

Data Sheet G250 Metal-Coated – GALVSTEEL<sup>TM</sup> Revision: 7/12/2021

### **GENERAL DESCRIPTION**

GALVSTEEL<sup>™</sup> G250 steel is a hot-dipped zinc-coated structural steel with a spangled surface and guaranteed minimum yield strength of 250MPa with good ductility. Suitable for severe roll forming.

## **APPLICATIONS**

- Roofing
- Cladding
- General manufacturing
- Roll-formed structural sections
- Pressing

#### **STANDARDS**

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

CHEMICAL COMPOSITION	TYPICAL (wt %)	EXPECTED MAXIMUM (wt %)
Carbon (C)	0.035 - 0.070	0.07
Phosphorus (P)	0.01 - 0.02	0.03
Manganese (Mn)	0.14 – 0.25	0.25
Sulphur (S)	0.01 - 0.02	0.03
Silicon (Si)	0.00 - 0.03	0.03
Aluminium (Al)	0.03 - 0.07	0.08

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

MECHANICAL PROPERTIES	EXPECTED MIN
Yield strength, MPa	250
Tensile strength, MPa	320
Elongation, % on L₀= 50mm (>0.6mm)	25
180° transverse bend (L axis)	Ot

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.

FABRICATING PERFORMANCE										
1 = Limited 5 = Excellent										
Method Rating										
Drawing	3									
Pressing	2									
Bending	5									
Roll-forming	5									
Welding	5									
Painting (Pre-treatment)	5									

GALVSTEEL<sup>™</sup> is a trademark of New Zealand Steel Limited.

# **New Zealand Steel Limited**

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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.

COATING ADHESIO	N - 180° BEND TEST
COATING CLASS	GUARANTEED
Z100	Ot
Z200	Ot
Z275	Ot
Z350	Ot
Z450	1t
Z600	2t

Other coating classes may be available by enquiry

#### **DIMENSION CAPABILITIES THICKNESS RANGE** WIDTH RANGE (mm) (mm) 70 - 1000\* 0.30 - 0.3370 - 1040\* 0.34 0.35 - 0.3670 - 1230 70 - 1250 0.37 - 1.4870 - 1230 1.49 - 1.551.56 - 1.8570 - 1230 1.86 - 2.0070 - 1220

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

## **TYPICAL PROPERTY RANGES**

Gauge		Yield Strength & Tensile Strength (MPa)																	
(mm)	260	270	280	290	300	310	320	330	340	350	360	370	380	390	400	410	420	430	440
0.30																			
0.55																			
0.75																			
0.95																			
1.15																			
2.00																			
	Key: Yield Strength (YS)									Tens	ile stre	ength (I	UTS)						

Gauge	Total Elongation (%)																		
(mm)	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
0.30																			
0.55																			
0.75																			
0.95																			
1.15																			
2.00																			
	Key: GL= 50mm									GL=	80mm								

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