

# COLORBOND® XRW

## Exterior Roofing and Walling

Revision 2, February 1995

This literature supersedes all previous issues.

### GENERAL DESCRIPTION

COLORBOND XRW prepainted steel has been developed by BHP SCPD to provide a high durability, cost effective cladding and roofing material for general exterior use.

### TYPICAL USES

Roofing and accessories, wall cladding, rainwater goods.

### AUSTRALIAN STANDARD:

Substrate - AS 1397

Paint Coating - AS 2728 Category 3

**PREFERRED SUBSTRATES:** ZINCALUME® G550 AZ150  
ZINCALUME G300 AZ150 ②

### DIMENSIONS: ZINCALUME G550 AZ150

#### For normal supply product

##### Preferred thickness, mm

|                        | Width range, mm       |       | Sheet length, mm |
|------------------------|-----------------------|-------|------------------|
|                        | Strip                 | Sheet |                  |
| 0.30                   | 360 - 520, 610 - 1070 | -     | -                |
| 0.32                   | 380 - 540, 610 - 1100 | -     |                  |
| 0.35, 0.38             | 250 - 1220            | -     |                  |
| 0.40, 0.50, 0.55, 0.60 | 120 - 1240            | -     |                  |
| 0.65, 0.70, 0.75, 0.80 | 450 - 1240            | -     |                  |
| 0.85, 0.90, 0.95, 1.0  | 450 - 1220            | -     |                  |
|                        |                       | -     |                  |

### DIMENSIONS: ZINCALUME G300 AZ150

#### For normal supply product

##### Preferred thickness, mm

|                                    | Width range, mm       |            | Sheet length, mm |
|------------------------------------|-----------------------|------------|------------------|
|                                    | Strip                 | Sheet      |                  |
| 0.30                               | 150 - 520, 610 - 1100 | 300 - 1100 | 1085 - 4880      |
| 0.32                               | 150 - 540, 610 - 1100 | 300 - 1100 |                  |
| 0.35                               | 150 - 1220            | 300 - 1220 |                  |
| 0.38                               | 150 - 1235            | 300 - 1235 |                  |
| 0.40, 0.42, 0.45, 0.48, 0.50, 0.55 | 150 - 1240            | 300 - 1240 |                  |
| 0.60, 0.65, 0.70, 0.75, 0.80       | 150 - 1240            | 300 - 1240 |                  |
| 0.85, 0.90, 0.95, 1.0              | 150 - 1235            | 300 - 1235 |                  |
| 1.1, 1.2                           | 150 - 1220            | 300 - 1235 |                  |
|                                    |                       |            |                  |
|                                    |                       |            |                  |
|                                    |                       |            |                  |
|                                    |                       |            |                  |

For maximum width less than 1200 mm, any width between half maximum and 610 mm is available by negotiation only. Availability applies only to product supplied direct from Western Port and Port Kembla, and may change if supplied from SCPD Steel Service Centres.

### PRETREATMENT:

Corrosion resistant proprietary conversion coating.

### PRIMER COAT:

Universal corrosion inhibitive primer. Nominal thickness 5 µm each side.

### FINISH COAT:

Custom formulated system. Nominal thickness 20 µm on the top or weather side. The finish coat is available in 12 standard specially selected colours. Other specially required colours may be available on request. The finish coat can, if required be applied to both sides to provide double-sided product.

### BACKING COAT:

Custom formulated Shadow Grey. Nominal film thickness 5 µm.

### GLOSS:

Nominal 25% (60°). Other gloss levels may be available upon request.

### PROTECTIVE FILM:

COLORBOND XRW can be supplied with CORSTRIP®, a specially designed protective polyethylene strippable film, on the top side. The polyethylene film should be removed from the painted steel strip within 12 months of delivery from BHP SCPD.

### EXPECTED PRODUCT SERVICE PERFORMANCE

| Property                      | Measured After                          | Test Method                | Ref. Standard    | Results   |
|-------------------------------|---|----------------------------|------------------|---|
| Resistance to colour change ② | QUV (2000 hours)                        | ASTM G 53                  | -                | Δ E Hunterlab: Intermediate colour<br>≤ 5 units, eg. Wheat                                  |
|                               | Natural well washed exposure (15 years) | ASTM D 2244                | AS 2728          | Δ E Hunterlab: Light colour: ≤ 6 units<br>Int. colour: ≤ 9 units<br>Dark colour: ≤ 15 units |
| Resistance to chalking        | QUV (2000 hours)                        | ASTM G 53<br>AS 1580 481.1 | AS 2728          | Rating range: 1-2   |
|                               | Natural well washed exposure (10 years) | AS 1580 481.1              | AS 2728 (App H1) | Chalk rating: ≤ 2   |



## EXPECTED PRODUCT SERVICE PERFORMANCE (Cont)

| Property                 | Measured After                                | Test Method                               | Ref. Standard         | Results  |
|--------------------------|---|---|-----------------------|--|
| Resistance to corrosion  | Salt spray<br>(1000 hours)                    | ASTM B 117<br>AS 2331.3.1<br>NCCA III - 2 | AS 2728 (App H2)      | Blister density: $\leq 1$<br>Blister size: $\leq S2$<br>Undercut from a score:<br>$\leq 2$ mm  |
|                          | Kesternich (SO <sub>2</sub> )<br>(50 cycles)  | DIN 50018                                 | AS 2728 (App H1)<br>— | No loss of adhesion<br>Edge creep: $< 4$ mm  |
| Resistance to humidity   | Cleveland<br>(1000 hours)                     | NCCA III - 6                              | AS 2728               | Blister density: $\leq 1$<br>Blister size: $\leq S2$<br>No loss of adhesion  |
| Resistance to acids ③    | Exposure                                      | ASTM D 1308<br>(3.1.1)                    | —                     | No discolouration<br>No blistering   |
| Resistance to alkalis ③  | Exposure                                      | ASTM D 1308<br>(3.1.1)                    | —                     | No discolouration<br>No blistering   |
| Resistance to solvents ③ | Exposure                                      | ASTM D 1308<br>(3.1.1)                    | —                     | No discolouration<br>No blistering   |
| Adhesion ②               | Natural well<br>washed exposure<br>(15 years) | —   | —                     | No flaking or peeling  |
| Resistance to heat       | Exposure<br>100°C continuous                  | ASTM D 2244                               | —                     | Colour change $\Delta E$<br>Hunterlab: $\leq 3$ units  |
| Resistance to fire       | Exposure                                      | AS 1530 Pt 3                              | —                     | Ignitability index:<br>0 rating in scale of 0-20<br>Spread of flame index:<br>0 rating in scale of 0-10<br>Heat evolved index:<br>0 rating in scale of 0-10<br>Smoke evolved index:<br>0-1 rating in scale of 0-10 |
| Flexibility              | T-bend  | AS 2935 (App E)<br>NCCA II - 19           | —                     | 7T or less<br>(no cracking)  |
| Resistance to abrasion   | Taper Abraser-<br>1000 g CS 10 wheels         | AS 2105 (App D)<br>NCCA II - 12           | —                     | $\leq 20$ mg per<br>100 cycles   |
|                          | Scratch                                       | AS 1580 403.1                             | AS 2728               | $\geq 2000$ g  |

## GUARANTEED PAINT PROPERTIES

| Property       | Measured By    | Test Method                                    | Ref. Standard | Results                                   |
|----------------|----------------|--|---------------|---|
| Hardness       | Pencil         | AS 1580 405.1<br>NCCA II - 12                  | AS 2728       | HB or harder                              |
| Adhesion       | Reverse impact | AS 2728 (App E)<br>NCCA II - 6                 | AS 2728       | $\geq 10$ joules                          |
|                | T-bend         | AS 2728 (App F)<br>NCCA II - 19                | AS 2728       | 5T or less                                |
|                | Cross hatch    | ASTM D3359 (B)<br>NCCA II - 5<br>AS 1580 408.4 | —             | No paint removal<br>0 rating (no removal) |
| Specular gloss | 60° meter      | AS 1580 602.2<br>ASTM D 523                    | —             | 15 – 35%                                  |

### NOTE

- 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.
- Values quoted are for standard COLORBOND XRW colours under normal well washed conditions of exposure.  
If it is intended to use COLORBOND XRW in an exterior application within 1 km of salt marine locations, severe industrial or abnormally corrosive environments, or in areas not washed by rain (or in applications where it will be wholly or partly buried in the ground), please contact your nearest SCPD Sales Office for advice.  
Improper storage or the use of non-approved roll-forming lubricants may adversely affect colour. Material which becomes wet while in stacks or bundles must be separated and dried (refer AS 2728 Appendix A3).
- COLORBOND XRW has good resistance to accidental spillage of solvents such as methylated spirits, white spirit, mineral turpentine, toluene, trichlorethylene and dilute mineral acids and alkalis. However, all spillages should be immediately removed by water washing and drying.

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

## Sheet & Coil Products Division - BHP Steel

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