Coated Steel - Metallic
Data Sheet

November 2025 - This literature supersedes all previous issues

GALVASPAN® steel G450

General description

GALVASPAN® steel G450 is a hot-dipped zinc-coated structural steel with a spangled surface and guaranteed minimum yield strength of 450MPa. Suitable for rollforming to a minimum internal diameter of 4t.



Typical uses

Rollformed sections such as purlins and girts for structural building applications.

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)	450
Tensile Strength, MPa (longitudinal tensile)	480
Elongation on 80mm (≥ 0.60mm) %	9
90° Transverse Bend	4t

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)
1.50 – 1.60	700 – 1525
1.61 – 2.00	700 – 1350
2.01 – 3.00	700 – 1225
3.01 – 3.20	700 – 1200

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)	1
NCC non-combustible material (NCC 2022)	National Construction Code, Building Code of Australia 2022; Volume 1 Part C1, C2D10, (5)	Non-combustible

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	3
Drawing	NR
Pressing	NR
Rollforming	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.

Galvaspan®

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