



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

Unique identification code of the product-type:
No. BS Section S420M

Section S420M / 1.8825 according EN 10025-4

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. 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/CPPR/LRQ0860859/1

Signed for and on behalf of the manufacturer by:

Chris Vaughan
SHEQ Director,
British Steel Limited

1st February, 2023
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 | 420 | | |
| 16 | 40 | 400 | | | |
| 40 | 63 | 390 | | | |
| 63 | 80 | 380 | | | |
| 80 | 100 | 370 | | | |
| 100 | 150 | 365 | | | |
| Tensile strength (transverse) | Nominal thickness (mm) | | Values (MPa) | | |
| | > | <= | min | max | |
| | 0 | 40 | 520 | 680 | |
| | 40 | 63 | 500 | 660 | |
| | 63 | 80 | 480 | 640 | |
| | 80 | 100 | 470 | 630 | |
| | 100 | 150 | 460 | 620 | |
| | Elongation (transverse) | Nominal thickness (mm) | | Values min (% 5.65√so) | |
| > | | <= | | | |
| 0 | | 150 | 19 | | |
| | | | | | |
| Impact strength (longitudinal) | 40J at -20°C | | | | |
| Weldability CEV | Nominal thickness (mm) | | Values max (%) | | |
| | > | <= | | | |
| | - | 16 | 0.43 | | |
| | 16 | 40 | 0.45 | | |
| | 40 | 63 | 0.46 | | |
| | 63 | 120 | 0.47 | | |
| Durability | Nominal thickness (mm) | | Values min (%) | Values max (%) | |
| | - | 120 | | Mn: 1.70 Cr: 0.30 Cu: 0.55 C: 0.16 Si: 0.50 P: 0.030 S: 0.025 Nb: 0.050 V: 0.12 Ti: 0.05 Ni: 0.80 Mo: 0.20 N: 0.025 | |
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2814

Manufacturer:
British Steel Limited
Brigg Road
Scunthorpe, UK

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Unique identification code of the product-type:

BS Section S420M

Harmonised Standard :
EN 10025-1 – 2004

Section S420M / 1.8825

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

Elongation :
Tensile Strength :
Yield Strength : EN 10025-4
Impact Strength :
Weldability :
Durability :

Dangerous Substances : No Performance Determined

EU Notified Body

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