

Metallic Coated MC Formable F ZINCANNEAL® G2S steel

Revision 8, November 2003

This literature supersedes all previous issues

GENERAL DESCRIPTION

ZINCANNEAL® G2S is a matte hot-dipped zinc/iron alloy-coated commercial forming steel with a skin-passed smooth surface suitable for direct-on painting. Some powdering of the coating may occur with severe deformation.

TYPICAL USES

Exposed painted panels, non-exposed automotive panels, washing machines, acoustic ceiling tiles, door frames, switchboards, commercial refrigerators and freezers.

AUSTRALIAN STANDARDS

AS 1365
AS 1397:2001

GUARANTEED PROPERTIES OF STEEL BASE

MECHANICAL PROPERTIES	GUARANTEED MINIMUM
Elongation on 80 mm (≥ 0.60 mm) %	27
180° transverse bend (L axis)	0t

Note – tensiles tested in transverse direction

CHEMICAL PROPERTIES	GUARANTEED MAXIMUM %
Carbon (C)	0.10
Phosphorus (P)	0.025
Manganese (Mn)	0.45
Sulphur (S)	0.03

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
0.50 < 0.57	1525
≥ 0.57 < 1.00	1625
≥ 1.00 < 1.83	1525
≥ 1.83 < 1.90	1470
$\geq 1.90 \leq 2.00$	1400

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	ZF100	45F45, 60F60, ZF80
Surface Condition	Smooth matte	–
Surface Treatment	Phosphated	Unphosphated (oiled)
Tolerance Class		
Dimensions	A Class	B Class
Flatness	A Class	B Class
Branding	Not Branded	–

Important Notes

Material should be used promptly (within 6 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 lubricant and other information please refer to the Technical Bulletins.

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

BlueScope Steel Limited

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BlueScope Steel (AIS) Pty Ltd ABN 19 000 019 625

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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



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Continued

TYPICAL PROPERTY RANGES (FOR NORMAL SUPPLY PRODUCT)

Thickness mm	Yield Strength & Tensile Strength MPa																			
	240	250	260	270	280	290	300	310	320	330	340	350	360	370	380	390	400	410	420	430
0.6																				
1.0																				
1.6																				
2																				

Key	 yield strength	 tensile strength
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Thickness mm	Total Elongation on 80mm (%)															
	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
0.6																
1.0																
1.6																
2																

FABRICATING PERFORMANCE

Method	Rating
Bending	5
Drawing	3
Pressing	3
Roll-forming	5
Welding	5
Painting (Pretreatment)	5

TYPICAL CHEMICAL COMPOSITION OF STEEL BASE

	%
Carbon (C)	0.035 - 0.070
Phosphorus (P)	0.00 - 0.025
Manganese (Mn)	0.20 - 0.30
Silicon (Si)	0.00 - 0.02
Sulphur (S)	0.00 - 0.02
Aluminium (Al)	0.02 - 0.07
Nitrogen (N)	0.000 - 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.
- This type of product is not suitable for painting in coil form and forming post painting as problems may be experienced with paint adhesion.

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