

# COLORBOND® Exterior Insulated Panel steel

**Designed for: Exterior Insulated Panels**

Revision 1, Sep 2012. This literature supersedes all previous issues.

## GENERAL DESCRIPTION

COLORBOND® Exterior Insulated Panel steel, by BlueScope Steel, is designed specifically for use in the manufacture of sandwich panels for exterior building use. The product offers excellent formability coupled with good durability.

## TYPICAL USES

Exterior sandwich panels. To determine if warranties apply, or for material selection advice, please visit the BlueScope Steel website, or contact your nearest BlueScope Steel Sales office.

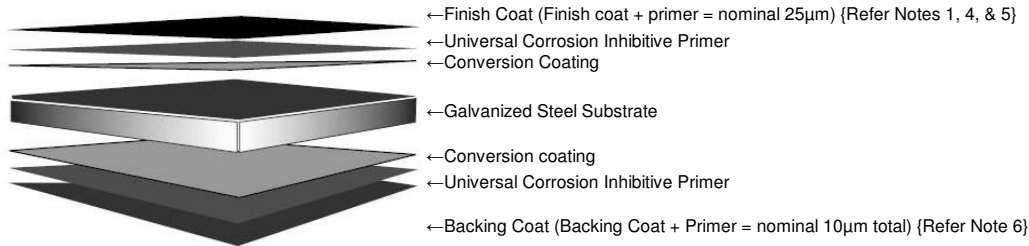
## AUSTRALIAN STANDARDS

Substrate - AS 1397  
Paint Coating - AS/NZS 2728 Type 3

## PREFERRED SUBSTRATES

ZINCFORM® G300S Z275 BF steel (Refer Note 8)

Please refer to current price list or BlueScope Steel Limited State Sales Office for availability of colours and dimensions.



## PRODUCT ATTRIBUTES

Property	Test & Evaluation Method(s)	Results
<b>Flexibility</b>		
T-bend	ASTM D4145-83	Maximum 10T (no cracking). Refer Note 7
<b>Resistance to abrasion</b>		
Taber Abraser - 1000g CS-10 wheels	AS/NZS 1580.403.2; NCCA Tech. Bull. 4.3.2 (test & eval)	≤20mg per 100 cycles
Scratch	AS 2331.4.7 (test & eval)	Typically 2000g
<b>Resistance to humidity</b>		
Cleveland (500 hours)	ASTM D4585; NCCA Tech. Bull 5.4.5 & AS/NZS 1580.481.1.9 (Blisters); AS 1580.408.4 (Adhesion)	Blister density: ≤3 Blister size: ≤S2 No loss of adhesion or corrosion
<b>Resistance to corrosion</b>		
Salt spray (500 hours)	AS/NZS 2728 (App. I), ASTM B117; AS 2331.3.1; NCCA Tech. Bull. 5.4.6 & AS/NZS 1580.481.1.9 (Blisters); AS 1580.408.4 (Adhesion)	Blister density: ≤2 Blister size: ≤S3 Undercut from a score: ≤2mm No loss of adhesion or corrosion. Refer Note 3.
Kesternich (SO <sub>2</sub> ) (50 cycles)	DIN 50018	Edge creep: <4mm Blisters: nil. Refer Note 3.
<b>Resistance to colour change</b>		
QUV (2000 hours)	ASTM G154 & ASTM D2244 (Colour)	Δ E cielab 2000: Light colour: ≤6 units
Natural well washed exposure (10 yrs) {Refer Notes 9 & 10}	AS/NZS 1580.457.1 & ASTM D2244 (Colour)	Δ E cielab 2000: Light colour: ≤6 units
<b>Resistance to chalking</b>		
QUV (1000 hours)	ASTM G154 & AS/NZS 1580.481.1.11 (Chalk Method B)	Chalk rating: ≤4
Natural well washed exposure (10 yrs)	AS/NZS 1580.457.1 & AS/NZS 1580.481.1.11 (Chalk Method B)	Chalk rating: ≤4. Refer Notes 9 & 10
<b>Resistance to solvents</b>		
Exposure	ASTM D1308 (3.1.1) & ASTM D2244 (Colour); AS/NZS 1580.481.1.9 (Blisters)	No discolouration or blistering. Refer Notes 9 & 11.
<b>Resistance to acids</b>		
Exposure	ASTM D1308 (3.1.1) & ASTM D2244 (Colour); AS/NZS 1580.481.1.9 (Blisters)	No discolouration or blistering. Refer Notes 3 & 11.
<b>Resistance to fire</b>		
Exposure	AS/NZS 1530.3 (test & eval)	Ignitability index: 0 rating in scale of 0-20 Spread of flame index: 0 rating in scale of 0-10 Heat evolved index: 0 rating in scale of 0-10 Smoke evolved index: 0 - 1 rating in scale of 0 - 10

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Continued

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## ATTRIBUTES TESTED DURING MANUFACTURE

Property	Test & Evaluation Method(s)	Results
<b>Adhesion</b>		
Reverse Impact	AS/NZS 2728 (App. E); NCCA Tech. Bull. 4.2.6 (test & eval)	≥10 joules
T-bend	AS/NZS 2728 (App. F); NCCA Tech. Bull. 4.2.8 (test & eval)	Maximum 6T. Refer Note 7
<b>Hardness</b>		
Pencil	AS/NZS 1580.405.1; NCCA Tech. Bull. 4.2.5 (test & eval)	HB or harder
<b>Specular gloss</b>		
60° meter	AS/NZS 1580.602.2; ASTM D523 (test & eval)	Nominal ± 10 units

## IMPORTANT NOTES

- 1 It is the panel manufacturers responsibility to ensure the colour of the Finish Coat selected is suitable for the core material, adhesives and the intended exposure conditions of the finished panel. Darker colours can attain a higher surface temperature which needs to be considered in the overall composition of the panel.
- 2 All warranties for a product, if any, are subject to eligibility. Terms and Conditions apply. Nothing in this document is intended by BlueScope Steel to extend, modify or otherwise affect any stated product warranty. To find out more, please visit the BlueScope Steel website or contact your nearest BlueScope Steel sales office for advice.
- 3 Product may not be suitable if it is intended to use COLORBOND® Exterior Insulated Panel 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. For selection of the most appropriate COLORBOND® Exterior Insulated Panel steel product, please refer to technical bulletins TB1a, TB1b, CTB16, CTB21 and CTB22. Before purchase, you should check on suitability by visiting the BlueScope Steel website, or by contacting your nearest BlueScope Steel Limited Sales office for advice.
- 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 25 unit (60°) gloss Finish Coat
- 6 Backing coat - a thin coating applied to the reverse surface of the prepainted coil. This backing coat has been specially designed to facilitate adhesion to foam cores, for common foam core adhesives. It is the manufacturer's responsibility to test the suitability of their adhesives to this backer.
- 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 total coated thickness (tct) in mm of the material. These results are based on testing at 20-25 deg 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 AS/NZS 2728 Appendix L, and also technical bulletin TB7). Contact your nearest BlueScope Steel Sales office to obtain advice on appropriate rollforming lubricants.
- 10 Values quoted are for panels exposed in accordance with AS2728. Variations for in-situ performance may occur due to complexity of building design and location.
- 11 COLORBOND® Exterior Insulated Panel steel has good resistance to accidental spillage of substances such as paint thinners, cleaning products, mineral acids and alkalis. All spillages however, should be removed as soon as possible in accordance with the advice given in the appropriate safety data sheet

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Please ensure you have the current datasheet for this product as displayed at [www.bluescopesteel.com](http://www.bluescopesteel.com)

## BlueScope Steel Limited

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