Coated Steel - Metallic
Data Sheet

April 2022 - This literature supersedes all previous issues

ZINCFORM® steel G300 / G300S

General description

ZINCFORM® steel G300 is a hot-dipped zinc-coated structural steel with a spangled surface and guaranteed minimum yield strength of 300MPa, with good ductility. Suitable for rollforming to an internal diameter of 1t.

ZINCFORM® steel G300S is skin passed to improve surface quality. This skin passed product is only available up to 1.6mm thick.

Typical uses

Rollformed structural sections, nailplate.

Australian and International Standards

AS/NZS 1365:1996 (R2016)

AS 1397:2021

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 (≥ 0.60mm) %	18
180° Transverse Bend	1t

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
Z350	1t
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 – 0.449	1390
0.45 – 0.500	1510
0.501 – 1.00	1530
1.001 – 2.00	1350
2.001 – 2.90	1220 (G300 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.

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)

* The results of this fire test may be used to directly assess fire hazard, but it should be recognised that a single test method will not provide a full assessment of fire hazard under all fire conditions.
# These test results relate only to the behaviour of the test specimens of the material under the particular conditions of the test and they are not intended to be the sole criterion for assessing the potential fire hazard of the material in use.

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Supply conditions

Attribute	Normal	Optional
Coating Class	Z275	Z200, Z350, Z450, Z600
Surface Condition	Spangled	Minimised Spangle
Surface Treatment	Passivated	-
Branding	Branded	-
Tolerance – Dimensions	Class A	Class B
Tolerance – Flatness	Class A	Class B

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

Fabricating performance

Method	Rating
Bending	5
Drawing	3
Pressing	2
Rollforming	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

Skin-passing will generally give a marginally higher yield strength and marginally reduced % elongation.

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.