

Prepainted - PP

GENERAL DESCRIPTION

VERMOE™ prepainted steel, specially designed by BlueScope to provide captivating and robust textured beauty unites with fine contemporary finish for modern homes. To determine if warranties apply, please contact your nearest BlueScope sales office for advice.

TYPICAL USES

Residential architectural uses, example residential roofing and wall cladding requires modern contemporary finishes. For material selection advice, please contact your nearest BlueScope sales office.

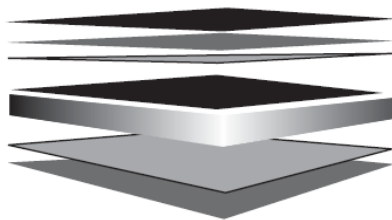
MALAYSIAN STANDARD

Paint Coating – MS 2383 C3;

Substrate – MS 1196

PRODUCT INFORMATION

PREFERRED SUBSTRATE	ZINCALUME® G550S AZ150 steel (Aluminium/Zinc alloy-coated steel)
	ZINCALUME® G300S AZ150 steel (Aluminium/Zinc alloy-coated steel) (Refer Note 8)
PRETREATMENT	Corrosion resistant proprietary conversion coating
PRIMER COAT	Universal corrosion inhibitive primer. Nominal dry film thickness 3µm on top primer
FINISH COAT	Custom formulated super polyester paint system with high performance pigments. Nominal dry film thickness 14µm on the top or weather side.
BACKING COAT	Custom formulated Texture Grey. Nominal dry film thickness 5µm
COLOUR	A range of standard colours is available. Other specifically required colours may be available on request.



Finish Coat (Nominal 14µm) (Refer Note 4 & 5)
 Universal Corrosion Inhibitive Primer (Nominal 3µm)
 Conversion Coating
 ZINCALUME® AZ150 Steel Substrate
 Conversion Coating
 Backing Coat (Texture Grey, Nominal 5µm) (Refer Note 6)

DIMENSIONAL CAPABILITIES*

ZINCALUME® G550S AZ150 STEEL		ZINCALUME® G300S AZ150 STEEL	
PREFERRED BASE METAL THICKNESS, mm*	MAXIMUM WIDTH, mm	PREFERRED BASE METAL THICKNESS, mm*	MAXIMUM WIDTH, mm
0.35, 0.42, 0.48, 0.60, 0.70, 0.75	1219	0.35, 0.42, 0.48, 0.60, 0.70, 0.75	1219
0.55	1200	0.55	1200

Notes

* The dimensional tolerances for thickness, width, flatness, and camber shall be in accordance with the requirements of AS/NZS 1365. Not every combination of thickness and width may be available. Supply conditions may be subject to dimensional restrictions and are 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.

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EXPECTED PRODUCT SERVICE PERFORMANCE

The appearance of VERMOE™ steel and other coil-coated products can change over time on exterior weathering not only due to dirt pick-up but also to changes in the paint system itself and resulting in gloss loss and fading of pigmentation. Colour change, which is largely due to changes in pigmentation will depend on the colour shade chosen. It is measured using a spectrophotometer, according to ASTM D2244 on surfaces thoroughly cleaned of dirt, oxidised film and foreign contaminants. The typical appearance changes of standard VERMOE™ steel colours in normal environments after 8 years of service are given in TABLE 1.

TABLE 1 – Expected colour change after 8 years in natural well washed exposure (AS/NZS 1580.457.1 & ASTM D2244).

COLOUR SHADE	TYPICAL APPEARANCE CHANGE (ΔE UNITS CIELAB 2000)
Intermediate (e.g. Thunder Grey)	≤ 6
Dark (e.g. Dazzling Black)	≤ 10

Notes

Refer Note 9 & 10

ATTRIBUTES TESTED DURING MANUFACTURE

PROPERTY	TEST & EVALUATION METHOD (S)	RESULTS
Specular Gloss		
Specular Gloss (60°meter)	ISO 2813	Nominal 7 \pm 3 units
Adhesion		
Reverse Impact	MS 2383 (Annex C)	≥ 10 joules
T-bend	MS 2383 (Annex D)	Maximum 6T. Refer Note 7
Hardness		
Pencil	ISO 15184	HB or harder

PRODUCT ATTRIBUTES

PROPERTY	TEST & EVALUATION METHOD (S)	RESULTS
Resistance to Abrasion		
Scratch	ISO 1518-1	Typically 1500g
Resistance to Humidity		
Cleveland (500 hours)	ISO 6270-2; ISO 4628-8 (Undercutting); ISO 2409 (Adhesion); ISO 4628-2 (Blisters); ISO 4628-3 (Corrosion).	Undercut at scribed lines: ≤ 2 mm. Loss of adhesion: Rating 0 for cross-cut test. Blistering: Not worse than Rating 3-S2. Corrosion of base metal: Not worse than Ri 0.
Resistance to Corrosion		
Neutral salt spray (500 hours)	ISO 9227; ISO 4628-8 (Undercutting); ISO 2409 (Adhesion); ISO 4628-2 (Blisters); ISO 4628-3 (Corrosion).	Undercut at scribed lines: ≤ 1 mm. Loss of adhesion: Rating 0 for cross-cut test. Blistering: Not worse than Rating 2-S3. Corrosion of base metal: Not worse than Ri 0.
Resistance to Heat		
Exposure 100°C continuous (500 hours)	ASTM D2244 (Colour)	Colour change ΔE CIELAB 2000: ≤ 3 units

NS BLUESCOPE MALAYSIA SDN BHD (199101012824 (223136-P))

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

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IMPORTANT NOTES

1. All warranties for a product, if any, are subject to eligibility. Terms and conditions apply. Nothing in this document is intended by BlueScope to extend, modify, or otherwise affect any stated product warranty. To find out more, please contact your nearest BlueScope sales office.
2. If it is intended to use VERMOE™ steel in an exterior application within 1km of salt marine locations, severe industrial or abnormally corrosive environments; in areas not washed by rain, or in applications where it will be wholly or partly buried in the ground, please contact your nearest BlueScope sales office for specialized advice. For selection of the most appropriate VERMOE™ steel product, please refer to Technical Bulletins TB1a, TB1b, CTB16, CTB21, CTB22.
3. Customers should use product promptly (within 6 months) to avoid the possibility of storage related corrosion.
4. Finish Coat – the coating applied to the exposed surface of the prepainted coil which is expected to meet the Performance Requirements.
5. The product is supplied with a nominal 7 unit (60°) gloss Finish Coat.
6. Backing Coat – a thin coating applied to the reverse surface of the prepainted coil. It also gives additional durability to the reverse surface during the service life of the product, but for aesthetic reasons is not recommended for exposure to sunlight. Performance Requirements are generally not applicable to Backing Coats.
7. The minimum internal bend diameters for forming processes to achieve no paint cracking (visible using x10 magnification) and to avoid paint adhesion issues are specified by the T-bend flexibility and T-bend adhesion results respectively – where 1T equals the After Painted Thickness (APT) in mm of the material. These results are based on testing at 20 – 25°C.
8. For most products, the metallurgical ageing process which is inherent in the paint stoving cycle will result in some loss of ductility compared with unpainted product. However, minimum strength levels designated by relevant standards will still be applicable.
9. Improper storage or use of non-approved roll-forming lubricants may cause brand transfer and paint blushing and may adversely affect colour and long-term durability. Product in coil or sheet pack form must be kept dry. If the coil or sheet pack becomes wet, it must be separated and dried (refer MS 2383 Annex E, and also Technical Bulletin TB7). Contact nearest BlueScope sales office on appropriate rollforming lubricants.
10. Values quoted are for panels exposed in accordance with AS/NZS 2728. Variations for in-situ performance may occur due complexity of building design and location.
11. VERMOE™ steel has good resistance to accidental spillage of solvents such as methylated spirits, white spirit, mineral turpentine, toluene, and trichloroethylene and dilute mineral acids and alkalis. However, all spillages should be immediately removed by water washing and drying.
12. We recommend storage in bore vertical orientation to prevent coil slump. If you wish to know more about the consequence of coil slump, please refer to our Fact Sheet 2, link: <https://www.nsbluescope.com/my/wp-content/uploads/sites/7/2020/10/Fact-Sheet-Coil-Slump.pdf>.
13. Use of aged coil might lead to quality issue during roll-forming process. To determine if warranties apply for aged coil, please contact your nearest BlueScope sales office for advice.