

# Coated Steel – Metallic

## Data Sheet



December 2017. This literature supersedes all previous issues



# GALVSPAN® steel

## G500

### General Description

GALVSPAN® G500 steel is a hot-dipped zinc-coated structural steel with a spangled surface and guaranteed minimum yield strength of 500MPa. Suitable for roll forming to a minimum internal diameter of 4t.

### Typical uses

Roll-formed sections for structural applications.

### Australian and International Standards

AS/NZS 1365:1996

AS 1397:2011

ISO 9001 Quality System certified

### Guaranteed properties of steel base

| Mechanical properties                         | Guaranteed minimum |
|---|--------------------|
| Yield Strength, MPa (longitudinal tensile)    | 500                |
| Tensile Strength, MPa (longitudinal tensile)  | 520                |
| Elongation on 80mm ( $\geq 0.60\text{mm}$ ) % | 7                  |
| 90° Transverse Bend                           | 6t                 |

### Chemical composition of steel base

| Chemical properties | Guaranteed maximum % |
|---------------------|----------------------|
| Carbon - C          | 0.20                 |
| Manganese - Mn      | 1.20                 |
| Phosphorus - P      | 0.040                |
| Sulphur - S         | 0.030                |

### Metal coating adhesion – 180° bend test

| Coating class | Result |
|---------------|--------|
| Z350          | 2t     |
| Z450          | 2t     |

Where t = the diameter of mandrel in terms of thickness of product.

### Dimensional capabilities

| Thickness range (mm) | Width range (mm) |
|----------------------|------------------|
| 1.001 - 1.499        | 700 - 1525       |

Notes: Not every combination of thickness and width may be available. Supply conditions may be subject to dimensional restrictions and are subject to BlueScope Sales and Marketing confirmation. Slitting and shearing available on request from BlueScope Sales Offices. For requirements outside the standard product range please contact your local Sales Office. To determine maximum mill edge width available, subtract 30mm from the maximum width.

## Resistance to fire

| Index                      | Range                      | Result |
|----------------------------|----------------------------|--------|
| Ignitability Index         | 0 - 20                     | 0      |
| Spread of Flame Index      | 0 - 10                     | 0      |
| Heat Evolved Index         | 0 - 10                     | 0      |
| Smoke Developed Index      | 0 - 10                     | 0      |
| National Construction Code | Non-Combustible Material * |        |

\*According to National Construction Code, Building Code of Australia, Volume1: Part C1.12.e, and Volume 2: Part 3.7.1.2.e

## Supply conditions

| Attribute              | Normal     | Optional |
|------------------------|------------|----------|
| Coating Class          | Z350       | Z450     |
| Surface Condition      | Spangled   | -        |
| Surface Treatment      | Passivated | -        |
| Branding               | Branded    | -        |
| Tolerance - Dimensions | Class A    | -        |
| Tolerance - Flatness   | Class A    | -        |

Important Notes: Optional supply conditions may be subject to dimensional restrictions

## Fabricating performance

| Method   | Rating |
|--|--------|
| Bending  | 2      |
| Drawing  | NR     |
| Pressing   | NR     |
| Roll Forming   | 3      |
| Welding (design must allow for some strength reduction near welds) | 5      |
| Painting Pre-treatment   | 5      |

Where: 1 = Limited to 5 = Excellent or NR = Not Recommended

The ratings in this table are general indicators only, given as a guide to fabricating performance.

## Important information

Material should be used promptly (within six months) to avoid the possibility of a storage related corrosion. For selection of the most appropriate metallic coated steel, please refer to technical bulletins TB1a, TB1b, CTB21 and CTB22. For storage, rollforming lubricants and other information please refer to the Technical Bulletins.

[steel.com.au](http://steel.com.au)

To learn more about this product

1800 064 384

For more information call Steel Direct



Galvaspan®



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