# Uncoated Steel Data Sheet



September 2024 - This literature supersedes all previous issues

# TRU-SPEC® coil plate steel AS/NZS 1594 - HA350

### **General description**

Hot rolled structural steel with a minimum yield strength of 350 MPa, good ductility and good weldability. Stretch-levelled to remove internal stresses and for excellent flatness.

### **Typical uses**

Structural members

Roll forming applications

Press brake forming applications

Galvanising applications

### **Features & benefits**

Guaranteed minimum strength levels

Good weldability

Good ductility

### **Warnings**

This material should be used in conjunction with the appropriate design and welding standards.

An untrimmed edge (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.

Free from coil break for 3 months after production.

Material should be stored under cover to avoid issues with storage related corrosion.

### **Australian and International Standards**

AS/NZS 1594:2002 (R2016)

AS/NZS 1365:1996 (R2016)

ISO 9001:2015 Quality System Certified

### **Supply conditions**

	Normal	Optional
Thickness Range	3.0 – 12.7 mm *	-
Width Range	910 – 1550 mm *	-
Length Range	1200 – 12000 mm *	-
Surface Finish	Hot Rolled	-
Edge Condition	Untrimmed (Mill Edge)	Trimmed
Tolerance	AS/NZS 1365:1996 (R2016)	-
Certification	BlueScope – Analysis and Mechanical tests	-

<sup>\*</sup> Not all thickness, width & length combinations are available Optional supply conditions are subject to dimensional restrictions

### **Chemical composition**

Element	Guaranteed Maximum %
Carbon	0.20
Silicon	0.030*
Manganese	1.60
Phosphorus	0.040
Sulfur	0.030
Aluminium	0.10
Micro Alloy (Niobium) **	0.15
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 (Longit	udinal)	Guaranteed Value
Yield Strength (MPa)	Guaranteed Minimum	350
Tensile Strength (MPa)	Guaranteed Minimum	430
Elongation 80 mm (%)	Guaranteed Minimum	16% (≤3mm), 20% (>3mm)
180° Bend (transverse)	Guaranteed Minimum	2t ≤5mm, 3t >5mm

t = thickness of test piece



 $CEQ(IIW) = C + \frac{Mn}{6} + \frac{(Cr + Mo + V)}{5} + \frac{(Cu + Ni)}{15}$ \* Value refers to the BlueScope internal standard, whereas the AS/NZS 1594:2002 (R2016) guaranteed maximum is 0.35% \*\* Niobium + Vanadium + Titanium = 0.15% Max

### **Galvanised Coating Characteristics Related to Steel Composition**

### Category

Α

Refer to Table 9.1 of AS/NZS 2312.2:2014

Where aesthetics are important or where particular coating thickness, surface smoothness or resistance to handling damage criteria exist, specialist advice on steel selection should be sought prior to fabrication of the article or hot dip galvanising.

### **Weldability Group**

### **WTIA Group**

4

Refer to WTIA Technical Note 1 or AS/NZS 1554.1:2014

### Fire hazard properties

Test & Evaluation Method	Result
Combustibility test for materials (AS 1530.1-1994 (R2016))	Not deemed combustible (steel substrate) #

# These test results relate only to the behaviour of the test specimens of the material under the particular conditions of the test and they are not intended to be the sole criterion for assessing the potential fire hazard of the material in use.



To ensure you have the most current information

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