

Metallic Coated - MC

GENERAL DESCRIPTION

SuperDyma® SmartPurlin™ is a continuous hot-dipped zinc-11% aluminium-3% Magnesium alloy coated structural steel with a zero-spangle surface.

TYPICAL USES

Roll-formed structuring section, purlins, girts

STANDARDS

Certified standard - TIS 2981-2562

Reference Standards – AS1397, JIS G 3323

GUARANTEED PROPERTIES OF STEEL BASE

STEEL GRADE	Yield Strength, MPa	Tensile Strength, MPa	Elongation, %
G450	>450	>480	>10*
G500	>500	>520	>8*
G550	>550	>550	>2*
SGMC570	>560	>570	-

*Applies for test pieces equal to or greater than 0.6 mm. thickness.

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

STEEL GRADE	COATING CLASS	COATING ADHESION
G450	ZM180, K18	1t
G500	ZM180, K18	2t
G550	ZM180, K18	2t
SGMC570	ZM180, K18	2t

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

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

DIAMENSIONAL CAPABILITIES

STEEL GRADE	THICKNESS RANGES (mm)	MAX. WIDTH (mm)
G450	1.50 – 1.60	1219
G500	1.01 – 1.49	1219
G550	0.75 – 1.00	1219
SGMC570	0.75 – 1.00	1219

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

Steel grade	Bending	Drawing	Pressing	Roll Forming	Welding (design must allow for some strength reduction near welds)	Painting Pretreatment	Lock forming
G450	3	NR	NR	3	5	5	NR
G500	2	NR	NR	3	4	5	NR
G550	2	NR	NR	3	5	5	NR
SGMC570	5	3	3	5	5	5	5

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