

Data Sheet

G550

Metal-Coated – GALVSTEEL[™]

Revision: 31/1/2012

GENERAL DESCRIPTION

GALVSTEEL™ G550 steel is a hot-dipped zinc-coated structural steel with a spangled surface and guaranteed minimum yield strength of 550MPa. Suitable for roll forming to a minimum internal diameter of 4t.

APPLICATIONS

- Roofing
- Cladding
- Roll-formed sections for structural applications

STANDARDS

- AS 1397:2011
- AS/NZS 1365:1996

CHEMICAL COMPOSITION	TYPICAL (wt %)	EXPECTED MAXIMUM (wt %) [1]		
Carbon (C)	0.020 - 0.050	0.050		
Manganese (Mn)	0.14 - 0.22	0.220		
Sulphur (S)	0.01 - 0.02	0.025		
Phosphorus (P)	0.01 - 0.02	0.020		
Silicon (Si)	0.00 - 0.02	0.025		
Aluminium (AI)	0.03 - 0.06	0.060		

^[1] Values shown refer to relevant Australian/New Zealand standards unless tighter internal limits are applied

MECHANICAL PROPERTIES	EXPECTED MINIMUM
Yield strength, MPa	550
Tensile strength, MPa	550
Elongation, % on L₀= 50mm (≥0.6mm)	2

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.

COATING ADHESION - 180° BEND TEST				
COATING CLASS	GUARANTEED			
Z100	1t			
Z200	2t			
Z275	2t			
Z350	2t			
Z450	2t			
Z600	3t			

Other coating classes may be available by enquiry

AVAILABLE FINISHES						
NORMAL OPTIONAL						
Surface Condition	Spangled	Minimised spangle				
Surface Treatment	Passivated	Oiled				
Branding	Branded	Unbranded				

Material should be used promptly (within 6 months) to avoid the possibility of storage related corrosion.

Mechanical properties are guaranteed at ambient/room temperatures. Please consult technical representatives at New Zealand Steel for high/low temperature use.

In the as-oiled state long-term corrosion, resistance cannot be guaranteed. Further surface treatment/coating is required.

GALVSTEEL™ is a trademark of New Zealand Steel Limited.

New Zealand Steel Limited

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FABRICATING PERFORMANCE 1 = Limited 5 = Excellent NR= Not Recommended				
Method	Rating			
Drawing	NR			
Pressing	NR			
Bending	1			
Roll-forming	3			
Welding	5*			
Painting (Pre-treatment)	5			

^{*}Design must allow for some strength reduction near welds

DIMENSION CAPABILITIES				
THICKNESS RANGE (mm)	MAXIMUM WIDTH (mm)			
0.30 - 0.31	70 – 1000*			
0.32 - 0.34	70 – 1082			
0.35 - 0.74	70 – 1230			
0.75	70 – 1258			
0.76 - 1.00	70 – 1230			

^{*}All orders in the range 0.30-0.34 greater widths than 1000/1040mm will be accepted on a trial basis, up to a maximum width 1230mm.

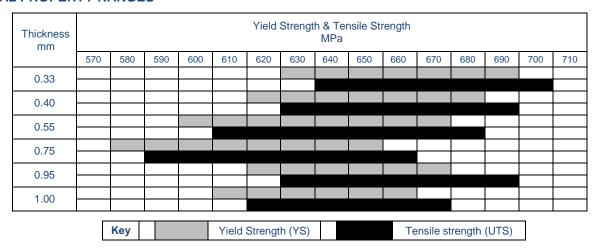
Slitting and shearing available on request from New Zealand Steel.

These dimensions are a reflection of technical capability to produce. Supply conditions may be subject to dimensional restrictions and is subject to New Zealand Steel Marketing confirmation. Other dimensional combinations may be available by enquiry.

PACKING

Despatched material will be packed appropriately providing protection against weather and transit damage.

TYPICAL PROPERTY RANGES



Thickness mm	Total Elongation (%) GL= 50mm								
	4	5	6	7	8	9	10	11	12
0.33									
0.40									
0.55									
0.75									
0.95									
1.00									

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