Uncoated Steel
Data Sheet

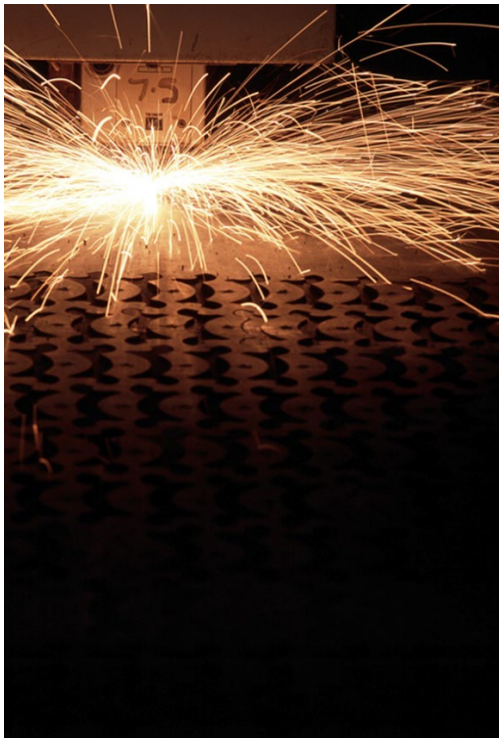
September 2026 - This literature supersedes all previous issues

XLERPLATE® steel

AS/NZS 3678 – Lasercut 250

General description

A medium strength structural steel with nominal yield strength of 250MPa designed specifically for laser cutting.



Typical uses

Components

Structural fabrication

Laser profiling

Features & benefits

Guaranteed minimum strength levels

Low silicon plate steel designed for laser cutting

ACRS accreditation (ACRS Certificate No. 120802)

Warnings

This material is produced on a Plate Mill and the surface quality requirements comply with the requirements of the AS/NZS 3678:2016 standard.

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

Lasercut 250 is designed with low silicon levels. This may have an impact on the thickness of the zinc coating when galvanising. Purchasers should satisfy themselves that the material meets the requirements of their operation.

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

Australian and International Standards

AS/NZS 3678:2016

AS/NZS 1365:1996 (R2016)

ISO 9001:2015 Quality System certified

Normal / optional supply conditions

	Normal	Optional
Thickness Range	8mm – 32mm	-
Width Range	1500	-
Length Range	3.0 and 6.0 m	By Enquiry
Surface Condition	Hot Rolled in accordance with Section 8 of AS/NZS 3678:2016	-
Edge Condition	Trimmed	-
Tolerances	AS/NZS 1365:1996 (R2016)	-
Ultrasonic Inspection	-	AS 1710:2007 (R2017)
Surface Inspection	BlueScope	Third party
Certification	BlueScope	Third party endorsed

Optional supply conditions may be subject to dimensional restrictions

Chemical composition

Element	Guaranteed Maximum %
Carbon	0.22
Silicon	0.5
Manganese	1.70
Phosphorus	0.040
Sulfur	0.030
Chromium	0.25
Nickel	0.30
Copper	0.40
Molybdenum	0.08
Aluminium	0.10
Niobium**	0.020
Titanium	0.040
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 (Transverse)		Thickness (mm)			
		t = 8	8 < t ≤ 12	12 < t ≤ 20	20 < t ≤ 32
Yield Strength (MPa)	Guaranteed Min	280	260	250	250
Tensile Strength (MPa)	Guaranteed Min	410	410	410	410
Elongation $5.65\sqrt{S_0}$ (%)	Guaranteed Min	22	22	22	22

BlueScope

Formability	Thickness (mm)	Longitudinal	Transverse
Recommended min inside Radius*	8 ≤ t ≤ 10	2.25t	1.5t
	10 < t ≤ 20	3.0t	2.0t
	20 < t ≤ 32	6.0t	4.0t

* For standard sizes, the longitudinal rolling axis is parallel to the shorter side (1200mm or 1500mm), for custom sizes please contact Steel Direct

Fire hazard properties

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

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