

Coated Steel – Metallic

Data Sheet



October 2020. This literature supersedes all previous issues



GALVABOND[®] steel

G2 / G2S

General Description

GALVABOND[®] G2 steel is a hot-dipped zinc-coated commercial forming steel with a spangled surface, suitable for general manufacturing, widely available as distributor stock. Product is suitable for moderate drawing applications and is suitable for lockseaming up to 1.6mm thick. GALVABOND[®] G2S steel is skinpassed to improve surface quality. Under normal storage conditions it will be free of fluting for 3 months after galvanising

Typical uses

Tube, airconditioning ducts, airconditioning panels, meter boxes, trailers, partitioning systems, cable trays, scaffolding planks, rendering mesh, feeder troughs.

Australian and International Standards

AS/NZS 1365:1996 (R2016)
AS 1397-2011
ISO 9001:2015 Quality System certified

Guaranteed properties of steel base

| Mechanical properties | Guaranteed minimum |
|--|--------------------|
| Elongation on 80mm ($\geq 0.60\text{mm}$) % (transverse tensile) | 27 |
| 180° Transverse Bend (L axis) | 0t |
| Pittsburgh lock-seam ($\leq 1.6\text{mm}$) | Pass |

Chemical composition of steel base

| Chemical properties | Guaranteed maximum % |
|---------------------|----------------------|
| Carbon - C | 0.10 |
| Manganese - Mn | 0.45 |
| Phosphorus - P | 0.025 |
| Sulfur - S | 0.030 |

Metal coating adhesion – 180° bend test

| Coating class | Result |
|---------------|--------|
| Z100 | 0t |
| Z200 | 0t |
| Z275 | 0t |
| Z450 | 1t |
| Z600 | 2t |

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

Dimensional capabilities

| Thickness range (mm) | Max Width(mm) |
|----------------------|----------------|
| 0.30 - 0.319 | 1000 |
| 0.32 – 0.349 | 1100 |
| 0.35 – 0.399 | 1220 |
| 0.40 – 0.419 | 1300 |
| 0.42 – 0.499 | 1390 |
| 0.45 – 0.500 | 1510 |
| 0.501 – 2.00 | 1530 |
| 2.01 – 3.20 | 1220 (G2 only) |
| 3.201 – 3.50 | 1000 (G2 only) |

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.

Fire hazard properties

| Test & Evaluation Methods | Range | Result |
|--|--|---|
| Simultaneous determination of ignitability, flame propagation, heat release and smoke release (AS/NZS 1530.3:1999 (R2016)) | Ignitability Index (0 – 20) | 0 |
| | Spread of Flame Index (0 – 10) | 0 |
| | Heat Evolved Index (0 – 10) | 0 |
| | Smoke Developed Index (0 – 10) | 2 |
| NCC non-combustible material concessions (NCC 2019; AS/NZS 1530.3:1999 (R2016)) | National Construction Code, Building Code of Australia 2019; Volume 1: Part C1.9.e, and Volume 2: Part 3.7.1.1.e | May be used wherever a non-combustible material is required |
| | AS/NZS 1530.3:1999 (R2016) | |
| Combustibility test for materials (steel substrate) (AS 1530.1-1994 (R2016)) | AS 1530.1-1994 (R2016) | Not deemed combustible (steel substrate) |

Supply conditions

| Attribute | Normal | Optional |
|------------------------|------------|--|
| Coating Class | Z275 | Z100, Z200, (Z450 >0.35mm; Z600 >0.40mm) |
| Surface Condition | Spangled | Minimised spangle |
| Surface Treatment | Passivated | Unpassivated (oiled) |
| Branding | Branded | - |
| Tolerance - Dimensions | Class A | B Class |
| Tolerance - Flatness | Class A | B Class |

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

Fabricating performance

| Method | Rating |
|--|--------|
| Bending | 5 |
| Drawing | 3 |
| Pressing | 3 |
| Roll Forming | 5 |
| Lock-Forming | 5 |
| 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

To learn more about this product

1800 064 384

steeldirect@bluescopesteel.com

For more information contact Steel Direct



The information contained in this datasheet is provided by way of general information about this product only, and has not been prepared with your specific needs in mind. We recommend that you seek BlueScope Steel Limited's advice as to the suitability of this product for the purpose(s) for which you propose to use it. To contact BlueScope Steel Limited for advice about your proposed use of this product, please contact Steel Direct. GALVABOND®, BlueScope and the BlueScope brand mark are registered trade marks of BlueScope Steel Limited.

© 2020 BlueScope Steel Limited ABN 16 000 011 058. All rights reserved.