



Data Sheet

# G550

## Metal-Coated – GALVSTEEL™

Revision: 31/1/2012

MC

### 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 %) <sup>[1]</sup>
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 (Al)	0.03 - 0.06	0.060

<sup>[1]</sup> 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 L <sub>0</sub> = 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	Yield Strength & Tensile Strength MPa														
	570	580	590	600	610	620	630	640	650	660	670	680	690	700	710
0.33															
0.40															
0.55															
0.75															
0.95															
1.00															

Key		Yield Strength (YS)		Tensile strength (UTS)

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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