# Metallic CoatedMCStructuralSZINCFORM®G350 steel

Revision 8, November 2003 This literature supersedes all previous issues

### **GENERAL DESCRIPTION**

ZINCFORM<sup>®</sup> G350 steel is a hot-dipped zinc-coated structural steel with a spangled surface and guaranteed minimum yield strength of 350 MPa, with good ductility. Suitable for roll forming to a minimum internal diameter of 2t.

#### **TYPICAL USES**

Roll-formed structural sections.

#### **AUSTRALIAN STANDARDS**

AS 1365 AS 1397:2001

#### **GUARANTEED PROPERTIES OF STEEL BASE**

MECHANICAL PROPERTIES	GUARANTEED MINIMUM
Yield Strength (MPa)	350
Tensile Strength (MPa)	420
Elongation on 80mm ( $\geq$ 0.60 mm) %	14
180° transverse bend (Laxis)	2t

Note - tensile tested in longitudinal direction

#### **COATING ADHESION – 180° BEND TEST**

COATING CLASS	GUARANTEED
Z100	Ot
Z200	Ot
Z275	1t
Z450	1t
Z600	2t

#### FIRE HAZARD PROPERTIES

CHEMICAL PROPERTIES

Carbon (C)

Sulphur (S)

Phosphorus (P)

Manganese (Mn)

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
≥ 0.40 ≤ 0.60	1380
> 0.60 ≤ 1.00	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

GUARANTEED MAXIMUM %

0.30

0.10

1.60 0.035

Coating Class	Normal Z275	<b>Optional</b> Z200, Z450, Z600
Surface Condition	Spangled	Minimised spangle
Surface Treatment	Passivated	-
Tolerance Class Dimensions Flatness	A Class A Class	B Class B Class
Branding	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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STEEL

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## Continued

## TYPICAL PROPERTY RANGES (FOR NORMAL SUPPLY PRODUCT)

Thickness						Yield	Stren		Tens Pa	ile Str	ength	1				
mm	330	340	350	360	370	380	390	400	410	420	430	440	450	460	470	480
0.85 - 1.0																

Key

tensile strength

Thickness		Total Elongation on 80mm (%)									
mm	28	29	30	31	32	33	34	35	36		
0.85 - 1.0											

	TYPICAL CHEMICAL COMPOSITION OF STEEL BASE			
Rating		<b>%</b>		
•	Carbon (C)	0.13 - 0.18		
3	Phosphorus (P)	0.00 - 0.03		
2	Manganese (Mn)	0.60 - 0.90		
2	Silicon (Si)	0.00 - 0.03		
3	Sulphur (S)	0.00 - 0.02		
5	Aluminium (Al)	0.015 - 0.08		
5	Nitrogen (N)	0.00 - 0.010		
	2 3 5	RatingCarbon (C)3Phosphorus (P)2Manganese (Mn)2Silicon (Si)3Sulphur (S)5Aluminium (Al)		

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

yield strength

#### **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.

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