



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
PO Box 1, Brigg Road
Scunthorpe, DN16 1BP

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. 2814 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. 2814/CPFR/LRQ0860859/1

Signed for and on behalf of the manufacturer by:

Richard Holcroft
COO, British Steel Limited

1st July, 2021
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		
Yield strength (transverse)	Equal Angle		EN 10056-2		
	Unequal Angle		EN10056-2		
	Tapered Flange I		EN 10024		
	Bulb Flats		EN 10067		
	Channels		EN 10279		
	Nominal thickness (mm)		Values Min (MPa)		
	>	<=			
	-	16	450		
16	40	430			
40	63	410			
63	80	390			
80	100	380			
100	150	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	



2814

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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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