

**Declaration of Performance**  
**Nº: CELSA01BCN**

1. **Name and identification code:**  
Hot rolled products of structural steels, types S235/S275/S355 and grades JR/JO/J2.
2. **Name and manufacturer's address:**  
Compañía Española de Laminación S.L.  
C/ Ferralla nº12,  
Polígono Industrial San Vicente S/N  
08755 Castellbisbal, Barcelona  
(Spain)
3. **Intended use:**  
To be used in welded, bolted and riveted structures.
4. **System of assessment and verification of constancy of performance of the product**  
**System 2+**
5. **Notified body:**  
AENOR N°0099  
Assessment and evaluation of factory production control for the system 2+  
Factory production control certificate 0099/CPR/A81/0007, issued on 27<sup>th</sup> February 2006.

The performances of the product identified in point 1 are in line with the performance declared in point 6.

This declaration of performance is issued under the sole responsibility of the manufacturer indicated in point 2.

Signed for and on behalf of the manufacturer:



Andreu Cardona Pallarès  
Quality Manager

Castellbisbal, 1<sup>st</sup> July of 2013

**6. Determined performances:**

Essential characteristics	Performance								Harmonised technical specifications
Dimensional and shape tolerances	EN 10056-1	Equal leg angles (L)							EN 10025-1:2004
	EN 10058	Merchant Rectangular Bars							
	EN 10059	Merchant Squared Bars							
	EN 10060	Merchant Round Bars							
	EN 10024	IPN							
	EN 10034	IPE/HE/UB/UC							
	EN 10279	UPN/PFC							
Elongation (%)	Type and grade	Nominal thickness (mm)							
		≥3≤40	>40≤63	>63≤100					
	S235JR / JO / J2	26	25	24					
	S275JR / JO / J2	23	22	21					
S355JR / JO / J2	22	21	20						
Tensile strength (MPa)	Type and grade	Nominal thickness (mm)							
		≥3 ≤100							
	S235JR / JO / J2	360 a 510							
	S275JR / JO / J2	410 a 560							
S355JR / JO / J2	470 a 630								
Yield strength (MPa)	Type and grade	Nominal thickness (mm)							
		≤16	>16≤40	>40≤63	>63≤80	>80≤100			
	S235JR / JO / J2	235	225	215	215	215			
	S275JR / JO / J2	275	265	255	245	235			
	S355JR / JO / J2	355	345	335	325	315			
Impact strength (J)	Type and grade	Temperature (°C)	Nominal thickness ≤150 mm						
		20	27						
	S235/275/355 JR	27							
	S235/275/355 JO	27							
S235/275/355 J2	-20								
Weldability (Chemical Composition)	Type and grade	CEV% max							
		≥3≤40	>30≤40	>40≤150					
	S235JR / JO / J2	0,35	0,35	0,38					
	S275JR / JO / J2	0,40	0,40	0,42					
S355JR / JO / J2	0,45	0,47	0,47						
Durability (Chemical Composition)	Type and grade	C % max		Si % max	Mn % max	P % max	S % max	N % max	Cu % max
		≤40	>40						
	S235JR	0,19	0,23	---	1,50	0,045	0,045	0,014	0,60
	S235JO	0,19	0,19	---	1,50	0,040	0,040	0,014	0,60
	S235J2	0,19	0,19	---	1,50	0,035	0,035	---	0,60
	S275JR	0,24	0,25	---	1,60	0,045	0,045	0,014	0,60
	S275JO	0,21	0,21	---	1,60	0,040	0,040	0,014	0,60
	S275J2	0,21	0,21	---	1,60	0,035	0,035	---	0,60
	S355JR	0,27	0,27	0,60	1,70	0,045	0,045	0,014	0,60
	S355JO	0,23	0,24	0,60	1,70	0,040	0,040	0,014	0,60
S355J2	0,23	0,24	0,60	1,70	0,035	0,035	---	0,60	