# ZINCALUME<sup>®</sup> G450 steel

June 2020

This literature supersedes all previous issues

## **GENERAL DESCRIPTION**

ZINCALUME<sup>®</sup> G450 steel is a hot-dipped zinc-aluminium 55% alloy-coated structural steel with coating mass of minimum 150 g/m<sup>2</sup> with a guaranteed minimum yield strength of 450 MPa.

### TYPICAL USES

Roll-formed structural and walling RWG

#### **STANDARDS**

Reference Standards - AS 1397

#### GUARANTEED PROPERTIES OF STEEL BASE

MECHANICAL PROPERTIES	GUARANTEED MINIMUM
Yield Strength, MPa	450
Tensile Strength, MPa	480
Elongation on 50mm (≥ 0.60mm), %	9

#### CHEMICAL COMPOSITION OF STEEL BASE

CHEMICAL PROPERTIES	GUARANTEED MAX %
Carbon - C	0.20
Phosphorus - P	0.04
Manganese – Mn	1.20
Sulphur - S	0.03

#### METAL COATING ADHESION - 180° BEND TEST

COATING CLASS	COATING ADHESION	
AZ150	2t	
AZ200	2t	

Where t = the diameter of mandrel in terms of thickness of product.

#### DIAMENSIONAL CAPABILITIES

THICKNESS RANGES (mm)	MAX. WIDTH (mm)
1.50 – 1.60	914

Notes: These dimensions are a reflection of technical capability to produce. Supply conditions may be subject to dimensional restrictions and is subject to BlueScope Sales and Marketing confirmation. Slitting and shearing available on request from BlueScope Sales Offices. For requirements outside the standard product range please contact your local Sales Office.

#### FABRICATING PERFORMANCE

METHOD	RATING	METHOD	RATING
Bending	Bending 3 Lock Forming		NR
Drawing	NR	Welding	5
Pressing	Pressing NR Painting Pretreatment		5
Roll Forming	3		

Where: 1 = Limited to 5 = Excellent or NR = Not Recommended

IMPORTANT INFORMATION

Typical mechanical properties are based on typical product despatched to customers. Note that ductility will decline through a natural ageing process during storage and/or paint stoving cycle. Material should be used promptly (within six months) to avoid the possibility of a storage related corrosion. For selection of the most appropriate metallic coated steel, please refer to technical bulletins TB-1a, TB-1b, CTB-21 and CTB-22. For storage, rollforming lubricants and other information please refer to the Technical Bulletins.

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Please ensure you have the current data sheet for this product as displayed at www.nsbluescope.com



# FIRE HAZARD PROPERTIES

INDEX	RANGE	RESULT
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

#### **NORMAL/OPTIONAL SUPPLY CONDITIONS**

	NORMAL	OPTIONAL
Coating Class	AZ150	AZ200
Surface Condition	Spangled	-
Surface Treatment	Passivated & Resin coated	-
Branding	Branded	Not branded

#### Important Notes

Optional supply conditions may be subject to dimensional restrictions