

# Coated Steel – Metallic

## Data Sheet



January 2020. This literature supersedes all previous issues

# TUBEFORM<sup>®</sup> steel

## G300

### General Description

TUBEFORM<sup>®</sup> G300 steel is a hot-dipped zinc-coated structural steel with a spangled surface and guaranteed minimum yield strength of 300MPa, with good ductility. Suitable for roll-forming to an internal diameter of 1t.

### Typical uses

Tubing sections.

### 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
Yield Strength, MPa (longitudinal tensile)	300
Tensile Strength, MPa (longitudinal tensile)	340
Elongation on 80mm ( $\geq 0.60\text{mm}$ ) %	18
180° Transverse Bend	0t

### Chemical composition of steel base

Chemical properties	Guaranteed maximum %
Carbon - C	0.30
Manganese - Mn	1.60
Phosphorus - P	0.100
Sulphur - S	0.035

### Metal coating adhesion – 180° bend test

Coating class	Result
Z100	0t
Z200	0t
Z275	1t

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

### Dimensional capabilities

Thickness ranges (mm)	Min width (mm)	Max width (mm)
1.45 – 2.00	801	1145
2.01 – 2.55	801	1100
2.56 – 2.85	801	995

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. For product  $\geq 2.0\text{mm}$  thick, widths  $>1165\text{mm}$  &  $\leq 1200\text{mm}$  must be ordered as trimmed edge. Slitting and shearing available on request from BlueScope Sales Offices. For requirements outside the standard product range please contact your local Sales Office.

## Fire hazard properties

Test & Evaluation Methods	Range	Result
Simultaneous determination of ignitability, flame propagation, heat release and smoke release (AS/NZS 1530.3:1999)	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)	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	
Combustibility test for materials (steel substrate) (AS 1530.1-1994)	AS 1530.1-1994	Not deemed combustible (steel substrate)

## Supply conditions

Attribute	Normal	Optional
Coating Class	Z200	Z100, Z275
Surface Condition	Spangled	-
Surface Treatment	Passivated	-
Branding	Branded	-
Tolerance - Dimensions	Class A	Class B
Tolerance - Flatness	Class A	-

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

## Fabricating performance

Method	Rating
Bending	5
Drawing	-
Pressing	-
Roll Forming	5
Lock Forming	-
Welding	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

Note that ductility will decline through a natural ageing process during storage and/or paint stoving cycle.

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](mailto:steeldirect@bluescopesteel.com)

For more information contact Steel Direct



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