

# Care of BlueScope coated steel products during transport and storage

## INTRODUCTION

ZINCALUME® steel, TRUECORE® steel and zinc-coated steel (e.g. GALVABOND® steel & ZINCFORM® steel), are manufactured with a surface passivation treatment that;

- a) provides some measure of protection to coils or packs prior to installation; and
- b) assists with uniform weathering of metallic finishes once installed.

ZINCALUME® steel has an additional thin resin film applied to improve rollformability and provide resistance to hand/foot marking during installation.

The protection provided by these surface treatments is limited against white and/or black staining which can result quickly when material becomes wet, either in coil or sheet form.

The pre-painted surface of next generation COLORBOND® steel provides the metal surface some protection from damage, however the painted surface can be adversely impacted if allowed to remain wet in coil or sheet pack form for extended periods.

The potential for damage from wet material can be reduced by adopting the following practices.

## TRANSPORT

It is important that coils and sheet packs be adequately protected from water ingress between coil wraps, or sheets in a pack, during transportation. They should be wrapped in waterproof wrapping and ideally be transported in covered, watertight vehicles.

If it is necessary to transport using an uncovered vehicle the load should be completely covered by tarping to ensure no water ingress if it rains

## STORAGE

It is important that coils and sheet packs be kept dry during storage prior to processing and installation. They should be stored undercover and protected from becoming wet. Rainwater and condensation are easily drawn between adjacent strip surfaces by capillary action or driven in by wind. Condensation can occur if the temperature of the metal is lower than the dew point of the surrounding air. In this case moisture from the warmer air will condense onto the colder metal surface. Any moisture that is trapped between coil wraps or sheets is unable to escape or evaporate. In such cases accelerated corrosion of the metallic coating will occur due to the absence of free air.

If not required for immediate use, on site, sheet packs should be neatly stacked off the ground and protected from rain and moisture with tarpaulins or similar covers. Often it is necessary to load sheets onto a roof as a bundle where complete covering can be impractical. In this case a useful means of protection is to use an appropriate strip of polythene dampcourse, or similar building plastic material, to minimise water ingress as follows:

- The strip length should exceed the bundle width by about 200 to 300mm. Place the strip under the end of the top sheet so that 100 to 150mm of its width protrudes from each side of the bundle.
- Fold the protrusion down to form a visor which will protect the end of the bundle from rain (only necessary on the high end if the bundle is on a slope).

If packs become wet the sheets should be separated as soon as possible to enable drying by air circulation. If packs remain wet for extended periods of time, staining and/or corrosion may occur.

*Table 1*, provides some guidance on the appearance of water damage for each of the products and restoration options should this occur.

In the case of TRUECORE® steel, it is important that excessive moisture trapped within and between bundled frame sections be removed and dried as soon as practical prior to installation to avoid long-term corrosion issues from wet storage.

## RELATED BLUESCOPE STEEL TECHNICAL BULLETINS

### **Technical Bulletin TB-2**

*Overpainting and Restoration of Exterior BlueScope Steel Products*

### **Technical Bulletin TB-4**

*Maintenance of COLORBOND® steel and ZINCALUME® steel*

### **Technical Bulletin TB-10**

*Cut Edge and Bend Protection of Next Generation ZINCALUME® Aluminium/ Zinc/Magnesium coated steel and COLORBOND® prepainted steel with ACTIVATE™ Technology*



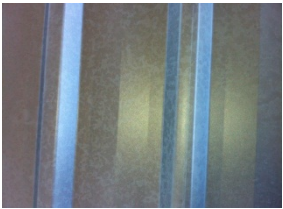
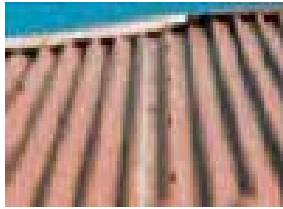
### **Technical Bulletin TB-13**

*General Guide to Good Practice in the use of Steel Roofing and Walling Products*

### **Technical Bulletin TB-18**

*Guide to Good Practice – Processing and Application of ZINCALUME® steel and TRUECORE® steel.*

Table 1: Summary of Product Appearance and Restoration Options

APPEARANCE	RESTORATION	
<b>ZINCALUME® STEEL</b>		
	Light white bluish	Light white bluish is temporary and full recovery is expected once water is dried from the resin after outdoor exposure. Time for bluish to disappear is dependent on ambient air temperature.
	Heavy white stain	Heavy white stain corrosion will reduce over time as the resin is eroded but will not completely disappear
	Heavy stain with darkening	This is permanent and no recovery is expected. The darkening results from corrosion
<b>COLORBOND® STEEL</b>		
	Discolouration Light discolouration and/or paint softening.	Discolouration Refer to Technical Bulletin TB-2 Overpainting and Restoration of Exterior BlueScope Steel Products.

If you have any questions regarding this Bulletin, please contact BlueScope Steel Direct on 1800 800 789.

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