

### Product

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

### Typical Uses

Roofing, Cladding, Structural sections

### Standard\*

AS 1397

\*Other standards (e. g. ASTM A 792M, ISO 9364, IS15961, etc.) and grades on specific agreement

### Properties of Steel Base

Mechanical Properties	Guaranteed Minimum
Logitudinal Tensile	
Yield Strength, MPa	550
Tensile Strength, MPa	550
Elongation on 80 mm, %	2 <sup>a</sup>
Hardness, HR30T	-

a) For thickness => 0.60 mm

### Chemical Composition of Steel Base

Element	Guaranteed Max# (%)
Carbon (C)	0.20
Manganese (Mn)	1.20
Phosphorus (P)	0.04
Sulphur (S)	0.03

# Values shown refer to relevant standard unless specifically agreed to  
# Other elements that are not harmful for the application may be present

### Coating Class

Coating Class	Minimum Coating - Total Both Surfaces, g/m <sup>2</sup>	
	Triple Spot Test	Single Spot Test
AZ150	150	135
AZ200	200	180

### Coating Adhesion - 180° Bend Test

Coating Class	Guaranteed Minimum
AZ150 / AZ200	2t

### Dimension Range & Tolerances (AS/NZS 1365)\*\*

Range	Base Metal Thickness (mm)	
	Tolerance	
	Width ≤ 1200	Width > 1200
0.30 - 0.50	± 0.03	± 0.04
0.51 - 0.80	± 0.04	± 0.05
0.81 - 1.20	± 0.05	± 0.06
> 1.20	± 0.06	± 0.07

Range	Width (mm)
	Tolerance
< 900 (in slit edge)	+1 / -0
914 - 1000	+ 4 / - 0
1001 - 1250	+ 5 / - 0

\*\*For requirements beyond the standard product range & tolerance, please contact Tata BlueScope Steel Office

### Fire Hazard Properties (AS/NZS 1530.3)

Index	Range	Rating
Ignitability Index	0-20	0
Spread of Flame Index	0-10	0
Heat Evolved Index	0-10	0
Smoke Developed Index	0-10	0-1

### Supply Conditions

Supply Condition	Normal	Optional
Surface Condition	Spangled	–
Coating Class	AZ150 <sup>i</sup>	AZ200 <sup>ii</sup>
Surface Treatment	Passivated and Resin coated	Passivated (for post painting / paint line feed)
Branding	Branded	Unbranded
Tolerance Class <sup>iii</sup>		
1. Dimensions	A Class	–
2. Flatness	A Class	–

i) Metallic coating of minimum 150 g/m<sup>2</sup>, ii) Metallic coating of minimum 200 g/m<sup>2</sup>, iii) Dimensional and shape tolerances as per AS/NZS 1365

### Fabrication Performance

Method	Rating <sup>#</sup>	Method	Rating <sup>#</sup>
Drawing	-	Lock Forming	NR
Pressing	-	Welding	4
Bending	1	Painting with Pre-treatment	5
Roll-forming	3		

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

Material should be used promptly (within 6 months) to avoid the possibility of improper storage related corrosion & change in performance due to ageing

### Typical Property Ranges (For Normal Supply Product)

	Yield Strength (MPa)	
	Minimum	Maximum
0.35	580	710
0.42	570	700
0.60	560	700
1.00	550	670
1.20	550	650
	Tensile Strength (MPa)	
	Minimum	Maximum
0.35	600	790
0.42	590	770
0.60	590	760
1.00	580	700
1.20	580	680
	Total Elongation on 80mm (%)	
	Minimum	Maximum
0.35	1	3
0.42	1	4
0.60	2	7
1.00	2	8
1.20	4	11

**Note:**

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