

Revision 2 April 2013

This literature supersedes all previous issues.

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|--|--|--------------------------------------|
| GENERAL DESCRIPTION TRUECORE® steel is a hot-dipped zinc/aluminum alloy-coated structural steel with a regular blue tinted resin spangle surface and a guaranteed minimum yield strength of 550MPa with limited ductility. | TYPICAL USES Steel house frames and trusses where the product is not visible. For material selection advice, please contact your nearest BlueScope Sales office. | |
| | AUSTRALIAN STANDARD AS 1397 | MALAYSIAN STANDARD MS 1196 |

DIMENSIONS: (For normal supply product)

| Preferred base metal thickness (BMT), mm* | Strip width range, mm |
|---|-----------------------|
| 0.45, 0.48, 0.50, 0.55 | 610 - 1219 |
| 0.60, 0.70, 0.75 | 610 - 1219 |
| 0.80, 0.90, 1.00, 1.20 | 610 - 1219 |

*Any other sizes may be available on request

MECHANICAL PROPERTIES

| Steel base | Guaranteed (0.42mm) (> 0.60mm) | | Typical* (0.42 mm thick) |
|----------------------------------|-----------------------------------|---------|-----------------------------|
| Longitudinal tensile | | | |
| Yield strength, MPa | 550 min | 550 min | 680 - 740 |
| Tensile strength, MPa | 550 min | 550 min | 680 - 740 |
| Elong on 50 mm, % | – | 2 min | 1 - 6 |
| Hardness, HR30T | – | – | 75 - 85 |
| 180° transverse bend (L axis) | – | – | – |

* Typical mechanical properties are based on aggregation of \bar{x} and 2SD performance.

CHEMICAL COMPOSITION OF STEEL BASE

| Guaranteed maximum % | |
|----------------------|---------------|
| Carbon (C) | 0.20 |
| Phosphorus (P) | 0.04 |
| Manganese (Mn) | 1.20 |
| Sulphur (S) | 0.03 |
| Typical % | |
| Carbon (C) | 0.035 - 0.070 |
| Phosphorus (P) | 0.00 - 0.02 |
| Manganese (Mn) | 0.20 - 0.30 |
| Sulphur (S) | 0.00 - 0.02 |
| Silicon (Si) | 0.00 - 0.02 |
| Aluminium (Al) | 0.02 - 0.07 |
| Nitrogen (N) | 0.000 - 0.008 |

SUPPLY CONDITION

| | Normal |
|------------------------------|-----------------------------|
| Coating Class | AZ150 |
| Surface Finish | Spangled |
| Surface Treatment | Passivated/ Resin Coated |
| Tolerance class AS/NZS 1365* | |
| Thickness | Class A |
| Width | Class A |
| Flatness | Class A |

Branding

Branded

* The dimensional tolerances for thickness, width, flatness and camber shall be in accordance with the requirements of AS 1365.

FABRICATING PERFORMANCE

| Method | Rating |
|-------------------------|--------|
| Bending | 2 |
| Drawing | NR |
| Pressing | NR |
| Roll-forming | 3 |
| Welding | 4* |
| Painting (pretreatment) | 5 |

Where 1 = limited to 5 = excellent, or NR = not recommended

* Welding design must allow for some strength reduction near welds

Note: 1. Customers should use this product promptly (within 6 months) to avoid the possibility of storage related corrosion.
2. Rollforming mark does not affect the performance of TRUECORE® steel.

Please ensure you have the current data sheet for this product.