

XLERPLATE® steel

Floorplate AS/NZS 3678 – 250

General description

A hot rolled structural floorplate (raised pattern on one surface) with guaranteed minimum yield strength of 250MPa.

Features & benefits

- Guaranteed minimum strength levels
- Excellent weldability
- Excellent formability
- ACRS accreditation (ACRS Certificate No. 120802)
- ATIC Scheme 10 accreditation

Warnings

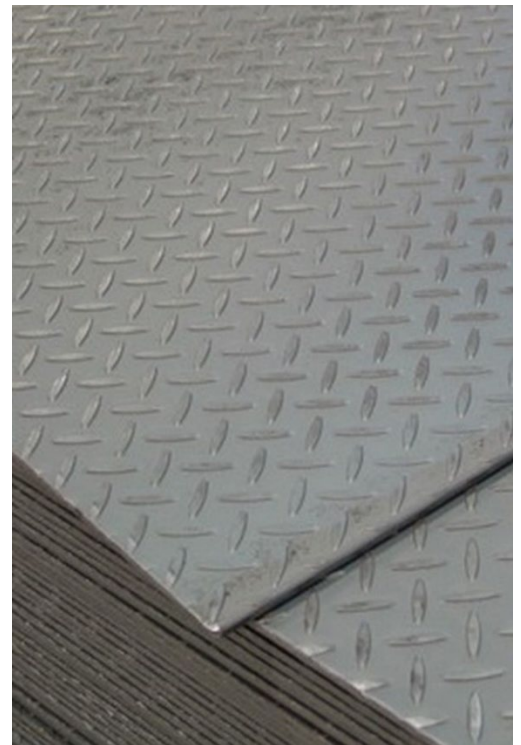
This material should be used in conjunction with the appropriate structural design and welding standards

An untrimmed (mill) edge may contain surface discontinuities associated with the rolling process (refer to clause 8 of AS/NZS 3678). The plate supplied may include an amount outside of the nominal ordered width, in accordance with relevant Australian standards. The area of the supplied plate which is outside of the nominal (customer ordered) width must not be used. Customers are advised to remove an equal width from each side of the plate when trimming.

No warranty is provided in relation to the use of this material for anti-slip applications.

This material is not suitable in 'wet' surface conditions and is not suitable in 'dry' surface conditions where ramps have a steeper incline than 1:14.

Customers to make their own assessment of the suitability of this product in the end use application.



Australian and International Standards

- AS/NZS 3678:2016
- AS/NZS 1365:1996 (R2016)
- ISO 9001:2015 Quality System Certified

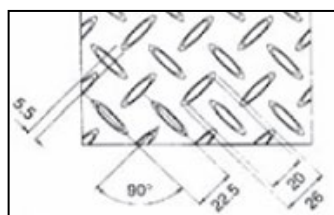
Normal / optional supply conditions

| | Normal | Optional |
|-----------------------|--------------------------------------|----------------------|
| Thickness Range | 6mm – 12mm | - |
| Availability | Plate is available in standard sizes | - |
| Edge Condition | Untrimmed (Mill Edge)* | Trimmed |
| Tolerances | AS/NZS 1365:1996 (R2016) | - |
| Ultrasonic Inspection | - | AS 1710:2007 |
| Surface Inspection | BlueScope | Third party |
| Certification | BlueScope | Third party endorsed |

Optional supply conditions may be subject to dimensional restrictions

*Plates less than 8mm in thickness are supplied with trimmed edges

Floorplate pattern



* Lozenge height approximately 1.5mm (Dimensions are indicative only)

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 |
| Yield Strength (MPa) | Guaranteed Min | 280 | 260 |
| Tensile Strength (MPa) | Required | 410 | 410 |
| Elongation $5.65\sqrt{S_0}$ (%) | Guaranteed Min | n/a | n/a |

| Formability | Thickness (mm) | Longitudinal | Transverse |
|--------------------------------|--------------------|--------------|------------|
| Recommended min inside* Radius | $8 \leq t \leq 20$ | 3.0t | 2.0t |

* Raised Pattern inside

Slip resistance

| Slip resistance classification tests* | Classification |
|--|----------------|
| Wet Pendulum Test (Appendix A) | P3 |
| Oil-Wet Inclining Platform Test (Appendix D) | R10 |

* Limited testing has been undertaken on this material to assess compliance with AS 4586-2013 'Slip resistance classification of new pedestrian surface materials'. These tests were undertaken on newly produced Floorplate with no surface treatment.

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.

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To ensure you have the most current information

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