

Hot Rolled - HR

Formable - F

GENERAL DESCRIPTION

Hot-rolled commercial forming product suitable for simple forming, welding and bending operations.

AUSTRALIAN STANDARDS

AS/NZS 1594: 2002

AS/NZS 1365: 1996

TYPICAL USES

- Shelving
- Brackets
- Guard rails
- Furniture

NORMAL / OPTIONAL SUPPLY CONDITIONS

	Normal	Optional
Thickness Range	1.5mm – 12.7mm	
Width Range	910mm – 1550mm	
Surface Finish	Hot-rolled	Pickled and Oiled Pickled not Oiled
Edge Condition	Untrimmed (Mill Edge)	Trimmed
Tolerances	AS/NZS 1365: 1996	
Flatness	Class A	
Certification	BlueScope Steel – Analysis	

Optional supply conditions may be subject to dimensional restrictions.

Hot Rolled - HR

Formable - F

CHEMICAL COMPOSITION

Element	Guaranteed Maximum %	Typical %
		1.5mm – 12.7mm
Carbon	0.13	0.055
Silicon	0.030*	0.002
Manganese	0.50	0.21
Phosphorus	0.040	0.012
Sulfur	0.030	0.010
Aluminium	0.10	0.035
CEQ (IIW)	-	0.095

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 %
		1.5mm – 12.7mm
Yield Strength (MPa)	-	200 – 320
Tensile Strength (MPa)	-	330 – 420
Elong. (%) on 5.65√So(%)	-	27 – 38
180° Bend (Transverse)	1t	0.5t

DIMENSIONS

Width Range (mm)	Thickness Range (mm)
910 – 1550	1.5 – 12.7

Not all thickness and width combinations are available.

WELDABILITY GROUP

WTIA Group
1

Refer to WTIA Technical Note 1 or AS/NZS 1554.1

Australia 1800 800 789