

DATA SHEET



This literature supersedes all previous issues.

GENERAL DESCRIPTION

SPECTRA® steel has been developed by ASTEEL Group to provide high quality for economical roofing and walling solution for expected product service life.

TYPICAL USES

General exterior architectural uses for light industrial and budget residential roofing and walling.

INTERNATIONAL STANDARD

Substrate - JIS G3321 Paint Coating - JIS G3322, MS 2383:2011

PREFERRED : GALUZINC® G550 AZ100 steel (Aluminium-Zinc Alloy Coated Steel)
SUBSTRATES GALUZINC® G300 AZ100 steel (Aluminium-Zinc Alloy Coated Steel)

PRETREATMENT: Corrosion resistant proprietary conversion coating.

PRIMER COAT : Universal corrosion inhibitive primer. Nominal thickness 5μm each side

FINISH COAT : Custom formulated superior polyester paint system with high grade pigments. Nominal film

thickness 16µm on the top for weather side. The finish coat can, if required, be applied to

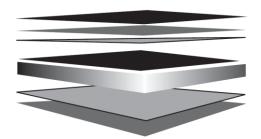
both sides to provide a double-sided product.

BACKING COAT : Custom formulated modified epoxy paint system. Nominal film thickness 6μm

COLOUR : A range of standard colours is available. Other specially required colours may be available

on request.

GLOSS : Nominal 15% - 85% (60°).



Finish Coat (Nominal 16µm)

Corrosion Inhibitive Primer (Nominal 5µm)

Conversion Coating

GaluZinc® AZ100 steel Substrate

Conversion Coating

Backing Coat (Nominal 6µm)

DIMENSIONS: (For normal supply product)

GALUZINC® G550 AZ100		GALUZINC® G300 AZ100		
Preferred base metal thickness (mm)	Strip width range (mm)	Preferred base metal thickness (mm)	Strip width range (mm)	
0.28, 0.30, 0.35, 0.38, 0.40, 0.42	914	0.30, 0.35, 0.38, 0.40, 0.42	914	
0.35, 0.38, 0.42	1219	0.30, 0.35, 0.38, 0.40, 0.42	1219	

^{*}Any other sizes may be available on request

TYPICAL PROPERTIES

Reverse Impact Resistance No loss of adhesion on paint coating, MS 2383:2011 (Annex C)		
Flexibility	Max 6T on HDG, MS 2383:2011 (Annex D)	
Cross Cut Test	No loss of adhesion on paint coating, MS 133-E6:2010	
Scratch Test	None of coating being penetrated, MS 133: Part E2	





EXPECTED PRODUCT SERVICE PERFORMANCE

Film Integrity SPECTRA® steel under normal well-washed exposure conditions should show no cracking (other

than that which may occur during forming), flaking or peeling of the paint for 10 years.

Change in Appearance

The appearance of SPECTRA® steel and other coil-coated products can change over time on exterior weathering not only due to pick-up of dirt but also to changes in the paint system itself such as gloss loss, chalking and fading of pigmentation.

Colour change, which is largely due to the changes in pigmentation will depend on the colour chosen. It is measured using a spectrophotometer, according to ASTM D-2244 on surfaces thoroughly cleaned of dirt, chalk, oxidised film and foreign contaminants. The typical appearance change of standard SPECTRA® steel colours in normal environments after 3 years of service are given in table below.

Paint System	Test (Standards)	Duration	Unit	
			Roofing	Walling
SPECTRA® —	Colour Change ΔE	3 Years	9	7
	(ASTM D-2244)			
	Chalking Grade	3 Years	4	6
	(ASTM D-4214)			

Note: Improper storage or the use of non-approved roll-forming lubricants may adversely affect colour stability. Wet storage should be avoided; however, materials which become wet while in bundles should be separated and dried.

Note: Customers should use product promptly (within 6 months) to avoid the possibility of storage related corrosion.

Corrosion Resistance (Salt Spray 500 hours)	MS ISO 9227, 2.00mm max with no corrosion of base metal undercut at scribed lines, no loss of adhesion and blistering not worse than rating 2-S3.
Gloss Retention (QUV 2000 hours)	MS 133: Part D1, gloss retention more than 80%.
Chemical Resistance	The integrity of the paint film on SPECTRA® steel is expected to be largely unaffected by accidental spillage of solvents such as methylated spirits, white spirits, mineral turpentine, toluene, trichloroethylene and dilute acids and alkali as long as these spillages are removed immediately by wiping or washing. However, contact with certain of these chemicals may reduce the resistance of the product to dirt pick-up.
Use Under Adverse Conditions If it is intended to use SPECTRA® steel in an exterior application within 1 km marine locations, severe industrial or unusually corrosive environment, in a washed by rain, or in end uses where it will be wholly or partly buried in the please contact your ASTEEL sales office for specialised advice.	

Please ensure you have the current data sheet for this product.

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