

## Declaration of Performance (according to Regulation EU No 305/2011)

Unique ID code TST Celsius355NLH [Grade S355NLH / 1.0549]

Harmonised standard EN 10210-1:2006 - Hot finished structural hollow sections of non-alloy and fine grain steels - Part 1: Technical delivery conditions (issued on the Official Journal of the European Union on 01/02/2007)

Intended use To be used in metal structures or in composite metal and concrete structures. This product is supplied with a specific inspection document 3.1 (according to EN 10204) that includes the full length non-destructive testing of the weld (as defined in table 2 of EN 10210-1). This product is suitable for being used as constituent product of a steel structure according to EN 1090. Table 1 of EN 1090-2:2018 requires a 3.1 inspection document for structural steel above S275.

Manufacturer TATA STEEL UK LIMITED  
Registered in England No. 2280000  
Registered office: 18 Grosvenor Place, London, SW1X 7HS, UK  
Website : [www.tatasteelurope.com](http://www.tatasteelurope.com)

Authorised representative Simon Edwards – Technical Director (acting)  
Tata Steel  
Wenckebachstraat 1  
Velsen Noord 1951 JZ NL  
PO Box 10.000  
IJmuiden  
1970 CA NL

System of AVCP System of assessment and verification of constancy of performance of the product  
System 2+ (FPC Certificate No: 0343/CPR/LRQ0840080/A)

Notified body Notified body No. 0343  
LRQA Nederland B.V.  
George Hintzenweg 77  
3068 AX Rotterdam  
The Netherlands



Richard Sidebottom  
Director Mills, DSO & Technical

Date 01/04/2024

Table 1 – Essential characteristics and declared performances

Essential characteristic	Performance			Harmonised technical specification
	Nominal thickness (mm)	Values Min (MPa)		
Yield strength	≤ 16	355		EN 10210-1:2006
	> 16 ≤ 40	345		
	> 40 ≤ 65	335		
Tensile strength	Nominal thickness (mm)	Values (MPa)		
	≤ 65	min	max	
		470	630	
Elongation	Nominal thickness (mm)	Values min (%)		
	≤ 65	22		
	longitudinal	20		
transverse				
Impact strength (longitudinal)	Grade	Nom. Thk. (mm)	Impact Value min. average (J) at Test Temp (°C)	
	NLH	≤ 65	27J at - 50°C	
Weldability (CEV)	Nominal thickness (mm)	Values max (%)		
	≤ 16	0.43		
	> 16 ≤ 65	0.45		
Durability	Nominal thickness (mm)	Composition (cast) (max. unless otherwise shown)		
		C	0.20	
		Si	0.14 – 0.25	
		Mn	0.90 – 1.65	
		P	0.035	
		S	0.030	
		Nb	0.050	
		V	0.12	
		Al	0.020 min.	
		Ti	0.03	
Cr	0.30			
Ni	0.50			
Mo	0.10			
Cu	0.35			
N	0.020			
	GF deoxidation (a)			
The product is suitable for hot dip galvanizing according to EN ISO 1461:2009 and fulfils the conditions of Category B of EN ISO 14713-2:2020				
Tolerances on dimensions and shape	Round, square, rectangular and elliptical hollow sections	In accordance with EN 10210-2:2006		

Notes: (a) GF – Fully killed fine grain steel containing nitrogen binding elements



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EN 10210-1:2006

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**Performance declared for the following essential characteristics:**

**Yield strength:** 355 MPa (≤ 16 mm)

**Tensile strength:** 470 – 630 MPa

**Elongation:** 22%

**Impact strength:** 27J at - 50°C

**Weldability (CEV):** 0.43% (≤ 16 mm)

**Durability:** See Declaration of Performance

**Tolerances on dimensions and shape:** In accordance with EN 10210-2:2006

**Dangerous Substances:** No Performance Determined (NPD)

## Declaration of Performance

(according to The Construction Products (Amendment etc.) (EU Exit) Regulations 2020 No 1359)

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System of AVCP System of assessment and verification of constancy of performance of the product  
System 2+ (FPC Certificate No: 0038/CPR/LRQ0840080/A)

Approved body Approved body No. 0038  
LRQA Verification Limited  
1 Trinity Park, Bickenhill  
Birmingham, B37 7ES  
UK



Richard Sidebottom  
Director Mills, DSO & Technical

Date 01/04/2024

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