



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
Chief Operating Officer (Interim),
British Steel Limited

22nd January 2026
Date

Essential characteristic	Declared Performance			Harmonised Standard	
Tolerances on dimensions and shape	I & H Sections Equal Flange Tee Equal Angle Unequal Angle Tapered Flange I Bulb Flats Channels		EN 10034 EN 10055 EN 10056-2 EN10056-2 EN 10024 EN 10067 EN 10279	EN10025-1 2004	
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	



0343

Manufacturer:
British Steel Limited
Brigg Road
Scunthorpe, UK

20

Unique identification code of the product-type:
BS Section S450J0

Harmonised Standard :
EN 10025-1 – 2004

Section S450J0 / 1.0590

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

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

Dangerous Substances : No Performance Determined

EU Notified Body
LRQA Nederland B.V.
George Hintzenweg 77, 3068 AX
Rotterdam, Netherlands
Tel : +31 (0)10 2248500
Website: www.lrqa.com