

COMPANIA ESPAÑOLA DE LAMINACION, S.L.
 OFICINAS: c/Ferralla,12 Pol.Ind. "SAN VICENTE"
 08755 Castellbisbal (BARCELONA)
 NIF: B-59/559351 Sociedad Unipersonal
 Teléfono: +34 93 773 04 00 - Fax: +34 93 772 02 76
 Calidad: +34 93 817 66 84 - Fax: +34 93 773 05 52



CELSA
BARCELONA



**TEST CERTIFICATE
 EN 10.204:2004, Type 3.1.**

Standard: CSA G40.21-04 50W/ASTM
 A572-07 GR50/A992-06A
 Type: A992
 St. Tol.: ASTM A6/A6M-08
 Our Ref: 01917926
 (B49-31B01)

Customer: FORTACERO S.A. DE C.V.
 Blvd. Carlos Salinas de Gortari km. 8.8 Apodaca
 N.L.
 66600 MEXICO
 Mexico

Destination: FORTACERO S.A. DE C.V.
 CFR LO PUERTO TAMPICO
 Mexico

Delivery number: 200626552
 Order number : 10377206
 Your order : 905138MX

Material	Heat Number	CHEMICAL ANALYSIS															MECHANICAL PROPERTIES			
		C	Mn	Si	S	P	Cr	Ni	Cu	Sn	Mo	V	Nb	AL	N	CE	Yield Str.	Ten-sile Str.	Yield/Tens. Str.	Elong. 8 in.
		%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	MPA	MPA	Str.	%
GRADO 50 W18X6X35 L.40fts(12.2m)	CE177820	0.090	1.230	0.210	0.012	0.014	0.100	0.140	0.440	0.015	0.022	0.070	0.002	0.003	0.0107	0.372	405	525	0.771	29.0
GRADO 50 W18X6X35 L.40fts(12.2m)	CE177820	0.090	1.230	0.210	0.012	0.014	0.100	0.140	0.440	0.015	0.022	0.070	0.002	0.003	0.0107	0.372	407	527	0.772	28.8
GRADO 50 W18X6X35 L.40fts(12.2m)	CE177822	0.090	1.220	0.190	0.012	0.014	0.110	0.140	0.420	0.019	0.021	0.072	0.002	0.003	0.0114	0.371	404	524	0.771	28.8
GRADO 50 W18X6X35 L.40fts(12.2m)	CE177822	0.090	1.220	0.190	0.012	0.014	0.110	0.140	0.420	0.019	0.021	0.072	0.002	0.003	0.0114	0.371	405	525	0.771	28.0
GRADO 50 W18X6X35 L.40fts(12.2m)	CE177823	0.090	1.240	0.220	0.025	0.014	0.100	0.140	0.400	0.021	0.023	0.073	0.002	0.003	0.0115	0.372	404	524	0.771	28.0
GRADO 50 W18X6X35 L.40fts(12.2m)	CE177823	0.090	1.240	0.220	0.025	0.014	0.100	0.140	0.400	0.021	0.023	0.073	0.002	0.003	0.0115	0.372	405	525	0.771	28.0
GRADO 50 W18X6X35 L.40fts(12.2m)	CE177824	0.080	1.210	0.180	0.022	0.017	0.120	0.150	0.410	0.017	0.023	0.072	0.002	0.002	0.0114	0.362	401	524	0.765	27.0
GRADO 50 W18X6X35 L.40fts(12.2m)	CE177824	0.080	1.210	0.180	0.022	0.017	0.120	0.150	0.410	0.017	0.023	0.072	0.002	0.002	0.0114	0.362	403	525	0.768	29.0
GRADO 50 W10X4X12 L.40fts(12.2m)	CE177826	0.090	1.250	0.200	0.026	0.013	0.090	0.150	0.370	0.013	0.022	0.070	0.002	0.002	0.0115	0.369	402	525	0.766	29.0
GRADO 50 W10X4X12 L.40fts(12.2m)	CE177826	0.090	1.250	0.200	0.026	0.013	0.090	0.150	0.370	0.013	0.022	0.070	0.002	0.002	0.0115	0.369	403	526	0.766	27.7
GRADO 50 W10X4X12 L.40fts(12.2m)	CE177827	0.080	1.250	0.200	0.024	0.014	0.100	0.160	0.410	0.015	0.023	0.068	0.003	0.002	0.0123	0.365	402	528	0.761	27.0
GRADO 50 W10X4X12 L.40fts(12.2m)	CE177827	0.080	1.250	0.200	0.024	0.014	0.100	0.160	0.410	0.015	0.023	0.068	0.003	0.002	0.0123	0.365	403	527	0.765	27.7

- Product suitable for galvanizing: 0.14<=Si<=0.25 & P<=0.035.
- Intended use: construction and civil engineering.
- Durability: not determined.
- Regulated substances: not determined

Castellbisbal, 25.09.2012
 Juan Diego Martínez Gálvez
 Quality Control Manager

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		C	Mn	Si	S	P	Cr	Ni	Cu	Sn	Mo	V	Nb	AL	N	CE	Yield Str.	Ten- sile Str.	Yield/ Tens. Str.	Elong. 8 in. %
		%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	MPA	MPA		%
GRADO 50 W10X4X12 L.40fts(12.2m)	CE177832	0.080	1.260	0.190	0.018	0.019	0.110	0.150	0.430	0.020	0.025	0.068	0.002	0.002	0.0115	0.369	404	524	0.771	28.2
GRADO 50 W10X4X12 L.40fts(12.2m)	CE177832	0.080	1.260	0.190	0.018	0.019	0.110	0.150	0.430	0.020	0.025	0.068	0.002	0.002	0.0115	0.369	404	528	0.765	28.0
GRADO 50 W18X6X35 L.40fts(12.2m)	CE177873	0.090	1.150	0.220	0.016	0.014	0.090	0.140	0.330	0.017	0.022	0.070	0.001	0.003	0.0122	0.349	404	527	0.767	28.0
GRADO 50 W18X6X35 L.40fts(12.2m)	CE177873	0.090	1.150	0.220	0.016	0.014	0.090	0.140	0.330	0.017	0.022	0.070	0.001	0.003	0.0122	0.349	405	525	0.770	27.7
GRADO 50 W18X6X35 L.40fts(12.2m)	CE177874	0.100	1.210	0.200	0.010	0.015	0.130	0.160	0.350	0.017	0.029	0.071	0.003	0.003	0.0130	0.382	401	524	0.765	27.0
GRADO 50 W18X6X35 L.40fts(12.2m)	CE177874	0.100	1.210	0.200	0.010	0.015	0.130	0.160	0.350	0.017	0.029	0.071	0.003	0.003	0.0130	0.382	403	523	0.771	28.0
GRADO 50 W18X6X35 L.40fts(12.2m)	CE177876	0.090	1.200	0.190	0.026	0.017	0.100	0.140	0.370	0.015	0.029	0.077	0.001	0.002	0.0123	0.365	401	524	0.765	29.0
GRADO 50 W18X6X35 L.40fts(12.2m)	CE177876	0.090	1.200	0.190	0.026	0.017	0.100	0.140	0.370	0.015	0.029	0.077	0.001	0.002	0.0123	0.365	403	525	0.768	28.0
GRADO 50 W18X6X35 L.40fts(12.2m)	CE177877	0.100	1.240	0.200	0.016	0.015	0.110	0.140	0.400	0.018	0.024	0.070	0.002	0.003	0.0118	0.384	401	525	0.764	29.0
GRADO 50 W18X6X35 L.40fts(12.2m)	CE177877	0.100	1.240	0.200	0.016	0.015	0.110	0.140	0.400	0.018	0.024	0.070	0.002	0.003	0.0118	0.384	402	525	0.766	28.0
GRADO 50 W18X6X35 L.40fts(12.2m)	CE177878	0.100	1.260	0.200	0.016	0.016	0.110	0.140	0.410	0.018	0.024	0.071	0.002	0.003	0.0113	0.386	401	524	0.765	28.0
GRADO 50 W18X6X35 L.40fts(12.2m)	CE177878	0.100	1.260	0.200	0.016	0.016	0.110	0.140	0.410	0.018	0.024	0.071	0.002	0.003	0.0113	0.388	402	525	0.766	27.7

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