APÉNDICE 2: CÁLCULO DE LAS ESCALERAS Y PLATAFORMAS

ÍNDICE

1. DATOS DE OBRA 3
1.1. Normas consideradas 3
1.2. Estados límite 3
1.2.1. Situaciones de proyecto 3

2. ESTRUCTURA 4
2.1. Geometría 4
2.1.1. Nudos 4
2.1.2. Barras 6
2.2. Resultados 12
2.2.1. Barras 12

1. DATOS DE OBRA

1.1. Normas consideradas

Aceros laminados y armados: CTE DB SE-A

Categoría de uso: C. Zonas de acceso al público

1.2. Estados límite

E.L.U. de rotura. Acero laminado	CTE Cota de nieve: Altitud inferior o igual a 1000 m
Desplazamientos	Acciones características

1.2.1. Situaciones de proyecto

Para las distintas situaciones de proyecto, las combinaciones de acciones se definirán de acuerdo con los siguientes criterios:

- Con coeficientes de combinación

$$\sum_{j\geq 1}\gamma_{Gj}G_{kj}+\gamma_P P_k+\gamma_{Q1}\Psi_{p1}Q_{k1}+\sum_{i>1}\gamma_{Qi}\Psi_{ai}Q_{ki}$$

- Sin coeficientes de combinación

$$\sum_{j\geq 1}\gamma_{Gj}G_{kj}+\gamma_P P_k+\sum_{i\geq 1}\gamma_{Qi}Q_{ki}$$

- Donde:

G_k Acción permanente
P_k Acción de pretensado
Q_k Acción variable
γ_G Coeficiente parcial de seguridad de las acciones permanentes
γ_P Coeficiente parcial de seguridad de la acción de pretensado
$\gamma_{Q,1}$ Coeficiente parcial de seguridad de la acción variable principal
$\gamma_{Q,i}$ Coeficiente parcial de seguridad de las acciones variables de acompañamiento
$\psi_{p,1}$ Coeficiente de combinación de la acción variable principal
$\psi_{a,i}$ Coeficiente de combinación de las acciones variables de acompañamiento

Para cada situación de proyecto y estado límite los coeficientes a utilizar serán:

E.L.U. de rotura. Acero laminado: CTE DB SE-A

Persistente o transitoria				
	Coeficientes parciales de seguridad (γ)		Coeficientes de combinación (ψ)	
	Favorable	Desfavorable	Principal (ψ_p)	Acompañamiento (ψ_a)
Carga permanente (G)	0.800	1.350	-	-
Sobrecarga (Q)	0.000	1.500	1.000	0.700

Desplazamientos

Característica				
	Coeficientes parciales de seguridad (γ)		Coeficientes de combinación (ψ)	
	Favorable	Desfavorable	Principal (ψ_p)	Acompañamiento (ψ_a)
Carga permanente (G)	1.000	1.000	-	-
Sobrecarga (Q)	0.000	1.000	1.000	1.000

2. ESTRUCTURA

2.1. Geometría

2.1.1. Nudos

Referencias:

Δ_x, Δ_y, Δ_z: Desplazamientos prescritos en ejes globales.

θ_x, θ_y, θ_z: Giros prescritos en ejes globales.

Cada grado de libertad se marca con 'X' si está coaccionado y, en caso contrario, con '-'.

Nudos										
Referencia	Coordenadas			Vinculación exterior						Vinculación interior
	X (m)	Y (m)	Z (m)	Δ_x	Δ_y	Δ_z	θ_x	θ_y	θ_z	
N1	63.750	42.136	0.000	-	-	-	-	-	-	Empotrado
N2	65.850	42.136	0.000	X	X	X	X	X	X	Empotrado
N3	63.750	41.336	0.000	-	-	-	-	-	-	Empotrado
N4	65.850	41.336	0.000	X	X	X	X	X	X	Empotrado
N5	64.800	19.970	0.000	-	-	-	-	-	-	Articulado
N6	64.800	42.136	0.000	-	-	-	-	-	-	Articulado
N7	63.750	21.735	0.000	-	-	-	-	-	-	Empotrado
N8	65.850	21.735	0.000	X	X	X	X	X	X	Empotrado
N9	63.750	22.535	0.000	-	-	-	-	-	-	Empotrado
N10	65.850	22.535	0.000	X	X	X	X	X	X	Empotrado
N11	63.750	25.288	0.000	-	-	-	-	-	-	Empotrado
N12	65.850	25.288	0.000	X	X	X	X	X	X	Empotrado
N13	63.750	26.088	0.000	-	-	-	-	-	-	Empotrado
N14	65.850	26.088	0.000	X	X	X	X	X	X	Empotrado
N15	63.750	29.335	0.000	-	-	-	-	-	-	Empotrado
N16	65.850	29.335	0.000	X	X	X	X	X	X	Empotrado
N17	63.750	30.135	0.000	-	-	-	-	-	-	Empotrado
N18	65.850	30.135	0.000	X	X	X	X	X	X	Empotrado
N19	63.750	33.335	0.000	-	-	-	-	-	-	Empotrado
N20	65.850	33.335	0.000	X	X	X	X	X	X	Empotrado
N21	63.750	34.135	0.000	-	-	-	-	-	-	Empotrado
N22	65.850	34.135	0.000	X	X	X	X	X	X	Empotrado
N23	63.750	37.335	0.000	-	-	-	-	-	-	Empotrado
N24	65.850	37.335	0.000	X	X	X	X	X	X	Empotrado

Nudos										
Referencia	Coordenadas			Vinculación exterior						Vinculación interior
	X (m)	Y (m)	Z (m)	Δ_x	Δ_y	Δ_z	θ_x	θ_y	θ_z	
N25	63.750	38.135	0.000	-	-	-	-	-	-	Empotrado
N26	65.850	38.135	0.000	X	X	X	X	X	X	Empotrado
N27	64.800	41.336	0.000	-	-	-	-	-	-	Articulado
N28	64.800	38.135	0.000	-	-	-	-	-	-	Articulado
N29	64.800	37.335	0.000	-	-	-	-	-	-	Articulado
N30	64.800	34.135	0.000	-	-	-	-	-	-	Articulado
N31	64.800	33.335	0.000	-	-	-	-	-	-	Articulado
N32	64.800	30.135	0.000	-	-	-	-	-	-	Empotrado
N33	64.800	29.335	0.000	-	-	-	-	-	-	Empotrado
N34	64.800	26.088	0.000	-	-	-	-	-	-	Articulado
N35	64.800	25.288	0.000	-	-	-	-	-	-	Articulado
N36	64.800	22.535	0.000	-	-	-	-	-	-	Articulado
N37	64.800	21.735	0.000	-	-	-	-	-	-	Articulado
N38	64.800	23.912	0.000	-	-	-	-	-	-	Articulado
N39	65.850	23.912	0.000	X	X	X	X	X	X	Empotrado
N40	64.800	27.711	0.000	-	-	-	-	-	-	Articulado
N41	65.850	27.711	0.000	X	X	X	X	X	X	Empotrado
N42	65.850	31.735	0.000	X	X	X	X	X	X	Empotrado
N43	64.800	39.736	0.000	-	-	-	-	-	-	Articulado
N44	65.850	39.736	0.000	X	X	X	X	X	X	Empotrado
N45	64.800	35.735	0.000	-	-	-	-	-	-	Articulado
N46	65.850	35.735	0.000	X	X	X	X	X	X	Empotrado
N47	64.800	31.735	0.000	-	-	-	-	-	-	Articulado
N48	63.750	19.970	0.000	-	-	-	-	-	-	Empotrado
N49	65.850	19.970	0.000	X	X	X	X	X	X	Empotrado
N50	63.750	18.521	0.000	-	-	-	-	-	-	Empotrado
N51	65.850	18.521	0.000	X	X	X	X	X	X	Empotrado
N52	64.800	18.521	0.000	-	-	-	-	-	-	Empotrado
N53	63.750	19.170	0.000	-	-	-	-	-	-	Empotrado
N54	64.800	15.921	2.000	-	-	-	-	-	-	Empotrado
N55	63.750	15.921	2.000	-	-	-	-	-	-	Empotrado
N56	64.800	14.800	2.000	X	X	X	X	X	X	Empotrado
N57	63.750	14.800	2.000	X	X	X	X	X	X	Empotrado
N58	65.850	15.921	2.000	X	X	X	X	X	X	Empotrado
N59	65.850	17.741	2.000	X	X	X	X	X	X	Empotrado
N60	65.850	18.521	2.600	X	X	X	X	X	X	Empotrado
N61	64.800	18.521	2.600	-	-	-	-	-	-	Empotrado
N62	64.800	17.741	2.000	-	-	-	-	-	-	Empotrado
N63	64.800	39.350	2.600	-	-	-	-	-	-	Articulado
N64	65.850	39.350	2.600	X	X	X	X	X	X	Empotrado
N65	65.850	37.861	2.600	X	X	X	X	X	X	Empotrado
N66	64.800	37.861	2.600	-	-	-	-	-	-	Articulado
N67	65.850	36.461	2.600	X	X	X	X	X	X	Empotrado

Nudos										
Referencia	Coordenadas			Vinculación exterior						Vinculación interior
	X (m)	Y (m)	Z (m)	Δ_x	Δ_y	Δ_z	θ_x	θ_y	θ_z	
N68	64.800	36.461	2.600	-	-	-	-	-	-	Articulado
N69	65.850	35.061	2.600	X	X	X	X	X	X	Empotrado
N70	64.800	35.061	2.600	-	-	-	-	-	-	Articulado
N71	65.850	33.661	2.600	X	X	X	X	X	X	Empotrado
N72	64.800	33.661	2.600	-	-	-	-	-	-	Articulado
N73	65.850	32.261	2.600	X	X	X	X	X	X	Empotrado
N74	64.800	32.261	2.600	-	-	-	-	-	-	Articulado
N75	65.850	30.861	2.600	X	X	X	X	X	X	Empotrado
N76	64.800	30.861	2.600	-	-	-	-	-	-	Articulado
N77	65.850	29.461	2.600	X	X	X	X	X	X	Empotrado
N78	64.800	29.461	2.600	-	-	-	-	-	-	Articulado
N79	65.850	28.061	2.600	X	X	X	X	X	X	Empotrado
N80	64.800	28.061	2.600	-	-	-	-	-	-	Articulado
N81	65.850	26.661	2.600	X	X	X	X	X	X	Empotrado
N82	64.800	26.661	2.600	-	-	-	-	-	-	Articulado
N83	65.850	25.261	2.600	X	X	X	X	X	X	Empotrado
N84	64.800	25.261	2.600	-	-	-	-	-	-	Articulado
N85	65.850	23.861	2.600	X	X	X	X	X	X	Empotrado
N86	64.800	23.861	2.600	-	-	-	-	-	-	Articulado
N87	65.850	22.461	2.600	X	X	X	X	X	X	Empotrado
N88	64.800	22.461	2.600	-	-	-	-	-	-	Articulado
N89	65.850	21.061	2.600	X	X	X	X	X	X	Empotrado
N90	64.800	21.061	2.600	-	-	-	-	-	-	Articulado
N91	65.850	19.661	2.600	X	X	X	X	X	X	Empotrado
N92	64.800	19.661	2.600	-	-	-	-	-	-	Articulado
N93	60.890	42.136	-2.400	X	X	X	X	X	X	Empotrado
N94	60.890	41.336	-2.400	X	X	X	X	X	X	Empotrado
N95	60.890	38.135	-2.400	X	X	X	X	X	X	Empotrado
N96	60.890	37.335	-2.400	X	X	X	X	X	X	Empotrado
N97	60.890	34.135	-2.400	X	X	X	X	X	X	Empotrado
N98	60.890	33.335	-2.400	X	X	X	X	X	X	Empotrado
N99	60.890	30.135	-2.400	X	X	X	X	X	X	Empotrado
N100	60.890	29.335	-2.400	X	X	X	X	X	X	Empotrado
N101	60.890	26.088	-2.400	X	X	X	X	X	X	Empotrado
N102	60.890	25.288	-2.400	X	X	X	X	X	X	Empotrado
N103	60.890	22.535	-2.400	X	X	X	X	X	X	Empotrado
N104	60.890	21.735	-2.400	X	X	X	X	X	X	Empotrado
N105	64.800	16.831	2.000	-	-	-	-	-	-	Empotrado
N106	65.850	16.831	2.000	X	X	X	X	X	X	Empotrado
N107	60.890	19.170	-2.400	X	X	X	X	X	X	Empotrado
N108	60.890	19.970	-2.400	X	X	X	X	X	X	Empotrado

2.1.2. Barras

2.1.2.1. Materiales utilizados

Materiales utilizados							
Material		E (kp/cm²)	ν	G (kp/cm²)	f_y (kp/cm²)	$\alpha_{\cdot t}$ (m/m°C)	γ (t/m³)
Tipo	Designación						
Acero laminado	S275	2140672.8	0.300	825688.1	2803.3	0.000012	7.850

Notación:
E: Módulo de elasticidad
ν: Módulo de Poisson
G: Módulo de cortadura
f_y: Límite elástico
$\alpha_{\cdot t}$: Coeficiente de dilatación
γ: Peso específico

2.1.2.2. Descripción

Descripción											
Material		Barra (Ni/Nf)	Pieza (Ni/Nf)	Perfil(Serie)	Longitud (m)			β_{xy}	β_{xz}	$Lb_{Sup.}$ (m)	$Lb_{Inf.}$ (m)
Tipo	Designación				Indeformable origen	Deformable	Indeformable extremo				
Acero laminado	S275	N1/N6	N1/N2	IPE-200 (IPE)	-	1.050	-	1.00	1.00	-	-
		N6/N2	N1/N2	IPE-200 (IPE)	-	1.050	-	1.00	1.00	-	-
		N3/N1	N3/N1	IPE-140 (IPE)	-	0.800	-	1.00	1.00	-	-
		N3/N27	N3/N4	IPE-200 (IPE)	-	1.050	-	1.00	1.00	-	-
		N27/N4	N3/N4	IPE-200 (IPE)	-	1.050	-	1.00	1.00	-	-
		N7/N37	N7/N8	IPE-200 (IPE)	-	1.050	-	1.00	1.00	-	-
		N37/N8	N7/N8	IPE-200 (IPE)	-	1.050	-	1.00	1.00	-	-
		N7/N9	N7/N9	IPE-140 (IPE)	-	0.800	-	1.00	1.00	-	-
		N9/N36	N9/N10	IPE-200 (IPE)	-	1.050	-	1.00	1.00	-	-
		N36/N10	N9/N10	IPE-200 (IPE)	-	1.050	-	1.00	1.00	-	-
		N11/N35	N11/N12	IPE-200 (IPE)	-	1.050	-	1.00	1.00	-	-
		N35/N12	N11/N12	IPE-200 (IPE)	-	1.050	-	1.00	1.00	-	-
		N11/N13	N11/N13	IPE-140 (IPE)	-	0.800	-	1.00	1.00	-	-
		N13/N34	N13/N14	IPE-200 (IPE)	-	1.050	-	1.00	1.00	-	-
		N34/N14	N13/N14	IPE-200 (IPE)	-	1.050	-	1.00	1.00	-	-
		N15/N33	N15/N16	IPE-200 (IPE)	-	1.050	-	1.00	1.00	-	-
		N33/N16	N15/N16	IPE-200 (IPE)	-	1.050	-	1.00	1.00	-	-
		N15/N17	N15/N17	IPE-140 (IPE)	-	0.800	-	1.00	1.00	-	-
		N17/N32	N17/N18	IPE-200 (IPE)	-	1.050	-	1.00	1.00	-	-
		N32/N18	N17/N18	IPE-200 (IPE)	-	1.050	-	1.00	1.00	-	-

Descripción											
Material		Barra (Ni/Nf)	Pieza (Ni/Nf)	Perfil(Serie)	Longitud (m)			β_{xy}	β_{xz}	$Lb_{Sup.}$ (m)	$Lb_{Inf.}$ (m)
Tipo	Designación				Indeformable origen	Deformable	Indeformable extremo				
		N19/N31	N19/N20	IPE-200 (IPE)	-	1.050	-	1.00	1.00	-	-
		N31/N20	N19/N20	IPE-200 (IPE)	-	1.050	-	1.00	1.00	-	-
		N19/N21	N19/N21	IPE-140 (IPE)	-	0.800	-	1.00	1.00	-	-
		N21/N30	N21/N22	IPE-200 (IPE)	-	1.050	-	1.00	1.00	-	-
		N30/N22	N21/N22	IPE-200 (IPE)	-	1.050	-	1.00	1.00	-	-
		N23/N29	N23/N24	IPE-200 (IPE)	-	1.050	-	1.00	1.00	-	-
		N29/N24	N23/N24	IPE-200 (IPE)	-	1.050	-	1.00	1.00	-	-
		N23/N25	N23/N25	IPE-140 (IPE)	-	0.800	-	1.00	1.00	-	-
		N25/N28	N25/N26	IPE-200 (IPE)	-	1.050	-	1.00	1.00	-	-
		N28/N26	N25/N26	IPE-200 (IPE)	-	1.050	-	1.00	1.00	-	-
		N27/N6	N27/N6	IPE-140 (IPE)	-	0.800	-	1.00	1.00	-	-
		N29/N28	N29/N28	IPE-140 (IPE)	-	0.800	-	1.00	1.00	-	-
		N31/N30	N31/N30	IPE-140 (IPE)	-	0.800	-	1.00	1.00	-	-
		N33/N32	N33/N32	IPE-140 (IPE)	0.050	0.700	0.050	1.00	1.00	-	-
		N34/N40	N34/N33	IPE-140 (IPE)	-	1.624	-	1.00	1.00	-	-
		N40/N33	N34/N33	IPE-140 (IPE)	-	1.574	0.050	1.00	1.00	-	-
		N35/N34	N35/N34	IPE-140 (IPE)	-	0.800	-	1.00	1.00	-	-
		N36/N38	N36/N35	IPE-140 (IPE)	-	1.376	-	1.00	1.00	-	-
		N38/N35	N36/N35	IPE-140 (IPE)	-	1.376	-	1.00	1.00	-	-
		N37/N36	N37/N36	IPE-140 (IPE)	-	0.800	-	1.00	1.00	-	-
		N38/N39	N38/N39	IPE-140 (IPE)	-	1.050	-	1.00	1.00	-	-
		N40/N41	N40/N41	IPE-140 (IPE)	-	1.050	-	1.00	1.00	-	-
		N32/N47	N32/N31	IPE-140 (IPE)	0.050	1.550	-	1.00	1.00	-	-
		N47/N31	N32/N31	IPE-140 (IPE)	-	1.600	-	1.00	1.00	-	-
		N30/N45	N30/N29	IPE-140 (IPE)	-	1.600	-	1.00	1.00	-	-
		N45/N29	N30/N29	IPE-140 (IPE)	-	1.600	-	1.00	1.00	-	-
		N28/N43	N28/N27	IPE-140 (IPE)	-	1.600	-	1.00	1.00	-	-
		N43/N27	N28/N27	IPE-140 (IPE)	-	1.600	-	1.00	1.00	-	-

Descripción											
Material		Barra (Ni/Nf)	Pieza (Ni/Nf)	Perfil(Serie)	Longitud (m)			β_{xy}	β_{xz}	$Lb_{Sup.}$ (m)	$Lb_{Inf.}$ (m)
Tipo	Designación				Indeformable origen	Deformable	Indeformable extremo				
		N43/N44	N43/N44	IPE-140 (IPE)	-	1.050	-	1.00	1.00	-	-
		N45/N46	N45/N46	IPE-140 (IPE)	-	1.050	-	1.00	1.00	-	-
		N47/N42	N47/N42	IPE-140 (IPE)	-	1.050	-	1.00	1.00	-	-
		N48/N5	N48/N49	IPE-200 (IPE)	-	1.050	-	1.00	1.00	-	-
		N5/N49	N48/N49	IPE-200 (IPE)	-	1.050	-	1.00	1.00	-	-
		N50/N53	N50/N48	IPE-200 (IPE)	-	0.649	-	1.00	1.00	-	-
		N53/N48	N50/N48	IPE-200 (IPE)	-	0.800	-	1.00	1.00	-	-
		N50/N52	N50/N51	IPE-200 (IPE)	-	1.050	-	1.00	1.00	-	-
		N52/N51	N50/N51	IPE-200 (IPE)	-	1.050	-	1.00	1.00	-	-
		N52/N5	N52/N5	IPE-140 (IPE)	-	1.449	-	1.00	1.00	-	-
		N55/N54	N55/N54	IPE-140 (IPE)	-	1.050	-	1.00	1.00	-	-
		N50/N55	N50/N55	IPE-200 (IPE)	-	3.180	0.100	1.00	1.00	-	-
		N52/N54	N52/N54	IPE-200 (IPE)	-	3.180	0.100	1.00	1.00	-	-
		N57/N55	N57/N55	IPE-200 (IPE)	-	1.121	-	1.00	1.00	-	-
		N56/N54	N56/N54	IPE-200 (IPE)	-	1.121	-	1.00	1.00	-	-
		N54/N58	N54/N58	IPE-140 (IPE)	-	1.050	-	1.00	1.00	-	-
		N5/N37	N5/N37	IPE-140 (IPE)	-	1.765	-	1.00	1.00	-	-
		N61/N60	N61/N60	IPE-140 (IPE)	-	1.050	-	1.00	1.00	-	-
		N62/N59	N62/N59	IPE-140 (IPE)	-	1.050	-	1.00	1.00	-	-
		N62/N61	N62/N61	IPE-140 (IPE)	-	0.927	0.057	1.00	1.00	-	-
		N61/N92	N61/N63	IPE-140 (IPE)	-	1.140	-	1.00	1.00	-	-
		N92/N90	N61/N63	IPE-140 (IPE)	-	1.400	-	1.00	1.00	-	-
		N90/N88	N61/N63	IPE-140 (IPE)	-	1.400	-	1.00	1.00	-	-
		N88/N86	N61/N63	IPE-140 (IPE)	-	1.400	-	1.00	1.00	-	-
		N86/N84	N61/N63	IPE-140 (IPE)	-	1.400	-	1.00	1.00	-	-
		N84/N82	N61/N63	IPE-140 (IPE)	-	1.400	-	1.00	1.00	-	-
		N82/N80	N61/N63	IPE-140 (IPE)	-	1.400	-	1.00	1.00	-	-
		N80/N78	N61/N63	IPE-140 (IPE)	-	1.400	-	1.00	1.00	-	-

Descripción											
Material		Barra (Ni/Nf)	Pieza (Ni/Nf)	Perfil(Serie)	Longitud (m)			β_{xy}	β_{xz}	$Lb_{Sup.}$ (m)	$Lb_{Inf.}$ (m)
Tipo	Designación				Indeformable origen	Deformable	Indeformable extremo				
		N78/N76	N61/N63	IPE-140 (IPE)	-	1.400	-	1.00	1.00	-	-
		N76/N74	N61/N63	IPE-140 (IPE)	-	1.400	-	1.00	1.00	-	-
		N74/N72	N61/N63	IPE-140 (IPE)	-	1.400	-	1.00	1.00	-	-
		N72/N70	N61/N63	IPE-140 (IPE)	-	1.400	-	1.00	1.00	-	-
		N70/N68	N61/N63	IPE-140 (IPE)	-	1.400	-	1.00	1.00	-	-
		N68/N66	N61/N63	IPE-140 (IPE)	-	1.400	-	1.00	1.00	-	-
		N66/N63	N61/N63	IPE-140 (IPE)	-	1.489	-	1.00	1.00	-	-
		N63/N64	N63/N64	IPE-140 (IPE)	-	1.050	-	1.00	1.00	-	-
		N66/N65	N66/N65	IPE-140 (IPE)	-	1.050	-	1.00	1.00	-	-
		N68/N67	N68/N67	IPE-140 (IPE)	-	1.050	-	1.00	1.00	-	-
		N70/N69	N70/N69	IPE-140 (IPE)	-	1.050	-	1.00	1.00	-	-
		N72/N71	N72/N71	IPE-140 (IPE)	-	1.050	-	1.00	1.00	-	-
		N74/N73	N74/N73	IPE-140 (IPE)	-	1.050	-	1.00	1.00	-	-
		N76/N75	N76/N75	IPE-140 (IPE)	-	1.050	-	1.00	1.00	-	-
		N78/N77	N78/N77	IPE-140 (IPE)	-	1.050	-	1.00	1.00	-	-
		N80/N79	N80/N79	IPE-140 (IPE)	-	1.050	-	1.00	1.00	-	-
		N82/N81	N82/N81	IPE-140 (IPE)	-	1.050	-	1.00	1.00	-	-
		N84/N83	N84/N83	IPE-140 (IPE)	-	1.050	-	1.00	1.00	-	-
		N86/N85	N86/N85	IPE-140 (IPE)	-	1.050	-	1.00	1.00	-	-
		N88/N87	N88/N87	IPE-140 (IPE)	-	1.050	-	1.00	1.00	-	-
		N90/N89	N90/N89	IPE-140 (IPE)	-	1.050	-	1.00	1.00	-	-
		N92/N91	N92/N91	IPE-140 (IPE)	-	1.050	-	1.00	1.00	-	-
		N93/N1	N93/N1	IPE-200 (IPE)	-	3.635	0.099	1.00	1.00	-	-
		N94/N3	N94/N3	IPE-200 (IPE)	-	3.635	0.099	1.00	1.00	-	-
		N95/N25	N95/N25	IPE-200 (IPE)	-	3.635	0.099	1.00	1.00	-	-
		N96/N23	N96/N23	IPE-200 (IPE)	-	3.635	0.099	1.00	1.00	-	-
		N97/N21	N97/N21	IPE-200 (IPE)	-	3.635	0.099	1.00	1.00	-	-
		N98/N19	N98/N19	IPE-200 (IPE)	-	3.635	0.099	1.00	1.00	-	-

Descripción											
Material		Barra (Ni/Nf)	Pieza (Ni/Nf)	Perfil(Serie)	Longitud (m)			β_{xy}	β_{xz}	$Lb_{Sup.}$ (m)	$Lb_{Inf.}$ (m)
Tipo	Designación				Indeformable origen	Deformable	Indeformable extremo				
		N99/N17	N99/N17	IPE-200 (IPE)	-	3.635	0.099	1.00	1.00	-	-
		N100/N15	N100/N15	IPE-200 (IPE)	-	3.635	0.099	1.00	1.00	-	-
		N101/N13	N101/N13	IPE-200 (IPE)	-	3.635	0.099	1.00	1.00	-	-
		N102/N11	N102/N11	IPE-200 (IPE)	-	3.635	0.099	1.00	1.00	-	-
		N103/N9	N103/N9	IPE-200 (IPE)	-	3.635	0.099	1.00	1.00	-	-
		N104/N7	N104/N7	IPE-200 (IPE)	-	3.635	0.099	1.00	1.00	-	-
		N105/N106	N105/N106	IPE-140 (IPE)	-	1.050	-	1.00	1.00	-	-
		N54/N105	N54/N105	IPE-140 (IPE)	0.091	0.819	-	1.00	1.00	-	-
		N105/N62	N105/N62	IPE-140 (IPE)	-	0.910	-	1.00	1.00	-	-
		N107/N53	N107/N53	IPE-200 (IPE)	-	3.646	0.088	1.00	1.00	-	-
		N108/N48	N108/N48	IPE-200 (IPE)	-	3.646	0.088	1.00	1.00	-	-

Notación:
Ni: Nudo inicial
Nf: Nudo final
β_{xy}: Coeficiente de pandeo en el plano 'XY'
β_{xz}: Coeficiente de pandeo en el plano 'XZ'
$Lb_{Sup.}$: Separación entre arriostramientos del ala superior
$Lb_{Inf.}$: Separación entre arriostramientos del ala inferior

2.1.2.3. Características mecánicas

Tipos de pieza	
Ref.	Piezas
1	N1/N2, N3/N4, N7/N8, N9/N10, N11/N12, N13/N14, N15/N16, N17/N18, N19/N20, N21/N22, N23/N24, N25/N26, N48/N49, N50/N48, N50/N51, N50/N55, N52/N54, N57/N55, N56/N54, N93/N1, N94/N3, N95/N25, N96/N23, N97/N21, N98/N19, N99/N17, N100/N15, N101/N13, N102/N11, N103/N9, N104/N7, N107/N53 y N108/N48
2	N3/N1, N7/N9, N11/N13, N15/N17, N19/N21, N23/N25, N27/N6, N29/N28, N31/N30, N33/N32, N34/N33, N35/N34, N36/N35, N37/N36, N38/N39, N40/N41, N32/N31, N30/N29, N28/N27, N43/N44, N45/N46, N47/N42, N52/N5, N55/N54, N54/N58, N5/N37, N61/N60, N62/N59, N62/N61, N61/N63, N63/N64, N66/N65, N68/N67, N70/N69, N72/N71, N74/N73, N76/N75, N78/N77, N80/N79, N82/N81, N84/N83, N86/N85, N88/N87, N90/N89, N92/N91, N105/N106, N54/N105 y N105/N62

Características mecánicas									
Material		Ref.	Descripción	A (cm²)	Avy (cm²)	Avz (cm²)	Iyy (cm4)	Izz (cm4)	It (cm4)
Tipo	Designación								
Acero laminado	S275	1	IPE-200, (IPE)	28.50	12.75	9.22	1940.00	142.00	6.67
		2	IPE-140, (IPE)	16.40	7.56	5.34	541.00	44.90	2.63

Características mecánicas									
Material		Ref.	Descripción	A (cm²)	Avy (cm²)	Avz (cm²)	Iyy (cm4)	Izz (cm4)	It (cm4)
Tipo	Designación								

Notación:
Ref.: Referencia
A: Área de la sección transversal
Avy: Área de cortante de la sección según el eje local 'Y'
Avz: Área de cortante de la sección según el eje local 'Z'
Iyy: Inercia de la sección alrededor del eje local 'Y'
Izz: Inercia de la sección alrededor del eje local 'Z'
It: Inercia a torsión
Las características mecánicas de las piezas corresponden a la sección en el punto medio de las mismas.

2.2. Resultados

2.2.1. Barras

2.2.1.1. Comprobaciones E.L.U. (Resumido)

Barras	COMPROBACIONES (CTE DB SE-A)															Estado
	$\bar{\lambda}$	λ_w	N_t	N_c	M_Y	M_Z	V_Z	V_Y	M_YV_Z	M_ZV_Y	NM_YM_Z	$NM_YM_ZV_YV_Z$	M_t	M_tV_Z	M_tV_Y	
N1/N6	$\bar{\lambda}$ < 2.0 Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	N_{Ed} = 0.00 N.P.(1)	η = 2.1	x: 1.05 m η = 1.6	x: 1.05 m η = 1.8	x: 0 m η = 1.3	η < 0.1	η < 0.1	η < 0.1	x: 1.05 m η = 5.2	η < 0.1	η = 3.5	x: 0 m η = 1.3	η < 0.1	**CUMPLE η = 5.2**
N6/N2	$\bar{\lambda}$ < 2.0 Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	N_{Ed} = 0.00 N.P.(1)	η = 2.1	x: 1.05 m η = 3.7	x: 1.05 m η = 5.0	x: 1.05 m η = 1.5	η = 0.3	η < 0.1	η < 0.1	x: 1.05 m η = 10.6	η < 0.1	η = 3.7	x: 1.05 m η = 1.5	η = 0.3	**CUMPLE η = 10.6**
N3/N1	$\bar{\lambda}$ < 2.0 Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	N_{Ed} = 0.00 N.P.(1)	η < 0.1	x: 0.4 m η = 7.4	x: 0.8 m η = 1.0	x: 0 m η = 8.0	η = 0.1	η < 0.1	η < 0.1	x: 0.4 m η = 7.7	η < 0.1	M_{Ed} = 0.00 N.P.(2)	N.P.(3)	N.P.(3)	**CUMPLE η = 8.0**
N3/N27	$\bar{\lambda}$ < 2.0 Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	N_{Ed} = 0.00 N.P.(1)	η = 2.7	x: 1.05 m η = 4.8	x: 1.05 m η = 1.9	x: 0 m η = 2.4	η < 0.1	η < 0.1	η < 0.1	x: 1.05 m η = 9.0	η < 0.1	η = 3.6	x: 0 m η = 2.4	η < 0.1	**CUMPLE η = 9.0**
N27/N4	$\bar{\lambda}$ < 2.0 Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	N_{Ed} = 0.00 N.P.(1)	η = 2.7	x: 1.05 m η = 7.6	x: 1.05 m η = 5.4	x: 1.05 m η = 3.4	η = 0.3	η < 0.1	η < 0.1	x: 1.05 m η = 15.3	η < 0.1	η = 3.5	x: 1.05 m η = 3.5	η = 0.3	**CUMPLE η = 15.3**
N7/N37	$\bar{\lambda}$ < 2.0 Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	N_{Ed} = 0.00 N.P.(1)	η = 1.9	x: 1.05 m η = 4.0	x: 1.05 m η = 0.4	x: 0 m η = 2.8	η < 0.1	η < 0.1	η < 0.1	x: 1.05 m η = 6.1	η < 0.1	η = 0.7	x: 0 m η = 2.8	η < 0.1	**CUMPLE η = 6.1**
N37/N8	$\bar{\lambda}$ < 2.0 Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	N_{Ed} = 0.00 N.P.(1)	η = 1.9	x: 1.05 m η = 5.9	x: 1.05 m η = 1.1	x: 1.05 m η = 2.8	η = 0.1	η < 0.1	η < 0.1	x: 1.05 m η = 8.7	η < 0.1	η = 0.7	x: 1.05 m η = 2.8	η = 0.1	**CUMPLE η = 8.7**
N7/N9	$\bar{\lambda}$ ≤ 3.0 Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	η < 0.1	N_{Ed} = 0.00 N.P.(4)	x: 0 m η = 0.1	x: 0.8 m η = 0.1	x: 0 m η = 0.1	η < 0.1	η < 0.1	x: 0 m η < 0.1	x: 0.8 m η = 0.3	η < 0.1	M_{Ed} = 0.00 N.P.(2)	N.P.(3)	N.P.(3)	**CUMPLE η = 0.3**
N9/N36	$\bar{\lambda}$ < 2.0 Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	N_{Ed} = 0.00 N.P.(1)	η = 1.9	x: 1.05 m η = 4.2	x: 1.05 m η = 0.4	x: 0 m η = 2.9	η < 0.1	η < 0.1	η < 0.1	x: 1.05 m η = 6.3	η < 0.1	η = 0.6	x: 0 m η = 2.9	η < 0.1	**CUMPLE η = 6.3**
N36/N10	$\bar{\lambda}$ < 2.0 Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	N_{Ed} = 0.00 N.P.(1)	η = 1.9	x: 1.05 m η = 6.2	x: 1.05 m η = 1.0	x: 1.05 m η = 2.9	η = 0.1	η < 0.1	η < 0.1	x: 1.05 m η = 8.9	η < 0.1	η = 0.6	x: 1.05 m η = 2.9	η = 0.1	**CUMPLE η = 8.9**
N11/N35	$\bar{\lambda}$ < 2.0 Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	N_{Ed} = 0.00 N.P.(1)	η = 2.0	x: 1.05 m η = 4.2	x: 1.05 m η = 0.7	x: 0 m η = 2.9	η < 0.1	η < 0.1	η < 0.1	x: 1.05 m η = 6.6	η < 0.1	η = 1.2	x: 0 m η = 2.9	η < 0.1	**CUMPLE η = 6.6**
N35/N12	$\bar{\lambda}$ < 2.0 Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	N_{Ed} = 0.00 N.P.(1)	η = 2.0	x: 1.05 m η = 6.2	x: 1.05 m η = 1.8	x: 1.05 m η = 2.9	η = 0.1	η < 0.1	η < 0.1	x: 1.05 m η = 9.7	η < 0.1	η = 1.2	x: 1.05 m η = 2.9	η = 0.1	**CUMPLE η = 9.7**
N11/N13	$\bar{\lambda}$ ≤ 3.0 Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	η < 0.1	N_{Ed} = 0.00 N.P.(4)	x: 0 m η = 0.2	x: 0.8 m η = 0.2	x: 0 m η = 0.2	η < 0.1	η < 0.1	x: 0 m η < 0.1	x: 0.8 m η = 0.4	η < 0.1	M_{Ed} = 0.00 N.P.(2)	N.P.(3)	N.P.(3)	**CUMPLE η = 0.4**
N13/N34	$\bar{\lambda}$ < 2.0 Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	N_{Ed} = 0.00 N.P.(1)	η = 2.0	x: 1.05 m η = 4.4	x: 1.05 m η = 0.6	x: 0 m η = 2.9	η < 0.1	η < 0.1	η < 0.1	x: 1.05 m η = 6.7	η < 0.1	η = 1.1	x: 0 m η = 2.9	η < 0.1	**CUMPLE η = 6.7**
N34/N14	$\bar{\lambda}$ < 2.0 Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	N_{Ed} = 0.00 N.P.(1)	η = 1.9	x: 1.05 m η = 6.3	x: 1.05 m η = 1.7	x: 1.05 m η = 3.0	η = 0.1	η < 0.1	η < 0.1	x: 1.05 m η = 9.7	η < 0.1	η = 1.1	x: 1.05 m η = 3.0	η = 0.1	**CUMPLE η = 9.7**
N15/N33	$\bar{\lambda}$ < 2.0 Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	N_{Ed} = 0.00 N.P.(1)	η = 2.1	x: 1.05 m η = 5.4	x: 1.05 m η = 0.7	x: 0 m η = 3.2	η < 0.1	η < 0.1	η < 0.1	x: 1.05 m η = 8.0	η < 0.1	η = 0.4	x: 0 m η = 3.2	η < 0.1	**CUMPLE η = 8.0**
N33/N16	$\bar{\lambda}$ < 2.0 Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	N_{Ed} = 0.00 N.P.(1)	η = 2.3	x: 1.05 m η = 7.5	x: 1.05 m η = 5.9	x: 1.05 m η = 3.6	η = 0.4	η < 0.1	η < 0.1	x: 1.05 m η = 15.4	η < 0.1	η = 0.4	x: 1.05 m η = 3.6	η = 0.4	**CUMPLE η = 15.4**
N15/N17	$\bar{\lambda}$ < 2.0 Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	N_{Ed} = 0.00 N.P.(1)	η < 0.1	x: 0 m η = 0.3	x: 0.8 m η = 0.2	x: 0 m η = 0.2	η < 0.1	η < 0.1	η < 0.1	x: 0.8 m η = 0.4	η < 0.1	M_{Ed} = 0.00 N.P.(2)	N.P.(3)	N.P.(3)	**CUMPLE η = 0.4**
N17/N32	$\bar{\lambda}$ < 2.0 Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	N_{Ed} = 0.00 N.P.(1)	η = 2.1	x: 1.05 m η = 5.3	x: 1.05 m η = 1.4	x: 0 m η = 3.2	η < 0.1	η < 0.1	η < 0.1	x: 1.05 m η = 8.5	η < 0.1	η = 0.4	x: 0 m η = 3.2	η < 0.1	**CUMPLE η = 8.5**
N32/N18	$\bar{\lambda}$ < 2.0 Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	N_{Ed} = 0.00 N.P.(1)	η = 2.0	x: 1.05 m η = 7.4	x: 1.05 m η = 6.4	x: 1.05 m η = 3.5	η = 0.4	η < 0.1	η < 0.1	x: 1.05 m η = 15.4	η < 0.1	η = 0.4	x: 1.05 m η = 3.5	η = 0.4	**CUMPLE η = 15.4**
N19/N31	$\bar{\lambda}$ < 2.0 Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	N_{Ed} = 0.00 N.P.(1)	η = 2.0	x: 1.05 m η = 4.4	x: 1.05 m η = 0.9	x: 0 m η = 2.2	η < 0.1	η < 0.1	η < 0.1	x: 1.05 m η = 7.0	η < 0.1	η = 1.6	x: 0 m η = 2.3	η < 0.1	**CUMPLE η = 7.0**
N31/N20	$\bar{\lambda}$ < 2.0 Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	N_{Ed} = 0.00 N.P.(1)	η = 2.0	x: 1.05 m η = 6.2	x: 1.05 m η = 2.5	x: 1.05 m η = 2.9	η = 0.1	η < 0.1	η < 0.1	x: 1.05 m η = 10.4	η < 0.1	η = 1.6	x: 1.05 m η = 3.0	η = 0.1	**CUMPLE η = 10.4**
N19/N21	$\bar{\lambda}$ < 2.0 Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	N_{Ed} = 0.00 N.P.(1)	η < 0.1	x: 0.4 m η = 1.1	x: 0.8 m η = 0.3	x: 0 m η = 1.3	η < 0.1	η < 0.1	η < 0.1	x: 0.6 m η = 1.1	η < 0.1	M_{Ed} = 0.00 N.P.(2)	N.P.(3)	N.P.(3)	**CUMPLE η = 1.3**
N21/N30	$\bar{\lambda}$ < 2.0 Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	N_{Ed} = 0.00 N.P.(1)	η = 1.9	x: 1.05 m η = 4.4	x: 1.05 m η = 0.9	x: 0 m η = 2.3	η < 0.1	η < 0.1	η < 0.1	x: 1.05 m η = 7.0	η < 0.1	η = 1.6	x: 0 m η = 2.3	η < 0.1	**CUMPLE η = 7.0**
N30/N22	$\bar{\lambda}$ < 2.0 Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	N_{Ed} = 0.00 N.P.(1)	η = 1.9	x: 1.05 m η = 6.2	x: 1.05 m η = 2.5	x: 1.05 m η = 3.0	η = 0.1	η < 0.1	η < 0.1	x: 1.05 m η = 10.3	η < 0.1	η = 1.7	x: 1.05 m η = 3.0	η = 0.1	**CUMPLE η = 10.3**
N23/N29	$\bar{\lambda}$ < 2.0 Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	N_{Ed} = 0.00 N.P.(1)	η = 2.0	x: 1.05 m η = 4.3	x: 1.05 m η = 1.4	x: 0 m η = 2.9	η < 0.1	η < 0.1	η < 0.1	x: 1.05 m η = 7.4	η < 0.1	η = 2.5	x: 0 m η = 2.9	η < 0.1	**CUMPLE η = 7.4**
N29/N24	$\bar{\lambda}$ < 2.0 Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	N_{Ed} = 0.00 N.P.(1)	η = 2.0	x: 1.05 m η = 6.3	x: 1.05 m η = 3.8	x: 1.05 m η = 2.9	η = 0.2	η < 0.1	η < 0.1	x: 1.05 m η = 11.8	η < 0.1	η = 2.5	x: 1.05 m η = 3.0	η = 0.2	**CUMPLE η = 11.8**
N23/N25	N.P.(5)	$\lambda_w \leq \lambda_{w,máx}$ Cumple	N_{Ed} = 0.00 N.P.(1)	N_{Ed} = 0.00 N.P.(4)	x: 0 m η = 0.4	x: 0 m η = 0.5	x: 0 m η = 0.3	η < 0.1	η < 0.1	x: 0 m η < 0.1	x: 0 m η = 0.9	x: 0 m η < 0.1	M_{Ed} = 0.00 N.P.(2)	N.P.(3)	N.P.(3)	**CUMPLE η = 0.9**
N25/N28	$\bar{\lambda}$ < 2.0 Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	N_{Ed} = 0.00 N.P.(1)	η = 1.9	x: 1.05 m η = 4.3	x: 1.05 m η = 1.4	x: 0 m η = 2.9	η < 0.1	η < 0.1	η < 0.1	x: 1.05 m η = 7.3	η < 0.1	η = 2.5	x: 0 m η = 2.9	η < 0.1	**CUMPLE η = 7.3**

Barras	COMPROBACIONES (CTE DB SE-A)															Estado
	$\bar{\lambda}$	λ_w	N_t	N_c	M_Y	M_Z	V_Z	V_Y	M_YV_Z	M_ZV_Y	NM_YM_Z	$NM_YM_ZV_YV_Z$	M_t	M_tV_Z	M_tV_Y	
N28/N26	$\bar{\lambda} < 2.0$ Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	$N_{Ed} = 0.00$ N.P.(1)	η = 1.9	x: 1.05 m η = 6.2	x: 1.05 m η = 3.8	x: 1.05 m η = 2.9	η = 0.2	η < 0.1	η < 0.1	x: 1.05 m η = 11.6	η < 0.1	η = 2.5	x: 1.05 m η = 2.9	η = 0.2	**CUMPLE η = 11.6**
N27/N6	$\bar{\lambda} \leq 3.0$ Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	η = 0.2	$N_{Ed} = 0.00$ N.P.(4)	x: 0.4 m η = 1.9	$M_{Ed} = 0.00$ N.P.(6)	x: 0 m η = 2.2	$V_{Ed} = 0.00$ N.P.(7)	x: 0 m η < 0.1	N.P.(8)	x: 0.4 m η = 2.1	x: 0 m η < 0.1	$M_{Ed} = 0.00$ N.P.(2)	N.P.(3)	N.P.(3)	**CUMPLE η = 2.2**
N29/N28	$\bar{\lambda} \leq 3.0$ Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	η = 0.6	$N_{Ed} = 0.00$ N.P.(4)	x: 0.4 m η = 1.4	$M_{Ed} = 0.00$ N.P.(6)	x: 0 m η = 2.2	$V_{Ed} = 0.00$ N.P.(7)	x: 0 m η < 0.1	N.P.(8)	x: 0.4 m η = 2.0	x: 0 m η < 0.1	$M_{Ed} = 0.00$ N.P.(2)	N.P.(3)	N.P.(3)	**CUMPLE η = 2.2**
N31/N30	$\bar{\lambda} \leq 3.0$ Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	η = 0.9	$N_{Ed} = 0.00$ N.P.(4)	x: 0.4 m η = 2.1	$M_{Ed} = 0.00$ N.P.(6)	x: 0 m η = 3.3	$V_{Ed} = 0.00$ N.P.(7)	x: 0 m η < 0.1	N.P.(8)	x: 0.4 m η = 3.0	x: 0 m η < 0.1	$M_{Ed} = 0.00$ N.P.(2)	N.P.(3)	N.P.(3)	**CUMPLE η = 3.3**
N33/N32	$\bar{\lambda} \leq 3.0$ Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	η = 1.3	$N_{Ed} = 0.00$ N.P.(4)	x: 0.05 m η = 14.4	x: 0.75 m η = 6.0	x: 0.05 m η = 2.0	η = 0.5	η < 0.1	η < 0.1	x: 0.05 m η = 21.6	η < 0.1	$M_{Ed} = 0.00$ N.P.(2)	N.P.(3)	N.P.(3)	**CUMPLE η = 21.6**
N34/N40	$\bar{\lambda} \leq 3.0$ Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	η = 1.6	$N_{Ed} = 0.00$ N.P.(4)	x: 1.015 m η = 11.3	x: 1.624 m η = 0.5	x: 0 m η = 5.5	η < 0.1	η < 0.1	x: 0.203 m η < 0.1	x: 1.015 m η = 13.2	η < 0.1	$M_{Ed} = 0.00$ N.P.(2)	N.P.(3)	N.P.(3)	**CUMPLE η = 13.2**
N40/N33	$\bar{\lambda} \leq 3.0$ Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	η = 1.5	$N_{Ed} = 0.00$ N.P.(4)	x: 1.574 m η = 13.1	x: 1.574 m η = 1.4	x: 1.574 m η = 6.8	η < 0.1	η < 0.1	η < 0.1	x: 1.574 m η = 16.1	η < 0.1	η = 0.7	x: 1.574 m η = 6.8	η < 0.1	**CUMPLE η = 16.1**
N35/N34	$\bar{\lambda} \leq 3.0$ Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	η = 1.6	$N_{Ed} = 0.00$ N.P.(4)	x: 0 m η = 2.1	$M_{Ed} = 0.00$ N.P.(6)	x: 0 m η = 2.2	$V_{Ed} = 0.00$ N.P.(7)	x: 0 m η < 0.1	N.P.(8)	x: 0 m η = 3.7	x: 0 m η < 0.1	$M_{Ed} = 0.00$ N.P.(2)	N.P.(3)	N.P.(3)	**CUMPLE η = 3.7**
N36/N38	$\bar{\lambda} \leq 3.0$ Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	η = 1.7	$N_{Ed} = 0.00$ N.P.(4)	x: 0.917 m η = 10.1	x: 1.376 m η = 0.4	x: 0 m η = 5.2	η < 0.1	η < 0.1	x: 0.229 m η < 0.1	x: 0.917 m η = 12.1	η < 0.1	$M_{Ed} = 0.00$ N.P.(2)	N.P.(3)	N.P.(3)	**CUMPLE η = 12.1**
N38/N35	$\bar{\lambda} \leq 3.0$ Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	η = 1.7	$N_{Ed} = 0.00$ N.P.(4)	x: 0.459 m η = 10.1	x: 0 m η = 0.4	x: 1.376 m η = 5.2	η < 0.1	η < 0.1	x: 0 m η < 0.1	x: 0.459 m η = 12.1	η < 0.1	$M_{Ed} = 0.00$ N.P.(2)	N.P.(3)	N.P.(3)	**CUMPLE η = 12.1**
N37/N36	$\bar{\lambda} \leq 3.0$ Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	η = 1.8	$N_{Ed} = 0.00$ N.P.(4)	x: 0 m η = 2.3	$M_{Ed} = 0.00$ N.P.(6)	x: 0 m η = 2.2	$V_{Ed} = 0.00$ N.P.(7)	x: 0 m η < 0.1	N.P.(8)	x: 0 m η = 4.0	x: 0 m η < 0.1	$M_{Ed} = 0.00$ N.P.(2)	N.P.(3)	N.P.(3)	**CUMPLE η = 4.0**
N38/N39	$\bar{\lambda} < 2.0$ Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	$N_{Ed} = 0.00$ N.P.(1)	η < 0.1	x: 1.05 m η = 25.1	x: 1.05 m η = 1.3	x: 1.05 m η = 4.9	η < 0.1	η < 0.1	x: 0.175 m η < 0.1	x: 1.05 m η = 26.4	η < 0.1	η = 0.7	x: 1.05 m η = 4.9	η < 0.1	**CUMPLE η = 26.4**
N40/N41	$\bar{\lambda} < 2.0$ Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	$N_{Ed} = 0.00$ N.P.(1)	η < 0.1	x: 1.05 m η = 28.7	x: 1.05 m η = 2.0	x: 1.05 m η = 5.6	η = 0.1	η < 0.1	x: 0.175 m η < 0.1	x: 1.05 m η = 30.7	η < 0.1	η = 1.1	x: 1.05 m η = 5.6	η = 0.1	**CUMPLE η = 30.7**
N32/N47	$\bar{\lambda} \leq 3.0$ Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	η = 1.0	$N_{Ed} = 0.00$ N.P.(4)	x: 0.05 m η = 13.2	x: 0.05 m η = 0.6	x: 0.05 m η = 6.8	η < 0.1	η < 0.1	η < 0.1	x: 0.05 m η = 14.7	η < 0.1	$M_{Ed} = 0.00$ N.P.(2)	N.P.(3)	N.P.(3)	**CUMPLE η = 14.7**
N47/N31	$\bar{\lambda} \leq 3.0$ Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	η = 1.0	$N_{Ed} = 0.00$ N.P.(4)	x: 0.6 m η = 11.5	x: 0 m η = 0.3	x: 1.6 m η = 5.3	η < 0.1	η < 0.1	x: 0 m η < 0.1	x: 0.6 m η = 12.6	η < 0.1	$M_{Ed} = 0.00$ N.P.(2)	N.P.(3)	N.P.(3)	**CUMPLE η = 12.6**
N30/N45	$\bar{\lambda} \leq 3.0$ Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	η = 0.8	$N_{Ed} = 0.00$ N.P.(4)	x: 1 m η = 12.0	x: 1.6 m η = 0.5	x: 0 m η = 5.4	η < 0.1	η < 0.1	x: 0.2 m η < 0.1	x: 1 m η = 13.0	η < 0.1	$M_{Ed} = 0.00$ N.P.(2)	N.P.(3)	N.P.(3)	**CUMPLE η = 13.0**
N45/N29	$\bar{\lambda} \leq 3.0$ Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	η = 0.7	$N_{Ed} = 0.00$ N.P.(4)	x: 0.6 m η = 12.0	x: 0 m η = 0.5	x: 1.6 m η = 5.4	η < 0.1	η < 0.1	x: 0 m η < 0.1	x: 0.6 m η = 13.0	η < 0.1	$M_{Ed} = 0.00$ N.P.(2)	N.P.(3)	N.P.(3)	**CUMPLE η = 13.0**
N28/N43	$\bar{\lambda} \leq 3.0$ Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	η = 0.4	$N_{Ed} = 0.00$ N.P.(4)	x: 1 m η = 12.1	x: 1.6 m η = 0.5	x: 0 m η = 5.3	η < 0.1	η < 0.1	x: 0.2 m η < 0.1	x: 1 m η = 12.8	η < 0.1	$M_{Ed} = 0.00$ N.P.(2)	N.P.(3)	N.P.(3)	**CUMPLE η = 12.8**
N43/N27	$\bar{\lambda} \leq 3.0$ Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	η = 0.4	$N_{Ed} = 0.00$ N.P.(4)	x: 0.6 m η = 12.1	x: 0 m η = 0.5	x: 1.6 m η = 5.3	η < 0.1	η < 0.1	x: 0 m η < 0.1	x: 0.6 m η = 12.8	η < 0.1	$M_{Ed} = 0.00$ N.P.(2)	N.P.(3)	N.P.(3)	**CUMPLE η = 12.8**
N43/N44	$\bar{\lambda} < 2.0$ Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	$N_{Ed} = 0.00$ N.P.(1)	η < 0.1	x: 1.05 m η = 37.2	x: 1.05 m η = 4.0	x: 1.05 m η = 7.2	η = 0.1	η < 0.1	x: 0.175 m η < 0.1	x: 1.05 m η = 41.2	η < 0.1	η = 2.2	x: 1.05 m η = 7.3	η = 0.1	**CUMPLE η = 41.2**
N45/N46	$\bar{\lambda} < 2.0$ Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	$N_{Ed} = 0.00$ N.P.(1)	η < 0.1	x: 1.05 m η = 36.5	x: 1.05 m η = 2.8	x: 1.05 m η = 7.1	η = 0.1	η < 0.1	x: 0.175 m η < 0.1	x: 1.05 m η = 39.3	η < 0.1	η = 1.6	x: 1.05 m η = 7.1	η = 0.1	**CUMPLE η = 39.3**
N47/N42	$\bar{\lambda} < 2.0$ Cumple	x: 0.175 m $\lambda_w \leq \lambda_{w,máx}$ Cumple	$N_{Ed} = 0.00$ N.P.(1)	η < 0.1	x: 1.05 m η = 28.1	x: 1.05 m η = 1.7	x: 1.05 m η = 5.5	η = 0.1	x: 0.175 m η < 0.1	x: 0.175 m η < 0.1	x: 1.05 m η = 29.7	x: 0.175 m η < 0.1	η = 0.9	x: 1.05 m η = 5.5	η = 0.1	**CUMPLE η = 29.7**
N48/N5	$\bar{\lambda} < 2.0$ Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	$N_{Ed} = 0.00$ N.P.(1)	η = 3.8	x: 1.05 m η = 5.7	x: 0 m η = 6.9	x: 0 m η = 2.0	η = 0.2	η < 0.1	η < 0.1	x: 0 m η = 11.6	η < 0.1	$M_{Ed} = 0.00$ N.P.(2)	N.P.(3)	N.P.(3)	**CUMPLE η = 11.6**
N5/N49	$\bar{\lambda} < 2.0$ Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	$N_{Ed} = 0.00$ N.P.(1)	η = 3.8	x: 1.05 m η = 8.9	x: 0 m η = 2.3	x: 1.05 m η = 4.0	η = 0.1	η < 0.1	η < 0.1	x: 1.05 m η = 13.3	η < 0.1	η = 0.9	x: 1.05 m η = 4.0	η = 0.1	**CUMPLE η = 13.3**
N50/N53	$\bar{\lambda} < 2.0$ Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	$N_{Ed} = 0.00$ N.P.(1)	η = 0.1	x: 0 m η = 5.7	x: 0.649 m η = 28.6	x: 0.649 m η = 2.1	η = 3.4	η < 0.1	η < 0.1	x: 0.649 m η = 30.9	η < 0.1	η = 1.5	x: 0.649 m η = 2.1	η = 3.4	**CUMPLE η = 30.9**
N53/N48	$\bar{\lambda} < 2.0$ Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	$N_{Ed} = 0.00$ N.P.(1)	η = 0.1	x: 0.4 m η = 5.0	x: 0 m η = 26.1	x: 0.8 m η = 5.8	η = 1.8	η < 0.1	η < 0.1	x: 0 m η = 28.8	η < 0.1	η = 0.4	x: 0.8 m η = 5.8	η = 1.8	**CUMPLE η = 28.8**
N50/N52	$\bar{\lambda} < 2.0$ Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	$N_{Ed} = 0.00$ N.P.(1)	η = 1.5	x: 0 m η = 0.8	x: 0 m η = 18.9	x: 1.05 m η = 0.2	η = 1.1	η < 0.1	η < 0.1	x: 0 m η = 21.0	η < 0.1	η = 0.3	x: 1.05 m η = 0.2	η = 1.1	**CUMPLE η = 21.0**
N52/N51	$\bar{\lambda} < 2.0$ Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	$N_{Ed} = 0.00$ N.P.(1)	η = 1.5	x: 1.05 m η = 21.2	x: 0 m η = 7.4	x: 1.05 m η = 5.9	η = 0.4	η < 0.1	η < 0.1	x: 1.05 m η = 24.9	η < 0.1	η = 0.2	x: 1.05 m η = 5.9	η = 0.4	**CUMPLE η = 24.9**
N52/N5	$\bar{\lambda} \leq 3.0$ Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	η = 1.8	$N_{Ed} = 0.00$ N.P.(4)	x: 0 m η = 8.0	x: 0 m η = 3.3	x: 0 m η = 6.7	η = 0.1	η < 0.1	x: 0 m η < 0.1	x: 0 m η = 13.2	η < 0.1	η = 1.3	x: 0 m η = 6.8	η = 0.1	**CUMPLE η = 13.2**
N55/N54	$\bar{\lambda} \leq 3.0$ Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	η = 0.1	$N_{Ed} = 0.00$ N.P.(4)	x: 1.05 m η = 5.7	x: 0 m η = 1.7	x: 0 m η = 1.0	η = 0.1	η < 0.1	η < 0.1	x: 1.05 m η = 6.9	η < 0.1	$M_{Ed} = 0.00$ N.P.(2)	N.P.(3)	N.P.(3)	**CUMPLE η = 6.9**
N50/N55	x: 0 m $\bar{\lambda} < 2.0$ Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	x: 3.18 m η = 1.0	x: 0 m η < 0.1	x: 1.193 m η = 9.2	x: 0 m η = 6.1	x: 3.18 m η = 2.7	η = 0.1	η < 0.1	η < 0.1	x: 0.596 m η = 13.0	η < 0.1	$M_{Ed} = 0.00$ N.P.(2)	N.P.(3)	N.P.(3)	**CUMPLE η = 13.0**
N52/N54	x: 0 m $\bar{\lambda} < 2.0$ Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	x: 3.18 m η = 1.0	x: 0 m η < 0.1	x: 1.988 m η = 5.5	x: 3.18 m η = 2.0	x: 0 m η = 2.5	η < 0.1	η < 0.1	η < 0.1	x: 2.186 m η = 7.0	η < 0.1	η = 0.1	x: 0 m η = 2.5	η < 0.1	**CUMPLE η = 7.0**
N57/N55	$\bar{\lambda} \leq 3.0$ Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	η = 0.3	$N_{Ed} = 0.00$ N.P.(4)	x: 0 m η = 23.7	x: 1.121 m η = 1.8	x: 0 m η = 6.8	η = 0.1	η < 0.1	x: 0 m η < 0.1	x: 0 m η = 24.9	η < 0.1	$M_{Ed} = 0.00$ N.P.(2)	N.P.(3)	N.P.(3)	**CUMPLE η = 24.9**
N56/N54	$\bar{\lambda} \leq 3.0$ Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	η = 0.5	$N_{Ed} = 0.00$ N.P.(4)	x: 0 m η = 18.3	x: 1.121 m η = 0.5	x: 0 m η = 7.8	η < 0.1	η < 0.1	η < 0.1	x: 0 m η = 19.2	η < 0.1	η = 0.4	x: 0 m η = 7.8	η < 0.1	**CUMPLE η = 19.2**
N54/N58	$\bar{\lambda} \leq 3.0$ Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	η = 0.2	$N_{Ed} = 0.00$ N.P.(4)	x: 1.05 m η = 15.4	x: 0 m η = 0.6	x: 1.05 m η = 4.3	η < 0.1	η < 0.1	η < 0.1	x: 1.05 m η = 16.1	η < 0.1	η = 0.3	x: 1.05 m η = 4.3	η < 0.1	**CUMPLE η = 16.1**
N5/N37	$\bar{\lambda} \leq 3.0$ Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	η = 1.8	$N_{Ed} = 0.00$ N.P.(4)	x: 0.882 m η = 8.3	$M_{Ed} = 0.00$ N.P.(6)	x: 0 m η = 4.9	$V_{Ed} = 0.00$ N.P.(7)	x: 0 m η < 0.1	N.P.(8)	x: 0.882 m η = 10.1	x: 0 m η < 0.1	$M_{Ed} = 0.00$ N.P.(2)	N.P.(3)	N.P.(3)	**CUMPLE η = 10.1**
N61/N60	$\bar{\lambda} \leq 3.0$ Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	η = 0.4	$N_{Ed} = 0.00$ N.P.(4)	x: 1.05 m η = 31.0	x: 0 m η = 5.8	x: 1.05 m η = 6.4	η = 0.2	η < 0.1	η < 0.1	x: 1.05 m η = 32.9	η < 0.1	$M_{Ed} = 0.00$ N.P.(2)	N.P.(3)	N.P.(3)	**CUMPLE η = 32.9**
N62/N59	$\bar{\lambda} < 2.0$ Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	$N_{Ed} = 0.00$ N.P.(1)	η = 0.6	x: 1.05 m η = 27.5	x: 0 m η = 5.2	x: 1.05 m η = 5.7	η = 0.2	η < 0.1	η < 0.1	x: 1.05 m η = 30.3	η < 0.1	$M_{Ed} = 0.00$ N.P.(2)	N.P.(3)	N.P.(3)	**CUMPLE η = 30.3**
N62/N61	x: 0 m $\bar{\lambda} < 2.0$ Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	x: 0.927 m η = 0.4	x: 0 m η = 0.5	x: 0.927 m η = 2.8	x: 0 m η = 12.7	x: 0.927 m η = 2.3	η = 0.9	η < 0.1	η < 0.1	x: 0.927 m η = 15.5	η < 0.1	$M_{Ed} = 0.00$ N.P.(2)	N.P.(3)	N.P.(3)	**CUMPLE η = 15.5**
N61/N92	$\bar{\lambda} < 2.0$ Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	$N_{Ed} = 0.00$ N.P.(1)	η = 0.2	x: 1.14 m η = 3.0	x: 0 m η = 4.0	x: 1.14 m η = 3.2	η = 0.1	η < 0.1	x: 0 m η < 0.1	x: 0 m η = 7.0	η < 0.1	η = 2.1	x: 1.14 m η = 3.2	η = 0.1	**CUMPLE η = 7.0**

Barras	COMPROBACIONES (CTE DB SE-A)															Estado
	$\bar{\lambda}$	λ_w	N_t	N_c	M_Y	M_Z	V_Z	V_Y	M_YV_Z	M_ZV_Y	NM_YM_Z	$NM_YM_ZV_YV_Z$	M_t	M_tV_Z	M_tV_Y	
N92/N90	$\bar{\lambda} < 2.0$ Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	$N_{Ed} = 0.00$ N.P.(1)	$\eta = 0.2$	x: 1.4 m $\eta = 3.7$	x: 1.4 m $\eta < 0.1$	x: 1.4 m $\eta = 4.0$	$V_{Ed} = 0.00$ N.P.(7)	$\eta < 0.1$	N.P.(8)	x: 1.4 m $\eta = 3.9$	$\eta < 0.1$	$M_{Ed} = 0.00$ N.P.(2)	N.P.(3)	N.P.(3)	**CUMPLE $\eta = 4.0$**
N90/N88	$\bar{\lambda} < 2.0$ Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	$N_{Ed} = 0.00$ N.P.(1)	$\eta = 0.2$	x: 1.4 m $\eta = 4.4$	x: 0 m $\eta < 0.1$	x: 1.4 m $\eta = 4.0$	$V_{Ed} = 0.00$ N.P.(7)	$\eta < 0.1$	N.P.(8)	x: 1.4 m $\eta = 4.5$	$\eta < 0.1$	$M_{Ed} = 0.00$ N.P.(2)	N.P.(3)	N.P.(3)	**CUMPLE $\eta = 4.5$**
N88/N86	$\bar{\lambda} < 2.0$ Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	$N_{Ed} = 0.00$ N.P.(1)	$\eta = 0.2$	x: 1.4 m $\eta = 4.5$	$M_{Ed} = 0.00$ N.P.(6)	x: 1.4 m $\eta = 3.9$	$V_{Ed} = 0.00$ N.P.(7)	$\eta < 0.1$	N.P.(8)	x: 1.4 m $\eta = 4.6$	$\eta < 0.1$	$M_{Ed} = 0.00$ N.P.(2)	N.P.(3)	N.P.(3)	**CUMPLE $\eta = 4.6$**
N86/N84	$\bar{\lambda} < 2.0$ Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	$N_{Ed} = 0.00$ N.P.(1)	$\eta = 0.1$	x: 0 m $\eta = 4.5$	$M_{Ed} = 0.00$ N.P.(6)	x: 0 m $\eta = 3.9$	$V_{Ed} = 0.00$ N.P.(7)	$\eta < 0.1$	N.P.(8)	x: 0 m $\eta = 4.6$	$\eta < 0.1$	$M_{Ed} = 0.00$ N.P.(2)	N.P.(3)	N.P.(3)	**CUMPLE $\eta = 4.6$**
N84/N82	$\bar{\lambda} < 2.0$ Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	$N_{Ed} = 0.00$ N.P.(1)	$\eta = 0.1$	x: 0 m $\eta = 4.5$	$M_{Ed} = 0.00$ N.P.(6)	x: 0 m $\eta = 3.9$	$V_{Ed} = 0.00$ N.P.(7)	$\eta < 0.1$	N.P.(8)	x: 0 m $\eta = 4.6$	$\eta < 0.1$	$M_{Ed} = 0.00$ N.P.(2)	N.P.(3)	N.P.(3)	**CUMPLE $\eta = 4.6$**
N82/N80	$\bar{\lambda} < 2.0$ Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	$N_{Ed} = 0.00$ N.P.(1)	$\eta = 0.1$	x: 0 m $\eta = 4.5$	$M_{Ed} = 0.00$ N.P.(6)	x: 0 m $\eta = 3.9$	$V_{Ed} = 0.00$ N.P.(7)	$\eta < 0.1$	N.P.(8)	x: 0 m $\eta = 4.6$	$\eta < 0.1$	$M_{Ed} = 0.00$ N.P.(2)	N.P.(3)	N.P.(3)	**CUMPLE $\eta = 4.6$**
N80/N78	$\bar{\lambda} < 2.0$ Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	$N_{Ed} = 0.00$ N.P.(1)	$\eta = 0.1$	x: 0 m $\eta = 4.5$	$M_{Ed} = 0.00$ N.P.(6)	x: 0 m $\eta = 3.9$	$V_{Ed} = 0.00$ N.P.(7)	$\eta < 0.1$	N.P.(8)	x: 0 m $\eta = 4.5$	$\eta < 0.1$	$M_{Ed} = 0.00$ N.P.(2)	N.P.(3)	N.P.(3)	**CUMPLE $\eta = 4.5$**
N78/N76	$\bar{\lambda} < 2.0$ Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	$N_{Ed} = 0.00$ N.P.(1)	$\eta = 0.1$	x: 0 m $\eta = 4.5$	$M_{Ed} = 0.00$ N.P.(6)	x: 0 m $\eta = 3.9$	$V_{Ed} = 0.00$ N.P.(7)	$\eta < 0.1$	N.P.(8)	x: 0 m $\eta = 4.5$	$\eta < 0.1$	$M_{Ed} = 0.00$ N.P.(2)	N.P.(3)	N.P.(3)	**CUMPLE $\eta = 4.5$**
N76/N74	$\bar{\lambda} < 2.0$ Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	$N_{Ed} = 0.00$ N.P.(1)	$\eta = 0.1$	x: 0 m $\eta = 4.5$	$M_{Ed} = 0.00$ N.P.(6)	x: 0 m $\eta = 3.9$	$V_{Ed} = 0.00$ N.P.(7)	x: 0 m $\eta < 0.1$	N.P.(8)	x: 0 m $\eta = 4.5$	x: 0 m $\eta < 0.1$	$M_{Ed} = 0.00$ N.P.(2)	N.P.(3)	N.P.(3)	**CUMPLE $\eta = 4.5$**
N74/N72	$\bar{\lambda} < 2.0$ Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	$N_{Ed} = 0.00$ N.P.(1)	$\eta = 0.1$	x: 1.4 m $\eta = 4.6$	$M_{Ed} = 0.00$ N.P.(6)	x: 1.4 m $\eta = 3.9$	$V_{Ed} = 0.00$ N.P.(7)	$\eta < 0.1$	N.P.(8)	x: 1.4 m $\eta = 4.6$	$\eta < 0.1$	$M_{Ed} = 0.00$ N.P.(2)	N.P.(3)	N.P.(3)	**CUMPLE $\eta = 4.6$**
N72/N70	$\bar{\lambda} < 2.0$ Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	$N_{Ed} = 0.00$ N.P.(1)	$\eta < 0.1$	x: 1.4 m $\eta = 4.7$	$M_{Ed} = 0.00$ N.P.(6)	x: 1.4 m $\eta = 3.9$	$V_{Ed} = 0.00$ N.P.(7)	$\eta < 0.1$	N.P.(8)	x: 1.4 m $\eta = 4.8$	$\eta < 0.1$	$M_{Ed} = 0.00$ N.P.(2)	N.P.(3)	N.P.(3)	**CUMPLE $\eta = 4.8$**
N70/N68	$\bar{\lambda} < 2.0$ Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	$N_{Ed} = 0.00$ N.P.(1)	$\eta < 0.1$	x: 0 m $\eta = 4.7$	$M_{Ed} = 0.00$ N.P.(6)	x: 0 m $\eta = 3.9$	$V_{Ed} = 0.00$ N.P.(7)	$\eta < 0.1$	N.P.(8)	x: 0 m $\eta = 4.8$	$\eta < 0.1$	$M_{Ed} = 0.00$ N.P.(2)	N.P.(3)	N.P.(3)	**CUMPLE $\eta = 4.8$**
N68/N66	$\bar{\lambda} < 2.0$ Cumple	x: 0 m $\lambda_w \leq \lambda_{w,máx}$ Cumple	$N_{Ed} = 0.00$ N.P.(1)	$\eta < 0.1$	x: 0 m $\eta = 4.2$	x: 1.4 m $\eta = 0.1$	x: 0 m $\eta = 4.3$	$\eta < 0.1$	x: 0 m $\eta < 0.1$	x: 0.233 m $\eta < 0.1$	x: 0 m $\eta = 4.2$	$\eta < 0.1$	$M_{Ed} = 0.00$ N.P.(2)	N.P.(3)	N.P.(3)	**CUMPLE $\eta = 4.3$**
N66/N63	$\bar{\lambda} < 2.0$ Cumple	x: 0 m $\lambda_w \leq \lambda_{w,máx}$ Cumple	$N_{Ed} = 0.00$ N.P.(1)	$\eta < 0.1$	x: 0.744 m $\eta = 7.0$	x: 0 m $\eta = 0.1$	x: 0 m $\eta = 4.3$	$\eta < 0.1$	x: 0 m $\eta < 0.1$	x: 0 m $\eta < 0.1$	x: 0.744 m $\eta = 7.0$	x: 0 m $\eta < 0.1$	$M_{Ed} = 0.00$ N.P.(2)	N.P.(3)	N.P.(3)	**CUMPLE $\eta = 7.0$**
N63/N64	$\bar{\lambda} \leq 3.0$ Cumple	x: 0.175 m $\lambda_w \leq \lambda_{w,máx}$ Cumple	$\eta < 0.1$	$N_{Ed} = 0.00$ N.P.(4)	x: 1.05 m $\eta = 20.9$	x: 1.05 m $\eta = 0.4$	x: 1.05 m $\eta = 4.1$	$\eta < 0.1$	x: 0.175 m $\eta < 0.1$	x: 0.175 m $\eta < 0.1$	x: 1.05 m $\eta = 21.3$	x: 0.175 m $\eta < 0.1$	$M_{Ed} = 0.00$ N.P.(2)	N.P.(3)	N.P.(3)	**CUMPLE $\eta = 21.3$**
N66/N65	$\bar{\lambda} < 2.0$ Cumple	x: 0.175 m $\lambda_w \leq \lambda_{w,máx}$ Cumple	$N_{Ed} = 0.00$ N.P.(1)	$\eta < 0.1$	x: 1.05 m $\eta = 40.7$	x: 1.05 m $\eta = 0.7$	x: 1.05 m $\eta = 7.9$	$\eta < 0.1$	x: 0.175 m $\eta < 0.1$	x: 0.175 m $\eta < 0.1$	x: 1.05 m $\eta = 41.4$	x: 0.175 m $\eta < 0.1$	$\eta = 0.4$	x: 1.05 m $\eta = 7.9$	$\eta < 0.1$	**CUMPLE $\eta = 41.4$**
N68/N67	$\bar{\lambda} \leq 3.0$ Cumple	x: 0.175 m $\lambda_w \leq \lambda_{w,máx}$ Cumple	$\eta < 0.1$	$N_{Ed} = 0.00$ N.P.(4)	x: 1.05 m $\eta = 42.5$	x: 1.05 m $\eta = 0.8$	x: 1.05 m $\eta = 8.2$	$\eta < 0.1$	x: 0.175 m $\eta < 0.1$	x: 0.175 m $\eta < 0.1$	x: 1.05 m $\eta = 43.3$	x: 0.175 m $\eta < 0.1$	$\eta = 0.5$	x: 1.05 m $\eta = 8.3$	$\eta < 0.1$	**CUMPLE $\eta = 43.3$**
N70/N69	N.P.(5)	x: 0.175 m $\lambda_w \leq \lambda_{w,máx}$ Cumple	$N_{Ed} = 0.00$ N.P.(1)	$N_{Ed} = 0.00$ N.P.(4)	x: 1.05 m $\eta = 41.2$	x: 1.05 m $\eta = 0.8$	x: 1.05 m $\eta = 8.0$	$\eta < 0.1$	x: 0.175 m $\eta < 0.1$	x: 0.175 m $\eta < 0.1$	x: 1.05 m $\eta = 42.0$	x: 0.175 m $\eta < 0.1$	$\eta = 0.5$	x: 1.05 m $\eta = 8.0$	$\eta < 0.1$	**CUMPLE $\eta = 42.0$**
N72/N71	N.P.(5)	x: 0.175 m $\lambda_w \leq \lambda_{w,máx}$ Cumple	$N_{Ed} = 0.00$ N.P.(1)	$N_{Ed} = 0.00$ N.P.(4)	x: 1.05 m $\eta = 40.7$	x: 1.05 m $\eta = 0.8$	x: 1.05 m $\eta = 7.9$	$\eta < 0.1$	x: 0.175 m $\eta < 0.1$	x: 0.175 m $\eta < 0.1$	x: 1.05 m $\eta = 41.4$	x: 0.175 m $\eta < 0.1$	$\eta = 0.5$	x: 1.05 m $\eta = 7.9$	$\eta < 0.1$	**CUMPLE $\eta = 41.4$**
N74/N73	N.P.(5)	x: 0.175 m $\lambda_w \leq \lambda_{w,máx}$ Cumple	$N_{Ed} = 0.00$ N.P.(1)	$N_{Ed} = 0.00$ N.P.(4)	x: 1.05 m $\eta = 40.6$	x: 1.05 m $\eta = 0.8$	x: 1.05 m $\eta = 7.9$	$\eta < 0.1$	x: 0.175 m $\eta < 0.1$	x: 0.175 m $\eta < 0.1$	x: 1.05 m $\eta = 41.4$	x: 0.175 m $\eta < 0.1$	$\eta = 0.5$	x: 1.05 m $\eta = 7.9$	$\eta < 0.1$	**CUMPLE $\eta = 41.4$**
N76/N75	N.P.(5)	x: 0.175 m $\lambda_w \leq \lambda_{w,máx}$ Cumple	$N_{Ed} = 0.00$ N.P.(1)	$N_{Ed} = 0.00$ N.P.(4)	x: 1.05 m $\eta = 40.7$	x: 1.05 m $\eta = 0.8$	x: 1.05 m $\eta = 7.9$	$\eta < 0.1$	x: 0.175 m $\eta < 0.1$	x: 0.175 m $\eta < 0.1$	x: 1.05 m $\eta = 41.5$	x: 0.175 m $\eta < 0.1$	$\eta = 0.5$	x: 1.05 m $\eta = 7.9$	$\eta < 0.1$	**CUMPLE $\eta = 41.5$**
N78/N77	N.P.(5)	x: 0.175 m $\lambda_w \leq \lambda_{w,máx}$ Cumple	$N_{Ed} = 0.00$ N.P.(1)	$N_{Ed} = 0.00$ N.P.(4)	x: 1.05 m $\eta = 40.7$	x: 1.05 m $\eta = 0.8$	x: 1.05 m $\eta = 7.9$	$\eta < 0.1$	x: 0.175 m $\eta < 0.1$	x: 0.175 m $\eta < 0.1$	x: 1.05 m $\eta = 41.5$	x: 0.175 m $\eta < 0.1$	$\eta = 0.5$	x: 1.05 m $\eta = 7.9$	$\eta < 0.1$	**CUMPLE $\eta = 41.5$**
N80/N79	N.P.(5)	x: 0.175 m $\lambda_w \leq \lambda_{w,máx}$ Cumple	$N_{Ed} = 0.00$ N.P.(1)	$N_{Ed} = 0.00$ N.P.(4)	x: 1.05 m $\eta = 40.7$	x: 1.05 m $\eta = 0.8$	x: 1.05 m $\eta = 7.9$	$\eta < 0.1$	x: 0.175 m $\eta < 0.1$	x: 0.175 m $\eta < 0.1$	x: 1.05 m $\eta = 41.5$	x: 0.175 m $\eta < 0.1$	$\eta = 0.5$	x: 1.05 m $\eta = 7.9$	$\eta < 0.1$	**CUMPLE $\eta = 41.5$**
N82/N81	N.P.(5)	x: 0.175 m $\lambda_w \leq \lambda_{w,máx}$ Cumple	$N_{Ed} = 0.00$ N.P.(1)	$N_{Ed} = 0.00$ N.P.(4)	x: 1.05 m $\eta = 40.7$	x: 1.05 m $\eta = 0.8$	x: 1.05 m $\eta = 7.9$	$\eta < 0.1$	x: 0.175 m $\eta < 0.1$	x: 0.175 m $\eta < 0.1$	x: 1.05 m $\eta = 41.5$	x: 0.175 m $\eta < 0.1$	$\eta = 0.5$	x: 1.05 m $\eta = 7.9$	$\eta < 0.1$	**CUMPLE $\eta = 41.5$**
N84/N83	N.P.(5)	x: 0.175 m $\lambda_w \leq \lambda_{w,máx}$ Cumple	$N_{Ed} = 0.00$ N.P.(1)	$N_{Ed} = 0.00$ N.P.(4)	x: 1.05 m $\eta = 40.7$	x: 1.05 m $\eta = 0.8$	x: 1.05 m $\eta = 7.9$	$\eta < 0.1$	x: 0.175 m $\eta < 0.1$	x: 0.175 m $\eta < 0.1$	x: 1.05 m $\eta = 41.5$	x: 0.175 m $\eta < 0.1$	$\eta = 0.5$	x: 1.05 m $\eta = 7.9$	$\eta < 0.1$	**CUMPLE $\eta = 41.5$**
N86/N85	N.P.(5)	x: 0.175 m $\lambda_w \leq \lambda_{w,máx}$ Cumple	$N_{Ed} = 0.00$ N.P.(1)	$N_{Ed} = 0.00$ N.P.(4)	x: 1.05 m $\eta = 40.8$	x: 1.05 m $\eta = 0.8$	x: 1.05 m $\eta = 7.9$	$\eta < 0.1$	x: 0.175 m $\eta < 0.1$	x: 0.175 m $\eta < 0.1$	x: 1.05 m $\eta = 41.6$	x: 0.175 m $\eta < 0.1$	$\eta = 0.5$	x: 1.05 m $\eta = 7.9$	$\eta < 0.1$	**CUMPLE $\eta = 41.6$**
N88/N87	N.P.(5)	x: 0.175 m $\lambda_w \leq \lambda_{w,máx}$ Cumple	$N_{Ed} = 0.00$ N.P.(1)	$N_{Ed} = 0.00$ N.P.(4)	x: 1.05 m $\eta = 41.2$	x: 1.05 m $\eta = 0.8$	x: 1.05 m $\eta = 8.0$	$\eta < 0.1$	x: 0.175 m $\eta < 0.1$	x: 0.175 m $\eta < 0.1$	x: 1.05 m $\eta = 42.0$	x: 0.175 m $\eta < 0.1$	$\eta = 0.5$	x: 1.05 m $\eta = 8.0$	$\eta < 0.1$	**CUMPLE $\eta = 42.0$**
N90/N89	N.P.(5)	x: 0.175 m $\lambda_w \leq \lambda_{w,máx}$ Cumple	$N_{Ed} = 0.00$ N.P.(1)	$N_{Ed} = 0.00$ N.P.(4)	x: 1.05 m $\eta = 40.7$	x: 1.05 m $\eta = 0.8$	x: 1.05 m $\eta = 7.9$	$\eta < 0.1$	x: 0.175 m $\eta < 0.1$	x: 0.175 m $\eta < 0.1$	x: 1.05 m $\eta = 41.6$	x: 0.175 m $\eta < 0.1$	$\eta = 0.5$	x: 1.05 m $\eta = 7.9$	$\eta < 0.1$	**CUMPLE $\eta = 41.6$**
N92/N91	$\bar{\lambda} < 2.0$ Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	$N_{Ed} = 0.00$ N.P.(1)	$\eta = 0.1$	x: 1.05 m $\eta = 36.5$	x: 1.05 m $\eta = 0.9$	x: 1.05 m $\eta = 7.1$	$\eta < 0.1$	$\eta < 0.1$	x: 0.175 m $\eta < 0.1$	x: 1.05 m $\eta = 37.5$	$\eta < 0.1$	$\eta = 0.5$	x: 1.05 m $\eta = 7.1$	$\eta < 0.1$	**CUMPLE $\eta = 37.5$**
N93/N1	$\bar{\lambda} < 2.0$ Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	$N_{Ed} = 0.00$ N.P.(1)	x: 0 m $\eta = 10.9$	x: 0 m $\eta = 1.1$	x: 0 m $\eta = 0.8$	x: 0 m $\eta = 0.3$	$\eta < 0.1$	$\eta < 0.1$	x: 0 m $\eta < 0.1$	x: 0 m $\eta = 12.5$	$\eta < 0.1$	$M_{Ed} = 0.00$ N.P.(2)	N.P.(3)	N.P.(3)	**CUMPLE $\eta = 12.5$**
N94/N3	$\bar{\lambda} < 2.0$ Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	$N_{Ed} = 0.00$ N.P.(1)	x: 0 m $\eta = 13.7$	x: 0 m $\eta = 0.8$	x: 3.635 m $\eta = 1.8$	x: 0 m $\eta = 0.2$	$\eta < 0.1$	$\eta < 0.1$	$\eta < 0.1$	x: 0 m $\eta = 16.0$	$\eta < 0.1$	$M_{Ed} = 0.00$ N.P.(2)	N.P.(3)	N.P.(3)	**CUMPLE $\eta = 16.0$**
N95/N25	$\bar{\lambda} < 2.0$ Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	$N_{Ed} = 0.00$ N.P.(1)	x: 0 m $\eta = 11.7$	x: 0 m $\eta = 4.6$	x: 3.635 m $\eta = 0.9$	x: 0 m $\eta = 1.9$	$\eta < 0.1$	$\eta < 0.1$	x: 0 m $\eta < 0.1$	x: 0 m $\eta = 15.4$	$\eta < 0.1$	$M_{Ed} = 0.00$ N.P.(2)	N.P.(3)	N.P.(3)	**CUMPLE $\eta = 15.4$**
N96/N23	$\bar{\lambda} < 2.0$ Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	$N_{Ed} = 0.00$ N.P.(1)	x: 0 m $\eta = 12.1$	x: 0 m $\eta = 4.6$	x: 3.635 m $\eta = 0.9$	x: 0 m $\eta = 1.9$	$\eta < 0.1$	$\eta < 0.1$	x: 0 m $\eta < 0.1$	x: 0 m $\eta = 15.9$	$\eta < 0.1$	$M_{Ed} = 0.00$ N.P.(2)	N.P.(3)	N.P.(3)	**CUMPLE $\eta = 15.9$**
N97/N21	$\bar{\lambda} < 2.0$ Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	$N_{Ed} = 0.00$ N.P.(1)	x: 0 m $\eta = 11.7$	x: 0 m $\eta = 4.7$	x: 0 m $\eta = 0.5$	x: 0 m $\eta = 2.0$	$\eta < 0.1$	$\eta < 0.1$	$\eta < 0.1$	x: 0 m $\eta = 15.1$	$\eta < 0.1$	$M_{Ed} = 0.00$ N.P.(2)	N.P.(3)	N.P.(3)	**CUMPLE $\eta = 15.1$**
N98/N19	$\bar{\lambda} < 2.0$ Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	$N_{Ed} = 0.00$ N.P.(1)	x: 0 m $\eta = 12.0$	x: 0 m $\eta = 4.7$	x: 3.635 m $\eta = 0.7$	x: 0 m $\eta = 2.0$	$\eta < 0.1$	$\eta < 0.1$	$\eta < 0.1$	x: 0 m $\eta = 15.5$	$\eta < 0.1$	$M_{Ed} = 0.00$ N.P.(2)	N.P.(3)	N.P.(3)	**CUMPLE $\eta = 15.5$**

Barras	COMPROBACIONES (CTE DB SE-A)															Estado
	$\bar{\lambda}$	λ_w	N_t	N_c	M_Y	M_Z	V_Z	V_Y	M_YV_Z	M_ZV_Y	NM_YM_Z	$NM_YM_ZV_YV_Z$	M_t	M_tV_Z	M_tV_Y	
N99/N17	$\bar{\lambda} < 2.0$ Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	$N_{Ed} = 0.00$ N.P.(1)	x: 0 m η = 12.5	x: 0 m η = 4.5	x: 0 m η = 0.8	x: 0 m η = 1.9	η < 0.1	η < 0.1	η < 0.1	x: 0 m η = 16.1	η < 0.1	$M_{Ed} = 0.00$ N.P.(2)	N.P.(3)	N.P.(3)	**CUMPLE η = 16.1**
N100/N15	$\bar{\lambda} < 2.0$ Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	$N_{Ed} = 0.00$ N.P.(1)	x: 0 m η = 12.8	x: 0 m η = 4.5	x: 3.635 m η = 0.9	x: 0 m η = 1.9	η < 0.1	η < 0.1	x: 0 m η < 0.1	x: 0 m η = 16.5	η < 0.1	$M_{Ed} = 0.00$ N.P.(2)	N.P.(3)	N.P.(3)	**CUMPLE η = 16.5**
N101/N13	$\bar{\lambda} < 2.0$ Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	$N_{Ed} = 0.00$ N.P.(1)	x: 0 m η = 11.9	x: 0 m η = 4.6	x: 3.635 m η = 0.4	x: 0 m η = 1.9	η < 0.1	η < 0.1	x: 0 m η < 0.1	x: 0 m η = 15.1	η < 0.1	$M_{Ed} = 0.00$ N.P.(2)	N.P.(3)	N.P.(3)	**CUMPLE η = 15.1**
N102/N11	$\bar{\lambda} < 2.0$ Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	$N_{Ed} = 0.00$ N.P.(1)	x: 0 m η = 12.2	x: 0 m η = 4.7	x: 3.635 m η = 0.4	x: 0 m η = 2.0	η < 0.1	η < 0.1	x: 0 m η < 0.1	x: 0 m η = 15.5	η < 0.1	$M_{Ed} = 0.00$ N.P.(2)	N.P.(3)	N.P.(3)	**CUMPLE η = 15.5**
N103/N9	$\bar{\lambda} < 2.0$ Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	$N_{Ed} = 0.00$ N.P.(1)	x: 0 m η = 11.8	x: 0 m η = 4.6	x: 3.635 m η = 0.2	x: 0 m η = 1.9	η < 0.1	η < 0.1	x: 0 m η < 0.1	x: 0 m η = 14.9	η < 0.1	$M_{Ed} = 0.00$ N.P.(2)	N.P.(3)	N.P.(3)	**CUMPLE η = 14.9**
N104/N7	$\bar{\lambda} < 2.0$ Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	$N_{Ed} = 0.00$ N.P.(1)	x: 0 m η = 11.8	x: 0 m η = 4.6	x: 3.635 m η = 0.2	x: 0 m η = 1.9	η < 0.1	η < 0.1	x: 0 m η < 0.1	x: 0 m η = 14.8	η < 0.1	$M_{Ed} = 0.00$ N.P.(2)	N.P.(3)	N.P.(3)	**CUMPLE η = 14.8**
N105/N106	$\bar{\lambda} \leq 3.0$ Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	η = 0.1	$N_{Ed} = 0.00$ N.P.(4)	x: 1.05 m η = 22.2	x: 0 m η = 1.1	x: 1.05 m η = 4.3	η = 0.1	η < 0.1	η < 0.1	x: 1.05 m η = 23.1	η < 0.1	$M_{Ed} = 0.00$ N.P.(2)	N.P.(3)	N.P.(3)	**CUMPLE η = 23.1**
N54/N105	$\bar{\lambda} \leq 3.0$ Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	η < 0.1	$N_{Ed} = 0.00$ N.P.(4)	x: 0.501 m η = 3.4	x: 0.91 m η = 1.1	x: 0.91 m η = 2.3	η = 0.1	η < 0.1	η < 0.1	x: 0.501 m η = 3.6	η < 0.1	η = 0.6	x: 0.91 m η = 2.3	η = 0.1	**CUMPLE η = 3.6**
N105/N62	$\bar{\lambda} \leq 3.0$ Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	η < 0.1	$N_{Ed} = 0.00$ N.P.(4)	x: 0.228 m η = 2.3	x: 0.91 m η = 6.0	x: 0.91 m η = 3.2	η = 0.3	η < 0.1	η < 0.1	x: 0.91 m η = 8.0	η < 0.1	$M_{Ed} = 0.00$ N.P.(2)	N.P.(3)	N.P.(3)	**CUMPLE η = 8.0**
N107/N53	$\bar{\lambda} < 2.0$ Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	$N_{Ed} = 0.00$ N.P.(1)	x: 0 m η = 11.9	x: 0 m η = 4.7	x: 3.646 m η = 3.2	x: 0 m η = 0.6	η < 0.1	η < 0.1	η < 0.1	x: 0 m η = 15.9	η < 0.1	$M_{Ed} = 0.00$ N.P.(2)	N.P.(3)	N.P.(3)	**CUMPLE η = 15.9**
N108/N48	$\bar{\lambda} < 2.0$ Cumple	$\lambda_w \leq \lambda_{w,máx}$ Cumple	$N_{Ed} = 0.00$ N.P.(1)	x: 0 m η = 15.4	x: 0 m η = 1.0	x: 3.646 m η = 1.9	x: 0 m η = 0.3	η < 0.1	η < 0.1	η < 0.1	x: 0 m η = 17.9	η < 0.1	η = 0.3	x: 0 m η = 0.3	η < 0.1	**CUMPLE η = 17.9**

Notación:

$\bar{\lambda}$: Limitación de esbeltez
λ_w: Abolladura del alma inducida por el ala comprimida
N_t: Resistencia a tracción
N_c: Resistencia a compresión
M_Y: Resistencia a flexión eje Y
M_Z: Resistencia a flexión eje Z
V_Z: Resistencia a corte Z
V_Y: Resistencia a corte Y
M_YV_Z: Resistencia a momento flector Y y fuerza cortante Z combinados
M_ZV_Y: Resistencia a momento flector Z y fuerza cortante Y combinados
NM_YM_Z: Resistencia a flexión y axil combinados
$NM_YM_ZV_YV_Z$: Resistencia a flexión, axil y cortante combinados
M_t: Resistencia a torsión
M_tV_Z: Resistencia a cortante Z y momento torsor combinados
M_tV_Y: Resistencia a cortante Y y momento torsor combinados
x: Distancia al origen de la barra
η: Coeficiente de aprovechamiento (%)
N.P.: No procede

Comprobaciones que no proceden (N.P.):

(1) La comprobación no procede, ya que no hay axil de tracción.
(2) La comprobación no procede, ya que no hay momento torsor.
(3) No hay interacción entre momento torsor y esfuerzo cortante para ninguna combinación. Por lo tanto, la comprobación no procede.
(4) La comprobación no procede, ya que no hay axil de compresión.
(5) La comprobación no procede, ya que no hay axil de compresión ni de tracción.
(6) La comprobación no procede, ya que no hay momento flector.
(7) La comprobación no procede, ya que no hay esfuerzo cortante.
(8) No hay interacción entre momento flctor y esfuerzo cortante para ninguna combinación. Por lo tanto, la comprobación no procede.