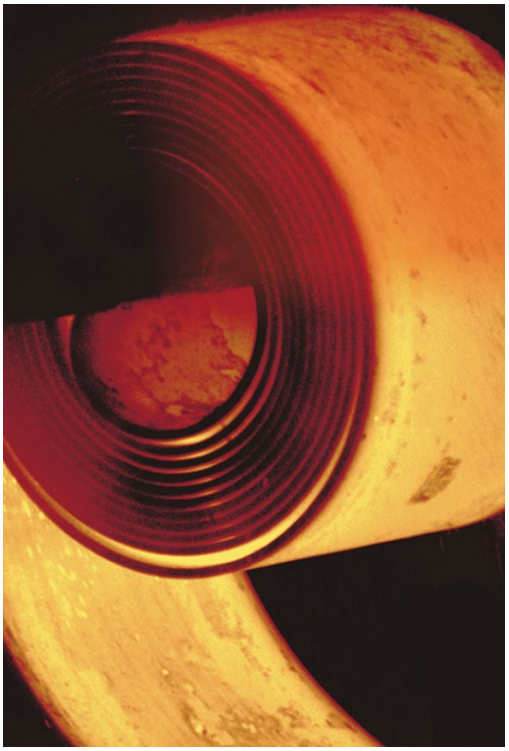
Uncoated Steel
Data Sheet

June 2025 - This literature supersedes all previous issues

Hot rolled strip AS/NZS 1594 – HU300

General description

Hot rolled silicon/aluminium killed structural steel with a minimum yield strength of 300 MPa, good ductility and good weldability.



Typical uses

Structural members

Roll forming applications

Press brake forming applications

General fabrications

Features & benefits

Good weldability

Good formability

Excellent for galvanising applications

Warnings

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

The surface of hot rolled grades may exhibit surface blemishes that while complying to AS/NZS 1594 may be visible through some surface coatings. For applications where surface finish is critical, AS/NZ 1595 cold rolled grades should be considered.

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.

This steel will produce thicker coatings in galvanizing that will be duller and more brittle than Al-killed steels.

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	7 – 12.7 mm *	-
Width Range	1150 – 1250 mm *	-
Surface Finish	Hot Rolled	Pickled & Oiled (1.6 to 6mm only)
Edge Condition	Untrimmed (Mill Edge)	Trimmed
Tolerance	AS/NZS 1365:1996 (R2016)	-
Certification	BlueScope	-

* Not all thickness & width combinations are available
Optional supply conditions are subject to dimensional restrictions

Chemical composition

Element	Guaranteed Maximum %
Carbon	0.20
Silicon	0.35
Manganese	1.60
Phosphorus	0.040
Sulfur	0.030
Aluminium	0.10
CEQ (IIW)	0.39

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 (Longitudinal)		Guaranteed Value
Yield Strength (MPa)	Guaranteed Minimum	300
Tensile Strength (MPa)	Guaranteed Minimum	400
Elongation 80 mm (%)	Guaranteed Minimum	18% (<=3mm), 22% (>3mm)
180° Bend (transverse)	Guaranteed Minimum	1t <=3mm, 2t >3mm

t = thickness of test piece

Galvanised Coating Characteristics Related to Steel Composition

Category
B or C

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.

BlueScope

Weldability Group

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

Fire hazard properties

NCC 2022	Deemed
NCC 2022 Vol 1, Part C2, C2D10, (5)(b)	Non-combustible