



REDCOR®

weathering steel

AS/NZS 1594 - HW350

General description

HW350 is a high phosphorous structural weathering steel with a minimum yield strength of 340MPa.

Typical uses

- Railway rolling stock and storage hoppers / bins
- Architectural features

Features & benefits

- Reduced atmospheric corrosion
- Guaranteed minimum strength levels
- Good formability
- Good toughness

Warnings

- This material should be used in conjunction with the appropriate structural design and welding standards
- The weathering properties of this material is due to the formation of an impervious oxide layer through the use of alloy additions. Damage to this

layer, or environmental conditions affecting the development of this layer, will impact on the effectiveness of the corrosion resistance.

- Colour retention across welds can be achieved by appropriate electrode selection. Welds may be susceptible to hot cracking
- Weathering steels are not recommended without further protection for buried or submerged situations or for applications exposed to concentrated industrial fumes or severe marine conditions
- Oxide staining of surrounding areas may occur due to run-off from this material
- Refer to BlueScope Technical Bulletin No. 26 for more information regarding the use of this material

Australian and International standards

AS/NZS 1594: 2002

AS/NZS 1365: 1996

ISO9001 Quality System certified

Supply conditions

	Normal
Thickness Range	3 – 10 mm
Width Range	1155 – 1250 mm
Surface Finish	Hot Rolled
Edge Condition	Untrimmed (Mill Edge)
Flatness	Class A (Sheet and Plate)
Certification	BlueScope

Chemical composition

Element	Guaranteed %	
	Min	Max
Carbon	-	0.15
Silicon	0.15	0.75
Manganese	-	1.60
Phosphorus	0.055	0.16
Sulfur	-	0.03
Chromium	0.35	1.05
Nickel	-	0.55
Copper	0.15	0.50
Aluminium	-	0.10
CEQ (IIW)	-	0.54

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 shown refer to the BlueScope internal standard

** Vanadium ≤ 0.10 %. Niobium + Titanium + Vanadium ≤ 0.15%

Mechanical properties

Tensile Properties (Longitudinal)		Thickness (mm)
		3 ≤ t ≤ 10
Yield Strength (MPa)	Guaranteed Min	340
Tensile Strength (MPa)	Guaranteed Min	450
Elong. on 200 mm (%)	Guaranteed Min	15

RedCor®

steel.com.au

To learn more about this product

1800 800 789

For more information call Steel Direct



The information contained in this datasheet is provided by way of general information about this product only, and has not been prepared with your specific needs in mind. We recommend that you seek BlueScope's advice as to the suitability of this product for the purpose(s) for which you propose to use it. To contact BlueScope for advice about your proposed use of this product, please contact Steel Direct. REDCOR®, BlueScope and the BlueScope brand mark are registered trade marks of BlueScope Steel Limited.

© 2017 BlueScope Steel Limited ABN 16 000 011 058