TB - 7 Technical Bulletin



May 2019 - Revision 12. This issue supersedes all previous issues

Care of BlueScope coated steel products during transport and storage

Introduction

ZINCALUME® aluminium/zinc/magnesium alloy-coated steel, TRUECORE® aluminium/zinc/magnesium alloy-coated 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 and TRUECORE® steel have 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 COLORBOND® prepainted 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 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 that 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 the visual appearance of the surface will be permanently damaged 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.

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.

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 Technical Bulletins

Technical Bulletin TB-2 Overpainting and restoration of exterior BlueScope coated steel products

Technical Bulletin TB-4 Maintenance of exterior BlueScope coated steel products

Technical Bulletin TB-10 Cut edge and bend protection of next generation ZINCALUME® steel and COLORBOND® steel

Technical Bulletin TB-13 General guide to good practice in the use of exterior BlueScope coated steel products

Technical Bulletin TB-18 Guide to good practice – Processing and application of BlueScope coated steel products

steel.com.au

To ensure you have the most current information

1800 800 789

steeldirect@bluescopesteel.com
For more information contact Steel Direct

