

Liberty Steel Dalzell - Declarations of Performance for TMCR Steels EN10025-4

The following slides represent a single declaration of performance.

Slide Num	Declaration of performance
2	Plate S275M / 1.8818 according EN 10025-4
3	Plate S275ML / 1.8819 according EN 10025-4
4	Plate S355M / 1.8823 according EN 10025-4
5	Plate S355ML / 1.8834 according EN 10025-4

Declaration of Performance

(according to regulation EU No 305/2011)

No. Plate **S275M**

Plate **S275M / 1.8818** according **EN 10025-4**

To be used in Metal Structures and Composite Metal and
Concrete Structures

Liberty Steel Dalzell Limited

Park Street, Motherwell, ML1 1PU

United Kingdom

Tel: +44 (0)1698 266100

Website: <https://libertysteelgroup.com/uk/our-locations/liberty-steel-dalzell/>

CE Marking Notified Body

LRQA, Nederland BV

George Hintzenweg 77

3068 AX Rotterdam

Tel: +31 (0) 10 2248500

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

Notified factory production control certification body No.
0038 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

Signed for and behalf of Liberty Steel Dalzell Ltd;

Name: Kenny McLeary
Title: Technical Manager

Sign: *K. McLeary*
Date: 29/04/24



Essential Characteristic	Performance			Harmonised Technical Specification
Tolerances on dimensions & shape	Thickness		EN 10029	
	Flatness		EN 10029	
Yield strength (transverse)	Nominal Thickness (mm)		Values Min (Mpa)	
	>	<=		
	-	16	275	
	16	40	265	
	40	63	255	
	63	80	245	
	80	100	245	
Tensile strength (transverse)	100		240	
	Nominal Thickness (mm)		Values (Mpa)	
	>	<=	Min	Max
	5	40	370	530
	40	63	360	520
Elongation (transverse)	63		350	
	120		510	
	Nominal Thickness (mm)		Values Min (% , 5.65√so)	
Impact strength (longitudinal)	>	<=		
	0	120	24	
Weldability CEV			40J at - 20°C	
Durability	Nominal Thickness (mm)		Values Max (%)	
	>	<=		
	-	40	0.34	
	40	63	0.35	
	63	120	0.38	
Durability	Nominal Thickness (mm)		Values Max (%)	
	0	120	C: 0.15	
			Si: 0.50	
			Mn: 1.50	
			P: 0.030	
			S: 0.025	
			Nb: 0.05	
			V: 0.08	
			Ti: 0.05	
			Cr: 0.30	
			Ni: 0.30	
			Mo: 0.10	
			Cu: 0.55	
N: 0.015				



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United Kingdom

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Plate **S275M**

EN 10025-1 – 2004

Plate **S275M / 1.8818**

To be used in Metal Structures and Composite Metal and
Concrete Structures

Tolerances on dimensions: Plate EN10029

Elongation:
Tensile Strength:
Yield Strength: **EN10025-4**
Impact Strength:
Weldability:
Durability:
Dangerous Substances: No Performance Determined

Declaration of Performance

(according to regulation EU No 305/2011)

No. Plate **S275ML**

Plate **S275ML / 1.8819** according **EN 10025-4**

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Concrete Structures

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System 2+

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control and issued the certificate of conformity of the factory
production control

Signed for and behalf of Liberty Steel Dalzell Ltd;

Name: Kenny McLeary
Title: Technical Manager

Sign: *K. McLeary*
Date: 29/04/24



Essential Characteristic	Performance			Harmonised Technical Specification
Tolerances on dimensions & shape	Thickness		EN 10029	
	Flatness		EN 10029	
Yield strength (transverse)	Nominal Thickness (mm)		Values Min (Mpa)	
	>	<=		
	-	16	275	
	16	40	265	
	40	63	255	
	63	80	245	
	80	100	245	
Tensile strength (transverse)	100		240	
	Nominal Thickness (mm)		Values (Mpa)	
	>	<=	Min	Max
	5	40	370	530
	40	63	360	520
Elongation (transverse)	63		510	
	120		350	
	Nominal Thickness (mm)		Values Min (% , 5.65√so)	
Impact strength (longitudinal)	>	<=		
	0	120	24	
Impact strength (longitudinal)	L		27J at - 50°C	
Weldability CEV	Nominal Thickness (mm)		Values Max (%)	
	>	<=		
	-	40	0.34	
	40	63	0.35	
	63	120	0.38	
Durability	Nominal Thickness (mm)		Values Max (%)	
	0	120	C: 0.15	
			Si: 0.50	
			Mn: 1.50	
			P: 0.025	
			S: 0.020	
			Nb: 0.05	
			V: 0.08	
			Ti: 0.05	
			Cr: 0.30	
			Ni: 0.30	
			Mo: 0.10	
			Cu: 0.55	
N: 0.015				



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Plate **S275ML**

EN 10025-1 – 2004

Plate **S275ML / 1.8819**

To be used in Metal Structures and Composite Metal and
Concrete Structures

Tolerances on dimensions: Plate EN10029

Elongation:
Tensile Strength:
Yield Strength: **EN10025-4**
Impact Strength:
Weldability:
Durability:
Dangerous Substances: No Performance Determined

Declaration of Performance

(according to regulation EU No 305/2011)

No. Plate **S355M**

Plate **S355M / 1.8823** according **EN 10025-4**

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

Notified factory production control certification body No. 0038 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

Signed for and behalf of Liberty Steel Dalzell Ltd;

Name: Kenny McLeary
Title: Technical Manager

Sign: *K. McLeary*
Date: 29/04/24



Essential Characteristic	Performance				Harmonised Technical Specification
Tolerances on dimensions & shape	Thickness		EN 10029		EN1005-1 2004
	Flatness		EN 10029		
Yield strength (transverse)	Nominal Thickness (mm)		Values Min (Mpa)		
	>	<=			
	-	16	355		
	16	40	345		
	40	63	335		
	63	80	325		
	80	100	325		
Tensile strength (transverse)	100	120	320		
	Nominal Thickness (mm)		Values (Mpa)		
	>	<=	Min	Max	
	5	40	470	630	
	40	63	450	610	
	63	100	440	600	
	100	120	430	590	
Elongation (transverse)	Nominal Thickness (mm)		Values Min (% , 5.65√so)		
	>	<=			
	0	120	22		
Impact strength (longitudinal)			40J at - 20°C		
Weldability CEV	Nominal Thickness (mm)		Values Max (%)		
	>	<=			
	-	40	0.39		
	40	63	0.40		
Durability	63	120	0.45		
	Nominal Thickness (mm)		Values Max (%)		
	0	120	C: 0.14		
			Si: 0.50		
			Mn: 1.60		
			P: 0.030		
			S: 0.025		
			Nb: 0.05		
			V: 0.10		
			Ti: 0.05		
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N: 0.015					



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Plate **S355M**

EN 10025-1 – 2004

Plate **S355M / 1.8823**

To be used in Metal Structures and Composite Metal and Concrete Structures

Tolerances on dimensions: Plate EN10029

Elongation:
Tensile Strength:
Yield Strength: **EN10025-4**
Impact Strength:
Weldability:
Durability:
Dangerous Substances: No Performance Determined

Declaration of Performance

(according to regulation EU No 305/2011)

No. Plate **S355ML**

Plate **S355ML / 1.8834** according **EN 10025-4**

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Essential Characteristic	Performance				Harmonised Technical Specification
Tolerances on dimensions & shape	Thickness		EN 10029		EN1005-1 2004
	Flatness		EN 10029		
Yield strength (transverse)	Nominal Thickness (mm)		Values Min (Mpa)		
	>	<=			
	-	16	355		
	16	40	345		
	40	63	335		
	63	80	325		
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Tensile strength (transverse)	100	120	320		
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	0	120	22		
Impact strength (longitudinal)	L		27J at - 50°C		
Weldability CEV	Nominal Thickness (mm)		Values Max (%)		
	>	<=			
	-	40	0.39		
	40	63	0.40		
Durability	63	120	0.45		
	Nominal Thickness (mm)		Values Max (%)		
	0	120	C: 0.14		
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			Nb: 0.05		
			V: 0.10		
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Plate **S355ML / 1.8834**

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Concrete Structures

Tolerances on dimensions: Plate EN10029

Elongation:
Tensile Strength:
Yield Strength: **EN10025-4**
Impact Strength:
Weldability:
Durability:
Dangerous Substances: No Performance Determined