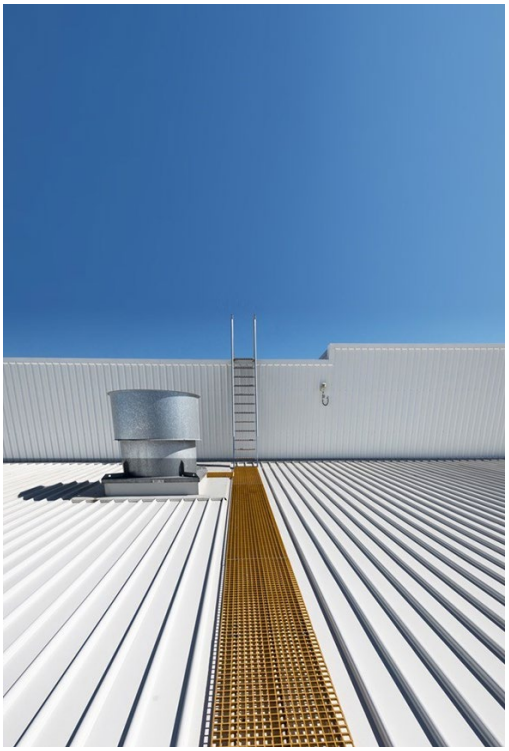
Coated Steel - Prepainted
Data Sheet

November 2025 - This literature supersedes all previous issues

COLORBOND® Coolmax® steel

General description

COLORBOND® Coolmax® steel (CMX), specifically designed by BlueScope to provide our highest solar reflectance prepainted steel product to achieve durable thermal performance and help reduce building temperatures.



Typical uses

Commercial and Industrial Roofing. To determine if warranties apply or for material selection advice, please visit steel.com.au or contact Steel Direct.

Australian and International standards

Substrate - AS 1397:2021
Paint Coating - AS/NZS 2728:2013 Type 4
ISO 9001:2015 Quality System certified

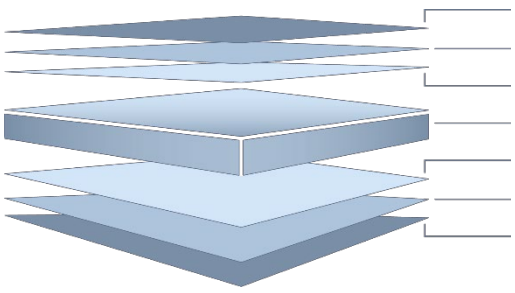
Preferred substrates

AM100 G550S steel with Activate® technology. AM100 G300S steel with Activate® technology {Refer Note 9}.

For substrate properties please refer to the relevant Metallic (AM) Coated steel datasheets or AS 1397:2021.

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

CORSTRIP® film may be available on request {Refer Note 4}.



Finish Coat (Finish Coat + Primer = nominal 38µm) {Refer Notes 1, 5 & 6}
Corrosion Inhibitive Primer
Conversion Coating
Aluminium / Zinc / Magnesium alloy-coated steel with Activate® technology substrate
Conversion Coating
Universal Corrosion Inhibitive Primer
Backing Coat (Backing Coat + Primer = nominal 10µm total) {Refer Note 7}

Attributes tested during manufacture

Property	Test & Evaluation Method(s)	Results
Adhesion		
Reverse impact	AS/NZS 2728:2013 (App. E)	≥10 joules
T-bend	AS/NZS 2728:2013 (App. F)	Maximum 6T. Refer Note 8.
Specular gloss		
60º meter	AS/NZS 1580.602.2:1995 (R2013); ASTM D523-25	Nominal ± 10 units

Product attributes

Property	Test & Evaluation Method(s)	Results
Flexibility		
T-bend	ASTM D4145-10 (2022)	Maximum 10T (no cracking). Refer Note 8.
Resistance to abrasion		
Scratch	AS 2331.4.7-2006 (R2017)	Typically 2000g
Hardness		
Pencil	AS/NZS 1580.405.1:1996 (R2013)	HB or harder
Adhesion		
Natural well washed exposure (10 years)	AS/NZS 1580.457.1:1996 (R2013); AS/NZS 1580.481.1.10:1998 (R2013)	No flaking or peeling. Refer Notes 10 & 11.
Resistance to humidity		
Cleveland (500 hours)	ASTM D4585/D4585M-25; AS/NZS 1580.481.1.9:1998 (R2013) (Blisters); AS 1580.408.4-2004 (R2019) (Adhesion)	Blister density: ≤3. Blister size: ≤S2. Undercut from score: ≤2mm. No loss of adhesion or corrosion of base metal.
Resistance to corrosion		
QFog (2000 hours)	AS/NZS 1580.481.1.9:1998 (R2013) (Blisters); AS 1580.408.4-2004 (R2019) (Adhesion), AS 1580.481.3-2002 (R2013) (Undercutting, Corrosion)	Blister density: ≤2. Blister size: ≤S2. Undercut from score: ≤1mm. No loss of adhesion or corrosion of base metal. Refer Note 3.
Resistance to colour change		
Natural well washed exposure (10 years)	AS/NZS 1580.457.1:1996 & ASTM D2244-25 (Colour)	ΔE CIEDE2000: ≤4 units Refer Notes 10 & 11.
QUV (2000 hours)	ASTM G154-23 & ASTM D2244-25 (Colour)	ΔE CIEDE2000: ≤4 units
Resistance to chalking		
Natural well washed exposure (10 years)	AS/NZS 1580.457.1:1996 (R2013) & AS/NZS 1580.481.1.11:1998 (R2013) (Chalk Method B)	Chalk rating: ≤4. Refer Notes 10 & 11.
QUV (2000 hours)	ASTM G154-23 & AS/NZS 1580.481.1.11:1998 (R2013) (Chalk Method B)	Chalk rating: ≤4

Property	Test & Evaluation Method(s)	Results
Resistance to solvents, acids, alkalis		
Exposure	ASTM D1308-20 & ASTM D2244-25 (Colour); AS/NZS 1580.481.1.9:1998 (R2013) (Blisters)	No discolouration or blistering. Refer Notes 3, 10 & 12.
Solar reflectance		
As produced	ASTM E903-96	Nominal 77%
Resistance to heat		
Exposure 100°C continuous (500 hours)	ASTM D2244-25 (Colour)	Colour change ΔE CIEDE2000: ≤3 units
Fire hazard properties		
Simultaneous determination of ignitability, flame propagation, heat release and smoke release (AS/NZS 1530.3:1999 (R2016)) *	Ignitability index (0 – 20)	0
	Spread of flame index (0 – 10)	0
	Heat evolved index (0 – 10)	0
	Smoke developed index (0 – 10)	1
NCC non-combustible material concessions (NCC 2022; AS/NZS 1530.3:1999 (R2016)) *	National Construction Code, Building Code of Australia 2022; Volume 1 Part C1, C2D10, (5) and (6)(e) and Volume 2: Section H, Part H3, H3D2, (1)(e)	May be used wherever a non-combustible material is required
	AS/NZS 1530.3:1999 (R2016)	

* The results of this fire test may be used to directly assess fire hazard, but it should be recognised that a single test method will not provide a full assessment of fire hazard under all fire conditions.

Important notes

1. Only available in the colour Whitehaven®.

2. 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 visit the BlueScope website or contact Steel Direct for advice.

3. Product may not be suitable if it is intended to use COLORBOND® Coolmax® steel (CMX) 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® steel product, please refer to the Technical Bulletins TB1a, TB1b, CTB16, CTB21 and CTB22. Before purchase, you should check on suitability by visiting the BlueScope website or by contacting Steel Direct for advice.

4. Note occasionally strippable film may be supplied in lieu of CORSTRIP® film for operational reasons. The CORSTRIP® film/strippable film should be removed from the painted steel strip immediately on installation. Sunlight can increase adhesion of the protective film to the painted surface if left uncovered outside. Please contact your relevant waste management provider to discuss requirements for recycling this type of material.

5. Finish Coat – the coating applied to the exposed surface of the prepainted coil which is expected to meet the Performance Requirements.

6. The product is supplied with a nominal 25 unit (60°) gloss Finish Coat.

7. 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. Where specific Performance Requirements are deemed necessary for the reverse surface coating, a “double sided” product should be specified, in which case a topcoat of full nominal thickness will be applied.

8. The minimal 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°C.

9. 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.

10. 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 2728:2013 Appendix L, and also Technical Bulletin TB7). Contact Steel Direct to obtain advice on appropriate rollforming lubricants.

11. Values quoted are for panels exposed in accordance with AS/NZS 2728:2013. Variations for in-situ performance may occur due to complexity of building design and location.

12. COLORBOND® Coolmax® steel (CMX) has good resistance to accidental spillage of solvents such as methylated spirits, white sprit, mineral turpentine, toluene, trichloroethylene and dilute mineral acids and alkalis. However, all spillages should be immediately removed by water washing and drying.

Colorbond® COOLMAX®

steel.com.au
To learn more about this product

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For more information contact Steel Direct

BlueScope

The information contained in this datasheet is provided by way of general information about this product only, and has not been prepared with your specific needs in mind. We recommend that you seek BlueScope Steel Limited's advice as to the suitability of this product for the purpose(s) for which you propose to use it. To contact BlueScope Steel Limited for advice about your proposed use of this product, please contact Steel Direct. COLORBOND®, Activate®, CORSTRIP®, Coolmax®, ® colour names, BlueScope and the BlueScope brand mark are registered trade marks of BlueScope Steel Limited. © 2025 BlueScope Steel Limited ABN 16 000 011 058. All rights reserved.