

This literature supersedes all previous issues

### Plate – PL

### Coil Plate - CPL

#### GENERAL DESCRIPTION

Hot-rolled structural product with minimum yield strength of 300 MPa, good ductility and good weldability.

#### AUSTRALIAN STANDARDS

AS/NZS 1594: 2002

AS/NZS 1365: 1996

#### TYPICAL USES

- Structural members
- Light Poles
- Brake press forming applications
- General fabrication
- Trailer and automotive components

#### FEATURES & BENEFITS

- Guaranteed minimum strength levels
- Excellent weldability
- Good formability
- Excellent for galvanising applications

#### WARNINGS

- This material should be used in conjunction with the appropriate design and welding standards.
- An untrimmed (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.

#### NORMAL / OPTIONAL SUPPLY CONDITIONS

|                 | Normal  | Optional |
|-----------------|---|----------|
| Thickness Range | 1.6mm – 12.7mm                                  |          |
| Width Range     | 910mm – 1550mm                                  |          |
| Length Range    | 1200mm – 9000mm                                 |          |
| Surface Finish  | Hot-rolled                                      |          |
| Edge Condition  | Untrimmed (Mill Edge)                           | Trimmed  |
| Tolerances      | AS/NZS 1365:1996                                |          |
| Flatness        | Class A   |          |
| Certification   | BlueScope Steel – Analysis and Mechanical tests |          |

Optional supply conditions may be subject to dimensional restrictions.

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### CHEMICAL COMPOSITION

| Element    | Guaranteed Maximum % | Typical %      |               |               |
|------------|----------------------|----------------|---------------|---------------|
|            |                      | 1.6mm – 5.79mm | >5.79mm – 8mm | >8mm – 12.7mm |
| Carbon     | 0.20                 | 0.15           | 0.15          | 0.08          |
| Silicon    | 0.03*                | 0.004          | 0.006         | 0.010         |
| Manganese  | 1.60                 | 0.75           | 1.00          | 1.3           |
| Phosphorus | 0.040                | 0.015          | 0.015         | 0.015         |
| Sulfur     | 0.030                | 0.010          | 0.010         | 0.010         |
| Aluminium  | 0.10                 | 0.030          | 0.030         | 0.03          |
| CEQ (IIW)  | 0.39                 | 0.28           | 0.32          | 0.31          |

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 refer to the BlueScope Steel internal standard, where the AS/NZS 1594 guaranteed maximum % is 0.35.

### MECHANICAL PROPERTIES

| Tensile Properties (Longitudinal) | Guaranteed Minimum | Typical %   |               |                  |
|-----------------------------------|--------------------|-------------|---------------|------------------|
|                                   |                    | 1.6mm – 3mm | >3mm – 5.79mm | >5.79mm – 12.7mm |
| Yield Strength (MPa)              | 300                | 320 – 390   |               |                  |
| Tensile Strength (MPa)            | 400                | 440 - 500   |               |                  |
| Elong. (%) on 80mm                | 18                 | 24 – 37     |               |                  |
| Elong. (%) on 80mm                | 22                 |             | 28 – 38       |                  |
| Elong. (%) on 200mm               | 16                 |             |               | 21 – 34          |
| 180° Bend (Transverse)            | 1t                 | 1t          |               |                  |
| 180° Bend (Transverse)            | 2t                 |             | 1t            |                  |

### DIMENSIONS

| Width Range (mm) | Thickness Range (mm) | Length Range (mm) |
|------------------|----------------------|-------------------|
| 910 - 1550       | 1.6 – 12.7           | 1200 - 9000       |

Not all thickness and width combinations are available.

### WELDABILITY GROUP

| WTIA Group |
|------------|
| 3          |

Refer to WTIA Technical Note 1 or AS/NZS 1554.1

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