0.6842	-0.6842	-0.6842	-0.6842	-0.6842
	N+	0.5217	0.5217	0.5217	0.5217	0.5217	0.5217	0.5217	0.5217	0.5217
	Ty-	-0.1393	-0.1333	-0.1272	-0.1212	-0.1151	-0.1091	-0.1030	-0.0970	-0.0910

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas**

	Ty+	0.3093	0.3195	0.3297	0.3399	0.3501	0.3603	0.3705	0.3807	0.3909
	Tz-	-0.0253	-0.0253	-0.0253	-0.0253	-0.0253	-0.0253	-0.0253	-0.0253	-0.0253
	Tz+	0.0042	0.0042	0.0042	0.0042	0.0042	0.0042	0.0042	0.0042	0.0042
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0185	-0.0154	-0.0122	-0.0090	-0.0059	-0.0027	-0.0001	-0.0007	-0.0012
	My+	0.0030	0.0025	0.0020	0.0014	0.0009	0.0022	0.0038	0.0056	0.0074
	Mz-	-0.0662	-0.0507	-0.0358	-0.0217	-0.0084	0.0042	0.0100	-0.0164	-0.0587
	Mz+	0.3008	0.2616	0.2211	0.1793	0.1362	0.0936	0.0551	0.0473	0.0507
510/508		0.000 m	0.101 m	0.203 m	0.304 m	0.406 m	0.507 m	0.608 m	0.710 m	0.811 m
		Envolvente (Acero laminado)								
	N-	-0.5836	-0.5835	-0.5834	-0.5833	-0.5833	-0.5832	-0.5831	-0.5830	-0.5829
	N+	0.1277	0.1277	0.1278	0.1278	0.1279	0.1279	0.1280	0.1280	0.1281
	Ty-	-0.0011	-0.0011	-0.0011	-0.0011	-0.0011	-0.0011	-0.0011	-0.0011	-0.0011
	Ty+	0.0146	0.0146	0.0146	0.0146	0.0146	0.0146	0.0146	0.0146	0.0146
	Tz-	-0.1840	-0.1829	-0.1817	-0.1806	-0.1795	-0.1784	-0.1773	-0.1762	-0.1751
	Tz+	0.0550	0.0556	0.0563	0.0569	0.0576	0.0582	0.0589	0.0595	0.0602
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0841	-0.0655	-0.0470	-0.0286	-0.0106	-0.0049	-0.0108	-0.0168	-0.0229
	My+	0.0238	0.0182	0.0125	0.0068	0.0010	0.0078	0.0258	0.0438	0.0616
	Mz-	-0.0003	-0.0002	-0.0001	0.0000	-0.0014	-0.0029	-0.0043	-0.0058	-0.0073
	Mz+	0.0046	0.0031	0.0016	0.0001	0.0001	0.0002	0.0003	0.0004	0.0005
509/510		0.000 m	0.241 m	0.483 m	0.724 m	0.965 m	1.207 m	1.448 m	1.689 m	1.931 m
		Envolvente (Acero Conformado)								
	N-	-0.0045	-0.0018	0.0006	0.0029	0.0053	0.0077	0.0101	0.0125	0.0148
	N+	0.1238	0.1275	0.1315	0.1355	0.1395	0.1435	0.1476	0.1516	0.1556
	Ty-	-0.1337	-0.1337	-0.1337	-0.1337	-0.1337	-0.1337	-0.1337	-0.1337	-0.1337
	Ty+	0.0055	0.0055	0.0055	0.0055	0.0055	0.0055	0.0055	0.0055	0.0055
	Tz-	-0.0047	-0.0047	-0.0047	-0.0047	-0.0047	-0.0047	-0.0047	-0.0047	-0.0047
	Tz+	0.4070	0.4323	0.4576	0.4830	0.5083	0.5337	0.5590	0.5844	0.6097
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.1014	-0.2087	-0.3223	-0.4418	-0.5677	-0.6994	-0.8375	-0.9815
	My+	0.0000	0.0011	0.0023	0.0034	0.0046	0.0057	0.0069	0.0080	0.0092
	Mz-	0.0000	-0.0013	-0.0027	-0.0040	-0.0053	-0.0066	-0.0080	-0.0093	-0.0106
	Mz+	0.0000	0.0323	0.0645	0.0968	0.1291	0.1614	0.1936	0.2259	0.2582
509/515		0.000 m	0.124 m	0.248 m	0.372 m	0.497 m	0.621 m	0.745 m	0.869 m	0.993 m
		Envolvente (Acero Conformado)								
	N-	-0.6725	-0.6725	-0.6725	-0.6725	-0.6725	-0.6725	-0.6725	-0.6725	-0.6725
	N+	0.1283	0.1283	0.1283	0.1283	0.1283	0.1283	0.1283	0.1283	0.1283
	Ty-	-0.1948	-0.1941	-0.1934	-0.1926	-0.1919	-0.1911	-0.1904	-0.1897	-0.1889
	Ty+	0.0117	0.0129	0.0142	0.0154	0.0167	0.0179	0.0192	0.0204	0.0217
	Tz-	-0.0044	-0.0044	-0.0044	-0.0044	-0.0044	-0.0044	-0.0044	-0.0044	-0.0044
	Tz+	0.6237	0.6237	0.6237	0.6237	0.6237	0.6237	0.6237	0.6237	0.6237
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0013	-0.0315	-0.1088	-0.1862	-0.2636	-0.3410	-0.4184	-0.4958	-0.5732
	My+	0.0466	0.0013	0.0013	0.0012	0.0016	0.0021	0.0027	0.0032	0.0037
	Mz-	-0.0129	-0.0001	-0.0016	-0.0034	-0.0054	-0.0075	-0.0098	-0.0123	-0.0149
	Mz+	0.0016	0.0115	0.0354	0.0593	0.0831	0.1069	0.1306	0.1542	0.1777
510/511		0.000 m	0.133 m	0.265 m	0.398 m	0.530 m	0.663 m	0.796 m	0.928 m	1.061 m
		Envolvente (Acero Conformado)								
	N-	-0.0760	-0.0747	-0.0734	-0.0721	-0.0708	-0.0695	-0.0682	-0.0668	-0.0655

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE** Adrián Freijomil Aradas

	N+	0.2110	0.2132	0.2154	0.2176	0.2198	0.2220	0.2242	0.2264	0.2286
	Ty-	-0.1513	-0.1513	-0.1513	-0.1513	-0.1513	-0.1513	-0.1513	-0.1513	-0.1513
	Ty+	0.1685	0.1685	0.1685	0.1685	0.1685	0.1685	0.1685	0.1685	0.1685
	Tz-	-0.0648	-0.0509	-0.0369	-0.0230	-0.0091	-0.0065	-0.0065	-0.0065	-0.0065
	Tz+	0.0193	0.0193	0.0193	0.0193	0.0193	0.0193	0.0224	0.0363	0.0503
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0096	-0.0060	-0.0052	-0.0043	-0.0035	-0.0026	-0.0017	-0.0009	0.0000
	My+	0.0205	0.0180	0.0154	0.0128	0.0119	0.0116	0.0096	0.0057	0.0000
	Mz-	-0.1605	-0.1404	-0.1203	-0.1003	-0.0802	-0.0602	-0.0401	-0.0201	0.0000
	Mz+	0.1787	0.1564	0.1340	0.1117	0.0894	0.0670	0.0447	0.0223	0.0000
512/510		0.000 m	0.095 m	0.190 m	0.286 m	0.381 m	0.476 m	0.571 m	0.666 m	0.762 m
		Envolvente (Acero laminado)								
	N-	-0.2278	-0.2277	-0.2277	-0.2276	-0.2276	-0.2276	-0.2275	-0.2275	-0.2274
	N+	0.2196	0.2197	0.2197	0.2198	0.2199	0.2199	0.2200	0.2201	0.2202
	Ty-	-0.0228	-0.0228	-0.0228	-0.0228	-0.0228	-0.0228	-0.0228	-0.0228	-0.0228
	Ty+	0.0320	0.0320	0.0320	0.0320	0.0320	0.0320	0.0320	0.0320	0.0320
	Tz-	-0.1872	-0.1862	-0.1852	-0.1841	-0.1831	-0.1820	-0.1810	-0.1800	-0.1789
	Tz+	0.0010	0.0017	0.0023	0.0029	0.0035	0.0041	0.0047	0.0053	0.0060
	Mt-	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0652	-0.0478	-0.0305	-0.0154	-0.0037	-0.0008	-0.0012	-0.0017	-0.0022
	My+	0.0052	0.0058	0.0071	0.0124	0.0176	0.0260	0.0430	0.0599	0.0767
	Mz-	-0.0087	-0.0065	-0.0044	-0.0022	0.0000	-0.0008	-0.0016	-0.0025	-0.0034
	Mz+	0.0229	0.0199	0.0168	0.0138	0.0107	0.0088	0.0070	0.0065	0.0087
511/517		0.000 m	0.124 m	0.248 m	0.372 m	0.497 m	0.621 m	0.745 m	0.869 m	0.993 m
		Envolvente (Acero laminado)								
	N-	-0.8349	-0.8349	-0.8349	-0.8349	-0.8349	-0.8349	-0.8349	-0.8349	-0.8349
	N+	0.6896	0.6896	0.6896	0.6896	0.6896	0.6896	0.6896	0.6896	0.6896
	Ty-	-0.1449	-0.1389	-0.1329	-0.1269	-0.1209	-0.1149	-0.1089	-0.1029	-0.0969
	Ty+	0.6190	0.6291	0.6392	0.6494	0.6595	0.6696	0.6797	0.6899	0.7000
	Tz-	-0.0755	-0.0755	-0.0755	-0.0755	-0.0755	-0.0755	-0.0755	-0.0755	-0.0755
	Tz+	0.0108	0.0108	0.0108	0.0108	0.0108	0.0108	0.0108	0.0108	0.0108
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0012	-0.0025	-0.0039	-0.0052	-0.0065	-0.0079	-0.0092	-0.0105	-0.0119
	My+	0.0074	0.0161	0.0255	0.0349	0.0443	0.0536	0.0630	0.0724	0.0818
	Mz-	-0.0587	-0.1361	-0.2146	-0.2945	-0.3756	-0.4579	-0.5416	-0.6264	-0.7126
	Mz+	0.0507	0.0644	0.0790	0.0930	0.1062	0.1186	0.1318	0.1450	0.1574
516/512		0.000 m	0.029 m	0.058 m	0.088 m	0.117 m	0.146 m	0.175 m	0.205 m	0.234 m
		Envolvente (Acero laminado)								
	N-	-0.2006	-0.2006	-0.2006	-0.2006	-0.2005	-0.2005	-0.2005	-0.2005	-0.2005
	N+	0.1894	0.1894	0.1895	0.1895	0.1895	0.1895	0.1896	0.1896	0.1896
	Ty-	-0.2916	-0.2916	-0.2916	-0.2916	-0.2916	-0.2916	-0.2916	-0.2916	-0.2916
	Ty+	0.0377	0.0377	0.0377	0.0377	0.0377	0.0377	0.0377	0.0377	0.0377
	Tz-	-0.4604	-0.4601	-0.4598	-0.4594	-0.4591	-0.4588	-0.4585	-0.4582	-0.4579
	Tz+	0.2460	0.2462	0.2464	0.2466	0.2468	0.2470	0.2472	0.2474	0.2475
	Mt-	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.1679	-0.1545	-0.1410	-0.1276	-0.1141	-0.1007	-0.0873	-0.0757	-0.0652
	My+	0.0582	0.0510	0.0438	0.0366	0.0294	0.0222	0.0149	0.0089	0.0052
	Mz-	-0.0454	-0.0373	-0.0294	-0.0215	-0.0136	-0.0060	-0.0065	-0.0076	-0.0087
	Mz+	0.0002	0.0000	0.0005	0.0010	0.0016	0.0021	0.0059	0.0144	0.0229
513/514		0.000 m	0.369 m	0.738 m	1.106 m	1.475 m	1.844 m	2.213 m	2.582 m	2.950 m

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		Envolvente (Acero laminado)								
	N-	-15.3724	-15.3591	-15.3458	-15.3325	-15.3192	-15.3060	-15.2927	-15.2794	-15.2661
	N+	-5.0635	-5.0556	-5.0477	-5.0399	-5.0320	-5.0241	-5.0162	-5.0084	-5.0005
	Ty-	-0.0267	-0.0267	-0.0267	-0.0267	-0.0267	-0.0267	-0.0267	-0.0267	-0.0267
	Ty+	0.0034	0.0034	0.0034	0.0034	0.0034	0.0034	0.0034	0.0034	0.0034
	Tz-	-1.7264	-1.5051	-1.2839	-1.0626	-0.8413	-0.6200	-0.3987	-0.1774	-0.0058
	Tz+	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0450
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	My-	-1.7118	-1.1176	-0.6017	-0.1707	-0.0038	-0.0039	-0.0040	-0.0041	-0.0042
	My+	-0.0016	-0.0013	-0.0008	-0.0001	0.1836	0.4513	0.6406	0.7451	0.7713
	Mz-	-0.0366	-0.0268	-0.0169	-0.0072	0.0009	-0.0003	-0.0015	-0.0027	-0.0040
	Mz+	0.0060	0.0047	0.0035	0.0024	0.0029	0.0126	0.0225	0.0323	0.0422
514/515		0.000 m	0.234 m	0.467 m	0.701 m	0.935 m	1.168 m	1.402 m	1.636 m	1.870 m
		Envolvente (Acero laminado)								
	N-	-2.0174	-2.0089	-2.0005	-1.9921	-1.9837	-1.9753	-1.9668	-1.9584	-1.9500
	N+	0.3910	0.3960	0.4010	0.4060	0.4110	0.4160	0.4210	0.4260	0.4309
	Ty-	-0.0495	-0.0495	-0.0495	-0.0495	-0.0495	-0.0495	-0.0495	-0.0495	-0.0495
	Ty+	-0.0109	-0.0109	-0.0109	-0.0109	-0.0109	-0.0109	-0.0109	-0.0109	-0.0109
	Tz-	-0.0131	-0.0050	-0.0050	-0.0050	-0.0050	-0.0050	-0.0050	-0.0050	-0.0050
	Tz+	0.0006	0.1295	0.2697	0.4099	0.5502	0.6904	0.8306	0.9708	1.1110
	Mt-	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010
	Mt+	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
	My-	-0.0042	-0.0030	-0.0020	-0.0012	-0.0004	0.0005	0.0012	-0.0295	-0.2575
	My+	0.7713	0.7568	0.7109	0.6312	0.5200	0.3748	0.1983	0.0207	0.0089
	Mz-	-0.0418	-0.0343	-0.0267	-0.0192	-0.0116	-0.0057	-0.0018	0.0021	0.0060
	Mz+	-0.0112	-0.0086	-0.0061	0.0008	0.0087	0.0176	0.0291	0.0407	0.0523
514/534		0.000 m	0.625 m	1.250 m	1.875 m	2.500 m	3.125 m	3.750 m	4.375 m	5.000 m
		Envolvente (Acero laminado)								
	N-	-0.4425	-0.4425	-0.4425	-0.4425	-0.4425	-0.4425	-0.4425	-0.4425	-0.4425
	N+	0.0994	0.0994	0.0994	0.0994	0.0994	0.0994	0.0994	0.0994	0.0994
	Ty-	-0.0044	-0.0044	-0.0044	-0.0044	-0.0044	-0.0044	-0.0044	-0.0044	-0.0044
	Ty+	0.0388	0.0388	0.0388	0.0388	0.0388	0.0388	0.0388	0.0388	0.0388
	Tz-	-6.9104	-5.2291	-3.5478	-1.8664	-0.1851	0.5673	1.2303	1.8933	2.5563
	Tz+	-2.7144	-2.0514	-1.3883	-0.7253	-0.0623	1.5147	3.1961	4.8774	6.5587
	Mt-	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-5.7941	-2.0216	0.2866	0.9475	1.2019	1.0254	0.4510	-1.3801	-4.9329
	My+	-2.2690	-0.7880	0.7473	2.4131	3.0752	2.6445	1.2049	-0.4584	-1.8406
	Mz-	-0.0053	-0.0026	-0.0005	-0.0032	-0.0176	-0.0419	-0.0661	-0.0904	-0.1146
	Mz+	0.0793	0.0551	0.0312	0.0084	0.0056	0.0083	0.0110	0.0138	0.0165
515/516		0.000 m	0.233 m	0.465 m	0.698 m	0.930 m	1.163 m	1.395 m	1.628 m	1.860 m
		Envolvente (Acero laminado)								
	N-	-2.1383	-2.1299	-2.1215	-2.1131	-2.1047	-2.0964	-2.0880	-2.0796	-2.0712
	N+	0.4312	0.4362	0.4412	0.4461	0.4511	0.4561	0.4610	0.4660	0.4709
	Ty-	-0.0253	-0.0253	-0.0253	-0.0253	-0.0253	-0.0253	-0.0253	-0.0253	-0.0253
	Ty+	0.0749	0.0749	0.0749	0.0749	0.0749	0.0749	0.0749	0.0749	0.0749
	Tz-	-0.1106	-0.0862	-0.0618	-0.0373	-0.0138	-0.0118	-0.0118	-0.0118	-0.0118
	Tz+	0.0091	0.0091	0.0091	0.0091	0.0091	0.0185	0.0430	0.0674	0.0918
	Mt-	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010
	Mt+	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
	My-	-0.2575	-0.2361	-0.2204	-0.2107	-0.2063	-0.2079	-0.2150	-0.2279	-0.2463
	My+	0.0089	0.0082	0.0106	0.0134	0.0161	0.0189	0.0216	0.0243	0.0271
	Mz-	0.0060	0.0062	0.0033	-0.0041	-0.0188	-0.0349	-0.0521	-0.0695	-0.0870

## Metal 3D

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	Mz+	0.0523	0.0349	0.0237	0.0263	0.0296	0.0354	0.0413	0.0471	0.0530	
515/518		0.000 m	0.126 m	0.252 m	0.378 m	0.503 m	0.629 m	0.755 m	0.881 m	1.007 m	
		Envolvente (Acero Conformado)									
	N-	-0.7754	-0.7754	-0.7754	-0.7754	-0.7754	-0.7754	-0.7754	-0.7754	-0.7754	-0.7754
	N+	0.1351	0.1351	0.1351	0.1351	0.1351	0.1351	0.1351	0.1351	0.1351	0.1351
	Ty-	-0.0218	-0.0205	-0.0193	-0.0180	-0.0167	-0.0154	-0.0142	-0.0129	-0.0116	-0.0116
	Ty+	0.1769	0.1777	0.1784	0.1792	0.1799	0.1807	0.1814	0.1822	0.1829	0.1829
	Tz-	-0.5955	-0.5955	-0.5955	-0.5955	-0.5955	-0.5955	-0.5955	-0.5955	-0.5955	-0.5955
	Tz+	0.0045	0.0045	0.0045	0.0045	0.0045	0.0045	0.0045	0.0045	0.0045	0.0045
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.5732	-0.4983	-0.4233	-0.3484	-0.2734	-0.1987	-0.1241	-0.0495	-0.0017	-0.0017
	My+	0.0037	0.0032	0.0026	0.0021	0.0015	0.0014	0.0019	0.0024	0.0268	0.0268
	Mz-	-0.0149	-0.0123	-0.0098	-0.0074	-0.0052	-0.0032	-0.0013	-0.0005	-0.0035	-0.0035
Mz+	0.1777	0.1554	0.1329	0.1104	0.0878	0.0652	0.0424	0.0198	0.0019	0.0019	
516/517		0.000 m	0.141 m	0.283 m	0.424 m	0.566 m	0.707 m	0.849 m	0.990 m	1.131 m	
		Envolvente (Acero Conformado)									
	N-	-1.5402	-1.5379	-1.5355	-1.5332	-1.5308	-1.5285	-1.5261	-1.5238	-1.5214	-1.5214
	N+	0.2089	0.2103	0.2117	0.2131	0.2145	0.2159	0.2173	0.2187	0.2201	0.2201
	Ty-	-0.1133	-0.1133	-0.1133	-0.1133	-0.1133	-0.1133	-0.1133	-0.1133	-0.1133	-0.1133
	Ty+	0.1730	0.1730	0.1730	0.1730	0.1730	0.1730	0.1730	0.1730	0.1730	0.1730
	Tz-	-0.2769	-0.2621	-0.2472	-0.2324	-0.2175	-0.2027	-0.1878	-0.1730	-0.1581	-0.1581
	Tz+	0.0240	0.0240	0.0240	0.0240	0.0240	0.0240	0.0240	0.0240	0.0240	0.0240
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.2461	-0.2080	-0.1720	-0.1381	-0.1062	-0.0766	-0.0489	-0.0235	0.0000	0.0000
	My+	0.0271	0.0237	0.0203	0.0169	0.0136	0.0102	0.0068	0.0034	0.0000	0.0000
	Mz-	-0.1282	-0.1122	-0.0961	-0.0801	-0.0641	-0.0481	-0.0320	-0.0160	0.0000	0.0000
Mz+	0.1957	0.1712	0.1468	0.1223	0.0978	0.0734	0.0489	0.0245	0.0000	0.0000	
519/516		0.000 m	0.126 m	0.252 m	0.379 m	0.505 m	0.631 m	0.757 m	0.883 m	1.009 m	
		Envolvente (Acero laminado)									
	N-	-0.1201	-0.1201	-0.1200	-0.1200	-0.1199	-0.1198	-0.1198	-0.1197	-0.1197	-0.1197
	N+	0.0571	0.0572	0.0573	0.0573	0.0574	0.0575	0.0576	0.0577	0.0578	0.0578
	Ty-	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
	Ty+	0.0780	0.0780	0.0780	0.0780	0.0780	0.0780	0.0780	0.0780	0.0780	0.0780
	Tz-	-0.0734	-0.0726	-0.0718	-0.0710	-0.0702	-0.0693	-0.0685	-0.0677	-0.0669	-0.0669
	Tz+	0.1400	0.1414	0.1428	0.1441	0.1455	0.1469	0.1483	0.1496	0.1510	0.1510
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
	My-	-0.0341	-0.0249	-0.0158	-0.0094	-0.0077	-0.0201	-0.0387	-0.0575	-0.0765	-0.0765
	My+	0.0704	0.0528	0.0391	0.0296	0.0220	0.0219	0.0219	0.0282	0.0367	0.0367
	Mz-	-0.0004	-0.0004	-0.0004	-0.0004	-0.0055	-0.0152	-0.0249	-0.0347	-0.0445	-0.0445
Mz+	0.0344	0.0246	0.0148	0.0049	0.0010	0.0008	0.0005	0.0003	0.0002	0.0002	
517/520		0.000 m	0.126 m	0.252 m	0.378 m	0.503 m	0.629 m	0.755 m	0.881 m	1.007 m	
		Envolvente (Acero laminado)									
	N-	-0.9479	-0.9479	-0.9479	-0.9479	-0.9479	-0.9479	-0.9479	-0.9479	-0.9479	-0.9479
	N+	0.8622	0.8622	0.8622	0.8622	0.8622	0.8622	0.8622	0.8622	0.8622	0.8622
	Ty-	-0.8225	-0.8122	-0.8019	-0.7916	-0.7814	-0.7711	-0.7608	-0.7506	-0.7403	-0.7403
	Ty+	0.1408	0.1469	0.1530	0.1590	0.1651	0.1712	0.1773	0.1834	0.1895	0.1895
	Tz-	-0.0314	-0.0314	-0.0314	-0.0314	-0.0314	-0.0314	-0.0314	-0.0314	-0.0314	-0.0314
	Tz+	0.0826	0.0826	0.0826	0.0826	0.0826	0.0826	0.0826	0.0826	0.0826	0.0826
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0119	-0.0102	-0.0086	-0.0069	-0.0052	-0.0036	-0.0019	-0.0003	-0.0014	-0.0014

## Metal 3D

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	My+	0.0818	0.0714	0.0610	0.0506	0.0529	0.0559	0.0589	0.0620	0.0657
	Mz-	-0.7126	-0.6097	-0.5089	-0.4135	-0.3194	-0.2265	-0.1412	-0.0688	-0.0197
	Mz+	0.1574	0.1416	0.1250	0.1077	0.0896	0.0707	0.0510	0.0306	0.0809
518/519		0.000 m	0.224 m	0.448 m	0.672 m	0.895 m	1.119 m	1.343 m	1.567 m	1.791 m
		Envolvente (Acero Conformado)								
	N-	-0.0071	-0.0042	-0.0020	0.0002	0.0024	0.0046	0.0068	0.0090	0.0112
	N+	0.1348	0.1378	0.1415	0.1453	0.1490	0.1527	0.1564	0.1601	0.1639
	Ty-	-0.1364	-0.1364	-0.1364	-0.1364	-0.1364	-0.1364	-0.1364	-0.1364	-0.1364
	Ty+	0.0067	0.0067	0.0067	0.0067	0.0067	0.0067	0.0067	0.0067	0.0067
	Tz-	-0.0031	-0.0031	-0.0031	-0.0031	-0.0031	-0.0031	-0.0031	-0.0031	-0.0031
	Tz+	0.4532	0.4667	0.4801	0.4935	0.5069	0.5204	0.5338	0.5472	0.5607
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.1030	-0.2089	-0.3180	-0.4299	-0.5449	-0.6628	-0.7839	-0.9078
	My+	0.0000	0.0007	0.0014	0.0021	0.0028	0.0035	0.0042	0.0049	0.0056
	Mz-	0.0000	-0.0015	-0.0030	-0.0045	-0.0060	-0.0076	-0.0091	-0.0106	-0.0121
	Mz+	0.0000	0.0305	0.0611	0.0916	0.1221	0.1526	0.1832	0.2137	0.2442
518/522		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-0.7822	-0.7822	-0.7822	-0.7822	-0.7822	-0.7822	-0.7822	-0.7822	-0.7822
	N+	0.2714	0.2714	0.2714	0.2714	0.2714	0.2714	0.2714	0.2714	0.2714
	Ty-	-0.0066	-0.0054	-0.0041	-0.0029	-0.0016	-0.0006	0.0001	0.0009	0.0016
	Ty+	0.0489	0.0496	0.0504	0.0511	0.0519	0.0529	0.0542	0.0554	0.0567
	Tz-	-0.1436	-0.1436	-0.1436	-0.1436	-0.1436	-0.1436	-0.1436	-0.1436	-0.1436
	Tz+	0.0035	0.0035	0.0035	0.0035	0.0035	0.0035	0.0035	0.0035	0.0035
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0017	-0.0019	-0.0021	-0.0023	-0.0026	-0.0030	-0.0033	-0.0037	-0.0040
	My+	0.0268	0.0446	0.0624	0.0802	0.0981	0.1161	0.1341	0.1520	0.1700
	Mz-	-0.0035	-0.0096	-0.0157	-0.0220	-0.0284	-0.0349	-0.0415	-0.0482	-0.0550
	Mz+	0.0019	0.0024	0.0027	0.0030	0.0031	0.0030	0.0028	0.0025	0.0020
519/520		0.000 m	0.150 m	0.300 m	0.450 m	0.600 m	0.751 m	0.901 m	1.051 m	1.201 m
		Envolvente (Acero Conformado)								
	N-	-0.1921	-0.1906	-0.1891	-0.1876	-0.1862	-0.1847	-0.1832	-0.1817	-0.1803
	N+	0.4639	0.4664	0.4688	0.4713	0.4738	0.4763	0.4788	0.4813	0.4838
	Ty-	-0.1043	-0.1043	-0.1043	-0.1043	-0.1043	-0.1043	-0.1043	-0.1043	-0.1043
	Ty+	0.1165	0.1165	0.1165	0.1165	0.1165	0.1165	0.1165	0.1165	0.1165
	Tz-	-0.0409	-0.0319	-0.0229	-0.0139	-0.0058	-0.0058	-0.0058	-0.0058	-0.0058
	Tz+	0.0113	0.0113	0.0113	0.0113	0.0113	0.0113	0.0163	0.0253	0.0343
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0069	-0.0060	-0.0052	-0.0043	-0.0035	-0.0026	-0.0017	-0.0009	0.0000
	My+	0.0136	0.0119	0.0102	0.0090	0.0098	0.0093	0.0076	0.0045	0.0000
	Mz-	-0.1252	-0.1096	-0.0939	-0.0783	-0.0626	-0.0470	-0.0313	-0.0157	0.0000
	Mz+	0.1399	0.1224	0.1049	0.0874	0.0699	0.0525	0.0350	0.0175	0.0000
521/519		0.000 m	0.041 m	0.082 m	0.124 m	0.165 m	0.206 m	0.247 m	0.288 m	0.329 m
		Envolvente (Acero laminado)								
	N-	-0.3159	-0.3159	-0.3159	-0.3158	-0.3158	-0.3158	-0.3158	-0.3158	-0.3157
	N+	0.6621	0.6622	0.6622	0.6622	0.6623	0.6623	0.6623	0.6624	0.6624
	Ty-	-0.0933	-0.0933	-0.0933	-0.0933	-0.0933	-0.0933	-0.0933	-0.0933	-0.0933
	Ty+	0.0202	0.0202	0.0202	0.0202	0.0202	0.0202	0.0202	0.0202	0.0202
	Tz-	-0.2393	-0.2390	-0.2388	-0.2385	-0.2382	-0.2380	-0.2377	-0.2374	-0.2372
	Tz+	0.3593	0.3597	0.3602	0.3606	0.3610	0.3615	0.3619	0.3624	0.3628
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0155	-0.0147	-0.0275	-0.0417	-0.0565	-0.0714	-0.0863	-0.1012	-0.1161
	My+	0.0059	0.0006	0.0091	0.0180	0.0278	0.0377	0.0474	0.0572	0.0670
	Mz-	-0.0122	-0.0084	-0.0045	-0.0007	-0.0007	-0.0015	-0.0024	-0.0032	-0.0040
	Mz+	0.0026	0.0018	0.0010	0.0001	0.0032	0.0070	0.0108	0.0147	0.0185
520/524		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-1.0513	-1.0513	-1.0513	-1.0513	-1.0513	-1.0513	-1.0513	-1.0513	-1.0513
	N+	0.9779	0.9779	0.9779	0.9779	0.9779	0.9779	0.9779	0.9779	0.9779
	Ty-	-0.2768	-0.2666	-0.2564	-0.2462	-0.2360	-0.2258	-0.2156	-0.2054	-0.1952
	Ty+	0.0313	0.0374	0.0434	0.0495	0.0555	0.0616	0.0676	0.0736	0.0797
	Tz-	-0.0395	-0.0395	-0.0395	-0.0395	-0.0395	-0.0395	-0.0395	-0.0395	-0.0395
	Tz+	0.0483	0.0483	0.0483	0.0483	0.0483	0.0483	0.0483	0.0483	0.0483
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0014	-0.0074	-0.0135	-0.0195	-0.0255	-0.0316	-0.0376	-0.0436	-0.0497
	My+	0.0657	0.0707	0.0756	0.0806	0.0855	0.0905	0.0954	0.1003	0.1053
	Mz-	-0.0197	-0.0163	-0.0186	-0.0216	-0.0254	-0.0300	-0.0353	-0.0414	-0.0482
	Mz+	0.0809	0.1081	0.1358	0.1647	0.1923	0.2186	0.2437	0.2675	0.2900
523/521		0.000 m	0.084 m	0.168 m	0.252 m	0.337 m	0.421 m	0.505 m	0.589 m	0.673 m
		Envolvente (Acero laminado)								
	N-	-0.2644	-0.2643	-0.2643	-0.2643	-0.2642	-0.2642	-0.2642	-0.2641	-0.2641
	N+	0.5908	0.5909	0.5909	0.5910	0.5911	0.5911	0.5912	0.5913	0.5913
	Ty-	-0.0069	-0.0069	-0.0069	-0.0069	-0.0069	-0.0069	-0.0069	-0.0069	-0.0069
	Ty+	0.0317	0.0317	0.0317	0.0317	0.0317	0.0317	0.0317	0.0317	0.0317
	Tz-	-0.0172	-0.0167	-0.0161	-0.0156	-0.0150	-0.0145	-0.0139	-0.0134	-0.0129
	Tz+	0.0765	0.0774	0.0784	0.0793	0.0802	0.0811	0.0820	0.0829	0.0839
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0181	-0.0167	-0.0153	-0.0141	-0.0135	-0.0129	-0.0129	-0.0137	-0.0155
	My+	0.0532	0.0467	0.0402	0.0340	0.0279	0.0217	0.0155	0.0101	0.0059
	Mz-	-0.0020	-0.0014	-0.0008	-0.0002	-0.0015	-0.0042	-0.0069	-0.0095	-0.0122
	Mz+	0.0091	0.0065	0.0038	0.0011	0.0003	0.0009	0.0015	0.0021	0.0026
522/523		0.000 m	0.215 m	0.430 m	0.645 m	0.860 m	1.076 m	1.291 m	1.506 m	1.721 m
		Envolvente (Acero Conformado)								
	N-	0.0042	0.0063	0.0084	0.0105	0.0127	0.0148	0.0169	0.0190	0.0211
	N+	0.0744	0.0780	0.0816	0.0852	0.0887	0.0923	0.0959	0.0995	0.1030
	Ty-	-0.0591	-0.0591	-0.0591	-0.0591	-0.0591	-0.0591	-0.0591	-0.0591	-0.0591
	Ty+	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078
	Tz-	-0.0078	-0.0078	-0.0078	-0.0078	-0.0078	-0.0078	-0.0078	-0.0078	-0.0078
	Tz+	0.1769	0.1898	0.2027	0.2156	0.2285	0.2414	0.2543	0.2673	0.2802
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0395	-0.0817	-0.1267	-0.1744	-0.2250	-0.2783	-0.3345	-0.3933
	My+	0.0000	0.0017	0.0034	0.0050	0.0067	0.0084	0.0101	0.0117	0.0134
	Mz-	0.0000	-0.0017	-0.0033	-0.0050	-0.0067	-0.0084	-0.0100	-0.0117	-0.0134
	Mz+	0.0000	0.0127	0.0254	0.0381	0.0508	0.0635	0.0762	0.0889	0.1016
522/526		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-0.7899	-0.7899	-0.7899	-0.7899	-0.7899	-0.7899	-0.7899	-0.7899	-0.7899
	N+	0.3300	0.3300	0.3300	0.3300	0.3300	0.3300	0.3300	0.3300	0.3300
	Ty-	-0.0181	-0.0168	-0.0156	-0.0143	-0.0131	-0.0118	-0.0111	-0.0103	-0.0096
	Ty+	-0.0022	-0.0015	-0.0007	0.0000	0.0008	0.0015	0.0028	0.0040	0.0053
	Tz-	-0.0061	-0.0061	-0.0061	-0.0061	-0.0061	-0.0061	-0.0061	-0.0061	-0.0061



## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

	Tz+	0.0345	0.0345	0.0345	0.0345	0.0345	0.0345	0.0345	0.0345	0.0345
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0040	-0.0045	-0.0050	-0.0055	-0.0060	-0.0065	-0.0070	-0.0075	-0.0080
	My+	0.1700	0.1661	0.1623	0.1584	0.1545	0.1507	0.1468	0.1430	0.1391
	Mz-	-0.0550	-0.0532	-0.0514	-0.0498	-0.0482	-0.0467	-0.0453	-0.0440	-0.0428
	Mz+	0.0020	0.0027	0.0032	0.0036	0.0039	0.0040	0.0039	0.0036	0.0033
523/524		0.000 m	0.159 m	0.318 m	0.477 m	0.635 m	0.794 m	0.953 m	1.112 m	1.271 m
		Envolvente (Acero Conformado)								
	N-	-0.0267	-0.0240	-0.0214	-0.0187	-0.0161	-0.0135	-0.0118	-0.0102	-0.0086
	N+	0.0274	0.0290	0.0305	0.0321	0.0337	0.0353	0.0378	0.0404	0.0430
	Ty-	-0.0827	-0.0827	-0.0827	-0.0827	-0.0827	-0.0827	-0.0827	-0.0827	-0.0827
	Ty+	0.1004	0.1004	0.1004	0.1004	0.1004	0.1004	0.1004	0.1004	0.1004
	Tz-	-0.0509	-0.0414	-0.0319	-0.0223	-0.0128	-0.0127	-0.0127	-0.0127	-0.0127
	Tz+	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0088	0.0183	0.0278
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0163	-0.0141	-0.0121	-0.0101	-0.0080	-0.0060	-0.0040	-0.0020	0.0000
	My+	0.0024	0.0021	0.0018	0.0031	0.0056	0.0064	0.0058	0.0036	0.0000
	Mz-	-0.1051	-0.0920	-0.0788	-0.0657	-0.0526	-0.0394	-0.0263	-0.0131	0.0000
	Mz+	0.1276	0.1116	0.0957	0.0797	0.0638	0.0478	0.0319	0.0159	0.0000
525/523		0.000 m	0.112 m	0.225 m	0.337 m	0.450 m	0.562 m	0.675 m	0.787 m	0.900 m
		Envolvente (Acero laminado)								
	N-	-0.2236	-0.2236	-0.2235	-0.2235	-0.2234	-0.2234	-0.2233	-0.2233	-0.2232
	N+	0.1207	0.1208	0.1209	0.1210	0.1211	0.1212	0.1213	0.1214	0.1214
	Ty-	-0.0027	-0.0027	-0.0027	-0.0027	-0.0027	-0.0027	-0.0027	-0.0027	-0.0027
	Ty+	0.0014	0.0014	0.0014	0.0014	0.0014	0.0014	0.0014	0.0014	0.0014
	Tz-	-0.0620	-0.0613	-0.0606	-0.0599	-0.0591	-0.0584	-0.0577	-0.0570	-0.0562
	Tz+	0.0321	0.0334	0.0346	0.0358	0.0370	0.0383	0.0395	0.0407	0.0419
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0249	-0.0180	-0.0111	-0.0043	-0.0003	-0.0043	-0.0087	-0.0132	-0.0179
	My+	0.0155	0.0118	0.0080	0.0040	0.0025	0.0090	0.0155	0.0219	0.0283
	Mz-	-0.0015	-0.0012	-0.0009	-0.0006	-0.0003	0.0000	-0.0001	-0.0003	-0.0005
	Mz+	0.0008	0.0007	0.0005	0.0003	0.0002	0.0000	0.0003	0.0006	0.0009
524/528		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-1.1334	-1.1334	-1.1334	-1.1334	-1.1334	-1.1334	-1.1334	-1.1334	-1.1334
	N+	1.0777	1.0777	1.0777	1.0777	1.0777	1.0777	1.0777	1.0777	1.0777
	Ty-	-0.1737	-0.1635	-0.1533	-0.1431	-0.1329	-0.1227	-0.1125	-0.1023	-0.0921
	Ty+	0.0741	0.0802	0.0862	0.0923	0.0983	0.1044	0.1104	0.1164	0.1225
	Tz-	-0.0269	-0.0269	-0.0269	-0.0269	-0.0269	-0.0269	-0.0269	-0.0269	-0.0269
	Tz+	0.0204	0.0204	0.0204	0.0204	0.0204	0.0204	0.0204	0.0204	0.0204
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0497	-0.0522	-0.0548	-0.0573	-0.0599	-0.0625	-0.0650	-0.0676	-0.0701
	My+	0.1053	0.1086	0.1120	0.1154	0.1187	0.1221	0.1254	0.1288	0.1321
	Mz-	-0.0482	-0.0557	-0.0661	-0.0772	-0.0892	-0.1018	-0.1152	-0.1294	-0.1444
	Mz+	0.2900	0.3058	0.3204	0.3341	0.3495	0.3636	0.3765	0.3881	0.3984
527/525		0.000 m	0.013 m	0.026 m	0.039 m	0.051 m	0.064 m	0.077 m	0.090 m	0.103 m
		Envolvente (Acero laminado)								
	N-	-0.1755	-0.1755	-0.1755	-0.1755	-0.1755	-0.1755	-0.1755	-0.1755	-0.1754
	N+	0.0357	0.0357	0.0357	0.0357	0.0357	0.0357	0.0357	0.0357	0.0357
	Ty-	-0.0464	-0.0464	-0.0464	-0.0464	-0.0464	-0.0464	-0.0464	-0.0464	-0.0464

## Metal 3D

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE** Adrián Freijomil Aradas

	Ty+	0.0856	0.0856	0.0856	0.0856	0.0856	0.0856	0.0856	0.0856	0.0856
	Tz-	-0.2277	-0.2275	-0.2274	-0.2272	-0.2271	-0.2270	-0.2268	-0.2267	-0.2265
	Tz+	0.1740	0.1741	0.1742	0.1743	0.1744	0.1745	0.1745	0.1746	0.1747
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0156	-0.0160	-0.0170	-0.0180	-0.0189	-0.0203	-0.0218	-0.0234	-0.0249
	My+	-0.0010	-0.0026	-0.0003	0.0020	0.0043	0.0069	0.0098	0.0126	0.0155
	Mz-	-0.0039	-0.0033	-0.0027	-0.0022	-0.0016	-0.0010	-0.0004	-0.0004	-0.0015
	Mz+	0.0073	0.0062	0.0051	0.0040	0.0029	0.0018	0.0007	0.0002	0.0008
526/527		0.000 m	0.206 m	0.413 m	0.619 m	0.825 m	1.032 m	1.238 m	1.444 m	1.651 m
		Envolvente (Acero Conformado)								
	N-	0.0031	0.0051	0.0072	0.0092	0.0112	0.0133	0.0153	0.0173	0.0194
	N+	0.0160	0.0194	0.0228	0.0263	0.0297	0.0331	0.0366	0.0400	0.0434
	Ty-	-0.0152	-0.0152	-0.0152	-0.0152	-0.0152	-0.0152	-0.0152	-0.0152	-0.0152
	Ty+	0.0093	0.0093	0.0093	0.0093	0.0093	0.0093	0.0093	0.0093	0.0093
	Tz-	-0.0069	-0.0069	-0.0069	-0.0069	-0.0069	-0.0069	-0.0069	-0.0069	-0.0069
	Tz+	0.0212	0.0336	0.0459	0.0583	0.0707	0.0831	0.0955	0.1078	0.1202
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0057	-0.0139	-0.0247	-0.0379	-0.0538	-0.0722	-0.0932	-0.1167
	My+	0.0000	0.0014	0.0028	0.0043	0.0057	0.0071	0.0085	0.0099	0.0114
	Mz-	0.0000	-0.0019	-0.0038	-0.0057	-0.0076	-0.0096	-0.0115	-0.0134	-0.0153
	Mz+	0.0000	0.0031	0.0063	0.0094	0.0125	0.0157	0.0188	0.0220	0.0251
526/529		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero Conformado)								
	N-	-0.7992	-0.7992	-0.7992	-0.7992	-0.7992	-0.7992	-0.7992	-0.7992	-0.7992
	N+	0.3452	0.3452	0.3452	0.3452	0.3452	0.3452	0.3452	0.3452	0.3452
	Ty-	-0.0240	-0.0228	-0.0215	-0.0202	-0.0194	-0.0187	-0.0179	-0.0172	-0.0165
	Ty+	-0.0004	0.0004	0.0011	0.0019	0.0031	0.0043	0.0056	0.0069	0.0081
	Tz-	-0.0130	-0.0130	-0.0130	-0.0130	-0.0130	-0.0130	-0.0130	-0.0130	-0.0130
	Tz+	0.0557	0.0557	0.0557	0.0557	0.0557	0.0557	0.0557	0.0557	0.0557
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0080	-0.0085	-0.0090	-0.0098	-0.0106	-0.0114	-0.0122	-0.0130	-0.0138
	My+	0.1391	0.1327	0.1265	0.1204	0.1144	0.1083	0.1023	0.0962	0.0901
	Mz-	-0.0428	-0.0403	-0.0378	-0.0354	-0.0330	-0.0308	-0.0287	-0.0267	-0.0248
	Mz+	0.0033	0.0037	0.0039	0.0040	0.0039	0.0037	0.0033	0.0028	0.0021
527/528		0.000 m	0.168 m	0.335 m	0.503 m	0.670 m	0.838 m	1.006 m	1.173 m	1.341 m
		Envolvente (Acero Conformado)								
	N-	-0.1187	-0.1171	-0.1154	-0.1138	-0.1121	-0.1105	-0.1088	-0.1072	-0.1055
	N+	0.0735	0.0763	0.0791	0.0819	0.0846	0.0874	0.0902	0.0930	0.0958
	Ty-	-0.0607	-0.0607	-0.0607	-0.0607	-0.0607	-0.0607	-0.0607	-0.0607	-0.0607
	Ty+	0.0851	0.0851	0.0851	0.0851	0.0851	0.0851	0.0851	0.0851	0.0851
	Tz-	-0.0510	-0.0471	-0.0471	-0.0471	-0.0471	-0.0471	-0.0471	-0.0471	-0.0471
	Tz+	0.0020	0.0020	0.0020	0.0020	0.0020	0.0031	0.0122	0.0222	0.0323
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0631	-0.0552	-0.0473	-0.0394	-0.0316	-0.0237	-0.0158	-0.0079	0.0000
	My+	0.0027	0.0023	0.0021	0.0060	0.0082	0.0086	0.0075	0.0045	0.0000
	Mz-	-0.0814	-0.0712	-0.0610	-0.0509	-0.0407	-0.0305	-0.0203	-0.0102	0.0000
	Mz+	0.1141	0.0998	0.0856	0.0713	0.0570	0.0428	0.0285	0.0143	0.0000
530/527		0.000 m	0.125 m	0.251 m	0.376 m	0.501 m	0.627 m	0.752 m	0.877 m	1.002 m
		Envolvente (Acero laminado)								
	N-	-0.6640	-0.6639	-0.6639	-0.6638	-0.6637	-0.6636	-0.6635	-0.6634	-0.6633

## Metal 3D

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	N+	0.0732	0.0733	0.0734	0.0734	0.0735	0.0735	0.0736	0.0736	0.0737
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Ty+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Tz-	-0.1672	-0.1658	-0.1644	-0.1631	-0.1617	-0.1603	-0.1590	-0.1576	-0.1562
	Tz+	0.0147	0.0155	0.0163	0.0171	0.0179	0.0187	0.0195	0.0203	0.0211
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0820	-0.0611	-0.0404	-0.0199	0.0003	-0.0020	-0.0044	-0.0069	-0.0095
	My+	0.0084	0.0065	0.0046	0.0025	0.0005	0.0206	0.0406	0.0605	0.0801
	Mz-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
528/531		0.000 m	0.125 m	0.250 m	0.375 m	0.500 m	0.625 m	0.750 m	0.875 m	1.000 m
		Envolvente (Acero laminado)								
	N-	-1.1934	-1.1934	-1.1934	-1.1934	-1.1934	-1.1934	-1.1934	-1.1934	-1.1934
	N+	1.1620	1.1620	1.1620	1.1620	1.1620	1.1620	1.1620	1.1620	1.1620
	Ty-	-0.0104	-0.0022	0.0038	0.0099	0.0159	0.0220	0.0280	0.0341	0.0401
	Ty+	0.0393	0.0474	0.0576	0.0678	0.0780	0.0882	0.0984	0.1086	0.1188
	Tz-	-0.0119	-0.0119	-0.0119	-0.0119	-0.0119	-0.0119	-0.0119	-0.0119	-0.0119
	Tz+	0.0202	0.0202	0.0202	0.0202	0.0202	0.0202	0.0202	0.0202	0.0202
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0701	-0.0686	-0.0671	-0.0657	-0.0642	-0.0627	-0.0612	-0.0597	-0.0583
	My+	0.1321	0.1296	0.1271	0.1246	0.1221	0.1195	0.1170	0.1145	0.1120
	Mz-	-0.1444	-0.1489	-0.1541	-0.1602	-0.1669	-0.1745	-0.1828	-0.1918	-0.2016
	Mz+	0.3984	0.3967	0.3937	0.3895	0.3840	0.3772	0.3692	0.3598	0.3492
529/530		0.000 m	0.198 m	0.395 m	0.593 m	0.790 m	0.988 m	1.186 m	1.383 m	1.581 m
		Envolvente (Acero Conformado)								
	N-	0.0044	0.0064	0.0083	0.0103	0.0122	0.0142	0.0161	0.0181	0.0200
	N+	0.0165	0.0198	0.0231	0.0263	0.0296	0.0329	0.0362	0.0395	0.0427
	Ty-	-0.0200	-0.0200	-0.0200	-0.0200	-0.0200	-0.0200	-0.0200	-0.0200	-0.0200
	Ty+	0.0131	0.0131	0.0131	0.0131	0.0131	0.0131	0.0131	0.0131	0.0131
	Tz-	-0.0202	-0.0202	-0.0202	-0.0202	-0.0202	-0.0202	-0.0202	-0.0202	-0.0202
	Tz+	0.0429	0.0542	0.0661	0.0779	0.0898	0.1016	0.1135	0.1254	0.1372
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	0.0000	-0.0096	-0.0214	-0.0357	-0.0522	-0.0712	-0.0924	-0.1160	-0.1419
	My+	0.0000	0.0040	0.0080	0.0120	0.0160	0.0200	0.0240	0.0280	0.0320
	Mz-	0.0000	-0.0026	-0.0052	-0.0078	-0.0104	-0.0130	-0.0156	-0.0181	-0.0207
	Mz+	0.0000	0.0039	0.0079	0.0118	0.0158	0.0197	0.0237	0.0276	0.0316
529/535		0.000 m	0.124 m	0.248 m	0.372 m	0.497 m	0.621 m	0.745 m	0.869 m	0.993 m
		Envolvente (Acero Conformado)								
	N-	-0.8117	-0.8117	-0.8117	-0.8117	-0.8117	-0.8117	-0.8117	-0.8117	-0.8117
	N+	0.3649	0.3649	0.3649	0.3649	0.3649	0.3649	0.3649	0.3649	0.3649
	Ty-	-0.0291	-0.0278	-0.0266	-0.0257	-0.0249	-0.0242	-0.0234	-0.0227	-0.0220
	Ty+	-0.0017	-0.0010	-0.0002	0.0009	0.0021	0.0034	0.0046	0.0059	0.0071
	Tz-	-0.0139	-0.0139	-0.0139	-0.0139	-0.0139	-0.0139	-0.0139	-0.0139	-0.0139
	Tz+	0.0908	0.0908	0.0908	0.0908	0.0908	0.0908	0.0908	0.0908	0.0908
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0138	-0.0121	-0.0103	-0.0086	-0.0069	-0.0052	-0.0034	-0.0017	0.0000
	My+	0.0901	0.0789	0.0676	0.0563	0.0451	0.0338	0.0225	0.0113	0.0000
	Mz-	-0.0248	-0.0213	-0.0180	-0.0148	-0.0116	-0.0086	-0.0056	-0.0028	0.0000
	Mz+	0.0021	0.0024	0.0025	0.0025	0.0023	0.0020	0.0015	0.0008	0.0000
530/531		0.000 m	0.176 m	0.353 m	0.529 m	0.705 m	0.882 m	1.058 m	1.235 m	1.411 m

## Metal 3D

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		Envolvente (Acero Conformado)								
	N-	-0.3223	-0.3206	-0.3189	-0.3171	-0.3154	-0.3137	-0.3119	-0.3102	-0.3085
	N+	0.1978	0.2008	0.2037	0.2066	0.2095	0.2125	0.2154	0.2183	0.2213
	Ty-	-0.0382	-0.0382	-0.0382	-0.0382	-0.0382	-0.0382	-0.0382	-0.0382	-0.0382
	Ty+	0.0700	0.0700	0.0700	0.0700	0.0700	0.0700	0.0700	0.0700	0.0700
	Tz-	-0.0925	-0.0925	-0.0925	-0.0925	-0.0925	-0.0925	-0.0925	-0.0925	-0.0925
	Tz+	0.0027	0.0027	0.0027	0.0027	0.0045	0.0151	0.0256	0.0362	0.0468
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.1306	-0.1142	-0.0979	-0.0816	-0.0653	-0.0490	-0.0326	-0.0163	0.0000
	My+	0.0063	0.0120	0.0159	0.0179	0.0181	0.0163	0.0128	0.0073	0.0000
	Mz-	-0.0539	-0.0471	-0.0404	-0.0337	-0.0269	-0.0202	-0.0135	-0.0067	0.0000
	Mz+	0.0987	0.0864	0.0740	0.0617	0.0494	0.0370	0.0247	0.0123	0.0000
532/530		0.000 m	0.058 m	0.117 m	0.175 m	0.234 m	0.292 m	0.351 m	0.409 m	0.468 m
		Envolvente (Acero laminado)								
	N-	-1.6941	-1.6940	-1.6940	-1.6940	-1.6940	-1.6939	-1.6939	-1.6939	-1.6938
	N+	2.0033	2.0033	2.0034	2.0034	2.0034	2.0035	2.0035	2.0036	2.0036
	Ty-	-0.0592	-0.0592	-0.0592	-0.0592	-0.0592	-0.0592	-0.0592	-0.0592	-0.0592
	Ty+	0.0133	0.0133	0.0133	0.0133	0.0133	0.0133	0.0133	0.0133	0.0133
	Tz-	-0.3539	-0.3533	-0.3526	-0.3520	-0.3514	-0.3507	-0.3501	-0.3495	-0.3488
	Tz+	-0.0970	-0.0966	-0.0962	-0.0959	-0.0955	-0.0951	-0.0947	-0.0944	-0.0940
	Mt-	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001
	Mt+	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
	My-	-0.0855	-0.0701	-0.0547	-0.0394	-0.0241	-0.0093	-0.0037	0.0019	0.0075
	My+	0.0476	0.0596	0.0717	0.0837	0.0956	0.1076	0.1195	0.1313	0.1433
	Mz-	-0.0225	-0.0190	-0.0156	-0.0121	-0.0087	-0.0084	-0.0081	-0.0078	-0.0075
	Mz+	0.0224	0.0230	0.0237	0.0245	0.0261	0.0281	0.0300	0.0319	0.0338
531/537		0.000 m	0.124 m	0.248 m	0.372 m	0.497 m	0.621 m	0.745 m	0.869 m	0.993 m
		Envolvente (Acero laminado)								
	N-	-1.2306	-1.2306	-1.2306	-1.2306	-1.2306	-1.2306	-1.2306	-1.2306	-1.2306
	N+	1.2310	1.2310	1.2310	1.2310	1.2310	1.2310	1.2310	1.2310	1.2310
	Ty-	-0.2270	-0.2210	-0.2150	-0.2090	-0.2030	-0.1970	-0.1910	-0.1850	-0.1790
	Ty+	0.3112	0.3213	0.3314	0.3416	0.3517	0.3618	0.3720	0.3821	0.3922
	Tz-	-0.0587	-0.0587	-0.0587	-0.0587	-0.0587	-0.0587	-0.0587	-0.0587	-0.0587
	Tz+	0.1127	0.1127	0.1127	0.1127	0.1127	0.1127	0.1127	0.1127	0.1127
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	My-	-0.0583	-0.0510	-0.0437	-0.0364	-0.0291	-0.0218	-0.0146	-0.0073	0.0000
	My+	0.1120	0.0980	0.0840	0.0700	0.0560	0.0420	0.0280	0.0140	0.0000
	Mz-	-0.2016	-0.1738	-0.1467	-0.1204	-0.0948	-0.0700	-0.0459	-0.0226	0.0000
	Mz+	0.3492	0.3100	0.2695	0.2277	0.1847	0.1404	0.0949	0.0481	0.0000
536/532		0.000 m	0.066 m	0.132 m	0.198 m	0.264 m	0.330 m	0.396 m	0.462 m	0.528 m
		Envolvente (Acero laminado)								
	N-	-0.9334	-0.9334	-0.9334	-0.9334	-0.9333	-0.9333	-0.9333	-0.9332	-0.9332
	N+	0.6417	0.6418	0.6418	0.6419	0.6419	0.6420	0.6420	0.6421	0.6421
	Ty-	-0.0644	-0.0644	-0.0644	-0.0644	-0.0644	-0.0644	-0.0644	-0.0644	-0.0644
	Ty+	0.0537	0.0537	0.0537	0.0537	0.0537	0.0537	0.0537	0.0537	0.0537
	Tz-	-0.5413	-0.5406	-0.5399	-0.5392	-0.5385	-0.5378	-0.5370	-0.5363	-0.5356
	Tz+	0.3635	0.3639	0.3643	0.3647	0.3652	0.3656	0.3660	0.3664	0.3669
	Mt-	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001
	Mt+	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
	My-	-0.2367	-0.2010	-0.1654	-0.1298	-0.0942	-0.0597	-0.0502	-0.0622	-0.0855
	My+	0.1073	0.0833	0.0593	0.0352	0.0112	-0.0130	-0.0124	0.0122	0.0476
	Mz-	-0.0123	-0.0084	-0.0046	-0.0048	-0.0083	-0.0119	-0.0154	-0.0189	-0.0225

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	Mz+	0.0058	0.0023	0.0005	0.0028	0.0067	0.0107	0.0146	0.0185	0.0224	
533/534		0.000 m	0.369 m	0.738 m	1.106 m	1.475 m	1.844 m	2.213 m	2.582 m	2.950 m	
		Envolvente (Acero laminado)									
	N-	-8.6678	-8.6264	-8.5850	-8.5436	-8.5021	-8.4607	-8.4193	-8.3778	-8.3364	
	N+	-2.6799	-2.6553	-2.6308	-2.6062	-2.5817	-2.5571	-2.5326	-2.5080	-2.4835	
	Ty-	-0.0297	-0.0297	-0.0297	-0.0297	-0.0297	-0.0297	-0.0297	-0.0297	-0.0826	-0.1656
	Ty+	0.5205	0.4375	0.3545	0.2715	0.1886	0.1543	0.1543	0.1543	0.1543	
	Tz-	-0.4220	-0.3114	-0.2007	-0.0901	0.0206	0.1312	0.2418	0.3525	0.3785	
	Tz+	1.5338	1.4647	1.3955	1.3444	1.3029	1.2614	1.2199	1.1923	1.1923	
	Mt-	-0.0007	-0.0007	-0.0007	-0.0007	-0.0007	-0.0007	-0.0007	-0.0007	-0.0007	
	Mt+	0.0024	0.0024	0.0024	0.0024	0.0024	0.0024	0.0024	0.0024	0.0024	
	My-	-0.5667	-0.4322	-0.3370	-0.4384	-0.7889	-1.2614	-1.7193	-2.1612	-2.5885	
	My+	1.3149	0.7625	0.2345	-0.1009	-0.2665	-0.2957	-0.3640	-0.4748	-0.6248	
	Mz-	-0.0403	-0.0297	-0.0190	-0.0093	-0.0691	-0.1228	-0.1470	-0.1825	-0.2394	
Mz+	0.4558	0.2801	0.1337	0.0482	0.0054	0.0164	0.0273	0.0383	0.0492		
534/535		0.000 m	0.234 m	0.467 m	0.701 m	0.935 m	1.168 m	1.402 m	1.636 m	1.870 m	
		Envolvente (Acero laminado)									
	N-	-1.6774	-1.6511	-1.6249	-1.5986	-1.5724	-1.5461	-1.5199	-1.4936	-1.4674	
	N+	0.1873	0.2028	0.2184	0.2339	0.2495	0.2650	0.2806	0.2962	0.3117	
	Ty-	-0.0353	-0.0353	-0.0353	-0.0353	-0.0534	-0.1040	-0.1566	-0.2092	-0.2618	
	Ty+	0.1999	0.1473	0.1325	0.1325	0.1325	0.1325	0.1325	0.1325	0.1325	
	Tz-	0.0817	0.1518	0.2219	0.2920	0.2802	0.2364	0.1925	0.1487	0.1049	
	Tz+	1.0954	1.0791	1.0791	1.0791	1.0791	1.0845	1.1235	1.1656	1.2077	
	Mt-	-0.0123	-0.0123	-0.0123	-0.0123	-0.0123	-0.0123	-0.0123	-0.0123	-0.0123	
	Mt+	0.0059	0.0059	0.0059	0.0059	0.0059	0.0059	0.0059	0.0059	0.0059	
	My-	0.8092	0.7081	0.6168	0.5362	0.4654	0.4052	0.3549	0.2602	0.1601	
	My+	2.5817	2.3730	2.1549	1.9309	1.7245	1.5043	1.2683	1.0153	0.7466	
	Mz-	-0.1220	-0.1511	-0.1802	-0.2093	-0.2383	-0.2674	-0.2965	-0.3256	-0.3547	
Mz+	0.4093	0.3942	0.3862	0.3884	0.3948	0.4071	0.4286	0.4578	0.4941		
535/536		0.000 m	0.189 m	0.378 m	0.566 m	0.755 m	0.944 m	1.133 m	1.322 m	1.510 m	
		Envolvente (Acero laminado)									
	N-	-1.4376	-1.4164	-1.3952	-1.3740	-1.3528	-1.3316	-1.3104	-1.2892	-1.2680	
	N+	0.3134	0.3260	0.3386	0.3511	0.3637	0.3763	0.3888	0.4014	0.4140	
	Ty-	-0.2351	-0.2351	-0.2351	-0.2351	-0.2351	-0.2351	-0.2351	-0.2351	-0.2351	
	Ty+	0.3414	0.3380	0.3346	0.3312	0.3278	0.3244	0.3210	0.3176	0.3142	
	Tz-	0.0522	0.0522	0.0522	0.0522	0.0522	0.0522	0.0522	0.0522	0.0522	
	Tz+	0.5325	0.5381	0.5438	0.5495	0.5551	0.5608	0.5665	0.5721	0.5778	
	Mt-	-0.0122	-0.0122	-0.0122	-0.0122	-0.0122	-0.0122	-0.0122	-0.0122	-0.0122	
	Mt+	0.0058	0.0058	0.0058	0.0058	0.0058	0.0058	0.0058	0.0058	0.0058	
	My-	0.1601	0.1240	0.0839	0.0437	0.0036	-0.0386	-0.0983	-0.1657	-0.2367	
	My+	0.7466	0.6455	0.5434	0.4401	0.3359	0.2326	0.1459	0.1172	0.1073	
	Mz-	-0.3546	-0.3102	-0.2659	-0.2215	-0.1771	-0.1327	-0.0883	-0.0439	-0.0010	
Mz+	0.4941	0.4300	0.3665	0.3036	0.2414	0.1799	0.1189	0.0587	0.0005		
536/537		0.000 m	0.185 m	0.370 m	0.556 m	0.741 m	0.926 m	1.111 m	1.296 m	1.481 m	
		Envolvente (Acero Conformado)									
	N-	-0.6485	-0.6475	-0.6465	-0.6455	-0.6444	-0.6434	-0.6424	-0.6414	-0.6404	
	N+	0.0362	0.0368	0.0374	0.0380	0.0386	0.0392	0.0398	0.0404	0.0410	
	Ty-	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0056	-0.0111	-0.0167	-0.0222	
	Ty+	0.0222	0.0167	0.0111	0.0056	0.0000	0.0000	0.0000	0.0000	0.0000	
	Tz-	-0.0222	-0.0167	-0.0111	-0.0056	0.0000	-0.0056	-0.0111	-0.0167	-0.0222	
	Tz+	0.0222	0.0167	0.0111	0.0056	0.0000	0.0056	0.0111	0.0167	0.0222	
	Mt-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
	Mt+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
	My-	0.0000	-0.0036	-0.0062	-0.0077	-0.0082	-0.0077	-0.0062	-0.0036	0.0000	

## Metal 3D

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

My+	0.0000	0.0036	0.0062	0.0077	0.0082	0.0077	0.0062	0.0036	0.0000
Mz-	0.0000	-0.0036	-0.0062	-0.0077	-0.0082	-0.0077	-0.0062	-0.0036	0.0000
Mz+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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## Listado de cimentación

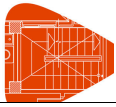
NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

### 1.- LISTADO DE ELEMENTOS DE CIMENTACIÓN

#### 1.1.- Descripción

Referencias	Geometría	Armado
1	Zapata rectangular excéntrica Ancho inicial X: 60.0 cm Ancho inicial Y: 60.0 cm Ancho final X: 60.0 cm Ancho final Y: 57.5 cm Ancho zapata X: 120.0 cm Ancho zapata Y: 117.5 cm Canto: 50.0 cm	Sup X: 5Ø12c/22 Sup Y: 5Ø12c/22 Inf X: 5Ø12c/22 Inf Y: 5Ø12c/22
25	Zapata rectangular excéntrica Ancho inicial X: 85.0 cm Ancho inicial Y: 85.0 cm Ancho final X: 85.0 cm Ancho final Y: 85.0 cm Ancho zapata X: 170.0 cm Ancho zapata Y: 170.0 cm Canto: 60.0 cm	Sup X: 9Ø12c/18 Sup Y: 9Ø12c/18 Inf X: 9Ø12c/18 Inf Y: 9Ø12c/18
44	Zapata rectangular excéntrica Ancho inicial X: 85.0 cm Ancho inicial Y: 85.0 cm Ancho final X: 85.0 cm Ancho final Y: 85.0 cm Ancho zapata X: 170.0 cm Ancho zapata Y: 170.0 cm Canto: 60.0 cm	Sup X: 9Ø12c/18 Sup Y: 9Ø12c/18 Inf X: 9Ø12c/18 Inf Y: 9Ø12c/18
63	Zapata rectangular excéntrica Ancho inicial X: 85.0 cm Ancho inicial Y: 85.0 cm Ancho final X: 85.0 cm Ancho final Y: 85.0 cm Ancho zapata X: 170.0 cm Ancho zapata Y: 170.0 cm Canto: 60.0 cm	Sup X: 9Ø12c/18 Sup Y: 9Ø12c/18 Inf X: 9Ø12c/18 Inf Y: 9Ø12c/18
83	Zapata cuadrada Ancho: 170.0 cm Canto: 70.0 cm	Sup X: 10Ø12c/16 Sup Y: 10Ø12c/16 Inf X: 10Ø12c/16 Inf Y: 10Ø12c/16
102	Zapata rectangular excéntrica Ancho inicial X: 70.0 cm Ancho inicial Y: 70.0 cm Ancho final X: 70.0 cm Ancho final Y: 70.0 cm Ancho zapata X: 140.0 cm Ancho zapata Y: 140.0 cm Canto: 60.0 cm	Sup X: 8Ø12c/18 Sup Y: 8Ø12c/18 Inf X: 8Ø12c/18 Inf Y: 8Ø12c/18
165, 311	Zapata rectangular excéntrica Ancho inicial X: 80.0 cm Ancho inicial Y: 80.0 cm Ancho final X: 80.0 cm Ancho final Y: 80.0 cm Ancho zapata X: 160.0 cm Ancho zapata Y: 160.0 cm Canto: 80.0 cm	Sup X: 6Ø16c/25 Sup Y: 6Ø16c/25 Inf X: 6Ø16c/25 Inf Y: 6Ø16c/25

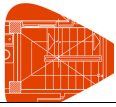




## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

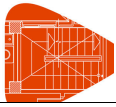
174	Zapata rectangular excéntrica Ancho inicial X: 100.0 cm Ancho inicial Y: 100.0 cm Ancho final X: 100.0 cm Ancho final Y: 100.0 cm Ancho zapata X: 200.0 cm Ancho zapata Y: 200.0 cm Canto: 80.0 cm	Sup X: 8Ø16c/25 Sup Y: 8Ø16c/25 Inf X: 8Ø16c/25 Inf Y: 8Ø16c/25
189	Zapata rectangular excéntrica Ancho inicial X: 125.0 cm Ancho inicial Y: 125.0 cm Ancho final X: 125.0 cm Ancho final Y: 125.0 cm Ancho zapata X: 250.0 cm Ancho zapata Y: 250.0 cm Canto: 100.0 cm	Sup X: 12Ø16c/20 Sup Y: 12Ø16c/20 Inf X: 12Ø16c/20 Inf Y: 12Ø16c/20
213	Zapata rectangular excéntrica Ancho inicial X: 80.0 cm Ancho inicial Y: 80.0 cm Ancho final X: 80.0 cm Ancho final Y: 80.0 cm Ancho zapata X: 160.0 cm Ancho zapata Y: 160.0 cm Canto: 80.0 cm	Sup X: 6Ø16c/25 Sup Y: 6Ø16c/25 Inf X: 6Ø16c/25 Inf Y: 6Ø16c/25
222	Zapata rectangular excéntrica Ancho inicial X: 100.0 cm Ancho inicial Y: 100.0 cm Ancho final X: 100.0 cm Ancho final Y: 100.0 cm Ancho zapata X: 200.0 cm Ancho zapata Y: 200.0 cm Canto: 80.0 cm	Sup X: 8Ø16c/25 Sup Y: 8Ø16c/25 Inf X: 8Ø16c/25 Inf Y: 8Ø16c/25
238	Zapata rectangular excéntrica Ancho inicial X: 125.0 cm Ancho inicial Y: 125.0 cm Ancho final X: 125.0 cm Ancho final Y: 125.0 cm Ancho zapata X: 250.0 cm Ancho zapata Y: 250.0 cm Canto: 100.0 cm	Sup X: 12Ø16c/20 Sup Y: 12Ø16c/20 Inf X: 12Ø16c/20 Inf Y: 12Ø16c/20
262	Zapata rectangular excéntrica Ancho inicial X: 80.0 cm Ancho inicial Y: 80.0 cm Ancho final X: 80.0 cm Ancho final Y: 80.0 cm Ancho zapata X: 160.0 cm Ancho zapata Y: 160.0 cm Canto: 80.0 cm	Sup X: 6Ø16c/25 Sup Y: 6Ø16c/25 Inf X: 6Ø16c/25 Inf Y: 6Ø16c/25
271	Zapata rectangular excéntrica Ancho inicial X: 100.0 cm Ancho inicial Y: 100.0 cm Ancho final X: 100.0 cm Ancho final Y: 100.0 cm Ancho zapata X: 200.0 cm Ancho zapata Y: 200.0 cm Canto: 80.0 cm	Sup X: 8Ø16c/25 Sup Y: 8Ø16c/25 Inf X: 8Ø16c/25 Inf Y: 8Ø16c/25



## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

287	Zapata rectangular excéntrica Ancho inicial X: 125.0 cm Ancho inicial Y: 125.0 cm Ancho final X: 125.0 cm Ancho final Y: 125.0 cm Ancho zapata X: 250.0 cm Ancho zapata Y: 250.0 cm Canto: 100.0 cm	Sup X: 12Ø16c/20 Sup Y: 12Ø16c/20 Inf X: 12Ø16c/20 Inf Y: 12Ø16c/20
320	Zapata rectangular excéntrica Ancho inicial X: 90.0 cm Ancho inicial Y: 90.0 cm Ancho final X: 90.0 cm Ancho final Y: 90.0 cm Ancho zapata X: 180.0 cm Ancho zapata Y: 180.0 cm Canto: 80.0 cm	Sup X: 7Ø16c/25 Sup Y: 7Ø16c/25 Inf X: 7Ø16c/25 Inf Y: 7Ø16c/25
327, 332, 339	Zapata rectangular excéntrica Ancho inicial X: 40.0 cm Ancho inicial Y: 40.0 cm Ancho final X: 40.0 cm Ancho final Y: 40.0 cm Ancho zapata X: 80.0 cm Ancho zapata Y: 80.0 cm Canto: 40.0 cm	X: 3Ø16c/25 Y: 3Ø16c/25
344	Zapata rectangular excéntrica Ancho inicial X: 72.5 cm Ancho inicial Y: 72.5 cm Ancho final X: 72.5 cm Ancho final Y: 72.5 cm Ancho zapata X: 145.0 cm Ancho zapata Y: 145.0 cm Canto: 40.0 cm	Sup X: 5Ø12c/28 Sup Y: 5Ø12c/28 Inf X: 5Ø12c/28 Inf Y: 5Ø12c/28
421	Zapata rectangular excéntrica Ancho inicial X: 65.0 cm Ancho inicial Y: 65.0 cm Ancho final X: 65.0 cm Ancho final Y: 65.0 cm Ancho zapata X: 130.0 cm Ancho zapata Y: 130.0 cm Canto: 60.0 cm	Sup X: 7Ø12c/18 Sup Y: 7Ø12c/18 Inf X: 7Ø12c/18 Inf Y: 7Ø12c/18
445, 526	Zapata rectangular excéntrica Ancho inicial X: 47.5 cm Ancho inicial Y: 47.5 cm Ancho final X: 47.5 cm Ancho final Y: 47.5 cm Ancho zapata X: 95.0 cm Ancho zapata Y: 95.0 cm Canto: 40.0 cm	Sup X: 3Ø12c/28 Sup Y: 3Ø12c/28 Inf X: 3Ø12c/28 Inf Y: 3Ø12c/28
465	Zapata rectangular excéntrica Ancho inicial X: 50.0 cm Ancho inicial Y: 50.0 cm Ancho final X: 50.0 cm Ancho final Y: 50.0 cm Ancho zapata X: 100.0 cm Ancho zapata Y: 100.0 cm Canto: 45.0 cm	X: 7Ø12c/12.5 Y: 7Ø12c/12.5



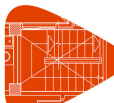
## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

485	Zapata rectangular excéntrica Ancho inicial X: 55.0 cm Ancho inicial Y: 55.0 cm Ancho final X: 55.0 cm Ancho final Y: 55.0 cm Ancho zapata X: 110.0 cm Ancho zapata Y: 110.0 cm Canto: 50.0 cm	Sup X: 5Ø12c/22 Sup Y: 5Ø12c/22 Inf X: 5Ø12c/22 Inf Y: 5Ø12c/22
506	Zapata rectangular excéntrica Ancho inicial X: 50.0 cm Ancho inicial Y: 50.0 cm Ancho final X: 50.0 cm Ancho final Y: 50.0 cm Ancho zapata X: 100.0 cm Ancho zapata Y: 100.0 cm Canto: 40.0 cm	X: 4Ø16c/25 Y: 4Ø16c/25

### 1.2.- Comprobación

Referencia: 1		
Dimensiones: 120 x 118 x 50		
Armados: Xi:Ø12c/22 Yi:Ø12c/22 Xs:Ø12c/22 Ys:Ø12c/22		
Comprobación	Valores	Estado
Tensiones sobre el terreno: <i>Criterio de CYPE Ingenieros</i>		
-Tensión media en situaciones persistentes:	Máximo: 2 kp/cm <sup>2</sup> Calculado: 0.254 kp/cm <sup>2</sup>	Cumple
-Tensión máxima en situaciones persistentes sin viento:	Máximo: 2.5 kp/cm <sup>2</sup> Calculado: 0.228 kp/cm <sup>2</sup>	Cumple
-Tensión máxima en situaciones persistentes con viento:	Máximo: 2.5 kp/cm <sup>2</sup> Calculado: 0.578 kp/cm <sup>2</sup>	Cumple
Vuelco de la zapata: <i>Si el % de reserva de seguridad es mayor que cero, quiere decir que los coeficientes de seguridad al vuelco son mayores que los valores estrictos exigidos para todas las combinaciones de equilibrio.</i>		
-En dirección X:	Reserva seguridad: 30.4 %	Cumple
-En dirección Y:	Reserva seguridad: 24.3 %	Cumple
Flexión en la zapata:		
-En dirección X:	Momento: 0.41 t·m	Cumple
-En dirección Y:	Momento: 0.76 t·m	Cumple
Cortante en la zapata:		
-En dirección X:	Cortante: 0.43 t	Cumple
-En dirección Y:	Cortante: 0.53 t	Cumple
Compresión oblicua en la zapata: -Situaciones persistentes: <i>Criterio de CYPE Ingenieros</i>		
	Máximo: 509.68 t/m <sup>2</sup> Calculado: 5.05 t/m <sup>2</sup>	Cumple
Canto mínimo: <i>Artículo 59.8.1 de la norma EHE-98</i>		
	Mínimo: 25 cm Calculado: 50 cm	Cumple
Espacio para anclar arranques en cimentación: -1:		
	Mínimo: 30 cm Calculado: 43 cm	Cumple
Cuantía geométrica mínima: <i>Criterio de CYPE Ingenieros</i>		
	Mínimo: 0.002	



## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas		
-En dirección X:	Calculado: 0.0021	Cumple
-En dirección Y:	Calculado: 0.0021	Cumple
Cuantía mínima necesaria por flexión: <i>Artículo 42.3.2 de la norma EHE-98</i>	Calculado: 0.0011	
-Armado inferior dirección X:	Mínimo: 0.0001	Cumple
-Armado inferior dirección Y:	Mínimo: 0.0002	Cumple
-Armado superior dirección X:	Mínimo: 0.0001	Cumple
-Armado superior dirección Y:	Mínimo: 0.0001	Cumple
Diámetro mínimo de las barras: <i>Recomendación del Artículo 59.8.2 (norma EHE-98)</i>	Mínimo: 12 mm	
-Parrilla inferior:	Calculado: 12 mm	Cumple
-Parrilla superior:	Calculado: 12 mm	Cumple
Separación máxima entre barras: <i>Artículo 59.8.2 de la norma EHE-98</i>	Máximo: 30 cm	
-Armado inferior dirección X:	Calculado: 22 cm	Cumple
-Armado inferior dirección Y:	Calculado: 22 cm	Cumple
-Armado superior dirección X:	Calculado: 22 cm	Cumple
-Armado superior dirección Y:	Calculado: 22 cm	Cumple
Separación mínima entre barras: <i>Recomendación del libro "Cálculo de estructuras de cimentación", J. Calavera. Ed. INTEMAC, 1991</i>	Mínimo: 10 cm	
-Armado inferior dirección X:	Calculado: 22 cm	Cumple
-Armado inferior dirección Y:	Calculado: 22 cm	Cumple
-Armado superior dirección X:	Calculado: 22 cm	Cumple
-Armado superior dirección Y:	Calculado: 22 cm	Cumple
Longitud de anclaje: <i>Criterio del libro "Cálculo de estructuras de cimentación", J. Calavera. Ed. INTEMAC, 1991</i>		
-Armado inf. dirección X hacia der:	Mínimo: 17 cm Calculado: 17 cm	Cumple
-Armado inf. dirección X hacia izq:	Mínimo: 17 cm Calculado: 17 cm	Cumple
-Armado inf. dirección Y hacia arriba:	Mínimo: 15 cm Calculado: 15 cm	Cumple
-Armado inf. dirección Y hacia abajo:	Mínimo: 17 cm Calculado: 20 cm	Cumple
-Armado sup. dirección X hacia der:	Mínimo: 17 cm Calculado: 17 cm	Cumple
-Armado sup. dirección X hacia izq:	Mínimo: 17 cm Calculado: 17 cm	Cumple
-Armado sup. dirección Y hacia arriba:	Mínimo: 15 cm Calculado: 15 cm	Cumple
-Armado sup. dirección Y hacia abajo:	Mínimo: 17 cm Calculado: 20 cm	Cumple
Longitud mínima de las patillas:	Mínimo: 12 cm	
-Armado inf. dirección X hacia der:	Calculado: 12 cm	Cumple
-Armado inf. dirección X hacia izq:	Calculado: 12 cm	Cumple

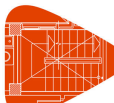


## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

-Armado inf. dirección Y hacia arriba:	Calculado: 15 cm	Cumple
-Armado inf. dirección Y hacia abajo:	Calculado: 15 cm	Cumple
-Armado sup. dirección X hacia der:	Calculado: 12 cm	Cumple
-Armado sup. dirección X hacia izq:	Calculado: 12 cm	Cumple
-Armado sup. dirección Y hacia arriba:	Calculado: 15 cm	Cumple
-Armado sup. dirección Y hacia abajo:	Calculado: 15 cm	Cumple
Se cumplen todas las comprobaciones		

Referencia: 25		
Dimensiones: 170 x 170 x 60		
Armados: Xi:Ø12c/18 Yi:Ø12c/18 Xs:Ø12c/18 Ys:Ø12c/18		
Comprobación	Valores	Estado
Tensiones sobre el terreno: <i>Criterio de CYPE Ingenieros</i>		
-Tensión media en situaciones persistentes:	Máximo: 2 kp/cm <sup>2</sup> Calculado: 0.264 kp/cm <sup>2</sup>	Cumple
-Tensión máxima en situaciones persistentes sin viento:	Máximo: 2.5 kp/cm <sup>2</sup> Calculado: 0.233 kp/cm <sup>2</sup>	Cumple
-Tensión máxima en situaciones persistentes con viento:	Máximo: 2.5 kp/cm <sup>2</sup> Calculado: 0.583 kp/cm <sup>2</sup>	Cumple
Vuelco de la zapata: <i>Si el % de reserva de seguridad es mayor que cero, quiere decir que los coeficientes de seguridad al vuelco son mayores que los valores estrictos exigidos para todas las combinaciones de equilibrio.</i>		
-En dirección X:	Reserva seguridad: 9.5 %	Cumple
-En dirección Y:	Reserva seguridad: 643.3 %	Cumple
Flexión en la zapata:		
-En dirección X:	Momento: 2.50 t·m	Cumple
-En dirección Y:	Momento: 0.73 t·m	Cumple
Cortante en la zapata:		
-En dirección X:	Cortante: 4.22 t	Cumple
-En dirección Y:	Cortante: 0.54 t	Cumple
Compresión oblicua en la zapata:		
-Situaciones persistentes: <i>Criterio de CYPE Ingenieros</i>	Máximo: 509.68 t/m <sup>2</sup> Calculado: 5.65 t/m <sup>2</sup>	Cumple
Canto mínimo: <i>Artículo 59.8.1 de la norma EHE-98</i>		
	Mínimo: 25 cm Calculado: 60 cm	Cumple
Espacio para anclar arranques en cimentación:		
-25:	Mínimo: 40 cm Calculado: 53 cm	Cumple
Cuantía geométrica mínima: <i>Criterio de CYPE Ingenieros</i>		
-En dirección X:	Mínimo: 0.002 Calculado: 0.0021	Cumple
-En dirección Y:	Calculado: 0.0021	Cumple
Cuantía mínima necesaria por flexión: <i>Artículo 42.3.2 de la norma EHE-98</i>		
-Armado inferior dirección X:	Calculado: 0.0011 Mínimo: 0.0003	Cumple



## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas		
-Armado inferior dirección Y:	Mínimo: 0.0001	Cumple
-Armado superior dirección X:	Mínimo: 0.0001	Cumple
Diámetro mínimo de las barras: <i>Recomendación del Artículo 59.8.2 (norma EHE-98)</i>	Mínimo: 12 mm	
-Parrilla inferior:	Calculado: 12 mm	Cumple
-Parrilla superior:	Calculado: 12 mm	Cumple
Separación máxima entre barras: <i>Artículo 59.8.2 de la norma EHE-98</i>	Máximo: 30 cm	
-Armado inferior dirección X:	Calculado: 18 cm	Cumple
-Armado inferior dirección Y:	Calculado: 18 cm	Cumple
-Armado superior dirección X:	Calculado: 18 cm	Cumple
-Armado superior dirección Y:	Calculado: 18 cm	Cumple
Separación mínima entre barras: <i>Recomendación del libro "Cálculo de estructuras de cimentación", J. Calavera. Ed. INTEMAC, 1991</i>	Mínimo: 10 cm	
-Armado inferior dirección X:	Calculado: 18 cm	Cumple
-Armado inferior dirección Y:	Calculado: 18 cm	Cumple
-Armado superior dirección X:	Calculado: 18 cm	Cumple
-Armado superior dirección Y:	Calculado: 18 cm	Cumple
Longitud de anclaje: <i>Criterio del libro "Cálculo de estructuras de cimentación", J. Calavera. Ed. INTEMAC, 1991</i>	Mínimo: 15 cm	
-Armado inf. dirección X hacia der:	Calculado: 16 cm	Cumple
-Armado inf. dirección X hacia izq:	Calculado: 16 cm	Cumple
-Armado inf. dirección Y hacia arriba:	Calculado: 16 cm	Cumple
-Armado inf. dirección Y hacia abajo:	Calculado: 16 cm	Cumple
-Armado sup. dirección X hacia der:	Calculado: 16 cm	Cumple
-Armado sup. dirección X hacia izq:	Calculado: 16 cm	Cumple
-Armado sup. dirección Y hacia arriba:	Calculado: 16 cm	Cumple
-Armado sup. dirección Y hacia abajo:	Calculado: 16 cm	Cumple
Se cumplen todas las comprobaciones		

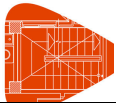
Referencia: 44		
Dimensiones: 170 x 170 x 60		
Armados: Xi:Ø12c/18 Yi:Ø12c/18 Xs:Ø12c/18 Ys:Ø12c/18		
Comprobación	Valores	Estado
Tensiones sobre el terreno: <i>Criterio de CYPE Ingenieros</i>		
-Tensión media en situaciones persistentes:	Máximo: 2 kp/cm <sup>2</sup> Calculado: 0.231 kp/cm <sup>2</sup>	Cumple
-Tensión máxima en situaciones persistentes sin viento:	Máximo: 2.5 kp/cm <sup>2</sup> Calculado: 0.204 kp/cm <sup>2</sup>	Cumple
-Tensión máxima en situaciones persistentes con viento:	Máximo: 2.5 kp/cm <sup>2</sup> Calculado: 0.465 kp/cm <sup>2</sup>	Cumple



## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

<p><b>Vuelco de la zapata:</b>  <i>Si el % de reserva de seguridad es mayor que cero, quiere decir que los coeficientes de seguridad al vuelco son mayores que los valores estrictos exigidos para todas las combinaciones de equilibrio.</i></p> <p>-En dirección X:            -En dirección Y:</p>	<p>Reserva seguridad: 16267.2 %            Reserva seguridad: 11.6 %</p>	<p>Cumple            Cumple</p>
<p><b>Flexión en la zapata:</b>            -En dirección X:            -En dirección Y:</p>	<p>Momento: 0.41 t·m            Momento: 2.23 t·m</p>	<p>Cumple            Cumple</p>
<p><b>Cortante en la zapata:</b>            -En dirección X:            -En dirección Y:</p>	<p>Cortante: 0.32 t            Cortante: 3.73 t</p>	<p>Cumple            Cumple</p>
<p><b>Compresión oblicua en la zapata:</b>            -Situaciones persistentes:  <i>Criterio de CYPE Ingenieros</i></p>	<p>Máximo: 509.68 t/m<sup>2</sup>            Calculado: 4.48 t/m<sup>2</sup></p>	<p>Cumple</p>
<p><b>Canto mínimo:</b>  <i>Artículo 59.8.1 de la norma EHE-98</i></p>	<p>Mínimo: 25 cm            Calculado: 60 cm</p>	<p>Cumple</p>
<p><b>Espacio para anclar arranques en cimentación:</b>            -44:</p>	<p>Mínimo: 44 cm            Calculado: 53 cm</p>	<p>Cumple</p>
<p><b>Cuantía geométrica mínima:</b>  <i>Criterio de CYPE Ingenieros</i></p> <p>-En dirección X:            -En dirección Y:</p>	<p>Mínimo: 0.002            Calculado: 0.0021            Calculado: 0.0021</p>	<p>Cumple            Cumple</p>
<p><b>Cuantía mínima necesaria por flexión:</b>  <i>Artículo 42.3.2 de la norma EHE-98</i></p> <p>-Armado inferior dirección X:            -Armado inferior dirección Y:            -Armado superior dirección Y:</p>	<p>Calculado: 0.0011            Mínimo: 0.0001            Mínimo: 0.0003            Mínimo: 0.0002</p>	<p>Cumple            Cumple            Cumple</p>
<p><b>Diámetro mínimo de las barras:</b>  <i>Recomendación del Artículo 59.8.2 (norma EHE-98)</i></p> <p>-Parrilla inferior:            -Parrilla superior:</p>	<p>Mínimo: 12 mm            Calculado: 12 mm            Calculado: 12 mm</p>	<p>Cumple            Cumple</p>
<p><b>Separación máxima entre barras:</b>  <i>Artículo 59.8.2 de la norma EHE-98</i></p> <p>-Armado inferior dirección X:            -Armado inferior dirección Y:            -Armado superior dirección X:            -Armado superior dirección Y:</p>	<p>Máximo: 30 cm            Calculado: 18 cm            Calculado: 18 cm            Calculado: 18 cm            Calculado: 18 cm</p>	<p>Cumple            Cumple            Cumple            Cumple</p>
<p><b>Separación mínima entre barras:</b>  <i>Recomendación del libro "Cálculo de estructuras de cimentación", J. Calavera. Ed. INTEMAC, 1991</i></p> <p>-Armado inferior dirección X:            -Armado inferior dirección Y:            -Armado superior dirección X:            -Armado superior dirección Y:</p>	<p>Mínimo: 10 cm            Calculado: 18 cm            Calculado: 18 cm            Calculado: 18 cm            Calculado: 18 cm</p>	<p>Cumple            Cumple            Cumple            Cumple</p>



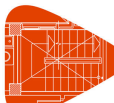
## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

<p>Longitud de anclaje:  <i>Criterio del libro "Cálculo de estructuras de cimentación", J. Calavera. Ed. INTEMAC, 1991</i></p>	Mínimo: 15 cm	
-Armado inf. dirección X hacia der:	Calculado: 20 cm	Cumple
-Armado inf. dirección X hacia izq:	Calculado: 20 cm	Cumple
-Armado inf. dirección Y hacia arriba:	Calculado: 20 cm	Cumple
-Armado inf. dirección Y hacia abajo:	Calculado: 20 cm	Cumple
-Armado sup. dirección X hacia der:	Calculado: 20 cm	Cumple
-Armado sup. dirección X hacia izq:	Calculado: 20 cm	Cumple
-Armado sup. dirección Y hacia arriba:	Calculado: 20 cm	Cumple
-Armado sup. dirección Y hacia abajo:	Calculado: 20 cm	Cumple
Se cumplen todas las comprobaciones		

<p>Referencia: 63          Dimensiones: 170 x 170 x 60          Armados: Xi:Ø12c/18 Yi:Ø12c/18 Xs:Ø12c/18 Ys:Ø12c/18</p>		
Comprobación	Valores	Estado
<p>Tensiones sobre el terreno:  <i>Criterio de CYPE Ingenieros</i></p>		
-Tensión media en situaciones persistentes:	Máximo: 2 kp/cm <sup>2</sup> Calculado: 0.256 kp/cm <sup>2</sup>	Cumple
-Tensión máxima en situaciones persistentes sin viento:	Máximo: 2.5 kp/cm <sup>2</sup> Calculado: 0.227 kp/cm <sup>2</sup>	Cumple
-Tensión máxima en situaciones persistentes con viento:	Máximo: 2.5 kp/cm <sup>2</sup> Calculado: 0.514 kp/cm <sup>2</sup>	Cumple
<p>Vuelco de la zapata:  <i>Si el % de reserva de seguridad es mayor que cero, quiere decir que los coeficientes de seguridad al vuelco son mayores que los valores estrictos exigidos para todas las combinaciones de equilibrio.</i></p>		
-En dirección X:	Reserva seguridad: 21898.3 %	Cumple
-En dirección Y:	Reserva seguridad: 3.5 %	Cumple
<p>Flexión en la zapata:</p>		
-En dirección X:	Momento: 0.59 t·m	Cumple
-En dirección Y:	Momento: 2.56 t·m	Cumple
<p>Cortante en la zapata:</p>		
-En dirección X:	Cortante: 0.45 t	Cumple
-En dirección Y:	Cortante: 4.27 t	Cumple
<p>Compresión oblicua en la zapata:          -Situaciones persistentes:  <i>Criterio de CYPE Ingenieros</i></p>	Máximo: 509.68 t/m <sup>2</sup> Calculado: 6.41 t/m <sup>2</sup>	Cumple
<p>Canto mínimo:  <i>Artículo 59.8.1 de la norma EHE-98</i></p>	Mínimo: 25 cm Calculado: 60 cm	Cumple
<p>Espacio para anclar arranques en cimentación:          -63:</p>	Mínimo: 49 cm Calculado: 53 cm	Cumple
<p>Cuantía geométrica mínima:  <i>Criterio de CYPE Ingenieros</i></p>	Mínimo: 0.002	





## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas		
-En dirección X:	Calculado: 0.0021	Cumple
-En dirección Y:	Calculado: 0.0021	Cumple
<b>Cuantía mínima necesaria por flexión:</b> <i>Artículo 42.3.2 de la norma EHE-98</i>	Calculado: 0.0011	
-Armado inferior dirección X:	Mínimo: 0.0001	Cumple
-Armado inferior dirección Y:	Mínimo: 0.0003	Cumple
-Armado superior dirección Y:	Mínimo: 0.0002	Cumple
<b>Diámetro mínimo de las barras:</b> <i>Recomendación del Artículo 59.8.2 (norma EHE-98)</i>	Mínimo: 12 mm	
-Parrilla inferior:	Calculado: 12 mm	Cumple
-Parrilla superior:	Calculado: 12 mm	Cumple
<b>Separación máxima entre barras:</b> <i>Artículo 59.8.2 de la norma EHE-98</i>	Máximo: 30 cm	
-Armado inferior dirección X:	Calculado: 18 cm	Cumple
-Armado inferior dirección Y:	Calculado: 18 cm	Cumple
-Armado superior dirección X:	Calculado: 18 cm	Cumple
-Armado superior dirección Y:	Calculado: 18 cm	Cumple
<b>Separación mínima entre barras:</b> <i>Recomendación del libro "Cálculo de estructuras de cimentación", J. Calavera. Ed. INTEMAC, 1991</i>	Mínimo: 10 cm	
-Armado inferior dirección X:	Calculado: 18 cm	Cumple
-Armado inferior dirección Y:	Calculado: 18 cm	Cumple
-Armado superior dirección X:	Calculado: 18 cm	Cumple
-Armado superior dirección Y:	Calculado: 18 cm	Cumple
<b>Longitud de anclaje:</b> <i>Criterio del libro "Cálculo de estructuras de cimentación", J. Calavera. Ed. INTEMAC, 1991</i>	Mínimo: 15 cm	
-Armado inf. dirección X hacia der:	Calculado: 20 cm	Cumple
-Armado inf. dirección X hacia izq:	Calculado: 20 cm	Cumple
-Armado inf. dirección Y hacia arriba:	Calculado: 20 cm	Cumple
-Armado inf. dirección Y hacia abajo:	Calculado: 20 cm	Cumple
-Armado sup. dirección X hacia der:	Calculado: 20 cm	Cumple
-Armado sup. dirección X hacia izq:	Calculado: 20 cm	Cumple
-Armado sup. dirección Y hacia arriba:	Calculado: 20 cm	Cumple
-Armado sup. dirección Y hacia abajo:	Calculado: 20 cm	Cumple
Se cumplen todas las comprobaciones		

Referencia: 83

Dimensiones: 170 x 170 x 70

Armados: Xi:Ø12c/16 Yi:Ø12c/16 Xs:Ø12c/16 Ys:Ø12c/16

Comprobación

Valores

Estado

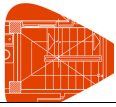
Tensiones sobre el terreno:

*Criterio de CYPE Ingenieros*

-Tensión media en situaciones persistentes:

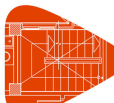
Máximo: 2 kp/cm<sup>2</sup>  
Calculado: 0.258 kp/cm<sup>2</sup>

Cumple



## Listado de cimentación

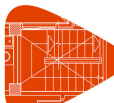
NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas		
-Tensión máxima en situaciones persistentes sin viento:	Máximo: 2.5 kp/cm <sup>2</sup> Calculado: 0.237 kp/cm <sup>2</sup>	Cumple
-Tensión máxima en situaciones persistentes con viento:	Máximo: 2.5 kp/cm <sup>2</sup> Calculado: 0.518 kp/cm <sup>2</sup>	Cumple
<b>Vuelco de la zapata:</b> <i>Si el % de reserva de seguridad es mayor que cero, quiere decir que los coeficientes de seguridad al vuelco son mayores que los valores estrictos exigidos para todas las combinaciones de equilibrio.</i>		
-En dirección X:	Reserva seguridad: 19983.2 %	Cumple
-En dirección Y:	Reserva seguridad: 12.8 %	Cumple
<b>Flexión en la zapata:</b>		
-En dirección X:	Momento: 0.48 t·m	Cumple
-En dirección Y:	Momento: 2.43 t·m	Cumple
<b>Cortante en la zapata:</b>		
-En dirección X:	Cortante: 0.19 t	Cumple
-En dirección Y:	Cortante: 2.71 t	Cumple
<b>Compresión oblicua en la zapata:</b> -Situaciones persistentes: <i>Criterio de CYPE Ingenieros</i>		
	Máximo: 509.68 t/m <sup>2</sup> Calculado: 4.37 t/m <sup>2</sup>	Cumple
<b>Canto mínimo:</b> <i>Artículo 59.8.1 de la norma EHE-98</i>		
	Mínimo: 25 cm Calculado: 70 cm	Cumple
<b>Espacio para anclar arranques en cimentación:</b> -83:		
	Mínimo: 49 cm Calculado: 63 cm	Cumple
<b>Cuantía geométrica mínima:</b> <i>Criterio de CYPE Ingenieros</i>		
-En dirección X:	Mínimo: 0.002 Calculado: 0.0021	Cumple
-En dirección Y:	Calculado: 0.0021	Cumple
<b>Cuantía mínima necesaria por flexión:</b> <i>Artículo 42.3.2 de la norma EHE-98</i>		
-Armado inferior dirección X:	Calculado: 0.0011 Mínimo: 0.0001	Cumple
-Armado inferior dirección Y:	Mínimo: 0.0002	Cumple
-Armado superior dirección Y:	Mínimo: 0.0001	Cumple
<b>Diámetro mínimo de las barras:</b> <i>Recomendación del Artículo 59.8.2 (norma EHE-98)</i>		
-Parrilla inferior:	Mínimo: 12 mm Calculado: 12 mm	Cumple
-Parrilla superior:	Calculado: 12 mm	Cumple
<b>Separación máxima entre barras:</b> <i>Artículo 59.8.2 de la norma EHE-98</i>		
-Armado inferior dirección X:	Máximo: 30 cm Calculado: 16 cm	Cumple
-Armado inferior dirección Y:	Calculado: 16 cm	Cumple
-Armado superior dirección X:	Calculado: 16 cm	Cumple
-Armado superior dirección Y:	Calculado: 16 cm	Cumple
<b>Separación mínima entre barras:</b> <i>Recomendación del libro "Cálculo de estructuras de cimentación", J. Calavera. Ed. INTEMAC, 1991</i>		
-Armado inferior dirección X:	Mínimo: 10 cm Calculado: 16 cm	Cumple



## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas		
-Armado inferior dirección Y:	Calculado: 16 cm	Cumple
-Armado superior dirección X:	Calculado: 16 cm	Cumple
-Armado superior dirección Y:	Calculado: 16 cm	Cumple
Longitud de anclaje: <i>Criterio del libro "Cálculo de estructuras de cimentación", J. Calavera. Ed. INTEMAC, 1991</i>	Mínimo: 24 cm	
-Armado inf. dirección X hacia der:	Calculado: 24 cm	Cumple
-Armado inf. dirección X hacia izq:	Calculado: 24 cm	Cumple
-Armado inf. dirección Y hacia arriba:	Calculado: 24 cm	Cumple
-Armado inf. dirección Y hacia abajo:	Calculado: 24 cm	Cumple
-Armado sup. dirección X hacia der:	Calculado: 24 cm	Cumple
-Armado sup. dirección X hacia izq:	Calculado: 24 cm	Cumple
-Armado sup. dirección Y hacia arriba:	Calculado: 24 cm	Cumple
-Armado sup. dirección Y hacia abajo:	Calculado: 24 cm	Cumple
Longitud mínima de las patillas:	Mínimo: 12 cm	
-Armado inf. dirección X hacia der:	Calculado: 12 cm	Cumple
-Armado inf. dirección X hacia izq:	Calculado: 12 cm	Cumple
-Armado inf. dirección Y hacia arriba:	Calculado: 12 cm	Cumple
-Armado inf. dirección Y hacia abajo:	Calculado: 12 cm	Cumple
-Armado sup. dirección X hacia der:	Calculado: 12 cm	Cumple
-Armado sup. dirección X hacia izq:	Calculado: 12 cm	Cumple
-Armado sup. dirección Y hacia arriba:	Calculado: 12 cm	Cumple
-Armado sup. dirección Y hacia abajo:	Calculado: 12 cm	Cumple
Se cumplen todas las comprobaciones		

Referencia: 102		
Dimensiones: 140 x 140 x 60		
Armados: Xi:Ø12c/18 Yi:Ø12c/18 Xs:Ø12c/18 Ys:Ø12c/18		
Comprobación	Valores	Estado
Tensiones sobre el terreno: <i>Criterio de CYPE Ingenieros</i>		
-Tensión media en situaciones persistentes:	Máximo: 2 kp/cm <sup>2</sup> Calculado: 0.408 kp/cm <sup>2</sup>	Cumple
-Tensión máxima en situaciones persistentes sin viento:	Máximo: 2.5 kp/cm <sup>2</sup> Calculado: 0.341 kp/cm <sup>2</sup>	Cumple
-Tensión máxima en situaciones persistentes con viento:	Máximo: 2.5 kp/cm <sup>2</sup> Calculado: 1.201 kp/cm <sup>2</sup>	Cumple
Vuelco de la zapata: <i>Si el % de reserva de seguridad es mayor que cero, quiere decir que los coeficientes de seguridad al vuelco son mayores que los valores estrictos exigidos para todas las combinaciones de equilibrio.</i>		
-En dirección X:	Reserva seguridad: 20.0 %	Cumple
-En dirección Y:	Reserva seguridad: 30.8 %	Cumple
Flexión en la zapata:		
-En dirección X:	Momento: 1.37 t·m	Cumple



## Listado de cimentación

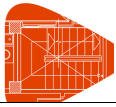
NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas		
-En dirección Y:	Momento: 1.06 t·m	Cumple
Cortante en la zapata:		
-En dirección X:	Cortante: 0.32 t	Cumple
-En dirección Y:	Cortante: 0.20 t	Cumple
Compresión oblicua en la zapata:		
-Situaciones persistentes: <i>Criterio de CYPE Ingenieros</i>	Máximo: 509.68 t/m <sup>2</sup> Calculado: 3.59 t/m <sup>2</sup>	Cumple
Canto mínimo: <i>Artículo 59.8.1 de la norma EHE-98</i>	Mínimo: 25 cm Calculado: 60 cm	Cumple
Espacio para anclar arranques en cimentación:		
-102:	Mínimo: 35 cm Calculado: 53 cm	Cumple
Cuantía geométrica mínima: <i>Criterio de CYPE Ingenieros</i>		
-En dirección X:	Mínimo: 0.002 Calculado: 0.0021	Cumple
-En dirección Y:	Calculado: 0.0021	Cumple
Cuantía mínima necesaria por flexión: <i>Artículo 42.3.2 de la norma EHE-98</i>		
-Armado inferior dirección X:	Calculado: 0.0011 Mínimo: 0.0002	Cumple
-Armado inferior dirección Y:	Mínimo: 0.0002	Cumple
-Armado superior dirección X:	Mínimo: 0.0001	Cumple
-Armado superior dirección Y:	Mínimo: 0.0001	Cumple
Diámetro mínimo de las barras: <i>Recomendación del Artículo 59.8.2 (norma EHE-98)</i>		
-Parrilla inferior:	Mínimo: 12 mm Calculado: 12 mm	Cumple
-Parrilla superior:	Calculado: 12 mm	Cumple
Separación máxima entre barras: <i>Artículo 59.8.2 de la norma EHE-98</i>		
-Armado inferior dirección X:	Máximo: 30 cm Calculado: 18 cm	Cumple
-Armado inferior dirección Y:	Calculado: 18 cm	Cumple
-Armado superior dirección X:	Calculado: 18 cm	Cumple
-Armado superior dirección Y:	Calculado: 18 cm	Cumple
Separación mínima entre barras: <i>Recomendación del libro "Cálculo de estructuras de cimentación", J. Calavera. Ed. INTEMAC, 1991</i>		
-Armado inferior dirección X:	Mínimo: 10 cm Calculado: 18 cm	Cumple
-Armado inferior dirección Y:	Calculado: 18 cm	Cumple
-Armado superior dirección X:	Calculado: 18 cm	Cumple
-Armado superior dirección Y:	Calculado: 18 cm	Cumple
Longitud de anclaje: <i>Criterio del libro "Cálculo de estructuras de cimentación", J. Calavera. Ed. INTEMAC, 1991</i>		
-Armado inf. dirección X hacia der:	Mínimo: 15 cm Calculado: 15 cm	Cumple
-Armado inf. dirección X hacia izq:	Calculado: 15 cm	Cumple
-Armado inf. dirección Y hacia arriba:	Calculado: 15 cm	Cumple
-Armado inf. dirección Y hacia abajo:	Calculado: 15 cm	Cumple



## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas		
-Armado sup. dirección X hacia der:	Calculado: 15 cm	Cumple
-Armado sup. dirección X hacia izq:	Calculado: 15 cm	Cumple
-Armado sup. dirección Y hacia arriba:	Calculado: 15 cm	Cumple
-Armado sup. dirección Y hacia abajo:	Calculado: 15 cm	Cumple
Longitud mínima de las patillas:	Mínimo: 12 cm	
-Armado inf. dirección X hacia der:	Calculado: 15 cm	Cumple
-Armado inf. dirección X hacia izq:	Calculado: 15 cm	Cumple
-Armado inf. dirección Y hacia arriba:	Calculado: 15 cm	Cumple
-Armado inf. dirección Y hacia abajo:	Calculado: 15 cm	Cumple
-Armado sup. dirección X hacia der:	Calculado: 15 cm	Cumple
-Armado sup. dirección X hacia izq:	Calculado: 15 cm	Cumple
-Armado sup. dirección Y hacia arriba:	Calculado: 15 cm	Cumple
-Armado sup. dirección Y hacia abajo:	Calculado: 15 cm	Cumple
Se cumplen todas las comprobaciones		

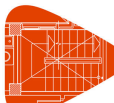
Referencia: 165		
Dimensiones: 160 x 160 x 80		
Armados: Xi:Ø16c/25 Yi:Ø16c/25 Xs:Ø16c/25 Ys:Ø16c/25		
Comprobación	Valores	Estado
Tensiones sobre el terreno: <i>Criterio de CYPE Ingenieros</i>		
-Tensión media en situaciones persistentes:	Máximo: 2 kp/cm <sup>2</sup> Calculado: 0.327 kp/cm <sup>2</sup>	Cumple
-Tensión máxima en situaciones persistentes sin viento:	Máximo: 2.5 kp/cm <sup>2</sup> Calculado: 0.355 kp/cm <sup>2</sup>	Cumple
-Tensión máxima en situaciones persistentes con viento:	Máximo: 2.5 kp/cm <sup>2</sup> Calculado: 0.678 kp/cm <sup>2</sup>	Cumple
Vuelco de la zapata: <i>Si el % de reserva de seguridad es mayor que cero, quiere decir que los coeficientes de seguridad al vuelco son mayores que los valores estrictos exigidos para todas las combinaciones de equilibrio.</i>		
-En dirección X:	Reserva seguridad: 2673.3 %	Cumple
-En dirección Y:	Reserva seguridad: 20.0 %	Cumple
Flexión en la zapata:		
-En dirección X:	Momento: 0.60 t·m	Cumple
-En dirección Y:	Momento: 2.63 t·m	Cumple
Cortante en la zapata:		
-En dirección X:	Cortante: 0.00 t	Cumple
-En dirección Y:	Cortante: 0.00 t	Cumple
Compresión oblicua en la zapata:		
-Situaciones persistentes: <i>Criterio de CYPE Ingenieros</i>	Máximo: 509.68 t/m <sup>2</sup> Calculado: 4.56 t/m <sup>2</sup>	Cumple
Canto mínimo: <i>Artículo 59.8.1 de la norma EHE-98</i>		
	Mínimo: 25 cm Calculado: 80 cm	Cumple



## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

<p>Espacio para anclar arranques en cimentación: -165:</p>	<p>Mínimo: 44 cm Calculado: 72 cm</p>	<p>Cumple</p>
<p>Cuantía geométrica mínima: <i>Criterio de CYPE Ingenieros</i></p> <p>-En dirección X: -En dirección Y:</p>	<p>Mínimo: 0.002 Calculado: 0.0021 Calculado: 0.0021</p>	<p>Cumple Cumple</p>
<p>Cuantía mínima necesaria por flexión: <i>Artículo 42.3.2 de la norma EHE-98</i></p> <p>-Armado inferior dirección X: -Armado inferior dirección Y: -Armado superior dirección X: -Armado superior dirección Y:</p>	<p>Calculado: 0.0011 Mínimo: 0.0001 Mínimo: 0.0002 Mínimo: 0.0001 Mínimo: 0.0001</p>	<p>Cumple Cumple Cumple Cumple</p>
<p>Diámetro mínimo de las barras: <i>Recomendación del Artículo 59.8.2 (norma EHE-98)</i></p> <p>-Parrilla inferior: -Parrilla superior:</p>	<p>Mínimo: 12 mm Calculado: 16 mm Calculado: 16 mm</p>	<p>Cumple Cumple</p>
<p>Separación máxima entre barras: <i>Artículo 59.8.2 de la norma EHE-98</i></p> <p>-Armado inferior dirección X: -Armado inferior dirección Y: -Armado superior dirección X: -Armado superior dirección Y:</p>	<p>Máximo: 30 cm Calculado: 25 cm Calculado: 25 cm Calculado: 25 cm Calculado: 25 cm</p>	<p>Cumple Cumple Cumple Cumple</p>
<p>Separación mínima entre barras: <i>Recomendación del libro "Cálculo de estructuras de cimentación", J. Calavera. Ed. INTEMAC, 1991</i></p> <p>-Armado inferior dirección X: -Armado inferior dirección Y: -Armado superior dirección X: -Armado superior dirección Y:</p>	<p>Mínimo: 10 cm Calculado: 25 cm Calculado: 25 cm Calculado: 25 cm Calculado: 25 cm</p>	<p>Cumple Cumple Cumple Cumple</p>
<p>Longitud de anclaje: <i>Criterio del libro "Cálculo de estructuras de cimentación", J. Calavera. Ed. INTEMAC, 1991</i></p> <p>-Armado inf. dirección X hacia der: -Armado inf. dirección X hacia izq: -Armado inf. dirección Y hacia arriba: -Armado inf. dirección Y hacia abajo: -Armado sup. dirección X hacia der: -Armado sup. dirección X hacia izq: -Armado sup. dirección Y hacia arriba: -Armado sup. dirección Y hacia abajo:</p>	<p>Mínimo: 16 cm Calculado: 16 cm Calculado: 16 cm Calculado: 16 cm Calculado: 16 cm Calculado: 16 cm Calculado: 16 cm Calculado: 16 cm</p>	<p>Cumple Cumple Cumple Cumple Cumple Cumple Cumple Cumple</p>
<p>Longitud mínima de las patillas: -Armado inf. dirección X hacia der: -Armado inf. dirección X hacia izq: -Armado inf. dirección Y hacia arriba:</p>	<p>Mínimo: 16 cm Calculado: 16 cm Calculado: 16 cm Calculado: 16 cm</p>	<p>Cumple Cumple Cumple</p>

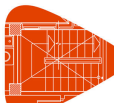


## Listado de cimentación

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE** Adrián Freijomil Aradas

-Armado inf. dirección Y hacia abajo:	Calculado: 16 cm	Cumple
-Armado sup. dirección X hacia der:	Calculado: 16 cm	Cumple
-Armado sup. dirección X hacia izq:	Calculado: 16 cm	Cumple
-Armado sup. dirección Y hacia arriba:	Calculado: 16 cm	Cumple
-Armado sup. dirección Y hacia abajo:	Calculado: 16 cm	Cumple
Se cumplen todas las comprobaciones		

Referencia: 174		
Dimensiones: 200 x 200 x 80		
Armados: Xi:Ø16c/25 Yi:Ø16c/25 Xs:Ø16c/25 Ys:Ø16c/25		
Comprobación	Valores	Estado
Tensiones sobre el terreno: <i>Criterio de CYPE Ingenieros</i>		
-Tensión media en situaciones persistentes:	Máximo: 2 kp/cm <sup>2</sup> Calculado: 0.492 kp/cm <sup>2</sup>	Cumple
-Tensión máxima en situaciones persistentes sin viento:	Máximo: 2.5 kp/cm <sup>2</sup> Calculado: 0.984 kp/cm <sup>2</sup>	Cumple
-Tensión máxima en situaciones persistentes con viento:	Máximo: 2.5 kp/cm <sup>2</sup> Calculado: 0.979 kp/cm <sup>2</sup>	Cumple
Vuelco de la zapata: <i>Si el % de reserva de seguridad es mayor que cero, quiere decir que los coeficientes de seguridad al vuelco son mayores que los valores estrictos exigidos para todas las combinaciones de equilibrio.</i>		
-En dirección X:	Reserva seguridad: 11047.8 %	Cumple
-En dirección Y:	Reserva seguridad: 14.8 %	Cumple
Flexión en la zapata:		
-En dirección X:	Momento: 1.78 t·m	Cumple
-En dirección Y:	Momento: 6.57 t·m	Cumple
Cortante en la zapata:		
-En dirección X:	Cortante: 0.49 t	Cumple
-En dirección Y:	Cortante: 2.26 t	Cumple
Compresión oblicua en la zapata: -Situaciones persistentes: <i>Criterio de CYPE Ingenieros</i>		
	Máximo: 509.68 t/m <sup>2</sup> Calculado: 9.05 t/m <sup>2</sup>	Cumple
Canto mínimo: <i>Artículo 59.8.1 de la norma EHE-98</i>		
	Mínimo: 25 cm Calculado: 80 cm	Cumple
Espacio para anclar arranques en cimentación: -174:		
	Mínimo: 65 cm Calculado: 72 cm	Cumple
Cuantía geométrica mínima: <i>Criterio de CYPE Ingenieros</i>		
-En dirección X:	Mínimo: 0.002 Calculado: 0.0021	Cumple
-En dirección Y:	Calculado: 0.0021	Cumple
Cuantía mínima necesaria por flexión: <i>Artículo 42.3.2 de la norma EHE-98</i>		
-Armado inferior dirección X:	Calculado: 0.0011 Mínimo: 0.0001	Cumple
-Armado inferior dirección Y:	Mínimo: 0.0003	Cumple



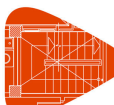
## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas		
-Armado superior dirección X:	Mínimo: 0.0001	Cumple
-Armado superior dirección Y:	Mínimo: 0.0001	Cumple
Diámetro mínimo de las barras: <i>Recomendación del Artículo 59.8.2 (norma EHE-98)</i>	Mínimo: 12 mm	
-Parrilla inferior:	Calculado: 16 mm	Cumple
-Parrilla superior:	Calculado: 16 mm	Cumple
Separación máxima entre barras: <i>Artículo 59.8.2 de la norma EHE-98</i>	Máximo: 30 cm	
-Armado inferior dirección X:	Calculado: 25 cm	Cumple
-Armado inferior dirección Y:	Calculado: 25 cm	Cumple
-Armado superior dirección X:	Calculado: 25 cm	Cumple
-Armado superior dirección Y:	Calculado: 25 cm	Cumple
Separación mínima entre barras: <i>Recomendación del libro "Cálculo de estructuras de cimentación", J. Calavera. Ed. INTEMAC, 1991</i>	Mínimo: 10 cm	
-Armado inferior dirección X:	Calculado: 25 cm	Cumple
-Armado inferior dirección Y:	Calculado: 25 cm	Cumple
-Armado superior dirección X:	Calculado: 25 cm	Cumple
-Armado superior dirección Y:	Calculado: 25 cm	Cumple
Longitud de anclaje: <i>Criterio del libro "Cálculo de estructuras de cimentación", J. Calavera. Ed. INTEMAC, 1991</i>	Mínimo: 28 cm	
-Armado inf. dirección X hacia der:	Calculado: 29 cm	Cumple
-Armado inf. dirección X hacia izq:	Calculado: 29 cm	Cumple
-Armado inf. dirección Y hacia arriba:	Calculado: 29 cm	Cumple
-Armado inf. dirección Y hacia abajo:	Calculado: 29 cm	Cumple
-Armado sup. dirección X hacia der:	Calculado: 29 cm	Cumple
-Armado sup. dirección X hacia izq:	Calculado: 29 cm	Cumple
-Armado sup. dirección Y hacia arriba:	Calculado: 29 cm	Cumple
-Armado sup. dirección Y hacia abajo:	Calculado: 29 cm	Cumple
Longitud mínima de las patillas:	Mínimo: 16 cm	
-Armado inf. dirección X hacia der:	Calculado: 16 cm	Cumple
-Armado inf. dirección X hacia izq:	Calculado: 16 cm	Cumple
-Armado inf. dirección Y hacia arriba:	Calculado: 16 cm	Cumple
-Armado inf. dirección Y hacia abajo:	Calculado: 16 cm	Cumple
-Armado sup. dirección X hacia der:	Calculado: 16 cm	Cumple
-Armado sup. dirección X hacia izq:	Calculado: 16 cm	Cumple
-Armado sup. dirección Y hacia arriba:	Calculado: 16 cm	Cumple
-Armado sup. dirección Y hacia abajo:	Calculado: 16 cm	Cumple
Se cumplen todas las comprobaciones		

Referencia: 189

Dimensiones: 250 x 250 x 100

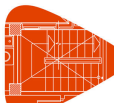




## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

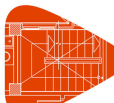
Armados: Xi:Ø16c/20 Yi:Ø16c/20 Xs:Ø16c/20 Ys:Ø16c/20		
Comprobación	Valores	Estado
Tensiones sobre el terreno: <i>Criterio de CYPE Ingenieros</i>		
-Tensión media en situaciones persistentes:	Máximo: 2 kp/cm <sup>2</sup> Calculado: 0.46 kp/cm <sup>2</sup>	Cumple
-Tensión máxima en situaciones persistentes sin viento:	Máximo: 2.5 kp/cm <sup>2</sup> Calculado: 0.776 kp/cm <sup>2</sup>	Cumple
-Tensión máxima en situaciones persistentes con viento:	Máximo: 2.5 kp/cm <sup>2</sup> Calculado: 0.975 kp/cm <sup>2</sup>	Cumple
Vuelco de la zapata: <i>Si el % de reserva de seguridad es mayor que cero, quiere decir que los coeficientes de seguridad al vuelco son mayores que los valores estrictos exigidos para todas las combinaciones de equilibrio.</i>		
-En dirección X:	Reserva seguridad: 2014.8 %	Cumple
-En dirección Y:	Reserva seguridad: 52.4 %	Cumple
Flexión en la zapata:		
-En dirección X:	Momento: 2.29 t·m	Cumple
-En dirección Y:	Momento: 9.73 t·m	Cumple
Cortante en la zapata:		
-En dirección X:	Cortante: 0.54 t	Cumple
-En dirección Y:	Cortante: 2.75 t	Cumple
Compresión oblicua en la zapata: <i>Criterio de CYPE Ingenieros</i>		
-Situaciones persistentes:	Máximo: 509.68 t/m <sup>2</sup> Calculado: 4.39 t/m <sup>2</sup>	Cumple
Canto mínimo: <i>Artículo 59.8.1 de la norma EHE-98</i>		
	Mínimo: 25 cm Calculado: 100 cm	Cumple
Espacio para anclar arranques en cimentación: -189:		
	Mínimo: 44 cm Calculado: 92 cm	Cumple
Cuantía geométrica mínima: <i>Criterio de CYPE Ingenieros</i>		
-En dirección X:	Mínimo: 0.002 Calculado: 0.0021	Cumple
-En dirección Y:	Calculado: 0.0021	Cumple
Cuantía mínima necesaria por flexión: <i>Artículo 42.3.2 de la norma EHE-98</i>		
-Armado inferior dirección X:	Calculado: 0.0011 Mínimo: 0.0001	Cumple
-Armado inferior dirección Y:	Mínimo: 0.0003	Cumple
-Armado superior dirección X:	Mínimo: 0.0001	Cumple
-Armado superior dirección Y:	Mínimo: 0.0002	Cumple
Diámetro mínimo de las barras: <i>Recomendación del Artículo 59.8.2 (norma EHE-98)</i>		
-Parrilla inferior:	Mínimo: 12 mm Calculado: 16 mm	Cumple
-Parrilla superior:	Calculado: 16 mm	Cumple
Separación máxima entre barras: <i>Artículo 59.8.2 de la norma EHE-98</i>		
-Armado inferior dirección X:	Máximo: 30 cm Calculado: 20 cm	Cumple



## Listado de cimentación

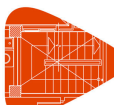
NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas		
-Armado inferior dirección Y:	Calculado: 20 cm	Cumple
-Armado superior dirección X:	Calculado: 20 cm	Cumple
-Armado superior dirección Y:	Calculado: 20 cm	Cumple
Separación mínima entre barras: <i>Recomendación del libro "Cálculo de estructuras de cimentación", J. Calavera. Ed. INTEMAC, 1991</i>		
-Armado inferior dirección X:	Mínimo: 10 cm Calculado: 20 cm	Cumple
-Armado inferior dirección Y:	Calculado: 20 cm	Cumple
-Armado superior dirección X:	Calculado: 20 cm	Cumple
-Armado superior dirección Y:	Calculado: 20 cm	Cumple
Longitud de anclaje: <i>Criterio del libro "Cálculo de estructuras de cimentación", J. Calavera. Ed. INTEMAC, 1991</i>		
-Armado inf. dirección X hacia der:	Mínimo: 16 cm Calculado: 19 cm	Cumple
-Armado inf. dirección X hacia izq:	Calculado: 19 cm	Cumple
-Armado inf. dirección Y hacia arriba:	Calculado: 19 cm	Cumple
-Armado inf. dirección Y hacia abajo:	Calculado: 19 cm	Cumple
-Armado sup. dirección X hacia der:	Calculado: 19 cm	Cumple
-Armado sup. dirección X hacia izq:	Calculado: 19 cm	Cumple
-Armado sup. dirección Y hacia arriba:	Calculado: 19 cm	Cumple
-Armado sup. dirección Y hacia abajo:	Calculado: 19 cm	Cumple
Se cumplen todas las comprobaciones		

Referencia: 213		
Dimensiones: 160 x 160 x 80		
Armados: Xi:Ø16c/25 Yi:Ø16c/25 Xs:Ø16c/25 Ys:Ø16c/25		
Comprobación	Valores	Estado
Tensiones sobre el terreno: <i>Criterio de CYPE Ingenieros</i>		
-Tensión media en situaciones persistentes:	Máximo: 2 kp/cm <sup>2</sup> Calculado: 0.387 kp/cm <sup>2</sup>	Cumple
-Tensión máxima en situaciones persistentes sin viento:	Máximo: 2.5 kp/cm <sup>2</sup> Calculado: 0.34 kp/cm <sup>2</sup>	Cumple
-Tensión máxima en situaciones persistentes con viento:	Máximo: 2.5 kp/cm <sup>2</sup> Calculado: 0.799 kp/cm <sup>2</sup>	Cumple
Vuelco de la zapata: <i>Si el % de reserva de seguridad es mayor que cero, quiere decir que los coeficientes de seguridad al vuelco son mayores que los valores estrictos exigidos para todas las combinaciones de equilibrio.</i>		
-En dirección X:	Reserva seguridad: 2877.4 %	Cumple
-En dirección Y:	Reserva seguridad: 6.3 %	Cumple
Flexión en la zapata:		
-En dirección X:	Momento: 0.42 t·m	Cumple
-En dirección Y:	Momento: 3.29 t·m	Cumple
Cortante en la zapata:		
-En dirección X:	Cortante: 0.00 t	Cumple



## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas		
-En dirección Y:	Cortante: 0.00 t	Cumple
Compresión oblicua en la zapata: -Situaciones persistentes: <i>Criterio de CYPE Ingenieros</i>	Máximo: 509.68 t/m <sup>2</sup> Calculado: 2.96 t/m <sup>2</sup>	Cumple
Canto mínimo: <i>Artículo 59.8.1 de la norma EHE-98</i>	Mínimo: 25 cm Calculado: 80 cm	Cumple
Espacio para anclar arranques en cimentación: -213:	Mínimo: 44 cm Calculado: 72 cm	Cumple
Cuantía geométrica mínima: <i>Criterio de CYPE Ingenieros</i>	Mínimo: 0.002	
-En dirección X:	Calculado: 0.0021	Cumple
-En dirección Y:	Calculado: 0.0021	Cumple
Cuantía mínima necesaria por flexión: <i>Artículo 42.3.2 de la norma EHE-98</i>	Calculado: 0.0011	
-Armado inferior dirección X:	Mínimo: 0.0001	Cumple
-Armado inferior dirección Y:	Mínimo: 0.0002	Cumple
-Armado superior dirección X:	Mínimo: 0.0001	Cumple
-Armado superior dirección Y:	Mínimo: 0.0001	Cumple
Diámetro mínimo de las barras: <i>Recomendación del Artículo 59.8.2 (norma EHE-98)</i>	Mínimo: 12 mm	
-Parrilla inferior:	Calculado: 16 mm	Cumple
-Parrilla superior:	Calculado: 16 mm	Cumple
Separación máxima entre barras: <i>Artículo 59.8.2 de la norma EHE-98</i>	Máximo: 30 cm	
-Armado inferior dirección X:	Calculado: 25 cm	Cumple
-Armado inferior dirección Y:	Calculado: 25 cm	Cumple
-Armado superior dirección X:	Calculado: 25 cm	Cumple
-Armado superior dirección Y:	Calculado: 25 cm	Cumple
Separación mínima entre barras: <i>Recomendación del libro "Cálculo de estructuras de cimentación", J. Calavera. Ed. INTEMAC, 1991</i>	Mínimo: 10 cm	
-Armado inferior dirección X:	Calculado: 25 cm	Cumple
-Armado inferior dirección Y:	Calculado: 25 cm	Cumple
-Armado superior dirección X:	Calculado: 25 cm	Cumple
-Armado superior dirección Y:	Calculado: 25 cm	Cumple
Longitud de anclaje: <i>Criterio del libro "Cálculo de estructuras de cimentación", J. Calavera. Ed. INTEMAC, 1991</i>	Mínimo: 16 cm	
-Armado inf. dirección X hacia der:	Calculado: 16 cm	Cumple
-Armado inf. dirección X hacia izq:	Calculado: 16 cm	Cumple
-Armado inf. dirección Y hacia arriba:	Calculado: 16 cm	Cumple
-Armado inf. dirección Y hacia abajo:	Calculado: 16 cm	Cumple
-Armado sup. dirección X hacia der:	Calculado: 16 cm	Cumple
-Armado sup. dirección X hacia izq:	Calculado: 16 cm	Cumple
-Armado sup. dirección Y hacia arriba:	Calculado: 16 cm	Cumple



## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

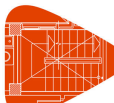
-Armado sup. dirección Y hacia abajo:	Calculado: 16 cm	Cumple
Longitud mínima de las patillas:	Mínimo: 16 cm	
-Armado inf. dirección X hacia der:	Calculado: 16 cm	Cumple
-Armado inf. dirección X hacia izq:	Calculado: 16 cm	Cumple
-Armado inf. dirección Y hacia arriba:	Calculado: 16 cm	Cumple
-Armado inf. dirección Y hacia abajo:	Calculado: 16 cm	Cumple
-Armado sup. dirección X hacia der:	Calculado: 16 cm	Cumple
-Armado sup. dirección X hacia izq:	Calculado: 16 cm	Cumple
-Armado sup. dirección Y hacia arriba:	Calculado: 16 cm	Cumple
-Armado sup. dirección Y hacia abajo:	Calculado: 16 cm	Cumple
Se cumplen todas las comprobaciones		

Referencia: 222		
Dimensiones: 200 x 200 x 80		
Armados: Xi:Ø16c/25 Yi:Ø16c/25 Xs:Ø16c/25 Ys:Ø16c/25		
Comprobación	Valores	Estado
Tensiones sobre el terreno: <i>Criterio de CYPE Ingenieros</i>		
-Tensión media en situaciones persistentes:	Máximo: 2 kp/cm <sup>2</sup> Calculado: 0.828 kp/cm <sup>2</sup>	Cumple
-Tensión máxima en situaciones persistentes sin viento:	Máximo: 2.5 kp/cm <sup>2</sup> Calculado: 1.657 kp/cm <sup>2</sup>	Cumple
-Tensión máxima en situaciones persistentes con viento:	Máximo: 2.5 kp/cm <sup>2</sup> Calculado: 1.339 kp/cm <sup>2</sup>	Cumple
Vuelco de la zapata: <i>Si el % de reserva de seguridad es mayor que cero, quiere decir que los coeficientes de seguridad al vuelco son mayores que los valores estrictos exigidos para todas las combinaciones de equilibrio.</i>		
-En dirección X:	Reserva seguridad: 15018.1 %	Cumple
-En dirección Y:	Reserva seguridad: 2.5 %	Cumple
Flexión en la zapata:		
-En dirección X:	Momento: 1.53 t·m	Cumple
-En dirección Y:	Momento: 9.58 t·m	Cumple
Cortante en la zapata:		
-En dirección X:	Cortante: 0.33 t	Cumple
-En dirección Y:	Cortante: 5.13 t	Cumple
Compresión oblicua en la zapata:		
-Situaciones persistentes: <i>Criterio de CYPE Ingenieros</i>	Máximo: 509.68 t/m <sup>2</sup> Calculado: 6.74 t/m <sup>2</sup>	Cumple
Canto mínimo: <i>Artículo 59.8.1 de la norma EHE-98</i>		
	Mínimo: 25 cm Calculado: 80 cm	Cumple
Espacio para anclar arranques en cimentación:		
-222:	Mínimo: 40 cm Calculado: 72 cm	Cumple
Cuantía geométrica mínima: <i>Criterio de CYPE Ingenieros</i>		
	Mínimo: 0.002	



## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas		
-En dirección X:	Calculado: 0.0021	Cumple
-En dirección Y:	Calculado: 0.0021	Cumple
<b>Cuántía mínima necesaria por flexión:</b> <i>Artículo 42.3.2 de la norma EHE-98</i>	Calculado: 0.0011	
-Armado inferior dirección X:	Mínimo: 0.0001	Cumple
-Armado inferior dirección Y:	Mínimo: 0.0004	Cumple
-Armado superior dirección X:	Mínimo: 0.0001	Cumple
-Armado superior dirección Y:	Mínimo: 0.0001	Cumple
<b>Diámetro mínimo de las barras:</b> <i>Recomendación del Artículo 59.8.2 (norma EHE-98)</i>	Mínimo: 12 mm	
-Parrilla inferior:	Calculado: 16 mm	Cumple
-Parrilla superior:	Calculado: 16 mm	Cumple
<b>Separación máxima entre barras:</b> <i>Artículo 59.8.2 de la norma EHE-98</i>	Máximo: 30 cm	
-Armado inferior dirección X:	Calculado: 25 cm	Cumple
-Armado inferior dirección Y:	Calculado: 25 cm	Cumple
-Armado superior dirección X:	Calculado: 25 cm	Cumple
-Armado superior dirección Y:	Calculado: 25 cm	Cumple
<b>Separación mínima entre barras:</b> <i>Recomendación del libro "Cálculo de estructuras de cimentación", J. Calavera. Ed. INTEMAC, 1991</i>	Mínimo: 10 cm	
-Armado inferior dirección X:	Calculado: 25 cm	Cumple
-Armado inferior dirección Y:	Calculado: 25 cm	Cumple
-Armado superior dirección X:	Calculado: 25 cm	Cumple
-Armado superior dirección Y:	Calculado: 25 cm	Cumple
<b>Longitud de anclaje:</b> <i>Criterio del libro "Cálculo de estructuras de cimentación", J. Calavera. Ed. INTEMAC, 1991</i>	Mínimo: 26 cm	
-Armado inf. dirección X hacia der:	Calculado: 26 cm	Cumple
-Armado inf. dirección X hacia izq:	Calculado: 26 cm	Cumple
-Armado inf. dirección Y hacia arriba:	Calculado: 26 cm	Cumple
-Armado inf. dirección Y hacia abajo:	Calculado: 26 cm	Cumple
-Armado sup. dirección X hacia der:	Calculado: 26 cm	Cumple
-Armado sup. dirección X hacia izq:	Calculado: 26 cm	Cumple
-Armado sup. dirección Y hacia arriba:	Calculado: 26 cm	Cumple
-Armado sup. dirección Y hacia abajo:	Calculado: 26 cm	Cumple
<b>Longitud mínima de las patillas:</b>	Mínimo: 16 cm	
-Armado inf. dirección X hacia der:	Calculado: 16 cm	Cumple
-Armado inf. dirección X hacia izq:	Calculado: 16 cm	Cumple
-Armado inf. dirección Y hacia arriba:	Calculado: 16 cm	Cumple
-Armado inf. dirección Y hacia abajo:	Calculado: 16 cm	Cumple
-Armado sup. dirección X hacia der:	Calculado: 16 cm	Cumple
-Armado sup. dirección X hacia izq:	Calculado: 16 cm	Cumple
-Armado sup. dirección Y hacia arriba:	Calculado: 16 cm	Cumple



## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

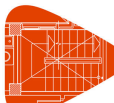
-Armado sup. dirección Y hacia abajo:

Calculado: 16 cm

Cumple

Se cumplen todas las comprobaciones

Referencia: 238		
Dimensiones: 250 x 250 x 100		
Armados: Xi:Ø16c/20 Yi:Ø16c/20 Xs:Ø16c/20 Ys:Ø16c/20		
Comprobación	Valores	Estado
Tensiones sobre el terreno: <i>Criterio de CYPE Ingenieros</i>		
-Tensión media en situaciones persistentes:	Máximo: 2 kp/cm <sup>2</sup> Calculado: 0.662 kp/cm <sup>2</sup>	Cumple
-Tensión máxima en situaciones persistentes sin viento:	Máximo: 2.5 kp/cm <sup>2</sup> Calculado: 0.754 kp/cm <sup>2</sup>	Cumple
-Tensión máxima en situaciones persistentes con viento:	Máximo: 2.5 kp/cm <sup>2</sup> Calculado: 1.34 kp/cm <sup>2</sup>	Cumple
Vuelco de la zapata: <i>Si el % de reserva de seguridad es mayor que cero, quiere decir que los coeficientes de seguridad al vuelco son mayores que los valores estrictos exigidos para todas las combinaciones de equilibrio.</i>		
-En dirección X:	Reserva seguridad: 4007.1 %	Cumple
-En dirección Y:	Reserva seguridad: 6.1 %	Cumple
Flexión en la zapata:		
-En dirección X:	Momento: 1.92 t·m	Cumple
-En dirección Y:	Momento: 14.37 t·m	Cumple
Cortante en la zapata:		
-En dirección X:	Cortante: 0.42 t	Cumple
-En dirección Y:	Cortante: 10.64 t	Cumple
Compresión oblicua en la zapata: -Situaciones persistentes: <i>Criterio de CYPE Ingenieros</i>		
	Máximo: 509.68 t/m <sup>2</sup> Calculado: 4.51 t/m <sup>2</sup>	Cumple
Canto mínimo: <i>Artículo 59.8.1 de la norma EHE-98</i>		
	Mínimo: 25 cm Calculado: 100 cm	Cumple
Espacio para anclar arranques en cimentación: -238:		
	Mínimo: 60 cm Calculado: 92 cm	Cumple
Cuantía geométrica mínima: <i>Criterio de CYPE Ingenieros</i>		
-En dirección X:	Mínimo: 0.002 Calculado: 0.0021	Cumple
-En dirección Y:	Calculado: 0.0021	Cumple
Cuantía mínima necesaria por flexión: <i>Artículo 42.3.2 de la norma EHE-98</i>		
	Calculado: 0.0011	
-Armado inferior dirección X:	Mínimo: 0.0001	Cumple
-Armado inferior dirección Y:	Mínimo: 0.0003	Cumple
-Armado superior dirección X:	Mínimo: 0.0001	Cumple
-Armado superior dirección Y:	Mínimo: 0.0002	Cumple
Diámetro mínimo de las barras: <i>Recomendación del Artículo 59.8.2 (norma EHE-98)</i>		
	Mínimo: 12 mm	



## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas		
-Parrilla inferior:	Calculado: 16 mm	Cumple
-Parrilla superior:	Calculado: 16 mm	Cumple
Separación máxima entre barras: <i>Artículo 59.8.2 de la norma EHE-98</i>	Máximo: 30 cm	
-Armado inferior dirección X:	Calculado: 20 cm	Cumple
-Armado inferior dirección Y:	Calculado: 20 cm	Cumple
-Armado superior dirección X:	Calculado: 20 cm	Cumple
-Armado superior dirección Y:	Calculado: 20 cm	Cumple
Separación mínima entre barras: <i>Recomendación del libro "Cálculo de estructuras de cimentación", J. Calavera. Ed. INTEMAC, 1991</i>	Mínimo: 10 cm	
-Armado inferior dirección X:	Calculado: 20 cm	Cumple
-Armado inferior dirección Y:	Calculado: 20 cm	Cumple
-Armado superior dirección X:	Calculado: 20 cm	Cumple
-Armado superior dirección Y:	Calculado: 20 cm	Cumple
Longitud de anclaje: <i>Criterio del libro "Cálculo de estructuras de cimentación", J. Calavera. Ed. INTEMAC, 1991</i>	Mínimo: 16 cm	
-Armado inf. dirección X hacia der:	Calculado: 19 cm	Cumple
-Armado inf. dirección X hacia izq:	Calculado: 19 cm	Cumple
-Armado inf. dirección Y hacia arriba:	Calculado: 19 cm	Cumple
-Armado inf. dirección Y hacia abajo:	Calculado: 19 cm	Cumple
-Armado sup. dirección X hacia der:	Calculado: 19 cm	Cumple
-Armado sup. dirección X hacia izq:	Calculado: 19 cm	Cumple
-Armado sup. dirección Y hacia arriba:	Calculado: 19 cm	Cumple
-Armado sup. dirección Y hacia abajo:	Calculado: 19 cm	Cumple
Se cumplen todas las comprobaciones		

Referencia: 262		
Dimensiones: 160 x 160 x 80		
Armados: Xi:Ø16c/25 Yi:Ø16c/25 Xs:Ø16c/25 Ys:Ø16c/25		
Comprobación	Valores	Estado
Tensiones sobre el terreno: <i>Criterio de CYPE Ingenieros</i>		
-Tensión media en situaciones persistentes:	Máximo: 2 kp/cm <sup>2</sup> Calculado: 0.39 kp/cm <sup>2</sup>	Cumple
-Tensión máxima en situaciones persistentes sin viento:	Máximo: 2.5 kp/cm <sup>2</sup> Calculado: 0.341 kp/cm <sup>2</sup>	Cumple
-Tensión máxima en situaciones persistentes con viento:	Máximo: 2.5 kp/cm <sup>2</sup> Calculado: 0.805 kp/cm <sup>2</sup>	Cumple
Vuelco de la zapata: <i>Si el % de reserva de seguridad es mayor que cero, quiere decir que los coeficientes de seguridad al vuelco son mayores que los valores estrictos exigidos para todas las combinaciones de equilibrio.</i>		
-En dirección X:	Reserva seguridad: 2757.3 %	Cumple
-En dirección Y:	Reserva seguridad: 5.8 %	Cumple

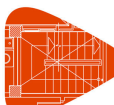


## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

Flexión en la zapata: -En dirección X: -En dirección Y:	Momento: 0.43 t·m Momento: 3.31 t·m	Cumple Cumple
Cortante en la zapata: -En dirección X: -En dirección Y:	Cortante: 0.00 t Cortante: 0.00 t	Cumple Cumple
Compresión oblicua en la zapata: -Situaciones persistentes: <i>Criterio de CYPE Ingenieros</i>	Máximo: 509.68 t/m <sup>2</sup> Calculado: 2.97 t/m <sup>2</sup>	Cumple
Canto mínimo: <i>Artículo 59.8.1 de la norma EHE-98</i>	Mínimo: 25 cm Calculado: 80 cm	Cumple
Espacio para anclar arranques en cimentación: -262:	Mínimo: 30 cm Calculado: 72 cm	Cumple
Cuantía geométrica mínima: <i>Criterio de CYPE Ingenieros</i> -En dirección X: -En dirección Y:	Mínimo: 0.002 Calculado: 0.0021 Calculado: 0.0021	Cumple Cumple
Cuantía mínima necesaria por flexión: <i>Artículo 42.3.2 de la norma EHE-98</i> -Armado inferior dirección X: -Armado inferior dirección Y: -Armado superior dirección X: -Armado superior dirección Y:	Calculado: 0.0011 Mínimo: 0.0001 Mínimo: 0.0002 Mínimo: 0.0001 Mínimo: 0.0001	Cumple Cumple Cumple Cumple
Diámetro mínimo de las barras: <i>Recomendación del Artículo 59.8.2 (norma EHE-98)</i> -Parrilla inferior: -Parrilla superior:	Mínimo: 12 mm Calculado: 16 mm Calculado: 16 mm	Cumple Cumple
Separación máxima entre barras: <i>Artículo 59.8.2 de la norma EHE-98</i> -Armado inferior dirección X: -Armado inferior dirección Y: -Armado superior dirección X: -Armado superior dirección Y:	Máximo: 30 cm Calculado: 25 cm Calculado: 25 cm Calculado: 25 cm Calculado: 25 cm	Cumple Cumple Cumple Cumple
Separación mínima entre barras: <i>Recomendación del libro "Cálculo de estructuras de cimentación", J. Calavera. Ed. INTEMAC, 1991</i> -Armado inferior dirección X: -Armado inferior dirección Y: -Armado superior dirección X: -Armado superior dirección Y:	Mínimo: 10 cm Calculado: 25 cm Calculado: 25 cm Calculado: 25 cm Calculado: 25 cm	Cumple Cumple Cumple Cumple
Longitud de anclaje: <i>Criterio del libro "Cálculo de estructuras de cimentación", J. Calavera. Ed. INTEMAC, 1991</i> -Armado inf. dirección X hacia der: -Armado inf. dirección X hacia izq:	Mínimo: 16 cm Calculado: 16 cm Calculado: 16 cm	Cumple Cumple

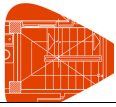




## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas		
-Armado inf. dirección Y hacia arriba:	Calculado: 16 cm	Cumple
-Armado inf. dirección Y hacia abajo:	Calculado: 16 cm	Cumple
-Armado sup. dirección X hacia der:	Calculado: 16 cm	Cumple
-Armado sup. dirección X hacia izq:	Calculado: 16 cm	Cumple
-Armado sup. dirección Y hacia arriba:	Calculado: 16 cm	Cumple
-Armado sup. dirección Y hacia abajo:	Calculado: 16 cm	Cumple
Longitud mínima de las patillas:	Mínimo: 16 cm	
-Armado inf. dirección X hacia der:	Calculado: 16 cm	Cumple
-Armado inf. dirección X hacia izq:	Calculado: 16 cm	Cumple
-Armado inf. dirección Y hacia arriba:	Calculado: 16 cm	Cumple
-Armado inf. dirección Y hacia abajo:	Calculado: 16 cm	Cumple
-Armado sup. dirección X hacia der:	Calculado: 16 cm	Cumple
-Armado sup. dirección X hacia izq:	Calculado: 16 cm	Cumple
-Armado sup. dirección Y hacia arriba:	Calculado: 16 cm	Cumple
-Armado sup. dirección Y hacia abajo:	Calculado: 16 cm	Cumple
Se cumplen todas las comprobaciones		

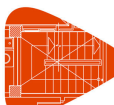
Referencia: 271		
Dimensiones: 200 x 200 x 80		
Armados: Xi:Ø16c/25 Yi:Ø16c/25 Xs:Ø16c/25 Ys:Ø16c/25		
Comprobación	Valores	Estado
Tensiones sobre el terreno: <i>Criterio de CYPE Ingenieros</i>		
-Tensión media en situaciones persistentes:	Máximo: 2 kp/cm <sup>2</sup> Calculado: 0.758 kp/cm <sup>2</sup>	Cumple
-Tensión máxima en situaciones persistentes sin viento:	Máximo: 2.5 kp/cm <sup>2</sup> Calculado: 1.517 kp/cm <sup>2</sup>	Cumple
-Tensión máxima en situaciones persistentes con viento:	Máximo: 2.5 kp/cm <sup>2</sup> Calculado: 1.224 kp/cm <sup>2</sup>	Cumple
Vuelco de la zapata: <i>Si el % de reserva de seguridad es mayor que cero, quiere decir que los coeficientes de seguridad al vuelco son mayores que los valores estrictos exigidos para todas las combinaciones de equilibrio.</i>		
-En dirección X:	Reserva seguridad: 17055.1 %	Cumple
-En dirección Y:	Reserva seguridad: 4.5 %	Cumple
Flexión en la zapata:		
-En dirección X:	Momento: 1.49 t·m	Cumple
-En dirección Y:	Momento: 8.97 t·m	Cumple
Cortante en la zapata:		
-En dirección X:	Cortante: 0.32 t	Cumple
-En dirección Y:	Cortante: 3.96 t	Cumple
Compresión oblicua en la zapata: <i>Criterio de CYPE Ingenieros</i>		
-Situaciones persistentes:	Máximo: 509.68 t/m <sup>2</sup> Calculado: 6.57 t/m <sup>2</sup>	Cumple



## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

Canto mínimo: <i>Artículo 59.8.1 de la norma EHE-98</i>	Mínimo: 25 cm Calculado: 80 cm	Cumple
Espacio para anclar arranques en cimentación: -271:	Mínimo: 54 cm Calculado: 72 cm	Cumple
Cuantía geométrica mínima: <i>Criterio de CYPE Ingenieros</i> -En dirección X: -En dirección Y:	Mínimo: 0.002 Calculado: 0.0021 Calculado: 0.0021	Cumple Cumple
Cuantía mínima necesaria por flexión: <i>Artículo 42.3.2 de la norma EHE-98</i> -Armado inferior dirección X: -Armado inferior dirección Y: -Armado superior dirección X: -Armado superior dirección Y:	Calculado: 0.0011 Mínimo: 0.0001 Mínimo: 0.0004 Mínimo: 0.0001 Mínimo: 0.0001	Cumple Cumple Cumple Cumple
Diámetro mínimo de las barras: <i>Recomendación del Artículo 59.8.2 (norma EHE-98)</i> -Parrilla inferior: -Parrilla superior:	Mínimo: 12 mm Calculado: 16 mm Calculado: 16 mm	Cumple Cumple
Separación máxima entre barras: <i>Artículo 59.8.2 de la norma EHE-98</i> -Armado inferior dirección X: -Armado inferior dirección Y: -Armado superior dirección X: -Armado superior dirección Y:	Máximo: 30 cm Calculado: 25 cm Calculado: 25 cm Calculado: 25 cm Calculado: 25 cm	Cumple Cumple Cumple Cumple
Separación mínima entre barras: <i>Recomendación del libro "Cálculo de estructuras de cimentación", J. Calavera. Ed. INTEMAC, 1991</i> -Armado inferior dirección X: -Armado inferior dirección Y: -Armado superior dirección X: -Armado superior dirección Y:	Mínimo: 10 cm Calculado: 25 cm Calculado: 25 cm Calculado: 25 cm Calculado: 25 cm	Cumple Cumple Cumple Cumple
Longitud de anclaje: <i>Criterio del libro "Cálculo de estructuras de cimentación", J. Calavera. Ed. INTEMAC, 1991</i> -Armado inf. dirección X hacia der: -Armado inf. dirección X hacia izq: -Armado inf. dirección Y hacia arriba: -Armado inf. dirección Y hacia abajo: -Armado sup. dirección X hacia der: -Armado sup. dirección X hacia izq: -Armado sup. dirección Y hacia arriba: -Armado sup. dirección Y hacia abajo:	Mínimo: 26 cm Calculado: 26 cm Calculado: 26 cm Calculado: 26 cm Calculado: 26 cm Calculado: 26 cm Calculado: 26 cm Calculado: 26 cm	Cumple Cumple Cumple Cumple Cumple Cumple Cumple Cumple
Longitud mínima de las patillas: -Armado inf. dirección X hacia der:	Mínimo: 16 cm Calculado: 16 cm	Cumple

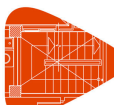


## Listado de cimentación

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE** Adrián Freijomil Aradas

-Armado inf. dirección X hacia izq:	Calculado: 16 cm	Cumple
-Armado inf. dirección Y hacia arriba:	Calculado: 16 cm	Cumple
-Armado inf. dirección Y hacia abajo:	Calculado: 16 cm	Cumple
-Armado sup. dirección X hacia der:	Calculado: 16 cm	Cumple
-Armado sup. dirección X hacia izq:	Calculado: 16 cm	Cumple
-Armado sup. dirección Y hacia arriba:	Calculado: 16 cm	Cumple
-Armado sup. dirección Y hacia abajo:	Calculado: 16 cm	Cumple
Se cumplen todas las comprobaciones		

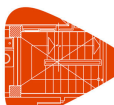
Referencia: 287		
Dimensiones: 250 x 250 x 100		
Armados: Xi:Ø16c/20 Yi:Ø16c/20 Xs:Ø16c/20 Ys:Ø16c/20		
Comprobación	Valores	Estado
<b>Tensiones sobre el terreno:</b> <i>Criterio de CYPE Ingenieros</i>		
-Tensión media en situaciones persistentes:	Máximo: 2 kp/cm <sup>2</sup> Calculado: 0.628 kp/cm <sup>2</sup>	Cumple
-Tensión máxima en situaciones persistentes sin viento:	Máximo: 2.5 kp/cm <sup>2</sup> Calculado: 0.726 kp/cm <sup>2</sup>	Cumple
-Tensión máxima en situaciones persistentes con viento:	Máximo: 2.5 kp/cm <sup>2</sup> Calculado: 1.262 kp/cm <sup>2</sup>	Cumple
<b>Vuelco de la zapata:</b> <i>Si el % de reserva de seguridad es mayor que cero, quiere decir que los coeficientes de seguridad al vuelco son mayores que los valores estrictos exigidos para todas las combinaciones de equilibrio.</i>		
-En dirección X:	Reserva seguridad: 5105.4 %	Cumple
-En dirección Y:	Reserva seguridad: 8.4 %	Cumple
<b>Flexión en la zapata:</b>		
-En dirección X:	Momento: 1.87 t·m	Cumple
-En dirección Y:	Momento: 13.90 t·m	Cumple
<b>Cortante en la zapata:</b>		
-En dirección X:	Cortante: 0.41 t	Cumple
-En dirección Y:	Cortante: 8.46 t	Cumple
<b>Compresión oblicua en la zapata:</b> -Situaciones persistentes: <i>Criterio de CYPE Ingenieros</i>		
	Máximo: 509.68 t/m <sup>2</sup> Calculado: 4.55 t/m <sup>2</sup>	Cumple
<b>Canto mínimo:</b> <i>Artículo 59.8.1 de la norma EHE-98</i>		
	Mínimo: 25 cm Calculado: 100 cm	Cumple
<b>Espacio para anclar arranques en cimentación:</b> -287:		
	Mínimo: 60 cm Calculado: 92 cm	Cumple
<b>Cuantía geométrica mínima:</b> <i>Criterio de CYPE Ingenieros</i>		
-En dirección X:	Mínimo: 0.002 Calculado: 0.0021	Cumple
-En dirección Y:	Calculado: 0.0021	Cumple
<b>Cuantía mínima necesaria por flexión:</b> <i>Artículo 42.3.2 de la norma EHE-98</i>		
	Calculado: 0.0011	



## Listado de cimentación

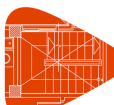
NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas		
-Armado inferior dirección X:	Mínimo: 0.0001	Cumple
-Armado inferior dirección Y:	Mínimo: 0.0003	Cumple
-Armado superior dirección X:	Mínimo: 0.0001	Cumple
-Armado superior dirección Y:	Mínimo: 0.0002	Cumple
Diámetro mínimo de las barras: <i>Recomendación del Artículo 59.8.2 (norma EHE-98)</i>	Mínimo: 12 mm	
-Parrilla inferior:	Calculado: 16 mm	Cumple
-Parrilla superior:	Calculado: 16 mm	Cumple
Separación máxima entre barras: <i>Artículo 59.8.2 de la norma EHE-98</i>	Máximo: 30 cm	
-Armado inferior dirección X:	Calculado: 20 cm	Cumple
-Armado inferior dirección Y:	Calculado: 20 cm	Cumple
-Armado superior dirección X:	Calculado: 20 cm	Cumple
-Armado superior dirección Y:	Calculado: 20 cm	Cumple
Separación mínima entre barras: <i>Recomendación del libro "Cálculo de estructuras de cimentación", J. Calavera. Ed. INTEMAC, 1991</i>	Mínimo: 10 cm	
-Armado inferior dirección X:	Calculado: 20 cm	Cumple
-Armado inferior dirección Y:	Calculado: 20 cm	Cumple
-Armado superior dirección X:	Calculado: 20 cm	Cumple
-Armado superior dirección Y:	Calculado: 20 cm	Cumple
Longitud de anclaje: <i>Criterio del libro "Cálculo de estructuras de cimentación", J. Calavera. Ed. INTEMAC, 1991</i>	Mínimo: 16 cm	
-Armado inf. dirección X hacia der:	Calculado: 19 cm	Cumple
-Armado inf. dirección X hacia izq:	Calculado: 19 cm	Cumple
-Armado inf. dirección Y hacia arriba:	Calculado: 19 cm	Cumple
-Armado inf. dirección Y hacia abajo:	Calculado: 19 cm	Cumple
-Armado sup. dirección X hacia der:	Calculado: 19 cm	Cumple
-Armado sup. dirección X hacia izq:	Calculado: 19 cm	Cumple
-Armado sup. dirección Y hacia arriba:	Calculado: 19 cm	Cumple
-Armado sup. dirección Y hacia abajo:	Calculado: 19 cm	Cumple
Se cumplen todas las comprobaciones		

Referencia: 311		
Dimensiones: 160 x 160 x 80		
Armados: Xi:Ø16c/25 Yi:Ø16c/25 Xs:Ø16c/25 Ys:Ø16c/25		
Comprobación	Valores	Estado
Tensiones sobre el terreno: <i>Criterio de CYPE Ingenieros</i>		
-Tensión media en situaciones persistentes:	Máximo: 2 kp/cm <sup>2</sup> Calculado: 0.324 kp/cm <sup>2</sup>	Cumple
-Tensión máxima en situaciones persistentes sin viento:	Máximo: 2.5 kp/cm <sup>2</sup> Calculado: 0.369 kp/cm <sup>2</sup>	Cumple



## Listado de cimentación

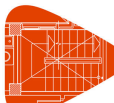
NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas		
-Tensión máxima en situaciones persistentes con viento:	Máximo: 2.5 kp/cm <sup>2</sup> Calculado: 0.671 kp/cm <sup>2</sup>	Cumple
Vuelco de la zapata: <i>Si el % de reserva de seguridad es mayor que cero, quiere decir que los coeficientes de seguridad al vuelco son mayores que los valores estrictos exigidos para todas las combinaciones de equilibrio.</i>		
-En dirección X:	Reserva seguridad: 2385.1 %	Cumple
-En dirección Y:	Reserva seguridad: 22.5 %	Cumple
Flexión en la zapata:		
-En dirección X:	Momento: 0.59 t·m	Cumple
-En dirección Y:	Momento: 2.59 t·m	Cumple
Cortante en la zapata:		
-En dirección X:	Cortante: 0.00 t	Cumple
-En dirección Y:	Cortante: 0.00 t	Cumple
Compresión oblicua en la zapata: -Situaciones persistentes: <i>Criterio de CYPE Ingenieros</i>		
	Máximo: 509.68 t/m <sup>2</sup> Calculado: 4.82 t/m <sup>2</sup>	Cumple
Canto mínimo: <i>Artículo 59.8.1 de la norma EHE-98</i>		
	Mínimo: 25 cm Calculado: 80 cm	Cumple
Espacio para anclar arranques en cimentación: -311:		
	Mínimo: 44 cm Calculado: 72 cm	Cumple
Cuantía geométrica mínima: <i>Criterio de CYPE Ingenieros</i>		
-En dirección X:	Mínimo: 0.002 Calculado: 0.0021	Cumple
-En dirección Y:	Calculado: 0.0021	Cumple
Cuantía mínima necesaria por flexión: <i>Artículo 42.3.2 de la norma EHE-98</i>		
-Armado inferior dirección X:	Calculado: 0.0011 Mínimo: 0.0001	Cumple
-Armado inferior dirección Y:	Mínimo: 0.0002	Cumple
-Armado superior dirección X:	Mínimo: 0.0001	Cumple
-Armado superior dirección Y:	Mínimo: 0.0001	Cumple
Diámetro mínimo de las barras: <i>Recomendación del Artículo 59.8.2 (norma EHE-98)</i>		
-Parrilla inferior:	Mínimo: 12 mm Calculado: 16 mm	Cumple
-Parrilla superior:	Calculado: 16 mm	Cumple
Separación máxima entre barras: <i>Artículo 59.8.2 de la norma EHE-98</i>		
-Armado inferior dirección X:	Máximo: 30 cm Calculado: 25 cm	Cumple
-Armado inferior dirección Y:	Calculado: 25 cm	Cumple
-Armado superior dirección X:	Calculado: 25 cm	Cumple
-Armado superior dirección Y:	Calculado: 25 cm	Cumple
Separación mínima entre barras: <i>Recomendación del libro "Cálculo de estructuras de cimentación", J. Calavera. Ed. INTEMAC, 1991</i>		
-Armado inferior dirección X:	Mínimo: 10 cm Calculado: 25 cm	Cumple
-Armado inferior dirección Y:	Calculado: 25 cm	Cumple



## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas		
-Armado superior dirección X:	Calculado: 25 cm	Cumple
-Armado superior dirección Y:	Calculado: 25 cm	Cumple
Longitud de anclaje: <i>Criterio del libro "Cálculo de estructuras de cimentación", J. Calavera. Ed. INTEMAC, 1991</i>	Mínimo: 16 cm	
-Armado inf. dirección X hacia der:	Calculado: 16 cm	Cumple
-Armado inf. dirección X hacia izq:	Calculado: 16 cm	Cumple
-Armado inf. dirección Y hacia arriba:	Calculado: 16 cm	Cumple
-Armado inf. dirección Y hacia abajo:	Calculado: 16 cm	Cumple
-Armado sup. dirección X hacia der:	Calculado: 16 cm	Cumple
-Armado sup. dirección X hacia izq:	Calculado: 16 cm	Cumple
-Armado sup. dirección Y hacia arriba:	Calculado: 16 cm	Cumple
-Armado sup. dirección Y hacia abajo:	Calculado: 16 cm	Cumple
Longitud mínima de las patillas:	Mínimo: 16 cm	
-Armado inf. dirección X hacia der:	Calculado: 16 cm	Cumple
-Armado inf. dirección X hacia izq:	Calculado: 16 cm	Cumple
-Armado inf. dirección Y hacia arriba:	Calculado: 16 cm	Cumple
-Armado inf. dirección Y hacia abajo:	Calculado: 16 cm	Cumple
-Armado sup. dirección X hacia der:	Calculado: 16 cm	Cumple
-Armado sup. dirección X hacia izq:	Calculado: 16 cm	Cumple
-Armado sup. dirección Y hacia arriba:	Calculado: 16 cm	Cumple
-Armado sup. dirección Y hacia abajo:	Calculado: 16 cm	Cumple
Se cumplen todas las comprobaciones		

Referencia: 320		
Dimensiones: 180 x 180 x 80		
Armados: Xi:Ø16c/25 Yi:Ø16c/25 Xs:Ø16c/25 Ys:Ø16c/25		
Comprobación	Valores	Estado
Tensiones sobre el terreno: <i>Criterio de CYPE Ingenieros</i>		
-Tensión media en situaciones persistentes:	Máximo: 2 kp/cm <sup>2</sup> Calculado: 0.564 kp/cm <sup>2</sup>	Cumple
-Tensión máxima en situaciones persistentes sin viento:	Máximo: 2.5 kp/cm <sup>2</sup> Calculado: 0.75 kp/cm <sup>2</sup>	Cumple
-Tensión máxima en situaciones persistentes con viento:	Máximo: 2.5 kp/cm <sup>2</sup> Calculado: 0.911 kp/cm <sup>2</sup>	Cumple
Vuelco de la zapata: <i>Si el % de reserva de seguridad es mayor que cero, quiere decir que los coeficientes de seguridad al vuelco son mayores que los valores estrictos exigidos para todas las combinaciones de equilibrio.</i>		
-En dirección X:	Reserva seguridad: 735.6 %	Cumple
-En dirección Y:	Reserva seguridad: 5.7 %	Cumple
Flexión en la zapata:		
-En dirección X:	Momento: 3.26 t·m	Cumple
-En dirección Y:	Momento: 4.31 t·m	Cumple



## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

<p>Cortante en la zapata:</p> <p>-En dirección X:</p> <p>-En dirección Y:</p>	<p>Cortante: 0.23 t</p> <p>Cortante: 1.36 t</p>	<p>Cumple</p> <p>Cumple</p>
<p>Compresión oblicua en la zapata:</p> <p>-Situaciones persistentes:</p> <p><i>Criterio de CYPE Ingenieros</i></p>	<p>Máximo: 509.68 t/m<sup>2</sup></p> <p>Calculado: 21.14 t/m<sup>2</sup></p>	<p>Cumple</p>
<p>Canto mínimo:</p> <p><i>Artículo 59.8.1 de la norma EHE-98</i></p>	<p>Mínimo: 25 cm</p> <p>Calculado: 80 cm</p>	<p>Cumple</p>
<p>Espacio para anclar arranques en cimentación:</p> <p>-320:</p>	<p>Mínimo: 49 cm</p> <p>Calculado: 72 cm</p>	<p>Cumple</p>
<p>Cuantía geométrica mínima:</p> <p><i>Criterio de CYPE Ingenieros</i></p> <p>-En dirección X:</p> <p>-En dirección Y:</p>	<p>Mínimo: 0.002</p> <p>Calculado: 0.0021</p> <p>Calculado: 0.0021</p>	<p>Cumple</p> <p>Cumple</p>
<p>Cuantía mínima necesaria por flexión:</p> <p><i>Artículo 42.3.2 de la norma EHE-98</i></p> <p>-Armado inferior dirección X:</p> <p>-Armado inferior dirección Y:</p> <p>-Armado superior dirección Y:</p>	<p>Calculado: 0.0011</p> <p>Mínimo: 0.0002</p> <p>Mínimo: 0.0002</p> <p>Mínimo: 0.0001</p>	<p>Cumple</p> <p>Cumple</p> <p>Cumple</p>
<p>Diámetro mínimo de las barras:</p> <p><i>Recomendación del Artículo 59.8.2 (norma EHE-98)</i></p> <p>-Parrilla inferior:</p> <p>-Parrilla superior:</p>	<p>Mínimo: 12 mm</p> <p>Calculado: 16 mm</p> <p>Calculado: 16 mm</p>	<p>Cumple</p> <p>Cumple</p>
<p>Separación máxima entre barras:</p> <p><i>Artículo 59.8.2 de la norma EHE-98</i></p> <p>-Armado inferior dirección X:</p> <p>-Armado inferior dirección Y:</p> <p>-Armado superior dirección X:</p> <p>-Armado superior dirección Y:</p>	<p>Máximo: 30 cm</p> <p>Calculado: 25 cm</p> <p>Calculado: 25 cm</p> <p>Calculado: 25 cm</p> <p>Calculado: 25 cm</p>	<p>Cumple</p> <p>Cumple</p> <p>Cumple</p> <p>Cumple</p>
<p>Separación mínima entre barras:</p> <p><i>Recomendación del libro "Cálculo de estructuras de cimentación", J. Calavera. Ed. INTEMAC, 1991</i></p> <p>-Armado inferior dirección X:</p> <p>-Armado inferior dirección Y:</p> <p>-Armado superior dirección X:</p> <p>-Armado superior dirección Y:</p>	<p>Mínimo: 10 cm</p> <p>Calculado: 25 cm</p> <p>Calculado: 25 cm</p> <p>Calculado: 25 cm</p> <p>Calculado: 25 cm</p>	<p>Cumple</p> <p>Cumple</p> <p>Cumple</p> <p>Cumple</p>
<p>Longitud de anclaje:</p> <p><i>Criterio del libro "Cálculo de estructuras de cimentación", J. Calavera. Ed. INTEMAC, 1991</i></p> <p>-Armado inf. dirección X hacia der:</p> <p>-Armado inf. dirección X hacia izq:</p> <p>-Armado inf. dirección Y hacia arriba:</p> <p>-Armado inf. dirección Y hacia abajo:</p> <p>-Armado sup. dirección X hacia der:</p> <p>-Armado sup. dirección X hacia izq:</p>	<p>Mínimo: 16 cm</p> <p>Calculado: 16 cm</p> <p>Calculado: 16 cm</p> <p>Calculado: 16 cm</p> <p>Calculado: 16 cm</p> <p>Calculado: 16 cm</p> <p>Calculado: 16 cm</p>	<p>Cumple</p> <p>Cumple</p> <p>Cumple</p> <p>Cumple</p> <p>Cumple</p> <p>Cumple</p>



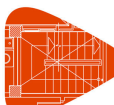
## Listado de cimentación

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE** Adrián Freijomil Aradas

-Armado sup. dirección Y hacia arriba:	Calculado: 16 cm	Cumple
-Armado sup. dirección Y hacia abajo:	Calculado: 16 cm	Cumple
Longitud mínima de las patillas:	Mínimo: 16 cm	
-Armado inf. dirección X hacia der:	Calculado: 16 cm	Cumple
-Armado inf. dirección X hacia izq:	Calculado: 16 cm	Cumple
-Armado inf. dirección Y hacia arriba:	Calculado: 16 cm	Cumple
-Armado inf. dirección Y hacia abajo:	Calculado: 16 cm	Cumple
-Armado sup. dirección X hacia der:	Calculado: 16 cm	Cumple
-Armado sup. dirección X hacia izq:	Calculado: 16 cm	Cumple
-Armado sup. dirección Y hacia arriba:	Calculado: 16 cm	Cumple
-Armado sup. dirección Y hacia abajo:	Calculado: 16 cm	Cumple
Se cumplen todas las comprobaciones		

Referencia: 327		
Dimensiones: 80 x 80 x 40		
Armados: Xi:Ø16c/25 Yi:Ø16c/25		
Comprobación	Valores	Estado
Tensiones sobre el terreno:		
<i>Criterio de CYPE Ingenieros</i>		
-Tensión media en situaciones persistentes:	Máximo: 2 kp/cm <sup>2</sup> Calculado: 1.638 kp/cm <sup>2</sup>	Cumple
-Tensión máxima en situaciones persistentes sin viento:	Máximo: 2.5 kp/cm <sup>2</sup> Calculado: 1.614 kp/cm <sup>2</sup>	Cumple
-Tensión máxima en situaciones persistentes con viento:	Máximo: 2.5 kp/cm <sup>2</sup> Calculado: 1.663 kp/cm <sup>2</sup>	Cumple
Vuelco de la zapata:		
<i>Si el % de reserva de seguridad es mayor que cero, quiere decir que los coeficientes de seguridad al vuelco son mayores que los valores estrictos exigidos para todas las combinaciones de equilibrio.</i>		
-En dirección X:	Reserva seguridad: 5538.3 %	Cumple
-En dirección Y:	Reserva seguridad: 68137.4 %	Cumple
Flexión en la zapata:		
-En dirección X:	Momento: 1.03 t·m	Cumple
-En dirección Y:	Momento: 1.03 t·m	Cumple
Cortante en la zapata:		
-En dirección X:	Cortante: 0.00 t	Cumple
-En dirección Y:	Cortante: 0.00 t	Cumple
Compresión oblicua en la zapata:		
-Situaciones persistentes:	Máximo: 509.68 t/m <sup>2</sup> Calculado: 67.18 t/m <sup>2</sup>	Cumple
<i>Criterio de CYPE Ingenieros</i>		
Canto mínimo:		
<i>Artículo 59.8.1 de la norma EHE-98</i>		
	Mínimo: 25 cm Calculado: 40 cm	Cumple
Espacio para anclar arranques en cimentación:		
-327:	Mínimo: 30 cm Calculado: 32 cm	Cumple



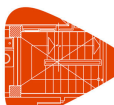


## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

<p>Cuantía geométrica mínima: <i>Criterio de CYPE Ingenieros</i></p> <p>-En dirección X: -En dirección Y:</p>	<p>Mínimo: 0.002 Calculado: 0.0021 Calculado: 0.0021</p>	<p>Cumple Cumple</p>
<p>Cuantía mínima necesaria por flexión: <i>Artículo 42.3.2 de la norma EHE-98</i></p> <p>-Armado inferior dirección X: -Armado inferior dirección Y:</p>	<p>Mínimo: 0.0005 Calculado: 0.0021 Calculado: 0.0021</p>	<p>Cumple Cumple</p>
<p>Diámetro mínimo de las barras: -Parrilla inferior: <i>Recomendación del Artículo 59.8.2 (norma EHE-98)</i></p>	<p>Mínimo: 12 mm Calculado: 16 mm</p>	<p>Cumple</p>
<p>Separación máxima entre barras: <i>Artículo 59.8.2 de la norma EHE-98</i></p> <p>-Armado inferior dirección X: -Armado inferior dirección Y:</p>	<p>Máximo: 30 cm Calculado: 25 cm Calculado: 25 cm</p>	<p>Cumple Cumple</p>
<p>Separación mínima entre barras: <i>Recomendación del libro "Cálculo de estructuras de cimentación", J. Calavera. Ed. INTEMAC, 1991</i></p> <p>-Armado inferior dirección X: -Armado inferior dirección Y:</p>	<p>Mínimo: 10 cm Calculado: 25 cm Calculado: 25 cm</p>	<p>Cumple Cumple</p>
<p>Longitud de anclaje: <i>Criterio del libro "Cálculo de estructuras de cimentación", J. Calavera. Ed. INTEMAC, 1991</i></p> <p>-Armado inf. dirección X hacia der: -Armado inf. dirección X hacia izq: -Armado inf. dirección Y hacia arriba: -Armado inf. dirección Y hacia abajo:</p>	<p>Mínimo: 16 cm Calculado: 16 cm Calculado: 16 cm Calculado: 16 cm Calculado: 16 cm</p>	<p>Cumple Cumple Cumple Cumple</p>
<p>Longitud mínima de las patillas: -Armado inf. dirección X hacia der: -Armado inf. dirección X hacia izq: -Armado inf. dirección Y hacia arriba: -Armado inf. dirección Y hacia abajo:</p>	<p>Mínimo: 16 cm Calculado: 16 cm Calculado: 16 cm Calculado: 16 cm Calculado: 16 cm</p>	<p>Cumple Cumple Cumple Cumple</p>
Se cumplen todas las comprobaciones		

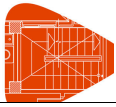
Referencia: 332		
Dimensiones: 80 x 80 x 40		
Armados: Xi:Ø16c/25 Yi:Ø16c/25		
Comprobación	Valores	Estado
Tensiones sobre el terreno: <i>Criterio de CYPE Ingenieros</i>		
-Tensión media en situaciones persistentes:	Máximo: 2 kp/cm <sup>2</sup> Calculado: 1.637 kp/cm <sup>2</sup>	Cumple
-Tensión máxima en situaciones persistentes sin viento:	Máximo: 2.5 kp/cm <sup>2</sup> Calculado: 1.666 kp/cm <sup>2</sup>	Cumple
-Tensión máxima en situaciones persistentes con viento:	Máximo: 2.5 kp/cm <sup>2</sup> Calculado: 1.691 kp/cm <sup>2</sup>	Cumple



## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

<p>Vuelco de la zapata:  <i>Si el % de reserva de seguridad es mayor que cero, quiere decir que los coeficientes de seguridad al vuelco son mayores que los valores estrictos exigidos para todas las combinaciones de equilibrio.</i></p>		
-En dirección X:	Reserva seguridad: 4515.6 %	Cumple
-En dirección Y:	Reserva seguridad: 48056.5 %	Cumple
<p>Flexión en la zapata:</p>		
-En dirección X:	Momento: 1.06 t·m	Cumple
-En dirección Y:	Momento: 1.04 t·m	Cumple
<p>Cortante en la zapata:</p>		
-En dirección X:	Cortante: 0.00 t	Cumple
-En dirección Y:	Cortante: 0.00 t	Cumple
<p>Compresión oblicua en la zapata:          -Situaciones persistentes:  <i>Criterio de CYPE Ingenieros</i></p>		
	Máximo: 509.68 t/m <sup>2</sup> Calculado: 67.73 t/m <sup>2</sup>	Cumple
<p>Canto mínimo:  <i>Artículo 59.8.1 de la norma EHE-98</i></p>		
	Mínimo: 25 cm Calculado: 40 cm	Cumple
<p>Espacio para anclar arranques en cimentación:          -332:</p>		
	Mínimo: 30 cm Calculado: 32 cm	Cumple
<p>Cuantía geométrica mínima:  <i>Criterio de CYPE Ingenieros</i></p>		
-En dirección X:	Mínimo: 0.002 Calculado: 0.0021	Cumple
-En dirección Y:	Calculado: 0.0021	Cumple
<p>Cuantía mínima necesaria por flexión:  <i>Artículo 42.3.2 de la norma EHE-98</i></p>		
-Armado inferior dirección X:	Calculado: 0.0021 Mínimo: 0.0006	Cumple
-Armado inferior dirección Y:	Mínimo: 0.0005	Cumple
<p>Diámetro mínimo de las barras:          -Parrilla inferior:  <i>Recomendación del Artículo 59.8.2 (norma EHE-98)</i></p>		
	Mínimo: 12 mm Calculado: 16 mm	Cumple
<p>Separación máxima entre barras:  <i>Artículo 59.8.2 de la norma EHE-98</i></p>		
-Armado inferior dirección X:	Máximo: 30 cm Calculado: 25 cm	Cumple
-Armado inferior dirección Y:	Calculado: 25 cm	Cumple
<p>Separación mínima entre barras:  <i>Recomendación del libro "Cálculo de estructuras de cimentación", J. Calavera. Ed. INTEMAC, 1991</i></p>		
-Armado inferior dirección X:	Mínimo: 10 cm Calculado: 25 cm	Cumple
-Armado inferior dirección Y:	Calculado: 25 cm	Cumple
<p>Longitud de anclaje:  <i>Criterio del libro "Cálculo de estructuras de cimentación", J. Calavera. Ed. INTEMAC, 1991</i></p>		
-Armado inf. dirección X hacia der:	Mínimo: 16 cm Calculado: 16 cm	Cumple
-Armado inf. dirección X hacia izq:	Calculado: 16 cm	Cumple
-Armado inf. dirección Y hacia arriba:	Calculado: 16 cm	Cumple
-Armado inf. dirección Y hacia abajo:	Calculado: 16 cm	Cumple



## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

Longitud mínima de las patillas:	Mínimo: 16 cm	
-Armado inf. dirección X hacia der:	Calculado: 16 cm	Cumple
-Armado inf. dirección X hacia izq:	Calculado: 16 cm	Cumple
-Armado inf. dirección Y hacia arriba:	Calculado: 16 cm	Cumple
-Armado inf. dirección Y hacia abajo:	Calculado: 16 cm	Cumple
Se cumplen todas las comprobaciones		

Referencia: 339		
Dimensiones: 80 x 80 x 40		
Armados: Xi:Ø16c/25 Yi:Ø16c/25		
Comprobación	Valores	Estado
Tensiones sobre el terreno: <i>Criterio de CYPE Ingenieros</i>		
-Tensión media en situaciones persistentes:	Máximo: 2 kp/cm <sup>2</sup> Calculado: 1.648 kp/cm <sup>2</sup>	Cumple
-Tensión máxima en situaciones persistentes sin viento:	Máximo: 2.5 kp/cm <sup>2</sup> Calculado: 1.628 kp/cm <sup>2</sup>	Cumple
-Tensión máxima en situaciones persistentes con viento:	Máximo: 2.5 kp/cm <sup>2</sup> Calculado: 1.703 kp/cm <sup>2</sup>	Cumple
Vuelco de la zapata: <i>Si el % de reserva de seguridad es mayor que cero, quiere decir que los coeficientes de seguridad al vuelco son mayores que los valores estrictos exigidos para todas las combinaciones de equilibrio.</i>		
-En dirección X:	Reserva seguridad: 3447.1 %	Cumple
-En dirección Y:	Reserva seguridad: 11942.6 %	Cumple
Flexión en la zapata:		
-En dirección X:	Momento: 1.04 t·m	Cumple
-En dirección Y:	Momento: 1.03 t·m	Cumple
Cortante en la zapata:		
-En dirección X:	Cortante: 0.00 t	Cumple
-En dirección Y:	Cortante: 0.00 t	Cumple
Compresión oblicua en la zapata: -Situaciones persistentes: <i>Criterio de CYPE Ingenieros</i>		
	Máximo: 509.68 t/m <sup>2</sup> Calculado: 67.18 t/m <sup>2</sup>	Cumple
Canto mínimo: <i>Artículo 59.8.1 de la norma EHE-98</i>		
	Mínimo: 25 cm Calculado: 40 cm	Cumple
Espacio para anclar arranques en cimentación: -339:		
	Mínimo: 30 cm Calculado: 32 cm	Cumple
Cuantía geométrica mínima: <i>Criterio de CYPE Ingenieros</i>		
-En dirección X:	Mínimo: 0.002 Calculado: 0.0021	Cumple
-En dirección Y:	Calculado: 0.0021	Cumple
Cuantía mínima necesaria por flexión: <i>Artículo 42.3.2 de la norma EHE-98</i>		
-Armado inferior dirección X:	Mínimo: 0.0005 Calculado: 0.0021	Cumple
-Armado inferior dirección Y:	Calculado: 0.0021	Cumple

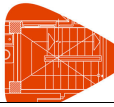


## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

<p>Diámetro mínimo de las barras: -Parrilla inferior: <i>Recomendación del Artículo 59.8.2 (norma EHE-98)</i></p>	<p>Mínimo: 12 mm Calculado: 16 mm</p>	Cumple
<p>Separación máxima entre barras: <i>Artículo 59.8.2 de la norma EHE-98</i> -Armado inferior dirección X: -Armado inferior dirección Y:</p>	<p>Máximo: 30 cm Calculado: 25 cm Calculado: 25 cm</p>	Cumple Cumple
<p>Separación mínima entre barras: <i>Recomendación del libro "Cálculo de estructuras de cimentación", J. Calavera. Ed. INTEMAC, 1991</i> -Armado inferior dirección X: -Armado inferior dirección Y:</p>	<p>Mínimo: 10 cm Calculado: 25 cm Calculado: 25 cm</p>	Cumple Cumple
<p>Longitud de anclaje: <i>Criterio del libro "Cálculo de estructuras de cimentación", J. Calavera. Ed. INTEMAC, 1991</i> -Armado inf. dirección X hacia der: -Armado inf. dirección X hacia izq: -Armado inf. dirección Y hacia arriba: -Armado inf. dirección Y hacia abajo:</p>	<p>Mínimo: 16 cm Calculado: 16 cm Calculado: 16 cm Calculado: 16 cm Calculado: 16 cm</p>	Cumple Cumple Cumple Cumple
<p>Longitud mínima de las patillas: -Armado inf. dirección X hacia der: -Armado inf. dirección X hacia izq: -Armado inf. dirección Y hacia arriba: -Armado inf. dirección Y hacia abajo:</p>	<p>Mínimo: 16 cm Calculado: 16 cm Calculado: 16 cm Calculado: 16 cm Calculado: 16 cm</p>	Cumple Cumple Cumple Cumple
Se cumplen todas las comprobaciones		

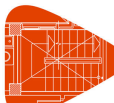
Referencia: 344		
Dimensiones: 145 x 145 x 40		
Armados: Xi:Ø12c/28 Yi:Ø12c/28 Xs:Ø12c/28 Ys:Ø12c/28		
Comprobación	Valores	Estado
<p>Tensiones sobre el terreno: <i>Criterio de CYPE Ingenieros</i> -Tensión media en situaciones persistentes: -Tensión máxima en situaciones persistentes sin viento: -Tensión máxima en situaciones persistentes con viento:</p>	<p>Máximo: 2 kp/cm<sup>2</sup> Calculado: 0.616 kp/cm<sup>2</sup> Máximo: 2.5 kp/cm<sup>2</sup> Calculado: 0.78 kp/cm<sup>2</sup> Máximo: 2.5 kp/cm<sup>2</sup> Calculado: 0.927 kp/cm<sup>2</sup></p>	Cumple Cumple Cumple
<p>Vuelco de la zapata: <i>Si el % de reserva de seguridad es mayor que cero, quiere decir que los coeficientes de seguridad al vuelco son mayores que los valores estrictos exigidos para todas las combinaciones de equilibrio.</i> -En dirección X: -En dirección Y:</p>	<p>Reserva seguridad: 314.4 % Reserva seguridad: 31.5 %</p>	Cumple Cumple
<p>Flexión en la zapata: -En dirección X: -En dirección Y:</p>	<p>Momento: 2.22 t·m Momento: 2.57 t·m</p>	Cumple Cumple



## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

<p>Cortante en la zapata:</p> <p>-En dirección X:</p> <p>-En dirección Y:</p>	<p>Cortante: 3.23 t</p> <p>Cortante: 3.84 t</p>	<p>Cumple</p> <p>Cumple</p>
<p>Compresión oblicua en la zapata:</p> <p>-Situaciones persistentes:</p> <p><i>Criterio de CYPE Ingenieros</i></p>	<p>Máximo: 509.68 t/m<sup>2</sup></p> <p>Calculado: 42.25 t/m<sup>2</sup></p>	<p>Cumple</p>
<p>Canto mínimo:</p> <p><i>Artículo 59.8.1 de la norma EHE-98</i></p>	<p>Mínimo: 25 cm</p> <p>Calculado: 40 cm</p>	<p>Cumple</p>
<p>Espacio para anclar arranques en cimentación:</p> <p>-344:</p>	<p>Mínimo: 30 cm</p> <p>Calculado: 33 cm</p>	<p>Cumple</p>
<p>Cuantía geométrica mínima:</p> <p><i>Criterio de CYPE Ingenieros</i></p> <p>-En dirección X:</p> <p>-En dirección Y:</p>	<p>Mínimo: 0.002</p> <p>Calculado: 0.0021</p> <p>Calculado: 0.0021</p>	<p>Cumple</p> <p>Cumple</p>
<p>Cuantía mínima necesaria por flexión:</p> <p><i>Artículo 42.3.2 de la norma EHE-98</i></p> <p>-Armado inferior dirección X:</p> <p>-Armado inferior dirección Y:</p> <p>-Armado superior dirección Y:</p>	<p>Calculado: 0.0011</p> <p>Mínimo: 0.0006</p> <p>Mínimo: 0.0007</p> <p>Mínimo: 0.0001</p>	<p>Cumple</p> <p>Cumple</p> <p>Cumple</p>
<p>Diámetro mínimo de las barras:</p> <p><i>Recomendación del Artículo 59.8.2 (norma EHE-98)</i></p> <p>-Parrilla inferior:</p> <p>-Parrilla superior:</p>	<p>Mínimo: 12 mm</p> <p>Calculado: 12 mm</p> <p>Calculado: 12 mm</p>	<p>Cumple</p> <p>Cumple</p>
<p>Separación máxima entre barras:</p> <p><i>Artículo 59.8.2 de la norma EHE-98</i></p> <p>-Armado inferior dirección X:</p> <p>-Armado inferior dirección Y:</p> <p>-Armado superior dirección X:</p> <p>-Armado superior dirección Y:</p>	<p>Máximo: 30 cm</p> <p>Calculado: 28 cm</p> <p>Calculado: 28 cm</p> <p>Calculado: 28 cm</p> <p>Calculado: 28 cm</p>	<p>Cumple</p> <p>Cumple</p> <p>Cumple</p> <p>Cumple</p>
<p>Separación mínima entre barras:</p> <p><i>Recomendación del libro "Cálculo de estructuras de cimentación", J. Calavera. Ed. INTEMAC, 1991</i></p> <p>-Armado inferior dirección X:</p> <p>-Armado inferior dirección Y:</p> <p>-Armado superior dirección X:</p> <p>-Armado superior dirección Y:</p>	<p>Mínimo: 10 cm</p> <p>Calculado: 28 cm</p> <p>Calculado: 28 cm</p> <p>Calculado: 28 cm</p> <p>Calculado: 28 cm</p>	<p>Cumple</p> <p>Cumple</p> <p>Cumple</p> <p>Cumple</p>
<p>Longitud de anclaje:</p> <p><i>Criterio del libro "Cálculo de estructuras de cimentación", J. Calavera. Ed. INTEMAC, 1991</i></p> <p>-Armado inf. dirección X hacia der:</p> <p>-Armado inf. dirección X hacia izq:</p> <p>-Armado inf. dirección Y hacia arriba:</p> <p>-Armado inf. dirección Y hacia abajo:</p> <p>-Armado sup. dirección X hacia der:</p> <p>-Armado sup. dirección X hacia izq:</p>	<p>Mínimo: 15 cm</p> <p>Calculado: 20 cm</p> <p>Calculado: 20 cm</p> <p>Calculado: 20 cm</p> <p>Calculado: 20 cm</p> <p>Calculado: 20 cm</p> <p>Calculado: 20 cm</p>	<p>Cumple</p> <p>Cumple</p> <p>Cumple</p> <p>Cumple</p> <p>Cumple</p> <p>Cumple</p>

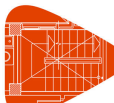


## Listado de cimentación

**NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE** Adrián Freijomil Aradas

-Armado sup. dirección Y hacia arriba:	Calculado: 20 cm	Cumple
-Armado sup. dirección Y hacia abajo:	Calculado: 20 cm	Cumple
Se cumplen todas las comprobaciones		

Referencia: 421		
Dimensiones: 130 x 130 x 60		
Armados: Xi:Ø12c/18 Yi:Ø12c/18 Xs:Ø12c/18 Ys:Ø12c/18		
Comprobación	Valores	Estado
<b>Tensiones sobre el terreno:</b>		
<i>Criterio de CYPE Ingenieros</i>		
-Tensión media en situaciones persistentes:	Máximo: 2 kp/cm <sup>2</sup> Calculado: 0.37 kp/cm <sup>2</sup>	Cumple
-Tensión máxima en situaciones persistentes sin viento:	Máximo: 2.5 kp/cm <sup>2</sup> Calculado: 0.245 kp/cm <sup>2</sup>	Cumple
-Tensión máxima en situaciones persistentes con viento:	Máximo: 2.5 kp/cm <sup>2</sup> Calculado: 1.063 kp/cm <sup>2</sup>	Cumple
<b>Vuelco de la zapata:</b>		
<i>Si el % de reserva de seguridad es mayor que cero, quiere decir que los coeficientes de seguridad al vuelco son mayores que los valores estrictos exigidos para todas las combinaciones de equilibrio.</i>		
-En dirección X:	Reserva seguridad: 14.2 %	Cumple
-En dirección Y:	Reserva seguridad: 75.0 %	Cumple
<b>Flexión en la zapata:</b>		
-En dirección X:	Momento: 1.34 t·m	Cumple
-En dirección Y:	Momento: 0.76 t·m	Cumple
<b>Cortante en la zapata:</b>		
-En dirección X:	Cortante: 0.00 t	Cumple
-En dirección Y:	Cortante: 0.00 t	Cumple
<b>Compresión oblicua en la zapata:</b>		
-Situaciones persistentes:	Máximo: 509.68 t/m <sup>2</sup> Calculado: 3.51 t/m <sup>2</sup>	Cumple
<i>Criterio de CYPE Ingenieros</i>		
<b>Canto mínimo:</b>		
<i>Artículo 59.8.1 de la norma EHE-98</i>		
	Mínimo: 25 cm Calculado: 60 cm	Cumple
<b>Espacio para anclar arranques en cimentación:</b>		
-421:	Mínimo: 35 cm Calculado: 53 cm	Cumple
<b>Cuantía geométrica mínima:</b>		
<i>Criterio de CYPE Ingenieros</i>		
	Mínimo: 0.002	
-En dirección X:	Calculado: 0.0021	Cumple
-En dirección Y:	Calculado: 0.0021	Cumple
<b>Cuantía mínima necesaria por flexión:</b>		
<i>Artículo 42.3.2 de la norma EHE-98</i>		
	Calculado: 0.0011	
-Armado inferior dirección X:	Mínimo: 0.0002	Cumple
-Armado inferior dirección Y:	Mínimo: 0.0001	Cumple
-Armado superior dirección X:	Mínimo: 0.0001	Cumple
-Armado superior dirección Y:	Mínimo: 0.0001	Cumple



## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

<p>Diámetro mínimo de las barras: <i>Recomendación del Artículo 59.8.2 (norma EHE-98)</i></p> <p>-Parrilla inferior: -Parrilla superior:</p>	<p>Mínimo: 12 mm Calculado: 12 mm Calculado: 12 mm</p>	<p>Cumple Cumple</p>
<p>Separación máxima entre barras: <i>Artículo 59.8.2 de la norma EHE-98</i></p> <p>-Armado inferior dirección X: -Armado inferior dirección Y: -Armado superior dirección X: -Armado superior dirección Y:</p>	<p>Máximo: 30 cm Calculado: 18 cm Calculado: 18 cm Calculado: 18 cm Calculado: 18 cm</p>	<p>Cumple Cumple Cumple Cumple</p>
<p>Separación mínima entre barras: <i>Recomendación del libro "Cálculo de estructuras de cimentación", J. Calavera. Ed. INTEMAC, 1991</i></p> <p>-Armado inferior dirección X: -Armado inferior dirección Y: -Armado superior dirección X: -Armado superior dirección Y:</p>	<p>Mínimo: 10 cm Calculado: 18 cm Calculado: 18 cm Calculado: 18 cm Calculado: 18 cm</p>	<p>Cumple Cumple Cumple Cumple</p>
<p>Longitud de anclaje: <i>Criterio del libro "Cálculo de estructuras de cimentación", J. Calavera. Ed. INTEMAC, 1991</i></p> <p>-Armado inf. dirección X hacia der: -Armado inf. dirección X hacia izq: -Armado inf. dirección Y hacia arriba: -Armado inf. dirección Y hacia abajo: -Armado sup. dirección X hacia der: -Armado sup. dirección X hacia izq: -Armado sup. dirección Y hacia arriba: -Armado sup. dirección Y hacia abajo:</p>	<p>Mínimo: 15 cm Calculado: 15 cm Calculado: 15 cm Calculado: 15 cm Calculado: 15 cm Calculado: 15 cm Calculado: 15 cm Calculado: 15 cm</p>	<p>Cumple Cumple Cumple Cumple Cumple Cumple Cumple Cumple</p>
<p>Longitud mínima de las patillas: -Armado inf. dirección X hacia der: -Armado inf. dirección X hacia izq: -Armado inf. dirección Y hacia arriba: -Armado inf. dirección Y hacia abajo: -Armado sup. dirección X hacia der: -Armado sup. dirección X hacia izq: -Armado sup. dirección Y hacia arriba: -Armado sup. dirección Y hacia abajo:</p>	<p>Mínimo: 12 cm Calculado: 15 cm Calculado: 15 cm Calculado: 15 cm Calculado: 15 cm Calculado: 15 cm Calculado: 15 cm Calculado: 15 cm</p>	<p>Cumple Cumple Cumple Cumple Cumple Cumple Cumple Cumple</p>
Se cumplen todas las comprobaciones		

Referencia: 445

Dimensiones: 95 x 95 x 40

Armados: Xi:Ø12c/28 Yi:Ø12c/28 Xs:Ø12c/28 Ys:Ø12c/28

Comprobación

Valores

Estado



## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

<p>Tensiones sobre el terreno: <i>Criterio de CYPE Ingenieros</i></p> <p>-Tensión media en situaciones persistentes:</p> <p>-Tensión máxima en situaciones persistentes sin viento:</p> <p>-Tensión máxima en situaciones persistentes con viento:</p>	<p>Máximo: 2 kp/cm<sup>2</sup> Calculado: 1.027 kp/cm<sup>2</sup></p> <p>Máximo: 2.5 kp/cm<sup>2</sup> Calculado: 1.713 kp/cm<sup>2</sup></p> <p>Máximo: 2.5 kp/cm<sup>2</sup> Calculado: 2.349 kp/cm<sup>2</sup></p>	<p>Cumple</p> <p>Cumple</p> <p>Cumple</p>
<p>Vuelco de la zapata: <i>Si el % de reserva de seguridad es mayor que cero, quiere decir que los coeficientes de seguridad al vuelco son mayores que los valores estrictos exigidos para todas las combinaciones de equilibrio.</i></p> <p>-En dirección X:</p> <p>-En dirección Y:</p>	<p>Reserva seguridad: 29.3 %</p> <p>Reserva seguridad: 42.0 %</p>	<p>Cumple</p> <p>Cumple</p>
<p>Flexión en la zapata:</p> <p>-En dirección X:</p> <p>-En dirección Y:</p>	<p>Momento: 1.21 t·m</p> <p>Momento: 1.25 t·m</p>	<p>Cumple</p> <p>Cumple</p>
<p>Cortante en la zapata:</p> <p>-En dirección X:</p> <p>-En dirección Y:</p>	<p>Cortante: 0.00 t</p> <p>Cortante: 0.00 t</p>	<p>Cumple</p> <p>Cumple</p>
<p>Compresión oblicua en la zapata: -Situaciones persistentes: <i>Criterio de CYPE Ingenieros</i></p>	<p>Máximo: 509.68 t/m<sup>2</sup> Calculado: 27.91 t/m<sup>2</sup></p>	<p>Cumple</p>
<p>Canto mínimo: <i>Artículo 59.8.1 de la norma EHE-98</i></p>	<p>Mínimo: 25 cm Calculado: 40 cm</p>	<p>Cumple</p>
<p>Espacio para anclar arranques en cimentación: -445:</p>	<p>Mínimo: 30 cm Calculado: 33 cm</p>	<p>Cumple</p>
<p>Cuánta geométrica mínima: <i>Criterio de CYPE Ingenieros</i></p> <p>-En dirección X:</p> <p>-En dirección Y:</p>	<p>Mínimo: 0.002</p> <p>Calculado: 0.0021</p> <p>Calculado: 0.0021</p>	<p>Cumple</p> <p>Cumple</p>
<p>Cuánta mínima necesaria por flexión: <i>Artículo 42.3.2 de la norma EHE-98</i></p> <p>-Armado inferior dirección X:</p> <p>-Armado inferior dirección Y:</p>	<p>Mínimo: 0.0005</p> <p>Calculado: 0.0011</p> <p>Calculado: 0.0011</p>	<p>Cumple</p> <p>Cumple</p>
<p>Diámetro mínimo de las barras: <i>Recomendación del Artículo 59.8.2 (norma EHE-98)</i></p> <p>-Parrilla inferior:</p> <p>-Parrilla superior:</p>	<p>Mínimo: 12 mm</p> <p>Calculado: 12 mm</p> <p>Calculado: 12 mm</p>	<p>Cumple</p> <p>Cumple</p>
<p>Separación máxima entre barras: <i>Artículo 59.8.2 de la norma EHE-98</i></p> <p>-Armado inferior dirección X:</p> <p>-Armado inferior dirección Y:</p> <p>-Armado superior dirección X:</p> <p>-Armado superior dirección Y:</p>	<p>Máximo: 30 cm</p> <p>Calculado: 28 cm</p> <p>Calculado: 28 cm</p> <p>Calculado: 28 cm</p> <p>Calculado: 28 cm</p>	<p>Cumple</p> <p>Cumple</p> <p>Cumple</p> <p>Cumple</p>



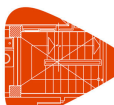


## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

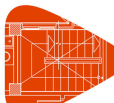
<b>Separación mínima entre barras:</b> <i>Recomendación del libro "Cálculo de estructuras de cimentación", J. Calavera. Ed. INTEMAC, 1991</i>		
-Armado inferior dirección X:	Mínimo: 10 cm Calculado: 28 cm	Cumple
-Armado inferior dirección Y:	Calculado: 28 cm	Cumple
-Armado superior dirección X:	Calculado: 28 cm	Cumple
-Armado superior dirección Y:	Calculado: 28 cm	Cumple
<b>Longitud de anclaje:</b> <i>Criterio del libro "Cálculo de estructuras de cimentación", J. Calavera. Ed. INTEMAC, 1991</i>		
-Armado inf. dirección X hacia der:	Mínimo: 15 cm Calculado: 15 cm	Cumple
-Armado inf. dirección X hacia izq:	Calculado: 15 cm	Cumple
-Armado inf. dirección Y hacia arriba:	Calculado: 15 cm	Cumple
-Armado inf. dirección Y hacia abajo:	Calculado: 15 cm	Cumple
-Armado sup. dirección X hacia der:	Calculado: 15 cm	Cumple
-Armado sup. dirección X hacia izq:	Calculado: 15 cm	Cumple
-Armado sup. dirección Y hacia arriba:	Calculado: 15 cm	Cumple
-Armado sup. dirección Y hacia abajo:	Calculado: 15 cm	Cumple
<b>Longitud mínima de las patillas:</b>	Mínimo: 12 cm	
-Armado inf. dirección X hacia der:	Calculado: 15 cm	Cumple
-Armado inf. dirección X hacia izq:	Calculado: 15 cm	Cumple
-Armado inf. dirección Y hacia arriba:	Calculado: 15 cm	Cumple
-Armado inf. dirección Y hacia abajo:	Calculado: 15 cm	Cumple
-Armado sup. dirección X hacia der:	Calculado: 15 cm	Cumple
-Armado sup. dirección X hacia izq:	Calculado: 15 cm	Cumple
-Armado sup. dirección Y hacia arriba:	Calculado: 15 cm	Cumple
-Armado sup. dirección Y hacia abajo:	Calculado: 15 cm	Cumple
Se cumplen todas las comprobaciones		

Referencia: 465		
Dimensiones: 100 x 100 x 45		
Armados: Xi:Ø12c/12.5 Yi:Ø12c/12.5		
Comprobación	Valores	Estado
<b>Tensiones sobre el terreno:</b> <i>Criterio de CYPE Ingenieros</i>		
-Tensión media en situaciones persistentes:	Máximo: 2 kp/cm <sup>2</sup> Calculado: 1.233 kp/cm <sup>2</sup>	Cumple
-Tensión máxima en situaciones persistentes sin viento:	Máximo: 2.5 kp/cm <sup>2</sup> Calculado: 1.236 kp/cm <sup>2</sup>	Cumple
-Tensión máxima en situaciones persistentes con viento:	Máximo: 2.5 kp/cm <sup>2</sup> Calculado: 2.442 kp/cm <sup>2</sup>	Cumple
<b>Vuelco de la zapata:</b> <i>Si el % de reserva de seguridad es mayor que cero, quiere decir que los coeficientes de seguridad al vuelco son mayores que los valores estrictos exigidos para todas las combinaciones de equilibrio.</i>		
-En dirección X:	Reserva seguridad: 11227.9 %	Cumple



## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas		
-En dirección Y:	Reserva seguridad: 39.2 %	Cumple
Flexión en la zapata:		
-En dirección X:	Momento: 1.41 t·m	Cumple
-En dirección Y:	Momento: 2.37 t·m	Cumple
Cortante en la zapata:		
-En dirección X:	Cortante: 0.00 t	Cumple
-En dirección Y:	Cortante: 0.00 t	Cumple
Compresión oblicua en la zapata:		
-Situaciones persistentes: <i>Criterio de CYPE Ingenieros</i>	Máximo: 509.68 t/m <sup>2</sup> Calculado: 44.3 t/m <sup>2</sup>	Cumple
Canto mínimo: <i>Artículo 59.8.1 de la norma EHE-98</i>	Mínimo: 25 cm Calculado: 45 cm	Cumple
Espacio para anclar arranques en cimentación:		
-465:	Mínimo: 35 cm Calculado: 38 cm	Cumple
Cuantía geométrica mínima: <i>Criterio de CYPE Ingenieros</i>		
-En dirección X:	Mínimo: 0.002 Calculado: 0.0021	Cumple
-En dirección Y:	Calculado: 0.0021	Cumple
Cuantía mínima necesaria por flexión: <i>Artículo 42.3.2 de la norma EHE-98</i>		
-Armado inferior dirección X:	Calculado: 0.0021 Mínimo: 0.0005	Cumple
-Armado inferior dirección Y:	Mínimo: 0.0007	Cumple
Diámetro mínimo de las barras:		
-Parrilla inferior: <i>Recomendación del Artículo 59.8.2 (norma EHE-98)</i>	Mínimo: 12 mm Calculado: 12 mm	Cumple
Separación máxima entre barras: <i>Artículo 59.8.2 de la norma EHE-98</i>		
-Armado inferior dirección X:	Máximo: 30 cm Calculado: 12.5 cm	Cumple
-Armado inferior dirección Y:	Calculado: 12.5 cm	Cumple
Separación mínima entre barras: <i>Recomendación del libro "Cálculo de estructuras de cimentación", J. Calavera. Ed. INTEMAC, 1991</i>		
-Armado inferior dirección X:	Mínimo: 10 cm Calculado: 12.5 cm	Cumple
-Armado inferior dirección Y:	Calculado: 12.5 cm	Cumple
Longitud de anclaje: <i>Criterio del libro "Cálculo de estructuras de cimentación", J. Calavera. Ed. INTEMAC, 1991</i>		
-Armado inf. dirección X hacia der:	Mínimo: 15 cm Calculado: 15 cm	Cumple
-Armado inf. dirección X hacia izq:	Calculado: 15 cm	Cumple
-Armado inf. dirección Y hacia arriba:	Calculado: 15 cm	Cumple
-Armado inf. dirección Y hacia abajo:	Calculado: 15 cm	Cumple
Longitud mínima de las patillas:		
-Armado inf. dirección X hacia der:	Mínimo: 12 cm Calculado: 15 cm	Cumple
-Armado inf. dirección X hacia izq:	Calculado: 15 cm	Cumple
-Armado inf. dirección Y hacia arriba:	Calculado: 15 cm	Cumple

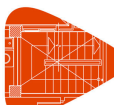


## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

-Armado inf. dirección Y hacia abajo:	Calculado: 15 cm	Cumple
Se cumplen todas las comprobaciones		

Referencia: 485		
Dimensiones: 110 x 110 x 50		
Armados: Xi:Ø12c/22 Yi:Ø12c/22 Xs:Ø12c/22 Ys:Ø12c/22		
Comprobación	Valores	Estado
Tensiones sobre el terreno: <i>Criterio de CYPE Ingenieros</i>		
-Tensión media en situaciones persistentes:	Máximo: 2 kp/cm <sup>2</sup> Calculado: 1.091 kp/cm <sup>2</sup>	Cumple
-Tensión máxima en situaciones persistentes sin viento:	Máximo: 2.5 kp/cm <sup>2</sup> Calculado: 1.091 kp/cm <sup>2</sup>	Cumple
-Tensión máxima en situaciones persistentes con viento:	Máximo: 2.5 kp/cm <sup>2</sup> Calculado: 2.114 kp/cm <sup>2</sup>	Cumple
Vuelco de la zapata: <i>Si el % de reserva de seguridad es mayor que cero, quiere decir que los coeficientes de seguridad al vuelco son mayores que los valores estrictos exigidos para todas las combinaciones de equilibrio.</i>		
-En dirección X:	Reserva seguridad: 11896.3 %	Cumple
-En dirección Y:	Reserva seguridad: 45.2 %	Cumple
Flexión en la zapata:		
-En dirección X:	Momento: 1.69 t·m	Cumple
-En dirección Y:	Momento: 2.81 t·m	Cumple
Cortante en la zapata:		
-En dirección X:	Cortante: 0.00 t	Cumple
-En dirección Y:	Cortante: 0.00 t	Cumple
Compresión oblicua en la zapata: -Situaciones persistentes: <i>Criterio de CYPE Ingenieros</i>		
	Máximo: 509.68 t/m <sup>2</sup> Calculado: 40.89 t/m <sup>2</sup>	Cumple
Canto mínimo: <i>Artículo 59.8.1 de la norma EHE-98</i>		
	Mínimo: 25 cm Calculado: 50 cm	Cumple
Espacio para anclar arranques en cimentación: -485:		
	Mínimo: 35 cm Calculado: 43 cm	Cumple
Cuantía geométrica mínima: <i>Criterio de CYPE Ingenieros</i>		
-En dirección X:	Mínimo: 0.002 Calculado: 0.0021	Cumple
-En dirección Y:	Calculado: 0.0021	Cumple
Cuantía mínima necesaria por flexión: <i>Artículo 42.3.2 de la norma EHE-98</i>		
-Armado inferior dirección X:	Calculado: 0.0011 Mínimo: 0.0004	Cumple
-Armado inferior dirección Y:	Mínimo: 0.0006	Cumple
-Armado superior dirección Y:	Mínimo: 0.0001	Cumple
Diámetro mínimo de las barras: <i>Recomendación del Artículo 59.8.2 (norma EHE-98)</i>		
-Parrilla inferior:	Mínimo: 12 mm Calculado: 12 mm	Cumple



## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas		
-Parrilla superior:	Calculado: 12 mm	Cumple
Separación máxima entre barras: <i>Artículo 59.8.2 de la norma EHE-98</i>	Máximo: 30 cm	
-Armado inferior dirección X:	Calculado: 22 cm	Cumple
-Armado inferior dirección Y:	Calculado: 22 cm	Cumple
-Armado superior dirección X:	Calculado: 22 cm	Cumple
-Armado superior dirección Y:	Calculado: 22 cm	Cumple
Separación mínima entre barras: <i>Recomendación del libro "Cálculo de estructuras de cimentación", J. Calavera. Ed. INTEMAC, 1991</i>	Mínimo: 10 cm	
-Armado inferior dirección X:	Calculado: 22 cm	Cumple
-Armado inferior dirección Y:	Calculado: 22 cm	Cumple
-Armado superior dirección X:	Calculado: 22 cm	Cumple
-Armado superior dirección Y:	Calculado: 22 cm	Cumple
Longitud de anclaje: <i>Criterio del libro "Cálculo de estructuras de cimentación", J. Calavera. Ed. INTEMAC, 1991</i>	Mínimo: 15 cm	
-Armado inf. dirección X hacia der:	Calculado: 15 cm	Cumple
-Armado inf. dirección X hacia izq:	Calculado: 15 cm	Cumple
-Armado inf. dirección Y hacia arriba:	Calculado: 15 cm	Cumple
-Armado inf. dirección Y hacia abajo:	Calculado: 15 cm	Cumple
-Armado sup. dirección X hacia der:	Calculado: 15 cm	Cumple
-Armado sup. dirección X hacia izq:	Calculado: 15 cm	Cumple
-Armado sup. dirección Y hacia arriba:	Calculado: 15 cm	Cumple
-Armado sup. dirección Y hacia abajo:	Calculado: 15 cm	Cumple
Longitud mínima de las patillas:	Mínimo: 12 cm	
-Armado inf. dirección X hacia der:	Calculado: 15 cm	Cumple
-Armado inf. dirección X hacia izq:	Calculado: 15 cm	Cumple
-Armado inf. dirección Y hacia arriba:	Calculado: 15 cm	Cumple
-Armado inf. dirección Y hacia abajo:	Calculado: 15 cm	Cumple
-Armado sup. dirección X hacia der:	Calculado: 15 cm	Cumple
-Armado sup. dirección X hacia izq:	Calculado: 15 cm	Cumple
-Armado sup. dirección Y hacia arriba:	Calculado: 15 cm	Cumple
-Armado sup. dirección Y hacia abajo:	Calculado: 15 cm	Cumple
Se cumplen todas las comprobaciones		

Referencia: 506

Dimensiones: 100 x 100 x 40

Armados: Xi:Ø16c/25 Yi:Ø16c/25

Comprobación

Tensiones sobre el terreno:

*Criterio de CYPE Ingenieros*

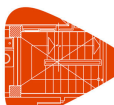
-Tensión media en situaciones persistentes:

Valores

Máximo: 2 kp/cm<sup>2</sup>  
Calculado: 1.244 kp/cm<sup>2</sup>

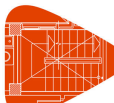
Estado

Cumple



## Listado de cimentación

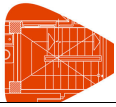
NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas		
-Tensión máxima en situaciones persistentes sin viento:	Máximo: 2.5 kp/cm <sup>2</sup> Calculado: 1.249 kp/cm <sup>2</sup>	Cumple
-Tensión máxima en situaciones persistentes con viento:	Máximo: 2.5 kp/cm <sup>2</sup> Calculado: 2.355 kp/cm <sup>2</sup>	Cumple
<b>Vuelco de la zapata:</b> <i>Si el % de reserva de seguridad es mayor que cero, quiere decir que los coeficientes de seguridad al vuelco son mayores que los valores estrictos exigidos para todas las combinaciones de equilibrio.</i>		
-En dirección X:	Reserva seguridad: 8749.5 %	Cumple
-En dirección Y:	Reserva seguridad: 51.4 %	Cumple
<b>Flexión en la zapata:</b>		
-En dirección X:	Momento: 1.43 t·m	Cumple
-En dirección Y:	Momento: 2.31 t·m	Cumple
<b>Cortante en la zapata:</b>		
-En dirección X:	Cortante: 1.12 t	Cumple
-En dirección Y:	Cortante: 2.03 t	Cumple
<b>Compresión oblicua en la zapata:</b> -Situaciones persistentes: <i>Criterio de CYPE Ingenieros</i>		
	Máximo: 509.68 t/m <sup>2</sup> Calculado: 52.47 t/m <sup>2</sup>	Cumple
<b>Canto mínimo:</b> <i>Artículo 59.8.1 de la norma EHE-98</i>		
	Mínimo: 25 cm Calculado: 40 cm	Cumple
<b>Espacio para anclar arranques en cimentación:</b> -506:		
	Mínimo: 30 cm Calculado: 32 cm	Cumple
<b>Cuantía geométrica mínima:</b> <i>Criterio de CYPE Ingenieros</i>		
-En dirección X:	Mínimo: 0.002 Calculado: 0.0021	Cumple
-En dirección Y:	Calculado: 0.0021	Cumple
<b>Cuantía mínima necesaria por flexión:</b> <i>Artículo 42.3.2 de la norma EHE-98</i>		
-Armado inferior dirección X:	Calculado: 0.0021 Mínimo: 0.0006	Cumple
-Armado inferior dirección Y:	Mínimo: 0.0009	Cumple
<b>Diámetro mínimo de las barras:</b> -Parrilla inferior: <i>Recomendación del Artículo 59.8.2 (norma EHE-98)</i>		
	Mínimo: 12 mm Calculado: 16 mm	Cumple
<b>Separación máxima entre barras:</b> <i>Artículo 59.8.2 de la norma EHE-98</i>		
-Armado inferior dirección X:	Máximo: 30 cm Calculado: 25 cm	Cumple
-Armado inferior dirección Y:	Calculado: 25 cm	Cumple
<b>Separación mínima entre barras:</b> <i>Recomendación del libro "Cálculo de estructuras de cimentación", J. Calavera. Ed. INTEMAC, 1991</i>		
-Armado inferior dirección X:	Mínimo: 10 cm Calculado: 25 cm	Cumple
-Armado inferior dirección Y:	Calculado: 25 cm	Cumple
<b>Longitud de anclaje:</b> <i>Criterio del libro "Cálculo de estructuras de cimentación", J. Calavera. Ed. INTEMAC, 1991</i>		
-Armado inf. dirección X hacia der:	Mínimo: 16 cm Calculado: 16 cm	Cumple



## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas		
-Armado inf. dirección X hacia izq:	Calculado: 16 cm	Cumple
-Armado inf. dirección Y hacia arriba:	Calculado: 16 cm	Cumple
-Armado inf. dirección Y hacia abajo:	Calculado: 16 cm	Cumple
Longitud mínima de las patillas:	Mínimo: 16 cm	
-Armado inf. dirección X hacia der:	Calculado: 16 cm	Cumple
-Armado inf. dirección X hacia izq:	Calculado: 16 cm	Cumple
-Armado inf. dirección Y hacia arriba:	Calculado: 16 cm	Cumple
-Armado inf. dirección Y hacia abajo:	Calculado: 16 cm	Cumple
Se cumplen todas las comprobaciones		

Referencia: 526		
Dimensiones: 95 x 95 x 40		
Armados: Xi:Ø12c/28 Yi:Ø12c/28 Xs:Ø12c/28 Ys:Ø12c/28		
Comprobación	Valores	Estado
Tensiones sobre el terreno: <i>Criterio de CYPE Ingenieros</i>		
-Tensión media en situaciones persistentes:	Máximo: 2 kp/cm <sup>2</sup> Calculado: 1.11 kp/cm <sup>2</sup>	Cumple
-Tensión máxima en situaciones persistentes sin viento:	Máximo: 2.5 kp/cm <sup>2</sup> Calculado: 1.795 kp/cm <sup>2</sup>	Cumple
-Tensión máxima en situaciones persistentes con viento:	Máximo: 2.5 kp/cm <sup>2</sup> Calculado: 2.445 kp/cm <sup>2</sup>	Cumple
Vuelco de la zapata: <i>Si el % de reserva de seguridad es mayor que cero, quiere decir que los coeficientes de seguridad al vuelco son mayores que los valores estrictos exigidos para todas las combinaciones de equilibrio.</i>		
-En dirección X:	Reserva seguridad: 245.3 %	Cumple
-En dirección Y:	Reserva seguridad: 43.6 %	Cumple
Flexión en la zapata:		
-En dirección X:	Momento: 0.73 t·m	Cumple
-En dirección Y:	Momento: 1.35 t·m	Cumple
Cortante en la zapata:		
-En dirección X:	Cortante: 0.00 t	Cumple
-En dirección Y:	Cortante: 0.00 t	Cumple
Compresión oblicua en la zapata: -Situaciones persistentes: <i>Criterio de CYPE Ingenieros</i>		
	Máximo: 509.68 t/m <sup>2</sup> Calculado: 24.9 t/m <sup>2</sup>	Cumple
Canto mínimo: <i>Artículo 59.8.1 de la norma EHE-98</i>		
	Mínimo: 25 cm Calculado: 40 cm	Cumple
Espacio para anclar arranques en cimentación: -526:		
	Mínimo: 30 cm Calculado: 33 cm	Cumple
Cuantía geométrica mínima: <i>Criterio de CYPE Ingenieros</i>		
-En dirección X:	Mínimo: 0.002 Calculado: 0.0021	Cumple
-En dirección Y:	Calculado: 0.0021	Cumple



## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

<p>Cuantía mínima necesaria por flexión: <i>Artículo 42.3.2 de la norma EHE-98</i></p> <p>-Armado inferior dirección X: -Armado inferior dirección Y:</p>	<p>Calculado: 0.0011 Mínimo: 0.0003 Mínimo: 0.0006</p>	<p>Cumple Cumple</p>
<p>Diámetro mínimo de las barras: <i>Recomendación del Artículo 59.8.2 (norma EHE-98)</i></p> <p>-Parrilla inferior: -Parrilla superior:</p>	<p>Mínimo: 12 mm Calculado: 12 mm Calculado: 12 mm</p>	<p>Cumple Cumple</p>
<p>Separación máxima entre barras: <i>Artículo 59.8.2 de la norma EHE-98</i></p> <p>-Armado inferior dirección X: -Armado inferior dirección Y: -Armado superior dirección X: -Armado superior dirección Y:</p>	<p>Máximo: 30 cm Calculado: 28 cm Calculado: 28 cm Calculado: 28 cm Calculado: 28 cm</p>	<p>Cumple Cumple Cumple Cumple</p>
<p>Separación mínima entre barras: <i>Recomendación del libro "Cálculo de estructuras de cimentación", J. Calavera. Ed. INTEMAC, 1991</i></p> <p>-Armado inferior dirección X: -Armado inferior dirección Y: -Armado superior dirección X: -Armado superior dirección Y:</p>	<p>Mínimo: 10 cm Calculado: 28 cm Calculado: 28 cm Calculado: 28 cm Calculado: 28 cm</p>	<p>Cumple Cumple Cumple Cumple</p>
<p>Longitud de anclaje: <i>Criterio del libro "Cálculo de estructuras de cimentación", J. Calavera. Ed. INTEMAC, 1991</i></p> <p>-Armado inf. dirección X hacia der: -Armado inf. dirección X hacia izq: -Armado inf. dirección Y hacia arriba: -Armado inf. dirección Y hacia abajo: -Armado sup. dirección X hacia der: -Armado sup. dirección X hacia izq: -Armado sup. dirección Y hacia arriba: -Armado sup. dirección Y hacia abajo:</p>	<p>Mínimo: 15 cm Calculado: 15 cm Calculado: 15 cm Calculado: 15 cm Calculado: 15 cm Calculado: 15 cm Calculado: 15 cm Calculado: 15 cm</p>	<p>Cumple Cumple Cumple Cumple Cumple Cumple Cumple Cumple</p>
<p>Longitud mínima de las patillas:</p> <p>-Armado inf. dirección X hacia der: -Armado inf. dirección X hacia izq: -Armado inf. dirección Y hacia arriba: -Armado inf. dirección Y hacia abajo: -Armado sup. dirección X hacia der: -Armado sup. dirección X hacia izq: -Armado sup. dirección Y hacia arriba: -Armado sup. dirección Y hacia abajo:</p>	<p>Mínimo: 12 cm Calculado: 15 cm Calculado: 15 cm Calculado: 15 cm Calculado: 15 cm Calculado: 15 cm Calculado: 15 cm Calculado: 15 cm</p>	<p>Cumple Cumple Cumple Cumple Cumple Cumple Cumple Cumple</p>
Se cumplen todas las comprobaciones		



## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

### 2.- LISTADO DE VIGAS DE ATADO

#### 2.1.- Descripción

Referencias	Tipo	Geometría	Armado
[445 - 465], [485 - 506], [465 - 485], [63 - 83], [44 - 63], [25 - 44], [506 - 526], [339 - 344], [332 - 339], [320 - 327], [327 - 332], [83 - 102]	C.1	Ancho: 40.0 cm Canto: 40.0 cm	Superior: 2 Ø12 Inferior: 2 Ø12 Estribos: 1xØ8c/30
[287 - 344], [238 - 287], [189 - 238], [222 - 271], [213 - 222], [165 - 213], [262 - 271], [213 - 262], [320 - 445], [271 - 320], [262 - 311], [311 - 320], [1 - 165], [1 - 25], [344 - 526], [339 - 506], [332 - 485], [327 - 465], [421 - 445], [311 - 421], [102 - 189], [174 - 222], [165 - 174], [25 - 174]	C.1	Ancho: 40.0 cm Canto: 40.0 cm	Superior: 2 Ø12 Inferior: 2 Ø12 Estribos: 1xØ8c/30

#### 2.2.- Comprobación

Referencia: C.1 [445 - 465] (Viga de atado) -Dimensiones: 40.0 cm x 40.0 cm -Armadura superior: 2 Ø12 -Armadura inferior: 2 Ø12 -Estribos: 1xØ8c/30		
Comprobación	Valores	Estado
Diámetro mínimo estribos:	Mínimo: 6 mm Calculado: 8 mm	Cumple
Separación mínima entre estribos: <i>Artículo 66.4.1 de la norma EHE-98</i>	Mínimo: 2 cm Calculado: 29.2 cm	Cumple
Separación mínima armadura longitudinal: <i>Artículo 66.4.1 de la norma EHE-98</i>	Mínimo: 2 cm	
-Armadura superior:	Calculado: 28 cm	Cumple
-Armadura inferior:	Calculado: 28 cm	Cumple





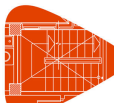
## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

Separación máxima estribos: -Sin cortantes: <i>Artículo 44.2.3.4.1 de la norma EHE-98</i>	Máximo: 30 cm Calculado: 30 cm	Cumple
Separación máxima armadura longitudinal: <i>Artículo 42.3.1 de la norma EHE-98</i>	Máximo: 30 cm	
-Armadura superior:	Calculado: 28 cm	Cumple
-Armadura inferior:	Calculado: 28 cm	Cumple
Se cumplen todas las comprobaciones		

Referencia: C.1 [287 - 344] (Viga de atado) -Dimensiones: 40.0 cm x 40.0 cm -Armadura superior: 2 Ø12 -Armadura inferior: 2 Ø12 -Estribos: 1xØ8c/30		
Comprobación	Valores	Estado
Diámetro mínimo estribos:	Mínimo: 6 mm Calculado: 8 mm	Cumple
Separación mínima entre estribos: <i>Artículo 66.4.1 de la norma EHE-98</i>	Mínimo: 2 cm Calculado: 29.2 cm	Cumple
Separación mínima armadura longitudinal: <i>Artículo 66.4.1 de la norma EHE-98</i>	Mínimo: 2 cm	
-Armadura superior:	Calculado: 28 cm	Cumple
-Armadura inferior:	Calculado: 28 cm	Cumple
Separación máxima estribos: -Sin cortantes: <i>Artículo 44.2.3.4.1 de la norma EHE-98</i>	Máximo: 30 cm Calculado: 30 cm	Cumple
Separación máxima armadura longitudinal: <i>Artículo 42.3.1 de la norma EHE-98</i>	Máximo: 30 cm	
-Armadura superior:	Calculado: 28 cm	Cumple
-Armadura inferior:	Calculado: 28 cm	Cumple
Se cumplen todas las comprobaciones		

Referencia: C.1 [238 - 287] (Viga de atado) -Dimensiones: 40.0 cm x 40.0 cm -Armadura superior: 2 Ø12 -Armadura inferior: 2 Ø12 -Estribos: 1xØ8c/30		
Comprobación	Valores	Estado
Diámetro mínimo estribos:	Mínimo: 6 mm Calculado: 8 mm	Cumple
Separación mínima entre estribos: <i>Artículo 66.4.1 de la norma EHE-98</i>	Mínimo: 2 cm Calculado: 29.2 cm	Cumple
Separación mínima armadura longitudinal: <i>Artículo 66.4.1 de la norma EHE-98</i>	Mínimo: 2 cm	
-Armadura superior:	Calculado: 28 cm	Cumple
-Armadura inferior:	Calculado: 28 cm	Cumple



## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

Separación máxima estribos: -Sin cortantes: <i>Artículo 44.2.3.4.1 de la norma EHE-98</i>	Máximo: 30 cm Calculado: 30 cm	Cumple
Separación máxima armadura longitudinal: <i>Artículo 42.3.1 de la norma EHE-98</i>	Máximo: 30 cm	
-Armadura superior:	Calculado: 28 cm	Cumple
-Armadura inferior:	Calculado: 28 cm	Cumple
Se cumplen todas las comprobaciones		

Referencia: C.1 [189 - 238] (Viga de atado) -Dimensiones: 40.0 cm x 40.0 cm -Armadura superior: 2 Ø12 -Armadura inferior: 2 Ø12 -Estribos: 1xØ8c/30		
Comprobación	Valores	Estado
Diámetro mínimo estribos:	Mínimo: 6 mm Calculado: 8 mm	Cumple
Separación mínima entre estribos: <i>Artículo 66.4.1 de la norma EHE-98</i>	Mínimo: 2 cm Calculado: 29.2 cm	Cumple
Separación mínima armadura longitudinal: <i>Artículo 66.4.1 de la norma EHE-98</i>	Mínimo: 2 cm	
-Armadura superior:	Calculado: 28 cm	Cumple
-Armadura inferior:	Calculado: 28 cm	Cumple
Separación máxima estribos: -Sin cortantes: <i>Artículo 44.2.3.4.1 de la norma EHE-98</i>	Máximo: 30 cm Calculado: 30 cm	Cumple
Separación máxima armadura longitudinal: <i>Artículo 42.3.1 de la norma EHE-98</i>	Máximo: 30 cm	
-Armadura superior:	Calculado: 28 cm	Cumple
-Armadura inferior:	Calculado: 28 cm	Cumple
Se cumplen todas las comprobaciones		

Referencia: C.1 [222 - 271] (Viga de atado) -Dimensiones: 40.0 cm x 40.0 cm -Armadura superior: 2 Ø12 -Armadura inferior: 2 Ø12 -Estribos: 1xØ8c/30		
Comprobación	Valores	Estado
Diámetro mínimo estribos:	Mínimo: 6 mm Calculado: 8 mm	Cumple
Separación mínima entre estribos: <i>Artículo 66.4.1 de la norma EHE-98</i>	Mínimo: 2 cm Calculado: 29.2 cm	Cumple
Separación mínima armadura longitudinal: <i>Artículo 66.4.1 de la norma EHE-98</i>	Mínimo: 2 cm	
-Armadura superior:	Calculado: 28 cm	Cumple
-Armadura inferior:	Calculado: 28 cm	Cumple



## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

Separación máxima estribos: -Sin cortantes: <i>Artículo 44.2.3.4.1 de la norma EHE-98</i>	Máximo: 30 cm Calculado: 30 cm	Cumple
Separación máxima armadura longitudinal: <i>Artículo 42.3.1 de la norma EHE-98</i>	Máximo: 30 cm	
-Armadura superior:	Calculado: 28 cm	Cumple
-Armadura inferior:	Calculado: 28 cm	Cumple
Se cumplen todas las comprobaciones		

Referencia: C.1 [213 - 222] (Viga de atado) -Dimensiones: 40.0 cm x 40.0 cm -Armadura superior: 2 Ø12 -Armadura inferior: 2 Ø12 -Estribos: 1xØ8c/30		
Comprobación	Valores	Estado
Diámetro mínimo estribos:	Mínimo: 6 mm Calculado: 8 mm	Cumple
Separación mínima entre estribos: <i>Artículo 66.4.1 de la norma EHE-98</i>	Mínimo: 2 cm Calculado: 29.2 cm	Cumple
Separación mínima armadura longitudinal: <i>Artículo 66.4.1 de la norma EHE-98</i>	Mínimo: 2 cm	
-Armadura superior:	Calculado: 28 cm	Cumple
-Armadura inferior:	Calculado: 28 cm	Cumple
Separación máxima estribos: -Sin cortantes: <i>Artículo 44.2.3.4.1 de la norma EHE-98</i>	Máximo: 30 cm Calculado: 30 cm	Cumple
Separación máxima armadura longitudinal: <i>Artículo 42.3.1 de la norma EHE-98</i>	Máximo: 30 cm	
-Armadura superior:	Calculado: 28 cm	Cumple
-Armadura inferior:	Calculado: 28 cm	Cumple
Se cumplen todas las comprobaciones		

Referencia: C.1 [165 - 213] (Viga de atado) -Dimensiones: 40.0 cm x 40.0 cm -Armadura superior: 2 Ø12 -Armadura inferior: 2 Ø12 -Estribos: 1xØ8c/30		
Comprobación	Valores	Estado
Diámetro mínimo estribos:	Mínimo: 6 mm Calculado: 8 mm	Cumple
Separación mínima entre estribos: <i>Artículo 66.4.1 de la norma EHE-98</i>	Mínimo: 2 cm Calculado: 29.2 cm	Cumple
Separación mínima armadura longitudinal: <i>Artículo 66.4.1 de la norma EHE-98</i>	Mínimo: 2 cm	
-Armadura superior:	Calculado: 28 cm	Cumple
-Armadura inferior:	Calculado: 28 cm	Cumple



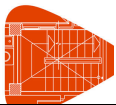
## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

Separación máxima estribos: -Sin cortantes: <i>Artículo 44.2.3.4.1 de la norma EHE-98</i>	Máximo: 30 cm Calculado: 30 cm	Cumple
Separación máxima armadura longitudinal: <i>Artículo 42.3.1 de la norma EHE-98</i>	Máximo: 30 cm	
-Armadura superior:	Calculado: 28 cm	Cumple
-Armadura inferior:	Calculado: 28 cm	Cumple
Se cumplen todas las comprobaciones		

Referencia: C.1 [262 - 271] (Viga de atado) -Dimensiones: 40.0 cm x 40.0 cm -Armadura superior: 2 Ø12 -Armadura inferior: 2 Ø12 -Estribos: 1xØ8c/30		
Comprobación	Valores	Estado
Diámetro mínimo estribos:	Mínimo: 6 mm Calculado: 8 mm	Cumple
Separación mínima entre estribos: <i>Artículo 66.4.1 de la norma EHE-98</i>	Mínimo: 2 cm Calculado: 29.2 cm	Cumple
Separación mínima armadura longitudinal: <i>Artículo 66.4.1 de la norma EHE-98</i>	Mínimo: 2 cm	
-Armadura superior:	Calculado: 28 cm	Cumple
-Armadura inferior:	Calculado: 28 cm	Cumple
Separación máxima estribos: -Sin cortantes: <i>Artículo 44.2.3.4.1 de la norma EHE-98</i>	Máximo: 30 cm Calculado: 30 cm	Cumple
Separación máxima armadura longitudinal: <i>Artículo 42.3.1 de la norma EHE-98</i>	Máximo: 30 cm	
-Armadura superior:	Calculado: 28 cm	Cumple
-Armadura inferior:	Calculado: 28 cm	Cumple
Se cumplen todas las comprobaciones		

Referencia: C.1 [213 - 262] (Viga de atado) -Dimensiones: 40.0 cm x 40.0 cm -Armadura superior: 2 Ø12 -Armadura inferior: 2 Ø12 -Estribos: 1xØ8c/30		
Comprobación	Valores	Estado
Diámetro mínimo estribos:	Mínimo: 6 mm Calculado: 8 mm	Cumple
Separación mínima entre estribos: <i>Artículo 66.4.1 de la norma EHE-98</i>	Mínimo: 2 cm Calculado: 29.2 cm	Cumple
Separación mínima armadura longitudinal: <i>Artículo 66.4.1 de la norma EHE-98</i>	Mínimo: 2 cm	
-Armadura superior:	Calculado: 28 cm	Cumple
-Armadura inferior:	Calculado: 28 cm	Cumple



## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

Separación máxima estribos: -Sin cortantes: <i>Artículo 44.2.3.4.1 de la norma EHE-98</i>	Máximo: 30 cm Calculado: 30 cm	Cumple
Separación máxima armadura longitudinal: <i>Artículo 42.3.1 de la norma EHE-98</i>	Máximo: 30 cm	
-Armadura superior:	Calculado: 28 cm	Cumple
-Armadura inferior:	Calculado: 28 cm	Cumple
Se cumplen todas las comprobaciones		

Referencia: C.1 [320 - 445] (Viga de atado) -Dimensiones: 40.0 cm x 40.0 cm -Armadura superior: 2 Ø12 -Armadura inferior: 2 Ø12 -Estribos: 1xØ8c/30		
Comprobación	Valores	Estado
Diámetro mínimo estribos:	Mínimo: 6 mm Calculado: 8 mm	Cumple
Separación mínima entre estribos: <i>Artículo 66.4.1 de la norma EHE-98</i>	Mínimo: 2 cm Calculado: 29.2 cm	Cumple
Separación mínima armadura longitudinal: <i>Artículo 66.4.1 de la norma EHE-98</i>	Mínimo: 2 cm	
-Armadura superior:	Calculado: 28 cm	Cumple
-Armadura inferior:	Calculado: 28 cm	Cumple
Separación máxima estribos: -Sin cortantes: <i>Artículo 44.2.3.4.1 de la norma EHE-98</i>	Máximo: 30 cm Calculado: 30 cm	Cumple
Separación máxima armadura longitudinal: <i>Artículo 42.3.1 de la norma EHE-98</i>	Máximo: 30 cm	
-Armadura superior:	Calculado: 28 cm	Cumple
-Armadura inferior:	Calculado: 28 cm	Cumple
Se cumplen todas las comprobaciones		

Referencia: C.1 [271 - 320] (Viga de atado) -Dimensiones: 40.0 cm x 40.0 cm -Armadura superior: 2 Ø12 -Armadura inferior: 2 Ø12 -Estribos: 1xØ8c/30		
Comprobación	Valores	Estado
Diámetro mínimo estribos:	Mínimo: 6 mm Calculado: 8 mm	Cumple
Separación mínima entre estribos: <i>Artículo 66.4.1 de la norma EHE-98</i>	Mínimo: 2 cm Calculado: 29.2 cm	Cumple
Separación mínima armadura longitudinal: <i>Artículo 66.4.1 de la norma EHE-98</i>	Mínimo: 2 cm	
-Armadura superior:	Calculado: 28 cm	Cumple
-Armadura inferior:	Calculado: 28 cm	Cumple



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NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

Separación máxima estribos: -Sin cortantes: <i>Artículo 44.2.3.4.1 de la norma EHE-98</i>	Máximo: 30 cm Calculado: 30 cm	Cumple
Separación máxima armadura longitudinal: <i>Artículo 42.3.1 de la norma EHE-98</i>	Máximo: 30 cm	
-Armadura superior:	Calculado: 28 cm	Cumple
-Armadura inferior:	Calculado: 28 cm	Cumple
Se cumplen todas las comprobaciones		

Referencia: C.1 [262 - 311] (Viga de atado) -Dimensiones: 40.0 cm x 40.0 cm -Armadura superior: 2 Ø12 -Armadura inferior: 2 Ø12 -Estribos: 1xØ8c/30		
Comprobación	Valores	Estado
Diámetro mínimo estribos:	Mínimo: 6 mm Calculado: 8 mm	Cumple
Separación mínima entre estribos: <i>Artículo 66.4.1 de la norma EHE-98</i>	Mínimo: 2 cm Calculado: 29.2 cm	Cumple
Separación mínima armadura longitudinal: <i>Artículo 66.4.1 de la norma EHE-98</i>	Mínimo: 2 cm	
-Armadura superior:	Calculado: 28 cm	Cumple
-Armadura inferior:	Calculado: 28 cm	Cumple
Separación máxima estribos: -Sin cortantes: <i>Artículo 44.2.3.4.1 de la norma EHE-98</i>	Máximo: 30 cm Calculado: 30 cm	Cumple
Separación máxima armadura longitudinal: <i>Artículo 42.3.1 de la norma EHE-98</i>	Máximo: 30 cm	
-Armadura superior:	Calculado: 28 cm	Cumple
-Armadura inferior:	Calculado: 28 cm	Cumple
Se cumplen todas las comprobaciones		

Referencia: C.1 [311 - 320] (Viga de atado) -Dimensiones: 40.0 cm x 40.0 cm -Armadura superior: 2 Ø12 -Armadura inferior: 2 Ø12 -Estribos: 1xØ8c/30		
Comprobación	Valores	Estado
Diámetro mínimo estribos:	Mínimo: 6 mm Calculado: 8 mm	Cumple
Separación mínima entre estribos: <i>Artículo 66.4.1 de la norma EHE-98</i>	Mínimo: 2 cm Calculado: 29.2 cm	Cumple
Separación mínima armadura longitudinal: <i>Artículo 66.4.1 de la norma EHE-98</i>	Mínimo: 2 cm	
-Armadura superior:	Calculado: 28 cm	Cumple
-Armadura inferior:	Calculado: 28 cm	Cumple



## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

Separación máxima estribos: -Sin cortantes: <i>Artículo 44.2.3.4.1 de la norma EHE-98</i>	Máximo: 30 cm Calculado: 30 cm	Cumple
Separación máxima armadura longitudinal: <i>Artículo 42.3.1 de la norma EHE-98</i>	Máximo: 30 cm	
-Armadura superior:	Calculado: 28 cm	Cumple
-Armadura inferior:	Calculado: 28 cm	Cumple
Se cumplen todas las comprobaciones		

Referencia: C.1 [485 - 506] (Viga de atado) -Dimensiones: 40.0 cm x 40.0 cm -Armadura superior: 2 Ø12 -Armadura inferior: 2 Ø12 -Estribos: 1xØ8c/30		
Comprobación	Valores	Estado
Diámetro mínimo estribos:	Mínimo: 6 mm Calculado: 8 mm	Cumple
Separación mínima entre estribos: <i>Artículo 66.4.1 de la norma EHE-98</i>	Mínimo: 2 cm Calculado: 29.2 cm	Cumple
Separación mínima armadura longitudinal: <i>Artículo 66.4.1 de la norma EHE-98</i>	Mínimo: 2 cm	
-Armadura superior:	Calculado: 28 cm	Cumple
-Armadura inferior:	Calculado: 28 cm	Cumple
Separación máxima estribos: -Sin cortantes: <i>Artículo 44.2.3.4.1 de la norma EHE-98</i>	Máximo: 30 cm Calculado: 30 cm	Cumple
Separación máxima armadura longitudinal: <i>Artículo 42.3.1 de la norma EHE-98</i>	Máximo: 30 cm	
-Armadura superior:	Calculado: 28 cm	Cumple
-Armadura inferior:	Calculado: 28 cm	Cumple
Se cumplen todas las comprobaciones		

Referencia: C.1 [465 - 485] (Viga de atado) -Dimensiones: 40.0 cm x 40.0 cm -Armadura superior: 2 Ø12 -Armadura inferior: 2 Ø12 -Estribos: 1xØ8c/30		
Comprobación	Valores	Estado
Diámetro mínimo estribos:	Mínimo: 6 mm Calculado: 8 mm	Cumple
Separación mínima entre estribos: <i>Artículo 66.4.1 de la norma EHE-98</i>	Mínimo: 2 cm Calculado: 29.2 cm	Cumple
Separación mínima armadura longitudinal: <i>Artículo 66.4.1 de la norma EHE-98</i>	Mínimo: 2 cm	
-Armadura superior:	Calculado: 28 cm	Cumple
-Armadura inferior:	Calculado: 28 cm	Cumple



## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

Separación máxima estribos: -Sin cortantes: <i>Artículo 44.2.3.4.1 de la norma EHE-98</i>	Máximo: 30 cm Calculado: 30 cm	Cumple
Separación máxima armadura longitudinal: <i>Artículo 42.3.1 de la norma EHE-98</i>	Máximo: 30 cm	
-Armadura superior:	Calculado: 28 cm	Cumple
-Armadura inferior:	Calculado: 28 cm	Cumple
Se cumplen todas las comprobaciones		

Referencia: C.1 [63 - 83] (Viga de atado) -Dimensiones: 40.0 cm x 40.0 cm -Armadura superior: 2 Ø12 -Armadura inferior: 2 Ø12 -Estribos: 1xØ8c/30		
Comprobación	Valores	Estado
Diámetro mínimo estribos:	Mínimo: 6 mm Calculado: 8 mm	Cumple
Separación mínima entre estribos: <i>Artículo 66.4.1 de la norma EHE-98</i>	Mínimo: 2 cm Calculado: 29.2 cm	Cumple
Separación mínima armadura longitudinal: <i>Artículo 66.4.1 de la norma EHE-98</i>	Mínimo: 2 cm	
-Armadura superior:	Calculado: 28 cm	Cumple
-Armadura inferior:	Calculado: 28 cm	Cumple
Separación máxima estribos: -Sin cortantes: <i>Artículo 44.2.3.4.1 de la norma EHE-98</i>	Máximo: 30 cm Calculado: 30 cm	Cumple
Separación máxima armadura longitudinal: <i>Artículo 42.3.1 de la norma EHE-98</i>	Máximo: 30 cm	
-Armadura superior:	Calculado: 28 cm	Cumple
-Armadura inferior:	Calculado: 28 cm	Cumple
Se cumplen todas las comprobaciones		

Referencia: C.1 [44 - 63] (Viga de atado) -Dimensiones: 40.0 cm x 40.0 cm -Armadura superior: 2 Ø12 -Armadura inferior: 2 Ø12 -Estribos: 1xØ8c/30		
Comprobación	Valores	Estado
Diámetro mínimo estribos:	Mínimo: 6 mm Calculado: 8 mm	Cumple
Separación mínima entre estribos: <i>Artículo 66.4.1 de la norma EHE-98</i>	Mínimo: 2 cm Calculado: 29.2 cm	Cumple
Separación mínima armadura longitudinal: <i>Artículo 66.4.1 de la norma EHE-98</i>	Mínimo: 2 cm	
-Armadura superior:	Calculado: 28 cm	Cumple
-Armadura inferior:	Calculado: 28 cm	Cumple





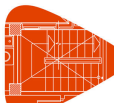
## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

Separación máxima estribos: -Sin cortantes: <i>Artículo 44.2.3.4.1 de la norma EHE-98</i>	Máximo: 30 cm Calculado: 30 cm	Cumple
Separación máxima armadura longitudinal: <i>Artículo 42.3.1 de la norma EHE-98</i>	Máximo: 30 cm	
-Armadura superior:	Calculado: 28 cm	Cumple
-Armadura inferior:	Calculado: 28 cm	Cumple
Se cumplen todas las comprobaciones		

Referencia: C.1 [25 - 44] (Viga de atado) -Dimensiones: 40.0 cm x 40.0 cm -Armadura superior: 2 Ø12 -Armadura inferior: 2 Ø12 -Estribos: 1xØ8c/30		
Comprobación	Valores	Estado
Diámetro mínimo estribos:	Mínimo: 6 mm Calculado: 8 mm	Cumple
Separación mínima entre estribos: <i>Artículo 66.4.1 de la norma EHE-98</i>	Mínimo: 2 cm Calculado: 29.2 cm	Cumple
Separación mínima armadura longitudinal: <i>Artículo 66.4.1 de la norma EHE-98</i>	Mínimo: 2 cm	
-Armadura superior:	Calculado: 28 cm	Cumple
-Armadura inferior:	Calculado: 28 cm	Cumple
Separación máxima estribos: -Sin cortantes: <i>Artículo 44.2.3.4.1 de la norma EHE-98</i>	Máximo: 30 cm Calculado: 30 cm	Cumple
Separación máxima armadura longitudinal: <i>Artículo 42.3.1 de la norma EHE-98</i>	Máximo: 30 cm	
-Armadura superior:	Calculado: 28 cm	Cumple
-Armadura inferior:	Calculado: 28 cm	Cumple
Se cumplen todas las comprobaciones		

Referencia: C.1 [1 - 165] (Viga de atado) -Dimensiones: 40.0 cm x 40.0 cm -Armadura superior: 2 Ø12 -Armadura inferior: 2 Ø12 -Estribos: 1xØ8c/30		
Comprobación	Valores	Estado
Diámetro mínimo estribos:	Mínimo: 6 mm Calculado: 8 mm	Cumple
Separación mínima entre estribos: <i>Artículo 66.4.1 de la norma EHE-98</i>	Mínimo: 2 cm Calculado: 29.2 cm	Cumple
Separación mínima armadura longitudinal: <i>Artículo 66.4.1 de la norma EHE-98</i>	Mínimo: 2 cm	
-Armadura superior:	Calculado: 28 cm	Cumple
-Armadura inferior:	Calculado: 28 cm	Cumple



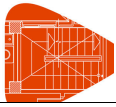
## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

Separación máxima estribos: -Sin cortantes: <i>Artículo 44.2.3.4.1 de la norma EHE-98</i>	Máximo: 30 cm Calculado: 30 cm	Cumple
Separación máxima armadura longitudinal: <i>Artículo 42.3.1 de la norma EHE-98</i>	Máximo: 30 cm	
-Armadura superior:	Calculado: 28 cm	Cumple
-Armadura inferior:	Calculado: 28 cm	Cumple
Se cumplen todas las comprobaciones		

Referencia: C.1 [1 - 25] (Viga de atado) -Dimensiones: 40.0 cm x 40.0 cm -Armadura superior: 2 Ø12 - Armadura inferior: 2 Ø12 -Estribos: 1xØ8c/30		
Comprobación	Valores	Estado
Diámetro mínimo estribos:	Mínimo: 6 mm Calculado: 8 mm	Cumple
Separación mínima entre estribos: <i>Artículo 66.4.1 de la norma EHE-98</i>	Mínimo: 2 cm Calculado: 29.2 cm	Cumple
Separación mínima armadura longitudinal: <i>Artículo 66.4.1 de la norma EHE-98</i>	Mínimo: 2 cm	
-Armadura superior:	Calculado: 28 cm	Cumple
-Armadura inferior:	Calculado: 28 cm	Cumple
Separación máxima estribos: -Sin cortantes: <i>Artículo 44.2.3.4.1 de la norma EHE-98</i>	Máximo: 30 cm Calculado: 30 cm	Cumple
Separación máxima armadura longitudinal: <i>Artículo 42.3.1 de la norma EHE-98</i>	Máximo: 30 cm	
-Armadura superior:	Calculado: 28 cm	Cumple
-Armadura inferior:	Calculado: 28 cm	Cumple
Se cumplen todas las comprobaciones		

Referencia: C.1 [344 - 526] (Viga de atado) -Dimensiones: 40.0 cm x 40.0 cm -Armadura superior: 2 Ø12 -Armadura inferior: 2 Ø12 -Estribos: 1xØ8c/30		
Comprobación	Valores	Estado
Diámetro mínimo estribos:	Mínimo: 6 mm Calculado: 8 mm	Cumple
Separación mínima entre estribos: <i>Artículo 66.4.1 de la norma EHE-98</i>	Mínimo: 2 cm Calculado: 29.2 cm	Cumple
Separación mínima armadura longitudinal: <i>Artículo 66.4.1 de la norma EHE-98</i>	Mínimo: 2 cm	
-Armadura superior:	Calculado: 28 cm	Cumple
-Armadura inferior:	Calculado: 28 cm	Cumple



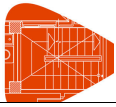
## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

Separación máxima estribos: -Sin cortantes: <i>Artículo 44.2.3.4.1 de la norma EHE-98</i>	Máximo: 30 cm Calculado: 30 cm	Cumple
Separación máxima armadura longitudinal: <i>Artículo 42.3.1 de la norma EHE-98</i>	Máximo: 30 cm	
-Armadura superior:	Calculado: 28 cm	Cumple
-Armadura inferior:	Calculado: 28 cm	Cumple
Se cumplen todas las comprobaciones		

Referencia: C.1 [506 - 526] (Viga de atado) -Dimensiones: 40.0 cm x 40.0 cm -Armadura superior: 2 Ø12 -Armadura inferior: 2 Ø12 -Estribos: 1xØ8c/30		
Comprobación	Valores	Estado
Diámetro mínimo estribos:	Mínimo: 6 mm Calculado: 8 mm	Cumple
Separación mínima entre estribos: <i>Artículo 66.4.1 de la norma EHE-98</i>	Mínimo: 2 cm Calculado: 29.2 cm	Cumple
Separación mínima armadura longitudinal: <i>Artículo 66.4.1 de la norma EHE-98</i>	Mínimo: 2 cm	
-Armadura superior:	Calculado: 28 cm	Cumple
-Armadura inferior:	Calculado: 28 cm	Cumple
Separación máxima estribos: -Sin cortantes: <i>Artículo 44.2.3.4.1 de la norma EHE-98</i>	Máximo: 30 cm Calculado: 30 cm	Cumple
Separación máxima armadura longitudinal: <i>Artículo 42.3.1 de la norma EHE-98</i>	Máximo: 30 cm	
-Armadura superior:	Calculado: 28 cm	Cumple
-Armadura inferior:	Calculado: 28 cm	Cumple
Se cumplen todas las comprobaciones		

Referencia: C.1 [339 - 344] (Viga de atado) -Dimensiones: 40.0 cm x 40.0 cm -Armadura superior: 2 Ø12 -Armadura inferior: 2 Ø12 -Estribos: 1xØ8c/30		
Comprobación	Valores	Estado
Diámetro mínimo estribos:	Mínimo: 6 mm Calculado: 8 mm	Cumple
Separación mínima entre estribos: <i>Artículo 66.4.1 de la norma EHE-98</i>	Mínimo: 2 cm Calculado: 29.2 cm	Cumple
Separación mínima armadura longitudinal: <i>Artículo 66.4.1 de la norma EHE-98</i>	Mínimo: 2 cm	
-Armadura superior:	Calculado: 28 cm	Cumple
-Armadura inferior:	Calculado: 28 cm	Cumple



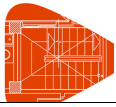
## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

Separación máxima estribos: -Sin cortantes: <i>Artículo 44.2.3.4.1 de la norma EHE-98</i>	Máximo: 30 cm Calculado: 30 cm	Cumple
Separación máxima armadura longitudinal: <i>Artículo 42.3.1 de la norma EHE-98</i>	Máximo: 30 cm	
-Armadura superior:	Calculado: 28 cm	Cumple
-Armadura inferior:	Calculado: 28 cm	Cumple
Se cumplen todas las comprobaciones		

Referencia: C.1 [339 - 506] (Viga de atado) -Dimensiones: 40.0 cm x 40.0 cm -Armadura superior: 2 Ø12 -Armadura inferior: 2 Ø12 -Estribos: 1xØ8c/30		
Comprobación	Valores	Estado
Diámetro mínimo estribos:	Mínimo: 6 mm Calculado: 8 mm	Cumple
Separación mínima entre estribos: <i>Artículo 66.4.1 de la norma EHE-98</i>	Mínimo: 2 cm Calculado: 29.2 cm	Cumple
Separación mínima armadura longitudinal: <i>Artículo 66.4.1 de la norma EHE-98</i>	Mínimo: 2 cm	
-Armadura superior:	Calculado: 28 cm	Cumple
-Armadura inferior:	Calculado: 28 cm	Cumple
Separación máxima estribos: -Sin cortantes: <i>Artículo 44.2.3.4.1 de la norma EHE-98</i>	Máximo: 30 cm Calculado: 30 cm	Cumple
Separación máxima armadura longitudinal: <i>Artículo 42.3.1 de la norma EHE-98</i>	Máximo: 30 cm	
-Armadura superior:	Calculado: 28 cm	Cumple
-Armadura inferior:	Calculado: 28 cm	Cumple
Se cumplen todas las comprobaciones		

Referencia: C.1 [332 - 485] (Viga de atado) -Dimensiones: 40.0 cm x 40.0 cm -Armadura superior: 2 Ø12 -Armadura inferior: 2 Ø12 -Estribos: 1xØ8c/30		
Comprobación	Valores	Estado
Diámetro mínimo estribos:	Mínimo: 6 mm Calculado: 8 mm	Cumple
Separación mínima entre estribos: <i>Artículo 66.4.1 de la norma EHE-98</i>	Mínimo: 2 cm Calculado: 29.2 cm	Cumple
Separación mínima armadura longitudinal: <i>Artículo 66.4.1 de la norma EHE-98</i>	Mínimo: 2 cm	
-Armadura superior:	Calculado: 28 cm	Cumple
-Armadura inferior:	Calculado: 28 cm	Cumple



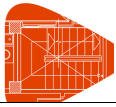
## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

Separación máxima estribos: -Sin cortantes: <i>Artículo 44.2.3.4.1 de la norma EHE-98</i>	Máximo: 30 cm Calculado: 30 cm	Cumple
Separación máxima armadura longitudinal: <i>Artículo 42.3.1 de la norma EHE-98</i>	Máximo: 30 cm	
-Armadura superior:	Calculado: 28 cm	Cumple
-Armadura inferior:	Calculado: 28 cm	Cumple
Se cumplen todas las comprobaciones		

Referencia: C.1 [332 - 339] (Viga de atado) -Dimensiones: 40.0 cm x 40.0 cm -Armadura superior: 2 Ø12 -Armadura inferior: 2 Ø12 -Estribos: 1xØ8c/30		
Comprobación	Valores	Estado
Diámetro mínimo estribos:	Mínimo: 6 mm Calculado: 8 mm	Cumple
Separación mínima entre estribos: <i>Artículo 66.4.1 de la norma EHE-98</i>	Mínimo: 2 cm Calculado: 29.2 cm	Cumple
Separación mínima armadura longitudinal: <i>Artículo 66.4.1 de la norma EHE-98</i>	Mínimo: 2 cm	
-Armadura superior:	Calculado: 28 cm	Cumple
-Armadura inferior:	Calculado: 28 cm	Cumple
Separación máxima estribos: -Sin cortantes: <i>Artículo 44.2.3.4.1 de la norma EHE-98</i>	Máximo: 30 cm Calculado: 30 cm	Cumple
Separación máxima armadura longitudinal: <i>Artículo 42.3.1 de la norma EHE-98</i>	Máximo: 30 cm	
-Armadura superior:	Calculado: 28 cm	Cumple
-Armadura inferior:	Calculado: 28 cm	Cumple
Se cumplen todas las comprobaciones		

Referencia: C.1 [327 - 465] (Viga de atado) -Dimensiones: 40.0 cm x 40.0 cm -Armadura superior: 2 Ø12 -Armadura inferior: 2 Ø12 -Estribos: 1xØ8c/30		
Comprobación	Valores	Estado
Diámetro mínimo estribos:	Mínimo: 6 mm Calculado: 8 mm	Cumple
Separación mínima entre estribos: <i>Artículo 66.4.1 de la norma EHE-98</i>	Mínimo: 2 cm Calculado: 29.2 cm	Cumple
Separación mínima armadura longitudinal: <i>Artículo 66.4.1 de la norma EHE-98</i>	Mínimo: 2 cm	
-Armadura superior:	Calculado: 28 cm	Cumple
-Armadura inferior:	Calculado: 28 cm	Cumple



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Separación máxima estribos: -Sin cortantes: <i>Artículo 44.2.3.4.1 de la norma EHE-98</i>	Máximo: 30 cm Calculado: 30 cm	Cumple
Separación máxima armadura longitudinal: <i>Artículo 42.3.1 de la norma EHE-98</i>	Máximo: 30 cm	
-Armadura superior:	Calculado: 28 cm	Cumple
-Armadura inferior:	Calculado: 28 cm	Cumple
Se cumplen todas las comprobaciones		

Referencia: C.1 [320 - 327] (Viga de atado) -Dimensiones: 40.0 cm x 40.0 cm -Armadura superior: 2 Ø12 -Armadura inferior: 2 Ø12 -Estribos: 1xØ8c/30		
Comprobación	Valores	Estado
Diámetro mínimo estribos:	Mínimo: 6 mm Calculado: 8 mm	Cumple
Separación mínima entre estribos: <i>Artículo 66.4.1 de la norma EHE-98</i>	Mínimo: 2 cm Calculado: 29.2 cm	Cumple
Separación mínima armadura longitudinal: <i>Artículo 66.4.1 de la norma EHE-98</i>	Mínimo: 2 cm	
-Armadura superior:	Calculado: 28 cm	Cumple
-Armadura inferior:	Calculado: 28 cm	Cumple
Separación máxima estribos: -Sin cortantes: <i>Artículo 44.2.3.4.1 de la norma EHE-98</i>	Máximo: 30 cm Calculado: 30 cm	Cumple
Separación máxima armadura longitudinal: <i>Artículo 42.3.1 de la norma EHE-98</i>	Máximo: 30 cm	
-Armadura superior:	Calculado: 28 cm	Cumple
-Armadura inferior:	Calculado: 28 cm	Cumple
Se cumplen todas las comprobaciones		

Referencia: C.1 [327 - 332] (Viga de atado) -Dimensiones: 40.0 cm x 40.0 cm -Armadura superior: 2 Ø12 -Armadura inferior: 2 Ø12 -Estribos: 1xØ8c/30		
Comprobación	Valores	Estado
Diámetro mínimo estribos:	Mínimo: 6 mm Calculado: 8 mm	Cumple
Separación mínima entre estribos: <i>Artículo 66.4.1 de la norma EHE-98</i>	Mínimo: 2 cm Calculado: 29.2 cm	Cumple
Separación mínima armadura longitudinal: <i>Artículo 66.4.1 de la norma EHE-98</i>	Mínimo: 2 cm	
-Armadura superior:	Calculado: 28 cm	Cumple
-Armadura inferior:	Calculado: 28 cm	Cumple



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NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

Separación máxima estribos: -Sin cortantes: <i>Artículo 44.2.3.4.1 de la norma EHE-98</i>	Máximo: 30 cm Calculado: 30 cm	Cumple
Separación máxima armadura longitudinal: <i>Artículo 42.3.1 de la norma EHE-98</i>	Máximo: 30 cm	
-Armadura superior:	Calculado: 28 cm	Cumple
-Armadura inferior:	Calculado: 28 cm	Cumple
Se cumplen todas las comprobaciones		

Referencia: C.1 [421 - 445] (Viga de atado) -Dimensiones: 40.0 cm x 40.0 cm -Armadura superior: 2 Ø12 -Armadura inferior: 2 Ø12 -Estribos: 1xØ8c/30		
Comprobación	Valores	Estado
Diámetro mínimo estribos:	Mínimo: 6 mm Calculado: 8 mm	Cumple
Separación mínima entre estribos: <i>Artículo 66.4.1 de la norma EHE-98</i>	Mínimo: 2 cm Calculado: 29.2 cm	Cumple
Separación mínima armadura longitudinal: <i>Artículo 66.4.1 de la norma EHE-98</i>	Mínimo: 2 cm	
-Armadura superior:	Calculado: 28 cm	Cumple
-Armadura inferior:	Calculado: 28 cm	Cumple
Separación máxima estribos: -Sin cortantes: <i>Artículo 44.2.3.4.1 de la norma EHE-98</i>	Máximo: 30 cm Calculado: 30 cm	Cumple
Separación máxima armadura longitudinal: <i>Artículo 42.3.1 de la norma EHE-98</i>	Máximo: 30 cm	
-Armadura superior:	Calculado: 28 cm	Cumple
-Armadura inferior:	Calculado: 28 cm	Cumple
Se cumplen todas las comprobaciones		

Referencia: C.1 [311 - 421] (Viga de atado) -Dimensiones: 40.0 cm x 40.0 cm -Armadura superior: 2 Ø12 -Armadura inferior: 2 Ø12 -Estribos: 1xØ8c/30		
Comprobación	Valores	Estado
Diámetro mínimo estribos:	Mínimo: 6 mm Calculado: 8 mm	Cumple
Separación mínima entre estribos: <i>Artículo 66.4.1 de la norma EHE-98</i>	Mínimo: 2 cm Calculado: 29.2 cm	Cumple
Separación mínima armadura longitudinal: <i>Artículo 66.4.1 de la norma EHE-98</i>	Mínimo: 2 cm	
-Armadura superior:	Calculado: 28 cm	Cumple
-Armadura inferior:	Calculado: 28 cm	Cumple



## Listado de cimentación

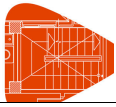
NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

Separación máxima estribos: -Sin cortantes: <i>Artículo 44.2.3.4.1 de la norma EHE-98</i>	Máximo: 30 cm Calculado: 30 cm	Cumple
Separación máxima armadura longitudinal: <i>Artículo 42.3.1 de la norma EHE-98</i>	Máximo: 30 cm	
-Armadura superior:	Calculado: 28 cm	Cumple
-Armadura inferior:	Calculado: 28 cm	Cumple
Se cumplen todas las comprobaciones		

Referencia: C.1 [102 - 189] (Viga de atado) -Dimensiones: 40.0 cm x 40.0 cm -Armadura superior: 2 Ø12 -Armadura inferior: 2 Ø12 -Estribos: 1xØ8c/30		
Comprobación	Valores	Estado
Diámetro mínimo estribos:	Mínimo: 6 mm Calculado: 8 mm	Cumple
Separación mínima entre estribos: <i>Artículo 66.4.1 de la norma EHE-98</i>	Mínimo: 2 cm Calculado: 29.2 cm	Cumple
Separación mínima armadura longitudinal: <i>Artículo 66.4.1 de la norma EHE-98</i>	Mínimo: 2 cm	
-Armadura superior:	Calculado: 28 cm	Cumple
-Armadura inferior:	Calculado: 28 cm	Cumple
Separación máxima estribos: -Sin cortantes: <i>Artículo 44.2.3.4.1 de la norma EHE-98</i>	Máximo: 30 cm Calculado: 30 cm	Cumple
Separación máxima armadura longitudinal: <i>Artículo 42.3.1 de la norma EHE-98</i>	Máximo: 30 cm	
-Armadura superior:	Calculado: 28 cm	Cumple
-Armadura inferior:	Calculado: 28 cm	Cumple
Se cumplen todas las comprobaciones		

Referencia: C.1 [83 - 102] (Viga de atado) -Dimensiones: 40.0 cm x 40.0 cm -Armadura superior: 2 Ø12 -Armadura inferior: 2 Ø12 -Estribos: 1xØ8c/30		
Comprobación	Valores	Estado
Diámetro mínimo estribos:	Mínimo: 6 mm Calculado: 8 mm	Cumple
Separación mínima entre estribos: <i>Artículo 66.4.1 de la norma EHE-98</i>	Mínimo: 2 cm Calculado: 29.2 cm	Cumple
Separación mínima armadura longitudinal: <i>Artículo 66.4.1 de la norma EHE-98</i>	Mínimo: 2 cm	
-Armadura superior:	Calculado: 28 cm	Cumple
-Armadura inferior:	Calculado: 28 cm	Cumple





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NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

Separación máxima estribos: -Sin cortantes: <i>Artículo 44.2.3.4.1 de la norma EHE-98</i>	Máximo: 30 cm Calculado: 30 cm	Cumple
Separación máxima armadura longitudinal: <i>Artículo 42.3.1 de la norma EHE-98</i>	Máximo: 30 cm	
-Armadura superior:	Calculado: 28 cm	Cumple
-Armadura inferior:	Calculado: 28 cm	Cumple
Se cumplen todas las comprobaciones		

Referencia: C.1 [174 - 222] (Viga de atado) -Dimensiones: 40.0 cm x 40.0 cm -Armadura superior: 2 Ø12 -Armadura inferior: 2 Ø12 -Estribos: 1xØ8c/30		
Comprobación	Valores	Estado
Diámetro mínimo estribos:	Mínimo: 6 mm Calculado: 8 mm	Cumple
Separación mínima entre estribos: <i>Artículo 66.4.1 de la norma EHE-98</i>	Mínimo: 2 cm Calculado: 29.2 cm	Cumple
Separación mínima armadura longitudinal: <i>Artículo 66.4.1 de la norma EHE-98</i>	Mínimo: 2 cm	
-Armadura superior:	Calculado: 28 cm	Cumple
-Armadura inferior:	Calculado: 28 cm	Cumple
Separación máxima estribos: -Sin cortantes: <i>Artículo 44.2.3.4.1 de la norma EHE-98</i>	Máximo: 30 cm Calculado: 30 cm	Cumple
Separación máxima armadura longitudinal: <i>Artículo 42.3.1 de la norma EHE-98</i>	Máximo: 30 cm	
-Armadura superior:	Calculado: 28 cm	Cumple
-Armadura inferior:	Calculado: 28 cm	Cumple
Se cumplen todas las comprobaciones		

Referencia: C.1 [165 - 174] (Viga de atado) -Dimensiones: 40.0 cm x 40.0 cm -Armadura superior: 2 Ø12 -Armadura inferior: 2 Ø12 -Estribos: 1xØ8c/30		
Comprobación	Valores	Estado
Diámetro mínimo estribos:	Mínimo: 6 mm Calculado: 8 mm	Cumple
Separación mínima entre estribos: <i>Artículo 66.4.1 de la norma EHE-98</i>	Mínimo: 2 cm Calculado: 29.2 cm	Cumple
Separación mínima armadura longitudinal: <i>Artículo 66.4.1 de la norma EHE-98</i>	Mínimo: 2 cm	
-Armadura superior:	Calculado: 28 cm	Cumple
-Armadura inferior:	Calculado: 28 cm	Cumple



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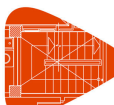
Separación máxima estribos: -Sin cortantes: <i>Artículo 44.2.3.4.1 de la norma EHE-98</i>	Máximo: 30 cm Calculado: 30 cm	Cumple
Separación máxima armadura longitudinal: <i>Artículo 42.3.1 de la norma EHE-98</i>	Máximo: 30 cm	
-Armadura superior:	Calculado: 28 cm	Cumple
-Armadura inferior:	Calculado: 28 cm	Cumple
Se cumplen todas las comprobaciones		

Referencia: C.1 [25 - 174] (Viga de atado) -Dimensiones: 40.0 cm x 40.0 cm -Armadura superior: 2 Ø12 -Armadura inferior: 2 Ø12 -Estribos: 1xØ8c/30		
Comprobación	Valores	Estado
Diámetro mínimo estribos:	Mínimo: 6 mm Calculado: 8 mm	Cumple
Separación mínima entre estribos: <i>Artículo 66.4.1 de la norma EHE-98</i>	Mínimo: 2 cm Calculado: 29.2 cm	Cumple
Separación mínima armadura longitudinal: <i>Artículo 66.4.1 de la norma EHE-98</i>	Mínimo: 2 cm	
-Armadura superior:	Calculado: 28 cm	Cumple
-Armadura inferior:	Calculado: 28 cm	Cumple
Separación máxima estribos: -Sin cortantes: <i>Artículo 44.2.3.4.1 de la norma EHE-98</i>	Máximo: 30 cm Calculado: 30 cm	Cumple
Separación máxima armadura longitudinal: <i>Artículo 42.3.1 de la norma EHE-98</i>	Máximo: 30 cm	
-Armadura superior:	Calculado: 28 cm	Cumple
-Armadura inferior:	Calculado: 28 cm	Cumple
Se cumplen todas las comprobaciones		

### 3.- LISTADO DE PLACAS DE ANCLAJE

#### 3.1.- Descripción

Referencias	Placa base	Disposición	Rigidizadores	Pernos
1	Ancho X: 250 mm Ancho Y: 250 mm Espesor: 14 mm	Posición X: Centrada Posición Y: Centrada	Paralelos X: - Paralelos Y: -	4Ø10 mm L=30 cm Prolongación recta
25	Ancho X: 350 mm Ancho Y: 350 mm Espesor: 12 mm	Posición X: Centrada Posición Y: Centrada	Paralelos X: - Paralelos Y: -	4Ø16 mm L=40 cm Prolongación recta
44	Ancho X: 300 mm Ancho Y: 300 mm Espesor: 15 mm	Posición X: Centrada Posición Y: Centrada	Paralelos X: - Paralelos Y: 1(100x0x5.0)	4Ø14 mm L=45 cm Prolongación recta

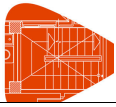


## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

63, 83	Ancho X: 300 mm Ancho Y: 300 mm Espesor: 15 mm	Posición X: Centrada Posición Y: Centrada	Paralelos X: - Paralelos Y: 2(100x0x5.0)	4Ø14 mm L=50 cm Prolongación recta
102	Ancho X: 350 mm Ancho Y: 350 mm Espesor: 12 mm	Posición X: Centrada Posición Y: Centrada	Paralelos X: - Paralelos Y: -	4Ø16 mm L=35 cm Prolongación recta
165, 311	Ancho X: 300 mm Ancho Y: 300 mm Espesor: 15 mm	Posición X: Centrada Posición Y: Centrada	Paralelos X: - Paralelos Y: 2(100x0x5.0)	4Ø14 mm L=45 cm Prolongación recta
174	Ancho X: 450 mm Ancho Y: 450 mm Espesor: 18 mm	Posición X: Centrada Posición Y: Centrada	Paralelos X: - Paralelos Y: 2(100x0x7.0)	4Ø20 mm L=65 cm Prolongación recta
189	Ancho X: 550 mm Ancho Y: 550 mm Espesor: 20 mm	Posición X: Centrada Posición Y: Centrada	Paralelos X: - Paralelos Y: 2(150x0x8.0)	8Ø25 mm L=45 cm Prolongación recta
213	Ancho X: 350 mm Ancho Y: 350 mm Espesor: 15 mm	Posición X: Centrada Posición Y: Centrada	Paralelos X: - Paralelos Y: 2(100x0x6.0)	4Ø16 mm L=45 cm Prolongación recta
222	Ancho X: 550 mm Ancho Y: 550 mm Espesor: 20 mm	Posición X: Centrada Posición Y: Centrada	Paralelos X: - Paralelos Y: 2(150x0x8.0)	8Ø25 mm L=40 cm Prolongación recta
238	Ancho X: 550 mm Ancho Y: 550 mm Espesor: 22 mm	Posición X: Centrada Posición Y: Centrada	Paralelos X: - Paralelos Y: 2(150x0x8.0)	8Ø25 mm L=60 cm Prolongación recta
262	Ancho X: 350 mm Ancho Y: 350 mm Espesor: 15 mm	Posición X: Centrada Posición Y: Centrada	Paralelos X: - Paralelos Y: 2(100x0x6.0)	8Ø16 mm L=30 cm Prolongación recta
271	Ancho X: 550 mm Ancho Y: 550 mm Espesor: 20 mm	Posición X: Centrada Posición Y: Centrada	Paralelos X: - Paralelos Y: 2(150x0x8.0)	4Ø25 mm L=55 cm Prolongación recta
287	Ancho X: 550 mm Ancho Y: 550 mm Espesor: 20 mm	Posición X: Centrada Posición Y: Centrada	Paralelos X: - Paralelos Y: 2(150x0x8.0)	8Ø25 mm L=60 cm Prolongación recta
320	Ancho X: 350 mm Ancho Y: 350 mm Espesor: 14 mm	Posición X: Centrada Posición Y: Centrada	Paralelos X: - Paralelos Y: -	4Ø16 mm L=50 cm Prolongación recta
327, 332, 339	Ancho X: 200 mm Ancho Y: 200 mm Espesor: 10 mm	Posición X: Centrada Posición Y: Centrada	Paralelos X: - Paralelos Y: -	4Ø8 mm L=30 cm Prolongación recta
344, 445, 526	Ancho X: 350 mm Ancho Y: 350 mm Espesor: 12 mm	Posición X: Centrada Posición Y: Centrada	Paralelos X: - Paralelos Y: -	4Ø16 mm L=30 cm Prolongación recta
421	Ancho X: 300 mm Ancho Y: 300 mm Espesor: 15 mm	Posición X: Centrada Posición Y: Centrada	Paralelos X: - Paralelos Y: -	4Ø14 mm L=35 cm Prolongación recta
465, 485	Ancho X: 300 mm Ancho Y: 300 mm Espesor: 15 mm	Posición X: Centrada Posición Y: Centrada	Paralelos X: - Paralelos Y: 2(100x0x5.0)	4Ø14 mm L=35 cm Prolongación recta
506	Ancho X: 300 mm Ancho Y: 300 mm Espesor: 15 mm	Posición X: Centrada Posición Y: Centrada	Paralelos X: - Paralelos Y: 2(100x0x5.0)	4Ø14 mm L=30 cm Prolongación recta

### 3.2.- Comprobación



## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

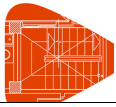
Referencia: 1 -Placa base: Ancho X: 250 mm Ancho Y: 250 mm Espesor: 14 mm -Pernos: 4Ø10 mm L=30 cm Prolongación recta -Disposición: Posición X: Centrada Posición Y: Centrada

Comprobación	Valores	Estado
Separación mínima entre pernos: <i>3 diámetros</i>	Mínimo: 30 mm Calculado: 210 mm	Cumple
Separación mínima pernos-borde: <i>1.5 diámetros</i>	Mínimo: 15 mm Calculado: 20 mm	Cumple
Longitud mínima del perno: <i>Se calcula la longitud de anclaje necesaria por adherencia.</i>	Mínimo: 15 cm Calculado: 30 cm	Cumple
Anclaje perno en hormigón:		
-Tracción:	Máximo: 2.614 t Calculado: 2.025 t	Cumple
-Cortante:	Máximo: 1.83 t Calculado: 0.222 t	Cumple
-Tracción + Cortante:	Máximo: 2.614 t Calculado: 2.343 t	Cumple
Tracción en vástago de pernos:	Máximo: 2.561 t Calculado: 1.93 t	Cumple
Tensión de Von Mises en vástago de pernos:	Máximo: 4077.47 kp/cm <sup>2</sup> Calculado: 2496.69 kp/cm <sup>2</sup>	Cumple
Aplastamiento perno en placa: <i>Límite del cortante en un perno actuando contra la placa</i>	Máximo: 7.849 t Calculado: 0.208 t	Cumple
Tensión de Von Mises en secciones globales:	Máximo: 2803.26 kp/cm <sup>2</sup>	
-Derecha:	Calculado: 977.636 kp/cm <sup>2</sup>	Cumple
-Izquierda:	Calculado: 1430.63 kp/cm <sup>2</sup>	Cumple
-Arriba:	Calculado: 2126.54 kp/cm <sup>2</sup>	Cumple
-Abajo:	Calculado: 1733.53 kp/cm <sup>2</sup>	Cumple
Flecha global equivalente: <i>Limitación de la deformabilidad de los vuelos</i>	Mínimo: 250	
-Derecha:	Calculado: 3289.16	Cumple
-Izquierda:	Calculado: 1030.21	Cumple
-Arriba:	Calculado: 570.181	Cumple
-Abajo:	Calculado: 556.086	Cumple
Tensión de Von Mises local: <i>Tensión por tracción de pernos sobre placas en voladizo</i>	Máximo: 2803.26 kp/cm <sup>2</sup> Calculado: 0 kp/cm <sup>2</sup>	Cumple

Se cumplen todas las comprobaciones

Referencia: 25 -Placa base: Ancho X: 350 mm Ancho Y: 350 mm Espesor: 12 mm -Pernos: 4Ø16 mm L=40 cm Prolongación recta -Disposición: Posición X: Centrada Posición Y: Centrada

Comprobación	Valores	Estado
Separación mínima entre pernos: <i>3 diámetros</i>	Mínimo: 48 mm Calculado: 291 mm	Cumple



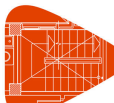
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Separación mínima pernos-borde: <i>1.5 diámetros</i>	Mínimo: 24 mm Calculado: 30 mm	Cumple
Longitud mínima del perno: <i>Se calcula la longitud de anclaje necesaria por adherencia.</i>	Mínimo: 19 cm Calculado: 40 cm	Cumple
Anclaje perno en hormigón:		
-Tracción:	Máximo: 5.576 t Calculado: 4.678 t	Cumple
-Cortante:	Máximo: 3.904 t Calculado: 0.553 t	Cumple
-Tracción + Cortante:	Máximo: 5.576 t Calculado: 5.467 t	Cumple
Tracción en vástago de pernos:	Máximo: 6.557 t Calculado: 4.44 t	Cumple
Tensión de Von Mises en vástago de pernos:	Máximo: 4077.47 kp/cm <sup>2</sup> Calculado: 2263.27 kp/cm <sup>2</sup>	Cumple
Aplastamiento perno en placa: <i>Límite del cortante en un perno actuando contra la placa</i>	Máximo: 10.765 t Calculado: 0.518 t	Cumple
Tensión de Von Mises en secciones globales:	Máximo: 2803.26 kp/cm <sup>2</sup>	
-Derecha:	Calculado: 2502.84 kp/cm <sup>2</sup>	Cumple
-Izquierda:	Calculado: 2476.71 kp/cm <sup>2</sup>	Cumple
-Arriba:	Calculado: 1249.96 kp/cm <sup>2</sup>	Cumple
-Abajo:	Calculado: 712.362 kp/cm <sup>2</sup>	Cumple
Flecha global equivalente: <i>Limitación de la deformabilidad de los vuelos</i>	Mínimo: 250	
-Derecha:	Calculado: 608.721	Cumple
-Izquierda:	Calculado: 567.008	Cumple
-Arriba:	Calculado: 2325.22	Cumple
-Abajo:	Calculado: 3785.39	Cumple
Tensión de Von Mises local: <i>Tensión por tracción de pernos sobre placas en voladizo</i>	Máximo: 2803.26 kp/cm <sup>2</sup> Calculado: 0 kp/cm <sup>2</sup>	Cumple
Se cumplen todas las comprobaciones		

Referencia: 44 -Placa base: Ancho X: 300 mm Ancho Y: 300 mm Espesor: 15 mm -Pernos: 4Ø14 mm L=45 cm Prolongación recta -Disposición: Posición X: Centrada Posición Y: Centrada -Rigidizadores: Paralelos X: - Paralelos Y: 1(100x0x5.0)

Comprobación	Valores	Estado
Separación mínima entre pernos: <i>3 diámetros</i>	Mínimo: 42 mm Calculado: 241 mm	Cumple
Separación mínima pernos-borde: <i>1.5 diámetros</i>	Mínimo: 21 mm Calculado: 30 mm	Cumple
Esbeltez de rigidizadores: -Paralelos a Y:	Máximo: 50 Calculado: 46.6	Cumple
Longitud mínima del perno: <i>Se calcula la longitud de anclaje necesaria por adherencia.</i>	Mínimo: 17 cm Calculado: 45 cm	Cumple



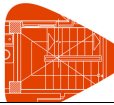
## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

Anclaje perno en hormigón:		
-Tracción:	Máximo: 5.489 t Calculado: 4.499 t	Cumple
-Cortante:	Máximo: 3.843 t Calculado: 0.507 t	Cumple
-Tracción + Cortante:	Máximo: 5.489 t Calculado: 5.223 t	Cumple
Tracción en vástago de pernos:	Máximo: 5.023 t Calculado: 4.25 t	Cumple
Tensión de Von Mises en vástago de pernos:	Máximo: 4077.47 kp/cm <sup>2</sup> Calculado: 2822.85 kp/cm <sup>2</sup>	Cumple
Aplastamiento perno en placa: <i>Límite del cortante en un perno actuando contra la placa</i>	Máximo: 11.774 t Calculado: 0.476 t	Cumple
Tensión de Von Mises en secciones globales:	Máximo: 2803.26 kp/cm <sup>2</sup>	
-Derecha:	Calculado: 1427.72 kp/cm <sup>2</sup>	Cumple
-Izquierda:	Calculado: 1361.03 kp/cm <sup>2</sup>	Cumple
-Arriba:	Calculado: 2608.06 kp/cm <sup>2</sup>	Cumple
-Abajo:	Calculado: 2776.6 kp/cm <sup>2</sup>	Cumple
Flecha global equivalente: <i>Limitación de la deformabilidad de los vuelos</i>	Mínimo: 250	
-Derecha:	Calculado: 2232.42	Cumple
-Izquierda:	Calculado: 2481.71	Cumple
-Arriba:	Calculado: 3661.8	Cumple
-Abajo:	Calculado: 3437.75	Cumple
Tensión de Von Mises local: <i>Tensión por tracción de pernos sobre placas en voladizo</i>	Máximo: 2803.26 kp/cm <sup>2</sup> Calculado: 0 kp/cm <sup>2</sup>	Cumple
Se cumplen todas las comprobaciones		

Referencia: 63 -Placa base: Ancho X: 300 mm Ancho Y: 300 mm Espesor: 15 mm -Pernos: 4Ø14 mm  
L=50 cm Prolongación recta -Disposición: Posición X: Centrada Posición Y: Centrada -Rigidizadores:  
Paralelos X: - Paralelos Y: 2(100x0x5.0)

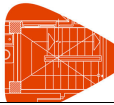
Comprobación	Valores	Estado
Separación mínima entre pernos: <i>3 diámetros</i>	Mínimo: 42 mm Calculado: 241 mm	Cumple
Separación mínima pernos-borde: <i>1.5 diámetros</i>	Mínimo: 21 mm Calculado: 30 mm	Cumple
Esbeltez de rigidizadores: -Paralelos a Y:	Máximo: 50 Calculado: 46.6	Cumple
Longitud mínima del perno: <i>Se calcula la longitud de anclaje necesaria por adherencia.</i>	Mínimo: 17 cm Calculado: 50 cm	Cumple
Anclaje perno en hormigón: -Tracción:	Máximo: 6.099 t Calculado: 5.035 t	Cumple



## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas		
-Cortante:	Máximo: 4.269 t Calculado: 0.535 t	Cumple
-Tracción + Cortante:	Máximo: 6.099 t Calculado: 5.799 t	Cumple
Tracción en vástago de pernos:	Máximo: 5.023 t Calculado: 4.761 t	Cumple
Tensión de Von Mises en vástago de pernos:	Máximo: 4077.47 kp/cm <sup>2</sup> Calculado: 3154.69 kp/cm <sup>2</sup>	Cumple
Aplastamiento perno en placa: <i>Límite del cortante en un perno actuando contra la placa</i>	Máximo: 11.774 t Calculado: 0.501 t	Cumple
Tensión de Von Mises en secciones globales:	Máximo: 2803.26 kp/cm <sup>2</sup>	
-Derecha:	Calculado: 1580.86 kp/cm <sup>2</sup>	Cumple
-Izquierda:	Calculado: 1527.84 kp/cm <sup>2</sup>	Cumple
-Arriba:	Calculado: 1550.51 kp/cm <sup>2</sup>	Cumple
-Abajo:	Calculado: 1673.01 kp/cm <sup>2</sup>	Cumple
Flecha global equivalente: <i>Limitación de la deformabilidad de los vuelos</i>	Mínimo: 250	
-Derecha:	Calculado: 2044.81	Cumple
-Izquierda:	Calculado: 2204.73	Cumple
-Arriba:	Calculado: 6025.87	Cumple
-Abajo:	Calculado: 5645.59	Cumple
Tensión de Von Mises local: <i>Tensión por tracción de pernos sobre placas en voladizo</i>	Máximo: 2803.26 kp/cm <sup>2</sup> Calculado: 0 kp/cm <sup>2</sup>	Cumple
Se cumplen todas las comprobaciones		

Referencia: 83 -Placa base: Ancho X: 300 mm Ancho Y: 300 mm Espesor: 15 mm -Pernos: 4Ø14 mm L=50 cm Prolongación recta -Disposición: Posición X: Centrada Posición Y: Centrada -Rigidizadores: Paralelos X: - Paralelos Y: 2(100x0x5.0)		
Comprobación	Valores	Estado
Separación mínima entre pernos: <i>3 diámetros</i>	Mínimo: 42 mm Calculado: 241 mm	Cumple
Separación mínima pernos-borde: <i>1.5 diámetros</i>	Mínimo: 21 mm Calculado: 30 mm	Cumple
Esbeltez de rigidizadores: -Paralelos a Y:	Máximo: 50 Calculado: 46.6	Cumple
Longitud mínima del perno: <i>Se calcula la longitud de anclaje necesaria por adherencia.</i>	Mínimo: 17 cm Calculado: 50 cm	Cumple
Anclaje perno en hormigón:		
-Tracción:	Máximo: 6.099 t Calculado: 4.812 t	Cumple
-Cortante:	Máximo: 4.269 t Calculado: 0.521 t	Cumple
-Tracción + Cortante:	Máximo: 6.099 t Calculado: 5.556 t	Cumple



## Listado de cimentación

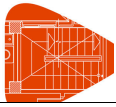
NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

Tracción en vástago de pernos:	Máximo: 5.023 t Calculado: 4.547 t	Cumple
Tensión de Von Mises en vástago de pernos:	Máximo: 4077.47 kp/cm <sup>2</sup> Calculado: 3014.84 kp/cm <sup>2</sup>	Cumple
Aplastamiento perno en placa: <i>Límite del cortante en un perno actuando contra la placa</i>	Máximo: 11.774 t Calculado: 0.489 t	Cumple
Tensión de Von Mises en secciones globales: -Derecha: -Izquierda: -Arriba: -Abajo:	Máximo: 2803.26 kp/cm <sup>2</sup> Calculado: 1543.98 kp/cm <sup>2</sup> Calculado: 1481.77 kp/cm <sup>2</sup> Calculado: 1479.46 kp/cm <sup>2</sup> Calculado: 1554.33 kp/cm <sup>2</sup>	Cumple Cumple Cumple Cumple
Flecha global equivalente: <i>Limitación de la deformabilidad de los vuelos</i> -Derecha: -Izquierda: -Arriba: -Abajo:	Mínimo: 250 Calculado: 2027.32 Calculado: 2218.55 Calculado: 6318.93 Calculado: 6012.69	Cumple Cumple Cumple Cumple
Tensión de Von Mises local: <i>Tensión por tracción de pernos sobre placas en voladizo</i>	Máximo: 2803.26 kp/cm <sup>2</sup> Calculado: 0 kp/cm <sup>2</sup>	Cumple
Se cumplen todas las comprobaciones		

Referencia: 102 -Placa base: Ancho X: 350 mm Ancho Y: 350 mm Espesor: 12 mm -Pernos: 4Ø16 mm L=35 cm Prolongación recta -Disposición: Posición X: Centrada Posición Y: Centrada

Comprobación	Valores	Estado
Separación mínima entre pernos: <i>3 diámetros</i>	Mínimo: 48 mm Calculado: 291 mm	Cumple
Separación mínima pernos-borde: <i>1.5 diámetros</i>	Mínimo: 24 mm Calculado: 30 mm	Cumple
Longitud mínima del perno: <i>Se calcula la longitud de anclaje necesaria por adherencia.</i>	Mínimo: 19 cm Calculado: 35 cm	Cumple
Anclaje perno en hormigón: -Tracción: -Cortante: -Tracción + Cortante:	Máximo: 4.879 t Calculado: 3.806 t Máximo: 3.416 t Calculado: 0.47 t Máximo: 4.879 t Calculado: 4.477 t	Cumple Cumple Cumple
Tracción en vástago de pernos:	Máximo: 6.557 t Calculado: 3.577 t	Cumple
Tensión de Von Mises en vástago de pernos:	Máximo: 4077.47 kp/cm <sup>2</sup> Calculado: 1822.61 kp/cm <sup>2</sup>	Cumple
Aplastamiento perno en placa: <i>Límite del cortante en un perno actuando contra la placa</i>	Máximo: 10.765 t Calculado: 0.44 t	Cumple
Tensión de Von Mises en secciones globales:	Máximo: 2803.26 kp/cm <sup>2</sup>	



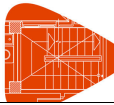


## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas		
-Derecha:	Calculado: 1172.81 kp/cm <sup>2</sup>	Cumple
-Izquierda:	Calculado: 1492.47 kp/cm <sup>2</sup>	Cumple
-Arriba:	Calculado: 1391.69 kp/cm <sup>2</sup>	Cumple
-Abajo:	Calculado: 905.47 kp/cm <sup>2</sup>	Cumple
Flecha global equivalente: <i>Limitación de la deformabilidad de los vuelos</i>	Mínimo: 250	
-Derecha:	Calculado: 2224.46	Cumple
-Izquierda:	Calculado: 1436.8	Cumple
-Arriba:	Calculado: 1608.52	Cumple
-Abajo:	Calculado: 2007.69	Cumple
Tensión de Von Mises local: <i>Tensión por tracción de pernos sobre placas en voladizo</i>	Máximo: 2803.26 kp/cm <sup>2</sup> Calculado: 0 kp/cm <sup>2</sup>	Cumple
Se cumplen todas las comprobaciones		

Referencia: 165 -Placa base: Ancho X: 300 mm Ancho Y: 300 mm Espesor: 15 mm -Pernos: 4Ø14 mm L=45 cm Prolongación recta -Disposición: Posición X: Centrada Posición Y: Centrada -Rigidizadores: Paralelos X: - Paralelos Y: 2(100x0x5.0)

Comprobación	Valores	Estado
Separación mínima entre pernos: <i>3 diámetros</i>	Mínimo: 42 mm Calculado: 241 mm	Cumple
Separación mínima pernos-borde: <i>1.5 diámetros</i>	Mínimo: 21 mm Calculado: 30 mm	Cumple
Esbeltez de rigidizadores: -Paralelos a Y:	Máximo: 50 Calculado: 46.6	Cumple
Longitud mínima del perno: <i>Se calcula la longitud de anclaje necesaria por adherencia.</i>	Mínimo: 17 cm Calculado: 45 cm	Cumple
Anclaje perno en hormigón:		
-Tracción:	Máximo: 5.489 t Calculado: 4.708 t	Cumple
-Cortante:	Máximo: 3.843 t Calculado: 0.541 t	Cumple
-Tracción + Cortante:	Máximo: 5.489 t Calculado: 5.481 t	Cumple
Tracción en vástago de pernos:	Máximo: 5.023 t Calculado: 4.486 t	Cumple
Tensión de Von Mises en vástago de pernos:	Máximo: 4077.47 kp/cm <sup>2</sup> Calculado: 2981.91 kp/cm <sup>2</sup>	Cumple
Aplastamiento perno en placa: <i>Límite del cortante en un perno actuando contra la placa</i>	Máximo: 11.774 t Calculado: 0.51 t	Cumple
Tensión de Von Mises en secciones globales:	Máximo: 2803.26 kp/cm <sup>2</sup>	
-Derecha:	Calculado: 1039.03 kp/cm <sup>2</sup>	Cumple
-Izquierda:	Calculado: 1502.39 kp/cm <sup>2</sup>	Cumple
-Arriba:	Calculado: 1639.06 kp/cm <sup>2</sup>	Cumple



## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas		
-Abajo:	Calculado: 1420.66 kp/cm <sup>2</sup>	Cumple
Flecha global equivalente: <i>Limitación de la deformabilidad de los vuelos</i>	Mínimo: 250	
-Derecha:	Calculado: 2636.42	Cumple
-Izquierda:	Calculado: 1874.84	Cumple
-Arriba:	Calculado: 5771.29	Cumple
-Abajo:	Calculado: 6610.18	Cumple
Tensión de Von Mises local: <i>Tensión por tracción de pernos sobre placas en voladizo</i>	Máximo: 2803.26 kp/cm <sup>2</sup> Calculado: 0 kp/cm <sup>2</sup>	Cumple
Se cumplen todas las comprobaciones		

Referencia: 174 -Placa base: Ancho X: 450 mm Ancho Y: 450 mm Espesor: 18 mm -Pernos: 4Ø20 mm L=65 cm Prolongación recta -Disposición: Posición X: Centrada Posición Y: Centrada -Rigidizadores: Paralelos X: - Paralelos Y: 2(100x0x7.0)

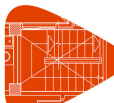
Comprobación	Valores	Estado
Separación mínima entre pernos: <i>3 diámetros</i>	Mínimo: 60 mm Calculado: 370 mm	Cumple
Separación mínima pernos-borde: <i>1.5 diámetros</i>	Mínimo: 30 mm Calculado: 40 mm	Cumple
Esbeltez de rigidizadores: -Paralelos a Y:	Máximo: 50 Calculado: 35.9	Cumple
Longitud mínima del perno: <i>Se calcula la longitud de anclaje necesaria por adherencia.</i>	Mínimo: 24 cm Calculado: 65 cm	Cumple
Anclaje perno en hormigón:		
-Tracción:	Máximo: 11.327 t Calculado: 9.317 t	Cumple
-Cortante:	Máximo: 7.929 t Calculado: 0.934 t	Cumple
-Tracción + Cortante:	Máximo: 11.327 t Calculado: 10.652 t	Cumple
Tracción en vástago de pernos:	Máximo: 10.243 t Calculado: 8.578 t	Cumple
Tensión de Von Mises en vástago de pernos:	Máximo: 4077.47 kp/cm <sup>2</sup> Calculado: 2781.05 kp/cm <sup>2</sup>	Cumple
Aplastamiento perno en placa: <i>Límite del cortante en un perno actuando contra la placa</i>	Máximo: 20.183 t Calculado: 0.861 t	Cumple
Tensión de Von Mises en secciones globales:	Máximo: 2803.26 kp/cm <sup>2</sup>	
-Derecha:	Calculado: 1172.2 kp/cm <sup>2</sup>	Cumple
-Izquierda:	Calculado: 1174.73 kp/cm <sup>2</sup>	Cumple
-Arriba:	Calculado: 2038.35 kp/cm <sup>2</sup>	Cumple
-Abajo:	Calculado: 2729.62 kp/cm <sup>2</sup>	Cumple
Flecha global equivalente: <i>Limitación de la deformabilidad de los vuelos</i>	Mínimo: 250	
-Derecha:	Calculado: 2259.02	Cumple



## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas		
-Izquierda:	Calculado: 2261.62	Cumple
-Arriba:	Calculado: 4221.58	Cumple
-Abajo:	Calculado: 3145.44	Cumple
Tensión de Von Mises local: <i>Tensión por tracción de pernos sobre placas en voladizo</i>	Máximo: 2803.26 kp/cm <sup>2</sup> Calculado: 0 kp/cm <sup>2</sup>	Cumple
Se cumplen todas las comprobaciones		

Referencia: 189 -Placa base: Ancho X: 550 mm Ancho Y: 550 mm Espesor: 20 mm -Pernos: 8Ø25 mm L=45 cm Prolongación recta -Disposición: Posición X: Centrada Posición Y: Centrada -Rigidizadores: Paralelos X: - Paralelos Y: 2(150x0x8.0)		
Comprobación	Valores	Estado
Separación mínima entre pernos: <i>3 diámetros</i>	Mínimo: 75 mm Calculado: 236 mm	Cumple
Separación mínima pernos-borde: <i>1.5 diámetros</i>	Mínimo: 37 mm Calculado: 40 mm	Cumple
Esbeltez de rigidizadores: -Paralelos a Y:	Máximo: 50 Calculado: 46.7	Cumple
Longitud mínima del perno: <i>Se calcula la longitud de anclaje necesaria por adherencia.</i>	Mínimo: 30 cm Calculado: 45 cm	Cumple
Anclaje perno en hormigón:		
-Tracción:	Máximo: 9.802 t Calculado: 8.564 t	Cumple
-Cortante:	Máximo: 6.862 t Calculado: 0.743 t	Cumple
-Tracción + Cortante:	Máximo: 9.802 t Calculado: 9.625 t	Cumple
Tracción en vástago de pernos:	Máximo: 16.016 t Calculado: 7.907 t	Cumple
Tensión de Von Mises en vástago de pernos:	Máximo: 4077.47 kp/cm <sup>2</sup> Calculado: 1632.78 kp/cm <sup>2</sup>	Cumple
Aplastamiento perno en placa: <i>Límite del cortante en un perno actuando contra la placa</i>	Máximo: 28.033 t Calculado: 0.687 t	Cumple
Tensión de Von Mises en secciones globales:	Máximo: 2803.26 kp/cm <sup>2</sup>	
-Derecha:	Calculado: 1245.83 kp/cm <sup>2</sup>	Cumple
-Izquierda:	Calculado: 1560.62 kp/cm <sup>2</sup>	Cumple
-Arriba:	Calculado: 2237.88 kp/cm <sup>2</sup>	Cumple
-Abajo:	Calculado: 2001.43 kp/cm <sup>2</sup>	Cumple
Flecha global equivalente: <i>Limitación de la deformabilidad de los vuelos</i>	Mínimo: 250	
-Derecha:	Calculado: 1675.26	Cumple
-Izquierda:	Calculado: 1613.05	Cumple
-Arriba:	Calculado: 4006.46	Cumple
-Abajo:	Calculado: 3687.34	Cumple



## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

Tensión de Von Mises local: <i>Tensión por tracción de pernos sobre placas en voladizo</i>	Máximo: 2803.26 kp/cm <sup>2</sup> Calculado: 2082.31 kp/cm <sup>2</sup>	Cumple
Se cumplen todas las comprobaciones		

Referencia: 213 -Placa base: Ancho X: 350 mm Ancho Y: 350 mm Espesor: 15 mm -Pernos: 4Ø16 mm L=45 cm Prolongación recta -Disposición: Posición X: Centrada Posición Y: Centrada -Rigidizadores: Paralelos X: - Paralelos Y: 2(100x0x6.0)		
Comprobación	Valores	Estado
Separación mínima entre pernos: <i>3 diámetros</i>	Mínimo: 48 mm Calculado: 291 mm	Cumple
Separación mínima pernos-borde: <i>1.5 diámetros</i>	Mínimo: 24 mm Calculado: 30 mm	Cumple
Esbeltez de rigidizadores: -Paralelos a Y:	Máximo: 50 Calculado: 44	Cumple
Longitud mínima del perno: <i>Se calcula la longitud de anclaje necesaria por adherencia.</i>	Mínimo: 19 cm Calculado: 45 cm	Cumple
Anclaje perno en hormigón: -Tracción:  -Cortante:  -Tracción + Cortante:	Máximo: 6.274 t Calculado: 4.896 t  Máximo: 4.391 t Calculado: 0.583 t  Máximo: 6.274 t Calculado: 5.729 t	Cumple  Cumple  Cumple
Tracción en vástago de pernos:	Máximo: 6.557 t Calculado: 4.662 t	Cumple
Tensión de Von Mises en vástago de pernos:	Máximo: 4077.47 kp/cm <sup>2</sup> Calculado: 2378.27 kp/cm <sup>2</sup>	Cumple
Aplastamiento perno en placa: <i>Límite del cortante en un perno actuando contra la placa</i>	Máximo: 13.456 t Calculado: 0.549 t	Cumple
Tensión de Von Mises en secciones globales: -Derecha: -Izquierda: -Arriba: -Abajo:	Máximo: 2803.26 kp/cm <sup>2</sup> Calculado: 1393.73 kp/cm <sup>2</sup> Calculado: 1869.73 kp/cm <sup>2</sup> Calculado: 1833.97 kp/cm <sup>2</sup> Calculado: 1742 kp/cm <sup>2</sup>	Cumple Cumple Cumple Cumple
Flecha global equivalente: <i>Limitación de la deformabilidad de los vuelos</i> -Derecha: -Izquierda: -Arriba: -Abajo:	Mínimo: 250 Calculado: 1757.42 Calculado: 1161.86 Calculado: 3772.56 Calculado: 3839.06	Cumple Cumple Cumple Cumple
Tensión de Von Mises local: <i>Tensión por tracción de pernos sobre placas en voladizo</i>	Máximo: 2803.26 kp/cm <sup>2</sup> Calculado: 0 kp/cm <sup>2</sup>	Cumple
Se cumplen todas las comprobaciones		

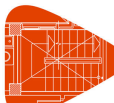


## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

Referencia: 222 -Placa base: Ancho X: 550 mm Ancho Y: 550 mm Espesor: 20 mm -Pernos: 8Ø25 mm L=40 cm Prolongación recta -Disposición: Posición X: Centrada Posición Y: Centrada -Rigidizadores: Paralelos X: - Paralelos Y: 2(150x0x8.0)

Comprobación	Valores	Estado
Separación mínima entre pernos: <i>3 diámetros</i>	Mínimo: 75 mm Calculado: 236 mm	Cumple
Separación mínima pernos-borde: <i>1.5 diámetros</i>	Mínimo: 37 mm Calculado: 40 mm	Cumple
Esbeltez de rigidizadores: -Paralelos a Y:	Máximo: 50 Calculado: 46.7	Cumple
Longitud mínima del perno: <i>Se calcula la longitud de anclaje necesaria por adherencia.</i>	Mínimo: 30 cm Calculado: 40 cm	Cumple
Anclaje perno en hormigón: -Tracción:  -Cortante:  -Tracción + Cortante:	Máximo: 8.713 t Calculado: 6.982 t  Máximo: 6.099 t Calculado: 0.591 t  Máximo: 8.713 t Calculado: 7.827 t	Cumple  Cumple  Cumple
Tracción en vástago de pernos:	Máximo: 16.016 t Calculado: 6.427 t	Cumple
Tensión de Von Mises en vástago de pernos:	Máximo: 4077.47 kp/cm <sup>2</sup> Calculado: 1326.2 kp/cm <sup>2</sup>	Cumple
Aplastamiento perno en placa: <i>Límite del cortante en un perno actuando contra la placa</i>	Máximo: 28.033 t Calculado: 0.545 t	Cumple
Tensión de Von Mises en secciones globales: -Derecha: -Izquierda: -Arriba: -Abajo:	Máximo: 2803.26 kp/cm <sup>2</sup> Calculado: 894.518 kp/cm <sup>2</sup> Calculado: 914.16 kp/cm <sup>2</sup> Calculado: 1695.58 kp/cm <sup>2</sup> Calculado: 2023.69 kp/cm <sup>2</sup>	Cumple Cumple Cumple Cumple
Flecha global equivalente: <i>Limitación de la deformabilidad de los vuelos</i> -Derecha: -Izquierda: -Arriba: -Abajo:	Mínimo: 250 Calculado: 2148.83 Calculado: 2150.54 Calculado: 4342.74 Calculado: 4433.22	Cumple Cumple Cumple Cumple
Tensión de Von Mises local: <i>Tensión por tracción de pernos sobre placas en voladizo</i>	Máximo: 2803.26 kp/cm <sup>2</sup> Calculado: 1765.99 kp/cm <sup>2</sup>	Cumple
Se cumplen todas las comprobaciones		

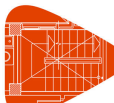


## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

Referencia: 238 -Placa base: Ancho X: 550 mm Ancho Y: 550 mm Espesor: 22 mm -Pernos: 8Ø25 mm L=60 cm Prolongación recta -Disposición: Posición X: Centrada Posición Y: Centrada -Rigidizadores: Paralelos X: - Paralelos Y: 2(150x0x8.0)

Comprobación	Valores	Estado
Separación mínima entre pernos: <i>3 diámetros</i>	Mínimo: 75 mm Calculado: 236 mm	Cumple
Separación mínima pernos-borde: <i>1.5 diámetros</i>	Mínimo: 37 mm Calculado: 40 mm	Cumple
Esbeltez de rigidizadores: -Paralelos a Y:	Máximo: 50 Calculado: 46.7	Cumple
Longitud mínima del perno: <i>Se calcula la longitud de anclaje necesaria por adherencia.</i>	Mínimo: 30 cm Calculado: 60 cm	Cumple
Anclaje perno en hormigón: -Tracción:  -Cortante:  -Tracción + Cortante:	Máximo: 13.07 t Calculado: 11.109 t  Máximo: 9.149 t Calculado: 0.887 t  Máximo: 13.07 t Calculado: 12.376 t	Cumple  Cumple  Cumple
Tracción en vástago de pernos:	Máximo: 16.016 t Calculado: 10.287 t	Cumple
Tensión de Von Mises en vástago de pernos:	Máximo: 4077.47 kp/cm <sup>2</sup> Calculado: 2119.79 kp/cm <sup>2</sup>	Cumple
Aplastamiento perno en placa: <i>Límite del cortante en un perno actuando contra la placa</i>	Máximo: 30.836 t Calculado: 0.821 t	Cumple
Tensión de Von Mises en secciones globales: -Derecha: -Izquierda: -Arriba: -Abajo:	Máximo: 2803.26 kp/cm <sup>2</sup> Calculado: 1512.11 kp/cm <sup>2</sup> Calculado: 1572.41 kp/cm <sup>2</sup> Calculado: 2770.07 kp/cm <sup>2</sup> Calculado: 2636.66 kp/cm <sup>2</sup>	Cumple Cumple Cumple Cumple
Flecha global equivalente: <i>Limitación de la deformabilidad de los vuelos</i> -Derecha: -Izquierda: -Arriba: -Abajo:	Mínimo: 250 Calculado: 2100.79 Calculado: 1436.29 Calculado: 3256.47 Calculado: 2823.09	Cumple Cumple Cumple Cumple
Tensión de Von Mises local: <i>Tensión por tracción de pernos sobre placas en voladizo</i>	Máximo: 2803.26 kp/cm <sup>2</sup> Calculado: 2322.31 kp/cm <sup>2</sup>	Cumple
Se cumplen todas las comprobaciones		

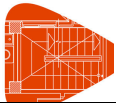


## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

Referencia: 262 -Placa base: Ancho X: 350 mm Ancho Y: 350 mm Espesor: 15 mm -Pernos: 8Ø16 mm L=30 cm Prolongación recta -Disposición: Posición X: Centrada Posición Y: Centrada -Rigidizadores: Paralelos X: - Paralelos Y: 2(100x0x6.0)

Comprobación	Valores	Estado
Separación mínima entre pernos: <i>3 diámetros</i>	Mínimo: 48 mm Calculado: 146 mm	Cumple
Separación mínima pernos-borde: <i>1.5 diámetros</i>	Mínimo: 24 mm Calculado: 30 mm	Cumple
Esbeltez de rigidizadores: -Paralelos a Y:	Máximo: 50 Calculado: 44	Cumple
Longitud mínima del perno: <i>Se calcula la longitud de anclaje necesaria por adherencia.</i>	Mínimo: 19 cm Calculado: 30 cm	Cumple
Anclaje perno en hormigón: -Tracción:  -Cortante:  -Tracción + Cortante:	Máximo: 4.182 t Calculado: 3.124 t  Máximo: 2.928 t Calculado: 0.292 t  Máximo: 4.182 t Calculado: 3.541 t	Cumple  Cumple  Cumple
Tracción en vástago de pernos:	Máximo: 6.557 t Calculado: 2.971 t	Cumple
Tensión de Von Mises en vástago de pernos:	Máximo: 4077.47 kp/cm <sup>2</sup> Calculado: 1501.12 kp/cm <sup>2</sup>	Cumple
Aplastamiento perno en placa: <i>Límite del cortante en un perno actuando contra la placa</i>	Máximo: 13.456 t Calculado: 0.275 t	Cumple
Tensión de Von Mises en secciones globales: -Derecha: -Izquierda: -Arriba: -Abajo:	Máximo: 2803.26 kp/cm <sup>2</sup> Calculado: 695.848 kp/cm <sup>2</sup> Calculado: 1121.13 kp/cm <sup>2</sup> Calculado: 1875.3 kp/cm <sup>2</sup> Calculado: 1661.75 kp/cm <sup>2</sup>	Cumple Cumple Cumple Cumple
Flecha global equivalente: <i>Limitación de la deformabilidad de los vuelos</i> -Derecha: -Izquierda: -Arriba: -Abajo:	Mínimo: 250 Calculado: 3872.08 Calculado: 2467.99 Calculado: 3917.25 Calculado: 4005.87	Cumple Cumple Cumple Cumple
Tensión de Von Mises local: <i>Tensión por tracción de pernos sobre placas en voladizo</i>	Máximo: 2803.26 kp/cm <sup>2</sup> Calculado: 1122.32 kp/cm <sup>2</sup>	Cumple
Se cumplen todas las comprobaciones		



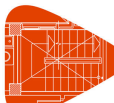
## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

Referencia: 271 -Placa base: Ancho X: 550 mm Ancho Y: 550 mm Espesor: 20 mm -Pernos: 4Ø25 mm L=55 cm Prolongación recta -Disposición: Posición X: Centrada Posición Y: Centrada -Rigidizadores: Paralelos X: - Paralelos Y: 2(150x0x8.0)

Comprobación	Valores	Estado
Separación mínima entre pernos: <i>3 diámetros</i>	Mínimo: 75 mm Calculado: 471 mm	Cumple
Separación mínima pernos-borde: <i>1.5 diámetros</i>	Mínimo: 37 mm Calculado: 40 mm	Cumple
Esbeltez de rigidizadores: -Paralelos a Y:	Máximo: 50 Calculado: 46.7	Cumple
Longitud mínima del perno: <i>Se calcula la longitud de anclaje necesaria por adherencia.</i>	Mínimo: 30 cm Calculado: 55 cm	Cumple
Anclaje perno en hormigón: -Tracción:  -Cortante:  -Tracción + Cortante:	Máximo: 11.981 t Calculado: 10.339 t  Máximo: 8.386 t Calculado: 1.13 t  Máximo: 11.981 t Calculado: 11.953 t	Cumple  Cumple  Cumple
Tracción en vástago de pernos:	Máximo: 16.016 t Calculado: 9.521 t	Cumple
Tensión de Von Mises en vástago de pernos:	Máximo: 4077.47 kp/cm <sup>2</sup> Calculado: 1981.61 kp/cm <sup>2</sup>	Cumple
Aplastamiento perno en placa: <i>Límite del cortante en un perno actuando contra la placa</i>	Máximo: 28.033 t Calculado: 1.041 t	Cumple
Tensión de Von Mises en secciones globales: -Derecha: -Izquierda: -Arriba: -Abajo:	Máximo: 2803.26 kp/cm <sup>2</sup> Calculado: 1512.33 kp/cm <sup>2</sup> Calculado: 1530.15 kp/cm <sup>2</sup> Calculado: 1672.87 kp/cm <sup>2</sup> Calculado: 2008.1 kp/cm <sup>2</sup>	Cumple Cumple Cumple Cumple
Flecha global equivalente: <i>Limitación de la deformabilidad de los vuelos</i> -Derecha: -Izquierda: -Arriba: -Abajo:	Mínimo: 250 Calculado: 1399.69 Calculado: 1399.95 Calculado: 4421.1 Calculado: 4213.64	Cumple Cumple Cumple Cumple
Tensión de Von Mises local: <i>Tensión por tracción de pernos sobre placas en voladizo</i>	Máximo: 2803.26 kp/cm <sup>2</sup> Calculado: 0 kp/cm <sup>2</sup>	Cumple
Se cumplen todas las comprobaciones		



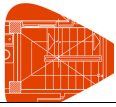


## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

Referencia: 287 -Placa base: Ancho X: 550 mm Ancho Y: 550 mm Espesor: 20 mm -Pernos: 8Ø25 mm L=60 cm Prolongación recta -Disposición: Posición X: Centrada Posición Y: Centrada -Rigidizadores: Paralelos X: - Paralelos Y: 2(150x0x8.0)

Comprobación	Valores	Estado
Separación mínima entre pernos: <i>3 diámetros</i>	Mínimo: 75 mm Calculado: 236 mm	Cumple
Separación mínima pernos-borde: <i>1.5 diámetros</i>	Mínimo: 37 mm Calculado: 40 mm	Cumple
Esbeltez de rigidizadores: -Paralelos a Y:	Máximo: 50 Calculado: 46.7	Cumple
Longitud mínima del perno: <i>Se calcula la longitud de anclaje necesaria por adherencia.</i>	Mínimo: 30 cm Calculado: 60 cm	Cumple
Anclaje perno en hormigón: -Tracción:  -Cortante:  -Tracción + Cortante:	Máximo: 13.07 t Calculado: 10.782 t  Máximo: 9.149 t Calculado: 0.864 t  Máximo: 13.07 t Calculado: 12.016 t	Cumple  Cumple  Cumple
Tracción en vástago de pernos:	Máximo: 16.016 t Calculado: 9.989 t	Cumple
Tensión de Von Mises en vástago de pernos:	Máximo: 4077.47 kp/cm <sup>2</sup> Calculado: 2058.46 kp/cm <sup>2</sup>	Cumple
Aplastamiento perno en placa: <i>Límite del cortante en un perno actuando contra la placa</i>	Máximo: 28.033 t Calculado: 0.8 t	Cumple
Tensión de Von Mises en secciones globales: -Derecha: -Izquierda: -Arriba: -Abajo:	Máximo: 2803.26 kp/cm <sup>2</sup> Calculado: 1690.73 kp/cm <sup>2</sup> Calculado: 1808.41 kp/cm <sup>2</sup> Calculado: 2779.26 kp/cm <sup>2</sup> Calculado: 2631.22 kp/cm <sup>2</sup>	Cumple Cumple Cumple Cumple
Flecha global equivalente: <i>Limitación de la deformabilidad de los vuelos</i> -Derecha: -Izquierda: -Arriba: -Abajo:	Mínimo: 250 Calculado: 1541.75 Calculado: 1137.53 Calculado: 3209.95 Calculado: 2796.4	Cumple Cumple Cumple Cumple
Tensión de Von Mises local: <i>Tensión por tracción de pernos sobre placas en voladizo</i>	Máximo: 2803.26 kp/cm <sup>2</sup> Calculado: 2739.76 kp/cm <sup>2</sup>	Cumple
Se cumplen todas las comprobaciones		



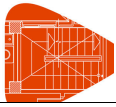
## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

Referencia: 311 -Placa base: Ancho X: 300 mm Ancho Y: 300 mm Espesor: 15 mm -Pernos: 4Ø14 mm L=45 cm Prolongación recta -Disposición: Posición X: Centrada Posición Y: Centrada -Rigidizadores: Paralelos X: - Paralelos Y: 2(100x0x5.0)

Comprobación	Valores	Estado
Separación mínima entre pernos: <i>3 diámetros</i>	Mínimo: 42 mm Calculado: 241 mm	Cumple
Separación mínima pernos-borde: <i>1.5 diámetros</i>	Mínimo: 21 mm Calculado: 30 mm	Cumple
Esbeltez de rigidizadores: -Paralelos a Y:	Máximo: 50 Calculado: 46.6	Cumple
Longitud mínima del perno: <i>Se calcula la longitud de anclaje necesaria por adherencia.</i>	Mínimo: 17 cm Calculado: 45 cm	Cumple
Anclaje perno en hormigón: -Tracción:  -Cortante:  -Tracción + Cortante:	Máximo: 5.489 t Calculado: 4.661 t  Máximo: 3.843 t Calculado: 0.538 t  Máximo: 5.489 t Calculado: 5.429 t	Cumple  Cumple  Cumple
Tracción en vástago de pernos:	Máximo: 5.023 t Calculado: 4.454 t	Cumple
Tensión de Von Mises en vástago de pernos:	Máximo: 4077.47 kp/cm <sup>2</sup> Calculado: 2960.74 kp/cm <sup>2</sup>	Cumple
Aplastamiento perno en placa: <i>Límite del cortante en un perno actuando contra la placa</i>	Máximo: 11.774 t Calculado: 0.507 t	Cumple
Tensión de Von Mises en secciones globales: -Derecha: -Izquierda: -Arriba: -Abajo:	Máximo: 2803.26 kp/cm <sup>2</sup> Calculado: 1045.84 kp/cm <sup>2</sup> Calculado: 1531.69 kp/cm <sup>2</sup> Calculado: 1627.76 kp/cm <sup>2</sup> Calculado: 1399.86 kp/cm <sup>2</sup>	Cumple Cumple Cumple Cumple
Flecha global equivalente: <i>Limitación de la deformabilidad de los vuelos</i> -Derecha: -Izquierda: -Arriba: -Abajo:	Mínimo: 250 Calculado: 2674.01 Calculado: 1888.41 Calculado: 5826.86 Calculado: 6714.58	Cumple Cumple Cumple Cumple
Tensión de Von Mises local: <i>Tensión por tracción de pernos sobre placas en voladizo</i>	Máximo: 2803.26 kp/cm <sup>2</sup> Calculado: 0 kp/cm <sup>2</sup>	Cumple
Se cumplen todas las comprobaciones		

Referencia: 320 -Placa base: Ancho X: 350 mm Ancho Y: 350 mm Espesor: 14 mm -Pernos: 4Ø16 mm L=50 cm Prolongación recta -Disposición: Posición X: Centrada Posición Y: Centrada



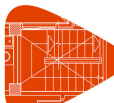
## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

Comprobación	Valores	Estado
Separación mínima entre pernos: <i>3 diámetros</i>	Mínimo: 48 mm Calculado: 291 mm	Cumple
Separación mínima pernos-borde: <i>1.5 diámetros</i>	Mínimo: 24 mm Calculado: 30 mm	Cumple
Longitud mínima del perno: <i>Se calcula la longitud de anclaje necesaria por adherencia.</i>	Mínimo: 19 cm Calculado: 50 cm	Cumple
Anclaje perno en hormigón: -Tracción:  -Cortante:  -Tracción + Cortante:	Máximo: 6.971 t Calculado: 5.487 t  Máximo: 4.879 t Calculado: 0.627 t  Máximo: 6.971 t Calculado: 6.383 t	Cumple  Cumple  Cumple
Tracción en vástago de pernos:	Máximo: 6.557 t Calculado: 5.405 t	Cumple
Tensión de Von Mises en vástago de pernos:	Máximo: 4077.47 kp/cm <sup>2</sup> Calculado: 2748.21 kp/cm <sup>2</sup>	Cumple
Aplastamiento perno en placa: <i>Límite del cortante en un perno actuando contra la placa</i>	Máximo: 12.559 t Calculado: 0.594 t	Cumple
Tensión de Von Mises en secciones globales: -Derecha: -Izquierda: -Arriba: -Abajo:	Máximo: 2803.26 kp/cm <sup>2</sup> Calculado: 1043.74 kp/cm <sup>2</sup> Calculado: 1075.66 kp/cm <sup>2</sup> Calculado: 2410.23 kp/cm <sup>2</sup> Calculado: 2224.86 kp/cm <sup>2</sup>	Cumple Cumple Cumple Cumple
Flecha global equivalente: <i>Limitación de la deformabilidad de los vuelos</i> -Derecha: -Izquierda: -Arriba: -Abajo:	Mínimo: 250 Calculado: 2951.65 Calculado: 4626.03 Calculado: 607.209 Calculado: 689.439	Cumple Cumple Cumple Cumple
Tensión de Von Mises local: <i>Tensión por tracción de pernos sobre placas en voladizo</i>	Máximo: 2803.26 kp/cm <sup>2</sup> Calculado: 0 kp/cm <sup>2</sup>	Cumple
Se cumplen todas las comprobaciones		

Referencia: 327 -Placa base: Ancho X: 200 mm Ancho Y: 200 mm Espesor: 10 mm -Pernos: 4Ø8 mm  
L=30 cm Prolongación recta -Disposición: Posición X: Centrada Posición Y: Centrada

Comprobación	Valores	Estado
Separación mínima entre pernos: <i>3 diámetros</i>	Mínimo: 24 mm Calculado: 160 mm	Cumple
Separación mínima pernos-borde: <i>1.5 diámetros</i>	Mínimo: 12 mm Calculado: 20 mm	Cumple
Longitud mínima del perno: <i>Se calcula la longitud de anclaje necesaria por adherencia.</i>	Mínimo: 15 cm Calculado: 30 cm	Cumple



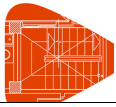
## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

Anclaje perno en hormigón:		
-Tracción:	Máximo: 2.091 t Calculado: 0 t	Cumple
-Cortante:	Máximo: 1.464 t Calculado: 0.007 t	Cumple
-Tracción + Cortante:	Máximo: 2.091 t Calculado: 0.01 t	Cumple
Tracción en vástago de pernos:	Máximo: 1.641 t Calculado: 0 t	Cumple
Tensión de Von Mises en vástago de pernos:	Máximo: 4077.47 kp/cm <sup>2</sup> Calculado: 25.1389 kp/cm <sup>2</sup>	Cumple
Aplastamiento perno en placa: <i>Límite del cortante en un perno actuando contra la placa</i>	Máximo: 4.485 t Calculado: 0.007 t	Cumple
Tensión de Von Mises en secciones globales:	Máximo: 2803.26 kp/cm <sup>2</sup>	
-Derecha:	Calculado: 2560.91 kp/cm <sup>2</sup>	Cumple
-Izquierda:	Calculado: 2553.82 kp/cm <sup>2</sup>	Cumple
-Arriba:	Calculado: 2480.79 kp/cm <sup>2</sup>	Cumple
-Abajo:	Calculado: 2473.63 kp/cm <sup>2</sup>	Cumple
Flecha global equivalente: <i>Limitación de la deformabilidad de los vuelos</i>	Mínimo: 250	
-Derecha:	Calculado: 487.432	Cumple
-Izquierda:	Calculado: 488.209	Cumple
-Arriba:	Calculado: 509.86	Cumple
-Abajo:	Calculado: 509.86	Cumple
Tensión de Von Mises local: <i>Tensión por tracción de pernos sobre placas en voladizo</i>	Máximo: 2803.26 kp/cm <sup>2</sup> Calculado: 0 kp/cm <sup>2</sup>	Cumple
Se cumplen todas las comprobaciones		

Referencia: 332 -Placa base: Ancho X: 200 mm Ancho Y: 200 mm Espesor: 10 mm -Pernos: 4Ø8 mm  
L=30 cm Prolongación recta -Disposición: Posición X: Centrada Posición Y: Centrada

Comprobación	Valores	Estado
Separación mínima entre pernos: <i>3 diámetros</i>	Mínimo: 24 mm Calculado: 160 mm	Cumple
Separación mínima pernos-borde: <i>1.5 diámetros</i>	Mínimo: 12 mm Calculado: 20 mm	Cumple
Longitud mínima del perno: <i>Se calcula la longitud de anclaje necesaria por adherencia.</i>	Mínimo: 15 cm Calculado: 30 cm	Cumple
Anclaje perno en hormigón:		
-Tracción:	Máximo: 2.091 t Calculado: 0 t	Cumple
-Cortante:	Máximo: 1.464 t Calculado: 0.008 t	Cumple
-Tracción + Cortante:	Máximo: 2.091 t Calculado: 0.012 t	Cumple



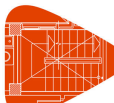
## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

Tracción en vástago de pernos:	Máximo: 1.641 t Calculado: 0 t	Cumple
Tensión de Von Mises en vástago de pernos:	Máximo: 4077.47 kp/cm <sup>2</sup> Calculado: 30.05 kp/cm <sup>2</sup>	Cumple
Aplastamiento perno en placa: <i>Límite del cortante en un perno actuando contra la placa</i>	Máximo: 4.485 t Calculado: 0.008 t	Cumple
Tensión de Von Mises en secciones globales: -Derecha: -Izquierda: -Arriba: -Abajo:	Máximo: 2803.26 kp/cm <sup>2</sup> Calculado: 2693.65 kp/cm <sup>2</sup> Calculado: 2535.28 kp/cm <sup>2</sup> Calculado: 2522.25 kp/cm <sup>2</sup> Calculado: 2509.23 kp/cm <sup>2</sup>	Cumple Cumple Cumple Cumple
Flecha global equivalente: <i>Limitación de la deformabilidad de los vuelos</i> -Derecha: -Izquierda: -Arriba: -Abajo:	Mínimo: 250 Calculado: 461.442 Calculado: 491.784 Calculado: 507.857 Calculado: 507.857	Cumple Cumple Cumple Cumple
Tensión de Von Mises local: <i>Tensión por tracción de pernos sobre placas en voladizo</i>	Máximo: 2803.26 kp/cm <sup>2</sup> Calculado: 0 kp/cm <sup>2</sup>	Cumple
Se cumplen todas las comprobaciones		

Referencia: 339 -Placa base: Ancho X: 200 mm Ancho Y: 200 mm Espesor: 10 mm -Pernos: 4Ø8 mm L=30 cm Prolongación recta -Disposición: Posición X: Centrada Posición Y: Centrada

Comprobación	Valores	Estado
Separación mínima entre pernos: <i>3 diámetros</i>	Mínimo: 24 mm Calculado: 160 mm	Cumple
Separación mínima pernos-borde: <i>1.5 diámetros</i>	Mínimo: 12 mm Calculado: 20 mm	Cumple
Longitud mínima del perno: <i>Se calcula la longitud de anclaje necesaria por adherencia.</i>	Mínimo: 15 cm Calculado: 30 cm	Cumple
Anclaje perno en hormigón: -Tracción: -Cortante: -Tracción + Cortante:	Máximo: 2.091 t Calculado: 0 t Máximo: 1.464 t Calculado: 0.014 t Máximo: 2.091 t Calculado: 0.02 t	Cumple Cumple Cumple
Tracción en vástago de pernos:	Máximo: 1.641 t Calculado: 0 t	Cumple
Tensión de Von Mises en vástago de pernos:	Máximo: 4077.47 kp/cm <sup>2</sup> Calculado: 49.4751 kp/cm <sup>2</sup>	Cumple
Aplastamiento perno en placa: <i>Límite del cortante en un perno actuando contra la placa</i>	Máximo: 4.485 t Calculado: 0.013 t	Cumple
Tensión de Von Mises en secciones globales:	Máximo: 2803.26 kp/cm <sup>2</sup>	

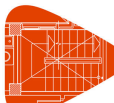


## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas		
-Derecha:	Calculado: 2670 kp/cm <sup>2</sup>	Cumple
-Izquierda:	Calculado: 2567 kp/cm <sup>2</sup>	Cumple
-Arriba:	Calculado: 2493.49 kp/cm <sup>2</sup>	Cumple
-Abajo:	Calculado: 2503.57 kp/cm <sup>2</sup>	Cumple
Flecha global equivalente: <i>Limitación de la deformabilidad de los vuelos</i>	Mínimo: 250	
-Derecha:	Calculado: 472.704	Cumple
-Izquierda:	Calculado: 486.996	Cumple
-Arriba:	Calculado: 505.202	Cumple
-Abajo:	Calculado: 510.108	Cumple
Tensión de Von Mises local: <i>Tensión por tracción de pernos sobre placas en voladizo</i>	Máximo: 2803.26 kp/cm <sup>2</sup> Calculado: 0 kp/cm <sup>2</sup>	Cumple
Se cumplen todas las comprobaciones		

Referencia: 344 -Placa base: Ancho X: 350 mm Ancho Y: 350 mm Espesor: 12 mm -Pernos: 4Ø16 mm  
L=30 cm Prolongación recta -Disposición: Posición X: Centrada Posición Y: Centrada

Comprobación	Valores	Estado
Separación mínima entre pernos: <i>3 diámetros</i>	Mínimo: 48 mm Calculado: 291 mm	Cumple
Separación mínima pernos-borde: <i>1.5 diámetros</i>	Mínimo: 24 mm Calculado: 30 mm	Cumple
Longitud mínima del perno: <i>Se calcula la longitud de anclaje necesaria por adherencia.</i>	Mínimo: 19 cm Calculado: 30 cm	Cumple
Anclaje perno en hormigón:		
-Tracción:	Máximo: 4.182 t Calculado: 3.011 t	Cumple
-Cortante:	Máximo: 2.928 t Calculado: 0.354 t	Cumple
-Tracción + Cortante:	Máximo: 4.182 t Calculado: 3.517 t	Cumple
Tracción en vástago de pernos:	Máximo: 6.557 t Calculado: 3.175 t	Cumple
Tensión de Von Mises en vástago de pernos:	Máximo: 4077.47 kp/cm <sup>2</sup> Calculado: 1587.46 kp/cm <sup>2</sup>	Cumple
Aplastamiento perno en placa: <i>Límite del cortante en un perno actuando contra la placa</i>	Máximo: 10.765 t Calculado: 0.331 t	Cumple
Tensión de Von Mises en secciones globales:	Máximo: 2803.26 kp/cm <sup>2</sup>	
-Derecha:	Calculado: 546.375 kp/cm <sup>2</sup>	Cumple
-Izquierda:	Calculado: 1087.8 kp/cm <sup>2</sup>	Cumple
-Arriba:	Calculado: 2311.8 kp/cm <sup>2</sup>	Cumple
-Abajo:	Calculado: 1805.81 kp/cm <sup>2</sup>	Cumple
Flecha global equivalente: <i>Limitación de la deformabilidad de los vuelos</i>	Mínimo: 250	



## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas		
-Derecha:	Calculado: 3521.11	Cumple
-Izquierda:	Calculado: 1837.05	Cumple
-Arriba:	Calculado: 598.488	Cumple
-Abajo:	Calculado: 897.193	Cumple
Tensión de Von Mises local: <i>Tensión por tracción de pernos sobre placas en voladizo</i>	Máximo: 2803.26 kp/cm <sup>2</sup> Calculado: 0 kp/cm <sup>2</sup>	Cumple
Se cumplen todas las comprobaciones		

Referencia: 421 -Placa base: Ancho X: 300 mm Ancho Y: 300 mm Espesor: 15 mm -Pernos: 4Ø14 mm L=35 cm Prolongación recta -Disposición: Posición X: Centrada Posición Y: Centrada		
Comprobación	Valores	Estado
Separación mínima entre pernos: <i>3 diámetros</i>	Mínimo: 42 mm Calculado: 241 mm	Cumple
Separación mínima pernos-borde: <i>1.5 diámetros</i>	Mínimo: 21 mm Calculado: 30 mm	Cumple
Longitud mínima del perno: <i>Se calcula la longitud de anclaje necesaria por adherencia.</i>	Mínimo: 17 cm Calculado: 35 cm	Cumple
Anclaje perno en hormigón:		
-Tracción:	Máximo: 4.269 t Calculado: 3.367 t	Cumple
-Cortante:	Máximo: 2.989 t Calculado: 0.394 t	Cumple
-Tracción + Cortante:	Máximo: 4.269 t Calculado: 3.93 t	Cumple
Tracción en vástago de pernos:	Máximo: 5.023 t Calculado: 3.187 t	Cumple
Tensión de Von Mises en vástago de pernos:	Máximo: 4077.47 kp/cm <sup>2</sup> Calculado: 2120.3 kp/cm <sup>2</sup>	Cumple
Aplastamiento perno en placa: <i>Límite del cortante en un perno actuando contra la placa</i>	Máximo: 11.774 t Calculado: 0.369 t	Cumple
Tensión de Von Mises en secciones globales:		
-Derecha:	Calculado: 2444.02 kp/cm <sup>2</sup>	Cumple
-Izquierda:	Calculado: 2515.89 kp/cm <sup>2</sup>	Cumple
-Arriba:	Calculado: 1348.06 kp/cm <sup>2</sup>	Cumple
-Abajo:	Calculado: 1953.84 kp/cm <sup>2</sup>	Cumple
Flecha global equivalente: <i>Limitación de la deformabilidad de los vuelos</i>		
-Derecha:	Mínimo: 250 Calculado: 616.529	Cumple
-Izquierda:	Calculado: 402.563	Cumple
-Arriba:	Calculado: 681.332	Cumple
-Abajo:	Calculado: 664.501	Cumple
Tensión de Von Mises local: <i>Tensión por tracción de pernos sobre placas en voladizo</i>	Máximo: 2803.26 kp/cm <sup>2</sup> Calculado: 0 kp/cm <sup>2</sup>	Cumple



## Listado de cimentación

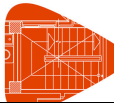
NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

Se cumplen todas las comprobaciones

Referencia: 445 -Placa base: Ancho X: 350 mm Ancho Y: 350 mm Espesor: 12 mm -Pernos: 4Ø16 mm L=30 cm Prolongación recta -Disposición: Posición X: Centrada Posición Y: Centrada		
Comprobación	Valores	Estado
Separación mínima entre pernos: <i>3 diámetros</i>	Mínimo: 48 mm Calculado: 291 mm	Cumple
Separación mínima pernos-borde: <i>1.5 diámetros</i>	Mínimo: 24 mm Calculado: 30 mm	Cumple
Longitud mínima del perno: <i>Se calcula la longitud de anclaje necesaria por adherencia.</i>	Mínimo: 19 cm Calculado: 30 cm	Cumple
Anclaje perno en hormigón:		
-Tracción:	Máximo: 4.182 t Calculado: 1.572 t	Cumple
-Cortante:	Máximo: 2.928 t Calculado: 0.466 t	Cumple
-Tracción + Cortante:	Máximo: 4.182 t Calculado: 2.237 t	Cumple
Tracción en vástago de pernos:	Máximo: 6.557 t Calculado: 1.667 t	Cumple
Tensión de Von Mises en vástago de pernos:	Máximo: 4077.47 kp/cm <sup>2</sup> Calculado: 906.226 kp/cm <sup>2</sup>	Cumple
Aplastamiento perno en placa: <i>Límite del cortante en un perno actuando contra la placa</i>	Máximo: 10.765 t Calculado: 0.432 t	Cumple
Tensión de Von Mises en secciones globales:		
-Derecha:	Máximo: 2803.26 kp/cm <sup>2</sup> Calculado: 1722.87 kp/cm <sup>2</sup>	Cumple
-Izquierda:	Calculado: 955.498 kp/cm <sup>2</sup>	Cumple
-Arriba:	Calculado: 797.057 kp/cm <sup>2</sup>	Cumple
-Abajo:	Calculado: 1934.69 kp/cm <sup>2</sup>	Cumple
Flecha global equivalente: <i>Limitación de la deformabilidad de los vuelos</i>		
-Derecha:	Mínimo: 250 Calculado: 866.723	Cumple
-Izquierda:	Calculado: 1446.87	Cumple
-Arriba:	Calculado: 1665.82	Cumple
-Abajo:	Calculado: 734.479	Cumple
Tensión de Von Mises local: <i>Tensión por tracción de pernos sobre placas en voladizo</i>	Máximo: 2803.26 kp/cm <sup>2</sup> Calculado: 0 kp/cm <sup>2</sup>	Cumple
Se cumplen todas las comprobaciones		

Referencia: 465 -Placa base: Ancho X: 300 mm Ancho Y: 300 mm Espesor: 15 mm -Pernos: 4Ø14 mm L=35 cm Prolongación recta -Disposición: Posición X: Centrada Posición Y: Centrada -Rigidizadores: Paralelos X: - Paralelos Y: 2(100x0x5.0)





## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

Comprobación	Valores	Estado
Separación mínima entre pernos: <i>3 diámetros</i>	Mínimo: 42 mm Calculado: 241 mm	Cumple
Separación mínima pernos-borde: <i>1.5 diámetros</i>	Mínimo: 21 mm Calculado: 30 mm	Cumple
Esbeltez de rigidizadores: -Paralelos a Y:	Máximo: 50 Calculado: 46.6	Cumple
Longitud mínima del perno: <i>Se calcula la longitud de anclaje necesaria por adherencia.</i>	Mínimo: 17 cm Calculado: 35 cm	Cumple
Anclaje perno en hormigón: -Tracción:  -Cortante:  -Tracción + Cortante:	Máximo: 4.269 t Calculado: 3.037 t  Máximo: 2.989 t Calculado: 0.513 t  Máximo: 4.269 t Calculado: 3.769 t	Cumple  Cumple  Cumple
Tracción en vástago de pernos:	Máximo: 5.023 t Calculado: 3.055 t	Cumple
Tensión de Von Mises en vástago de pernos:	Máximo: 4077.47 kp/cm <sup>2</sup> Calculado: 2072.49 kp/cm <sup>2</sup>	Cumple
Aplastamiento perno en placa: <i>Límite del cortante en un perno actuando contra la placa</i>	Máximo: 11.774 t Calculado: 0.481 t	Cumple
Tensión de Von Mises en secciones globales: -Derecha: -Izquierda: -Arriba: -Abajo:	Máximo: 2803.26 kp/cm <sup>2</sup> Calculado: 1896.82 kp/cm <sup>2</sup> Calculado: 1879.18 kp/cm <sup>2</sup> Calculado: 986.281 kp/cm <sup>2</sup> Calculado: 2016.26 kp/cm <sup>2</sup>	Cumple Cumple Cumple Cumple
Flecha global equivalente: <i>Limitación de la deformabilidad de los vuelos</i> -Derecha: -Izquierda: -Arriba: -Abajo:	Mínimo: 250 Calculado: 458.271 Calculado: 458.271 Calculado: 9602.47 Calculado: 5310.91	Cumple Cumple Cumple Cumple
Tensión de Von Mises local: <i>Tensión por tracción de pernos sobre placas en voladizo</i>	Máximo: 2803.26 kp/cm <sup>2</sup> Calculado: 0 kp/cm <sup>2</sup>	Cumple
Se cumplen todas las comprobaciones		

Referencia: 485 -Placa base: Ancho X: 300 mm Ancho Y: 300 mm Espesor: 15 mm -Pernos: 4Ø14 mm L=35 cm Prolongación recta -Disposición: Posición X: Centrada Posición Y: Centrada -Rigidizadores: Paralelos X: - Paralelos Y: 2(100x0x5.0)

Comprobación	Valores	Estado
Separación mínima entre pernos: <i>3 diámetros</i>	Mínimo: 42 mm Calculado: 241 mm	Cumple



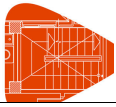
## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

Separación mínima pernos-borde: <i>1.5 diámetros</i>	Mínimo: 21 mm Calculado: 30 mm	Cumple
Esbeltez de rigidizadores: -Paralelos a Y:	Máximo: 50 Calculado: 46.6	Cumple
Longitud mínima del perno: <i>Se calcula la longitud de anclaje necesaria por adherencia.</i>	Mínimo: 17 cm Calculado: 35 cm	Cumple
Anclaje perno en hormigón: -Tracción:  -Cortante:  -Tracción + Cortante:	Máximo: 4.269 t Calculado: 3.491 t  Máximo: 2.989 t Calculado: 0.543 t  Máximo: 4.269 t Calculado: 4.266 t	Cumple  Cumple  Cumple
Tracción en vástago de pernos:	Máximo: 5.023 t Calculado: 3.485 t	Cumple
Tensión de Von Mises en vástago de pernos:	Máximo: 4077.47 kp/cm <sup>2</sup> Calculado: 2350.27 kp/cm <sup>2</sup>	Cumple
Aplastamiento perno en placa: <i>Límite del cortante en un perno actuando contra la placa</i>	Máximo: 11.774 t Calculado: 0.509 t	Cumple
Tensión de Von Mises en secciones globales: -Derecha: -Izquierda: -Arriba: -Abajo:	Máximo: 2803.26 kp/cm <sup>2</sup> Calculado: 1954.06 kp/cm <sup>2</sup> Calculado: 1951 kp/cm <sup>2</sup> Calculado: 1128.02 kp/cm <sup>2</sup> Calculado: 2208.05 kp/cm <sup>2</sup>	Cumple Cumple Cumple Cumple
Flecha global equivalente: <i>Limitación de la deformabilidad de los vuelos</i> -Derecha: -Izquierda: -Arriba: -Abajo:	Mínimo: 250 Calculado: 441.402 Calculado: 441.402 Calculado: 8370.16 Calculado: 4831.53	Cumple Cumple Cumple Cumple
Tensión de Von Mises local: <i>Tensión por tracción de pernos sobre placas en voladizo</i>	Máximo: 2803.26 kp/cm <sup>2</sup> Calculado: 0 kp/cm <sup>2</sup>	Cumple
Se cumplen todas las comprobaciones		

Referencia: 506 -Placa base: Ancho X: 300 mm Ancho Y: 300 mm Espesor: 15 mm -Pernos: 4Ø14 mm L=30 cm Prolongación recta -Disposición: Posición X: Centrada Posición Y: Centrada -Rigidizadores: Paralelos X: - Paralelos Y: 2(100x0x5.0)

Comprobación	Valores	Estado
Separación mínima entre pernos: <i>3 diámetros</i>	Mínimo: 42 mm Calculado: 241 mm	Cumple
Separación mínima pernos-borde: <i>1.5 diámetros</i>	Mínimo: 21 mm Calculado: 30 mm	Cumple
Esbeltez de rigidizadores: -Paralelos a Y:	Máximo: 50 Calculado: 46.6	Cumple

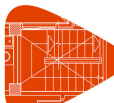


## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas

Longitud mínima del perno: <i>Se calcula la longitud de anclaje necesaria por adherencia.</i>	Mínimo: 17 cm Calculado: 30 cm	Cumple
Anclaje perno en hormigón: -Tracción:  -Cortante:  -Tracción + Cortante:	Máximo: 3.66 t Calculado: 2.767 t  Máximo: 2.562 t Calculado: 0.499 t  Máximo: 3.66 t Calculado: 3.48 t	Cumple  Cumple  Cumple
Tracción en vástago de pernos:	Máximo: 5.023 t Calculado: 2.804 t	Cumple
Tensión de Von Mises en vástago de pernos:	Máximo: 4077.47 kp/cm <sup>2</sup> Calculado: 1911.45 kp/cm <sup>2</sup>	Cumple
Aplastamiento perno en placa: <i>Límite del cortante en un perno actuando contra la placa</i>	Máximo: 11.774 t Calculado: 0.468 t	Cumple
Tensión de Von Mises en secciones globales: -Derecha: -Izquierda: -Arriba: -Abajo:	Máximo: 2803.26 kp/cm <sup>2</sup> Calculado: 1941.23 kp/cm <sup>2</sup> Calculado: 1903.2 kp/cm <sup>2</sup> Calculado: 905.403 kp/cm <sup>2</sup> Calculado: 1935.29 kp/cm <sup>2</sup>	Cumple Cumple Cumple Cumple
Flecha global equivalente: <i>Limitación de la deformabilidad de los vuelos</i> -Derecha: -Izquierda: -Arriba: -Abajo:	Mínimo: 250 Calculado: 456.518 Calculado: 456.518 Calculado: 10484.4 Calculado: 5560	Cumple Cumple Cumple Cumple
Tensión de Von Mises local: <i>Tensión por tracción de pernos sobre placas en voladizo</i>	Máximo: 2803.26 kp/cm <sup>2</sup> Calculado: 0 kp/cm <sup>2</sup>	Cumple
Se cumplen todas las comprobaciones		

Referencia: 526 -Placa base: Ancho X: 350 mm Ancho Y: 350 mm Espesor: 12 mm -Pernos: 4Ø16 mm L=30 cm Prolongación recta -Disposición: Posición X: Centrada Posición Y: Centrada		
Comprobación	Valores	Estado
Separación mínima entre pernos: <i>3 diámetros</i>	Mínimo: 48 mm Calculado: 291 mm	Cumple
Separación mínima pernos-borde: <i>1.5 diámetros</i>	Mínimo: 24 mm Calculado: 30 mm	Cumple
Longitud mínima del perno: <i>Se calcula la longitud de anclaje necesaria por adherencia.</i>	Mínimo: 19 cm Calculado: 30 cm	Cumple
Anclaje perno en hormigón: -Tracción:  -Cortante:	Máximo: 4.182 t Calculado: 1.671 t  Máximo: 2.928 t Calculado: 0.484 t	Cumple  Cumple



## Listado de cimentación

NAVE PARA GARAJE TALLER DE AUTOBUSES DE EMPRESA DE TRANSPORTE Adrián Freijomil Aradas		
-Tracción + Cortante:	Máximo: 4.182 t Calculado: 2.362 t	Cumple
Tracción en vástago de pernos:	Máximo: 6.557 t Calculado: 1.583 t	Cumple
Tensión de Von Mises en vástago de pernos:	Máximo: 4077.47 kp/cm <sup>2</sup> Calculado: 869.279 kp/cm <sup>2</sup>	Cumple
Aplastamiento perno en placa: <i>Límite del cortante en un perno actuando contra la placa</i>	Máximo: 10.765 t Calculado: 0.446 t	Cumple
Tensión de Von Mises en secciones globales: -Derecha: -Izquierda: -Arriba: -Abajo:	Máximo: 2803.26 kp/cm <sup>2</sup> Calculado: 663.729 kp/cm <sup>2</sup> Calculado: 729.986 kp/cm <sup>2</sup> Calculado: 2056.54 kp/cm <sup>2</sup> Calculado: 843.501 kp/cm <sup>2</sup>	Cumple Cumple Cumple Cumple
Flecha global equivalente: <i>Limitación de la deformabilidad de los vuelos</i> -Derecha: -Izquierda: -Arriba: -Abajo:	Mínimo: 250 Calculado: 2230.53 Calculado: 4075.41 Calculado: 700.32 Calculado: 1679.64	Cumple Cumple Cumple Cumple
Tensión de Von Mises local: <i>Tensión por tracción de pernos sobre placas en voladizo</i>	Máximo: 2803.26 kp/cm <sup>2</sup> Calculado: 0 kp/cm <sup>2</sup>	Cumple
Se cumplen todas las comprobaciones		