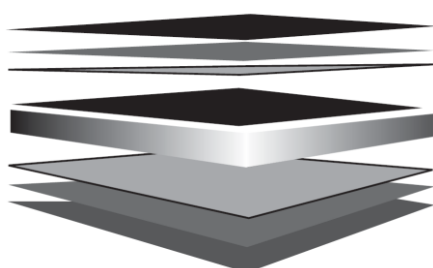


DATA SHEET

GENERAL DESCRIPTION envioClean® steel has been developed by ASTEEL Group to provide high durability for cost effective roofing and walling maintaining long term colour and gloss retention.	TYPICAL USES General exterior architectural uses roofing and walling, architectural panels and building accessories requiring premium colour and gloss retention
	INTERNATIONAL STANDARD Substrate – JIS G3321 Paint Coating – JIS G3322, MS 2383:2011

PREFERRED SUBSTRATES	: GALUZINC® G550 AZ150 steel (Aluminium-Zinc Alloy Coated Steel) 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 and infrared red 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 15% - 85% (60°).



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

GaluZinc® AZ150 steel Substrate

Conversion Coating
Corrosion Inhibitive Primer (Nominal 5µm)
Backing Coat (Nominal 8µm)

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

*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** ENVIOCLEAN® 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 15 years.
- Change in Appearance** The appearance of ENVIOCLEAN® 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 ENVIOCLEAN® steel colours in normal environments after 12 years of service are given in table below.

Paint System	Test (Standards)	Duration	Colour Shade	Unit	
				Roofing	Walling
envioClean®	Colour Change ΔE (ASTM D-2244)	12 Years	Light	8	7
			Mid	12	10
			Dark	16	15
	Chalking Grade (ASTM D-4214)	12 Years	Light	2	4
			Mid	2	4
			Dark	1	4
	Discolouration by Dirt Staining ΔE (ASTM D-2244)	5 Years	Light	2	3
			Mid	3	4
			Dark	4	5

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 ENVIOCLEAN® 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 ENVIOCLEAN® 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.

GaluZinc®, envioKool™, envioPrime®, envioClean®, envioMATT®, ZincCoat®, ColorCoat®, envioTEX® and envioSHIELD® are registered trademarks of ASTEEL SDN BHD.

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