## Uncoated steel

Data Sheet

October 2020. This literature supersedes all previous issues



# XLERPLATE<sup>®</sup> steel Floorplate AS/NZS 3678 – 250



#### **General description**

A hot rolled structural floorplate (raised pattern on one surface) with guaranteed minimum yield strength of 250MPa.

#### Features & benefits

- Guaranteed minimum strength levels
- Excellent weldability
- Excellent formability
- ACRS accreditation (ACRS Certificate No. 120802)
- ATIC10 accreditation

#### Warnings

- This material should be used in conjunction with the appropriate structural design and welding standards
- An untrimmed (mill) edge may contain surface discontinuities associated with the rolling process (refer to clause 8 of AS/NZS 3678). The plate

supplied may include an amount outside of the nominal ordered width, in accordance with relevant Australian standards. The area of the supplied plate which is outside of the nominal (customer ordered) width must not be used. Customers are advised to remove an equal width from each side of the plate when trimming.

- No warranty is provided in relation to the use of this material for anti-slip applications.
- This material is not suitable in 'wet' surface conditions and is not suitable in 'dry' surface conditions where ramps have a steeper incline than 1:14.
- Customers to make their own assessment of the suitability of this product in the end use application.

#### Australian standards

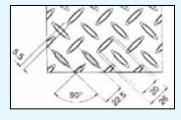
AS/NZS 3678:2016 AS/NZS 1365:1996 (R2016) ISO 9001:2015 Quality System certified

#### Normal / optional supply conditions

	Normal	Optional
Thickness Range	6mm – 12mm	-
Availability	Plate is available in standard sizes	-
Edge Condition	Untrimmed (Mill Edge)*	Trimmed
Tolerances	AS/NZS 1365:1996 (R2016)	-
Ultrasonic Inspection	-	AS 1710:2007 (R2017)
Surface Inspection	BlueScope	Third party
Certification	BlueScope	Third party endorsed

Optional supply conditions may be subject to dimensional restrictions \*Plates less than 8mm in thickness are supplied with trimmed edges

#### **Floorplate Pattern**



\* Lozenge height approximately 1.5mm (Dimensions are indicative only)

#### **Chemical composition**

Element	Guaranteed Maximum %
Carbon	0.22
Silicon	0.5
Manganese	1.70
Phosphorus	0.040
Sulfur	0.030
Chromium	0.25
Nickel	0.30
Copper	0.40
Molybdenum	0.08
Aluminium	0.10
Niobium**	0.020
Titanium	0.040
CEQ (IIW)	0.44

All values shown refer to the relevant Australian Standard unless otherwise stated

$$CEQ(IIW) = C + \frac{Mn}{6} + \frac{(Cr+Mo+V)}{5} + \frac{(Cu+Ni)}{15}$$

#### **Mechanical properties**

Tensile Properties (Transverse)		Thickness (mm)		
		t = 8	8 < t ≤ 12	
Yield Strength (MPa)	Guaranteed Min	280	260	
Tensile Strength (MPa)	Guaranteed Min	410	410	
Elongation 5.65 $\sqrt{S_0}$ (%)	Guaranteed Min	22	22	

Formability	Thickness (mm)	Longitudinal	Transverse
Recommended min inside* Radius	$8 \le t \le 20$	3.0t	2.0t

\* Raised Pattern inside

#### **Slip Resistance**

Slip resistance classification tests*	Classification
Wet Pendulum Test (Appendix A)	P3
Oil-Wet Inclining Platform Test (Appendix D)	R10

\* Limited testing has been undertaken on this material to assess compliance with AS 4586-2013 'Slip resistance classification of new pedestrian surface materials'. These tests were undertaken on newly produced Floorplate with no surface treatment.

#### Fire hazard properties

Test & Evaluation Method	Result
Combustibility test for materials (AS 1530.1-1994)	Not deemed combustible

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1800 024 402

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steeldirect@bluescopesteel.com For more information contact Steel Direct





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