

Metallic Coated MC Structural S GALVSPAN® G500 steel S

Revision 9, November 2003

This literature supersedes all previous issues

GENERAL DESCRIPTION

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

TYPICAL USES

Roll-formed sections for structural applications.

AUSTRALIAN STANDARDS

AS 1365
AS 1397:2001

GUARANTEED PROPERTIES OF STEEL BASE

MECHANICAL PROPERTIES	GUARANTEED MINIMUM
Yield strength (MPa)	500
Tensile Strength (MPa)	520
Elongation on 80mm (≥ 0.60 mm) %	7
90° transverse bend (L axis)	6t

CHEMICAL PROPERTIES	GUARANTEED MAXIMUM %
Carbon (C)	0.20
Phosphorus (P)	0.04
Manganese (Mn)	1.20
Sulphur (S)	0.03

Note – tensiles tested in longitudinal direction.

COATING ADHESION – 180° BEND TEST

COATING CLASS	GUARANTEED
Z350	2t
Z450	2t

FIRE HAZARD PROPERTIES

IGNITABILITY INDEX	(range 0-20)	0
SPREAD OF FLAME INDEX	(range 0-10)	0
HEAT EVOLVED INDEX	(range 0-10)	0
SMOKE DEVELOPED INDEX	(range 0-10)	0

DIMENSIONAL CAPABILITIES

Thickness Ranges mm	Max. Width mm
>1.00 < 1.50	1350

Slitting and shearing available on request from BlueScope Steel sales offices.

These dimensions are a reflection of technical capability to produce. Supply conditions may be subject to dimensional restrictions and is subject to BlueScope Steel Sales and Marketing confirmation.

NORMAL/OPTIONAL SUPPLY CONDITIONS

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

Important Notes

Material should be used promptly (within 6 months) to avoid the possibility of a storage related phenomena of galvanised coatings termed intergranular corrosion.

For selection of the most appropriate metallic coated steel, please refer to technical bulletins TB1a, TB1b, CTB21 and CTB22.

For storage, rollforming lubricant and other information please refer to the Technical Bulletins.

GALVSPAN® is a registered trade mark of BlueScope Steel Limited.

BlueScope is a trade mark of BlueScope Steel Limited.

Please ensure you have the current data sheet for this product as displayed at www.bluescopesteel.com.au

BlueScope Steel Limited

BlueScope Steel Limited ABN 16 000 011 058
BlueScope Steel (AIS) Pty Ltd ABN 19 000 019 625

Copyright © 2003 BlueScope Steel Limited

SYDNEY: (02) 9795 6700 **MELBOURNE:** (03) 9586 2222 **BRISBANE:** (07) 3845 9300 **ADELAIDE:** (08) 8243 7333 **PERTH:** (09) 9330 0666

Produced by Artimprint (02) 9984 8586



Metallic Coated MC Structural S GALVSPAN® G500 steel

Revision 9, November 2003
This literature supersedes all previous issues

Continued

TYPICAL PROPERTY RANGES (FOR NORMAL SUPPLY PRODUCT)

Thickness mm	Yield Strength/Proof Strength & Tensile Strength MPa													
	550	560	570	580	590	600	610	620	630	640	650	660	670	680
1.2														

Key	 yield strength	 tensile strength
------------	--	--

Thickness mm	Total Elongation (%)							
	7	8	9	10	11	12	13	14
1.2								

FABRICATING PERFORMANCE		TYPICAL CHEMICAL COMPOSITION OF STEEL BASE	
Method	Rating		%
Bending	2	Carbon (C)	0.035 - 0.070
Drawing	NR	Phosphorus (P)	0.00 - 0.02
Pressing	NR	Manganese (Mn)	0.20 - 0.30
Roll-Forming	3	Sulphur (S)	0.00 - 0.02
Welding (design must allow for some strength reduction near welds)	5	Silicon (Si)	0.00 - 0.02
Painting (Pretreatment)	5	Aluminium (Al)	0.02 - 0.07
		Nitrogen (N)	0.00 - 0.008

where 1 = limited to 5 = excellent, or NR = not recommended

IMPORTANT NOTES:

- Typical Mechanical Properties are based on typical product dispatched to customers. Note that ductility will decline through a natural aging process during storage and/or paint stoving cycle.

GALVSPAN® is a registered trade mark of BlueScope Steel Limited.

BlueScope is a trade mark of BlueScope Steel Limited.

Please ensure you have the current data sheet for this product as displayed at www.bluescopesteel.com.au

BlueScope Steel Limited

BlueScope Steel Limited ABN 16 000 011 058
BlueScope Steel (AIS) Pty Ltd ABN 19 000 019 625

Copyright © 2003 BlueScope Steel Limited

SYDNEY: (02) 9795 6700 **MELBOURNE:** (03) 9586 2222 **BRISBANE:** (07) 3845 9300 **ADELAIDE:** (08) 8243 7333 **PERTH:** (09) 9330 0666

Produced by Artimprint (02) 9984 8586

