

# **DATA SHEET**



This literature supersedes all previous issues.

### **GENERAL DESCRIPTION**

envioMATT™ steel has been developed by ASTEEL Group to provide aesthetic and high durability for cost effective roofing and walling maintaining long term colour and matt finishes.

### **TYPICAL USES**

General exterior architectural uses roofing and walling, architectural panels and building accessories requiring premium colour and matt finishes.

#### INTERNATIONAL STANDARD

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

PREFERRED : GALUZINC® G550 AZ150 steel (Aluminium-Zinc Alloy Coated Steel)
SUBSTRATES GALUZINC® G300 AZ150 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 high durability polyester paint system with inorganic pigments. Nominal

film thickness 20µm on the top for weather side. The finish coat can, if required, be applied

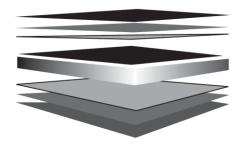
to both sides to provide a double-sided product.

BACKING COAT : Custom formulated modified polyester paint system. Nominal film thickness 5μm

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

on request.

**GLOSS** : Nominal 5% (60°).



Finish Coat (Nominal 20μm) Corrosion Inhibitive Primer (Nominal 5μm) Conversion Coating

GaluZinc® AZ150 steel Substrate

Conversion Coating Corrosion Inhibitive Primer (Nominal  $5\mu m$ ) Backing Coat (Nominal  $5\mu m$ )

## **DIMENSIONS: (For normal supply product)**

GALUZINC® G550 AZ150		GALUZINC® G300 AZ150		
Preferred base metal thickness (mm)	Strip width range (mm)	Preferred base metal thickness (mm)	Strip width range (mm)	
0.35, 0.38, 0.42, 0.48	914	0.35, 0.38, 0.42, 0.48	914	
0.35, 0.38, 0.42	1219	0.35, 0.38, 0.42	1219	

<sup>\*</sup>Any other sizes may be available on request

## TYPICAL PROPERTIES

Reverse Impact Resistance	pact 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

ENVIOMATT™ 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 20 years.

Change in Appearance

The appearance of ENVIOMATT™ 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 ENVIOMATT™ steel colours in normal environments after 15 years of service are given in table below.

Paint System	Test (Standards)	Duration	Unit	
			Roofing	Walling
envioMatt™ -	Colour Change ΔE (ASTM D-2244)	15 Years	14	12
	Chalking Grade (ASTM D-4214)	15 Years	4	6

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 ENVIOMATT™ 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 spillage 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 ENVIOMATT™ steel in an exterior application within 1 km of salt marine locations, severe industrial or unusually corrosive environment, in areas not washed by rain, or in end uses where it will be wholly or partly buried in the ground, please contact your ASTEEL sales office for specialised advice.	

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

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