# Data Sheet G550



# Metal Coated - ZINCALUME® - Structural

Revision: 09/07/2025

### **General Description**

ZINCALUME® G550 steel is a hot-dipped aluminium/zinc/magnesium alloy-coated structural steel with a regular spangle surface and guaranteed minimum yield strength of 550MPa with limited ductility. Suitable for roll forming to a minimum internal diameter of 4t.

# **Applications**

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

### **Standards**

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

CHEMICAL COMPOSITION	TYPICAL (wt%)	EXPECTED MAXIMUM (wt %) [1]
Carbon (C)	0.020 - 0.070	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

<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 Lo= 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				
AM125	2t				

Other coating classes may be available by enquiry.

DIMENSION CAPABILITIES						
THICKNESS (mm) WIDTH (mm)						
0.32 - 0.33	100 – 940					
0.33 – 0.35	100 – 1050					
0.35 - 0.40	100 – 1176					
0.40 – 1.00*	100 – 1230					

<sup>\*</sup>Products above 0.95mm are only suitable for non-critical surface finish application as resin blushing and rough coating metal finishes can be present.

Slitting is 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.

<sup>\*</sup>Greater than 0.75mm is subject to mill confirmation.



FABRICATING PERFORMANCE  1 = Limited 5 = Excellent NR= Not Recommended					
METHOD	RATING				
Drawing	NR				
Pressing	NR				
Bending	1				
Roll-forming	3				
Welding	4				
Painting (Pre-treatment)	5				

AVAILABLE FINISHES							
	NORMAL	OPTIONAL					
Surface Condition	Finely spangled	-					
Surface Treatment	Passivated & Resin coated	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.

### **Packing**

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

## **Typical Property Ranges**



THICKNESS	TOTAL ELONGATION (%) GL= 50mm											
(mm)	2	3	4	5	6	7	8	9	10	11	12	13
0.350												
0.400												
0.420												
0.480												
0.550												
0.750												
0.950												

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