AS/NZS 1594-HA250 Floorplate

Revision 2 June 2016

This literature supersedes all previous issues

Hot Rolled - HR **Structural - S**

GENERAL DESCRIPTION

Hot-rolled structural floorplate (raised pattern on one surface) with minimum yield strength of 250MPa and good weldability.

AUSTRALIAN STANDARDS

AS/NZS 1594: 2002
AS/NZS 1365: 1996

FEATURES & BENEFITS

- Guaranteed minimum strength levels
- Excellent weldability
- Good formability
- Excellent for galvanising applications

WARNINGS

- This material should be used in conjunction with the appropriate design and welding standards.
- An untrimmed (Mill) edge may contain minor surface discontinuities as a result of the rolling process. It is recommended that customers satisfy themselves that the edge is suitable for the application.
- 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.

NORMAL / OPTIONAL SUPPLY CONDITIONS

	Normal
Thickness Range	2.1mm – 8mm
Width Range	910mm – 1550mm
Surface Finish	Hot-rolled floorplate
Edge Condition	Untrimmed (Mill Edge)
Tolerances	AS/NZS 1365: 1996
Flatness	Class A
Certification	BlueScope Steel – Analysis and Mechanical tests

Optional supply conditions may be subject to dimensional restrictions.

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CHEMICAL COMPOSITION

Element	Guaranteed Maximum %	Typical %	
		2.1mm – 3mm	>3.99mm – 8mm
Carbon	0.20	0.10	0.15
Silicon	0.030*	0.003	0.005
Manganese	1.20	0.45	0.75
Phosphorus	0.040	0.015	0.015
Sulfur	0.030	0.010	0.010
Aluminium	0.10	0.030	0.030
CEQ (IIW)	0.39	0.19	0.28

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

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

* Values refer to the BlueScope Steel internal standard, where the AS/NZS 1594 guaranteed maximum % is 0.35

MECHANICAL PROPERTIES

Tensile Properties (Longitudinal)	Guaranteed Minimum	Typical %	
		2.1mm – 3mm	>3.99mm – 8mm
Yield Strength (MPa)	250	270 – 340	
Tensile Strength (MPa)	350	430 – 490	
Elong. (%) on 80mm	-	21 - 29	
Elong. (%) on 200mm	-		23 - 33

SLIP RESISTENCE TESTING

Limited testing has been undertaken on this material to assess compliance with AS 4586 Wet Pendulum Test (Appendix A) and Oil Wet Inclining Platform Test (Appendix D). These tests were undertaken on newly produced Floorplate with no surface treatment. The results for the testing were as follows:

AS4586:2013 Appendix A Wet Pendulum Test - P3
AS4586:2013 Appendix D Oil-Wet Inclining Platform Test - R10

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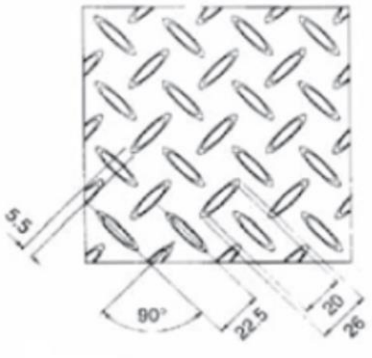
WELDABILITY GROUP

WTIA Group
3

Refer to WTIA Technical Note 1 or AS/NZS 1554.1

Floorplate Pattern



Dimensions in Lozenge height approximately 1.5mm
(Dimensions are indicative only)