



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

Unique identification code of the product-type:  
No. BS Section S355ML

**Section S355ML / 1.8834 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](http://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  
Technical Director,  
British Steel Limited

**1<sup>st</sup> May, 2024**  
Date

| Essential characteristic           | Declared Performance    |                        | Harmonised Standard |   |
|------------------------------------|-------------------------|------------------------|---------------------|---|
| Tolerances on dimensions and shape | I & H Sections          |                        | EN 10034            |   |
|                                    | 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                      | 40                     | 355                 |   |
| 40                                 | 63                      | 335                    |                     |   |
| 63                                 | 80                      | 325                    |                     |   |
| 80                                 | 100                     | 325                    |                     |   |
| 100                                | 150                     | 320                    |                     |   |
| Tensile strength (transverse)      | Nominal thickness (mm)  |                        | Values (MPa)        |   |
|                                    | >                       | <=                     | min                 | max   |
|                                    | 0                       | 40                     | 470                 | 630   |
|                                    | 40                      | 63                     | 450                 | 610   |
|                                    | 63                      | 80                     | 440                 | 600   |
|                                    | 80                      | 100                    | 440                 | 600   |
|                                    | 100                     | 150                    | 430                 | 590   |
|                                    | Elongation (transverse) | Nominal thickness (mm) |                     | Values min (% 5.65√s <sub>0</sub> )   |
| >                                  |                         | <=                     |                     |   |
| 0                                  |                         | 150                    | 22                  |   |
|                                    |                         |                        |                     |   |
| Impact strength (longitudinal)     |                         |                        | 27J at - 50°C       |   |
|                                    |                         |                        |                     |   |
| Weldability CEV                    | Nominal thickness (mm)  |                        | Values max (%)      |   |
|                                    | >                       | <=                     |                     |   |
|                                    | 16                      | 40                     | 0.39                |   |
|                                    | 40                      | 63                     | 0.40                |   |
|                                    | 63                      | 120                    | 0.45                |   |
|                                    | 63                      | 120                    | 0.45                |   |
|                                    |                         |                        |                     |   |
| Durability                         | Nominal thickness (mm)  |                        | Values min (%)      | Values max (%)  |
|                                    | -                       | 120                    |                     | Mn: 1.60<br>Cr: 0.30<br>Cu: 0.55<br>C: 0.14<br>Si: 0.50<br>P: 0.025<br>S: 0.020<br>Nb: 0.050<br>V: 0.10<br>Ni: 0.50<br>Mo: 0.10<br>N: 0.015 |

EN10025-1  
2004



0343

Manufacturer:  
British Steel Limited  
Brigg Road  
Scunthorpe, UK

20

Unique identification code of the product-type:

**BS Section S355ML**

Harmonised Standard :  
EN 10025-1 – 2004

**Section S355ML / 1.8834**

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

**LRQA Nederland B.V.**  
George Hintzenweg 77, 3068 AX  
Rotterdam, Netherlands  
Tel : +31 (0)10 2248500  
Email : [marc.verboon@lrqa.com](mailto:marc.verboon@lrqa.com)  
Website : [www.lrqa.com](http://www.lrqa.com)