



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

Unique identification code of the product-type:
No. BS Section S450J0

Section S450J0 / 1.0590 according EN10025-2

Intended use:
To be used in Metal Structures and Composite Metal and Concrete Structures

Manufacturer:
British Steel Limited
Brigg Road
Scunthorpe, DN16 1XA

Tel: +44 (0)1724 404040

Website : www.britishsteel.co.uk

System of assessment and verification of constancy of performance of the product:
System 2+

Factory Production Control Notified Body No. 0343 performed the initial inspection of the manufacturing plant and of factory production control and the continuous surveillance, assessment, and evaluation of factory production control and issued the certificate of conformity of the factory production control.

The performance of the product identified in the Declared Performance is in conformity with the set of declared performance/s.

This declaration of performance is issued, in accordance with: Regulation EU No 305/2011 under the sole responsibility of the manufacturer identified above.

Certificate No. 0343/CPR/LRQ0860859/1

Signed for and on behalf of the manufacturer by:

Chris Vaughan
SHEQ Director,
British Steel Limited

1st April, 2024
Date

Essential characteristic	Declared Performance			Harmonised Standard
Tolerances on dimensions and shape	I & H Sections		EN 10034	EN10025-1 2004
	Equal Flange Tee		EN 10055	
	Equal Angle		EN 10056-2	
	Unequal Angle		EN10056-2	
	Tapered Flange I		EN 10024	
	Bulb Flats Channels		EN 10067 EN 10279	
Yield strength (transverse)	Nominal thickness (mm)		Values Min (MPa)	
	>	<=		
	-	16	450	
	16	40	430	
	40	63	410	
	63	80	390	
	80	100	380	
Tensile strength (transverse)	Nominal thickness (mm)		Values (MPa)	
	>	<=	min max	
	3	100	550 720	
	100	150	530 700	
Elongation (transverse)	Nominal thickness (mm)		Values min (% 5.65√s ₀)	
	>	<=		
	3	150	17	
Impact strength (longitudinal)	27J at - 0oC			
Weldability CEV	Nominal thickness (mm)		Values max (%)	
	>	<=		
	-	30	0.47	
	30	40	0.49	
	40	150	0.49	
Durability	Nominal thickness (mm)		Values min (%) Values max (%)	
	-	40	Mn: 1.70 Cu: 0.55 C: 0.20 (>30mm 0.22) Si: 0.55 P: 0.03 S: 0.03 N: 0.025	
	40	150	Mn: 1.70 Cu: 0.55 C: 0.22 Si: 0.55 P: 0.03 S: 0.03 N: 0.025	



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Manufacturer:
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Brigg Road
Scunthorpe, UK

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Harmonised Standard :
EN 10025-1 – 2004

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Elongation :
Tensile Strength :
Yield Strength : EN10025-2
Impact Strength :
Weldability :
Durability :

Dangerous Substances : No Performance Determined

EU Notified Body
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