

Guide to good practice – Processing and application of BlueScope coated steel products

INTRODUCTION

The paint system on COLORBOND® prepainted steel offers both a highly durable and decorative finish.

ZINCALUME® aluminium/zinc/magnesium alloy-coated steel is supplied with a specially formulated clear resin film.

TRUECORE® aluminium/zinc/magnesium alloy-coated steel is supplied with a specially formulated blue resin film. Both films have very good impact resistance and flexibility and provide excellent resistance to hand marking.

While the use of paint and resin films have significant inherent benefits, its use necessitates specific recommendations associated with the processing of COLORBOND® steel, ZINCALUME® steel and TRUECORE® steel.

STORING BLUESCOPE COATED STEEL PRODUCTS

It is recommended that COLORBOND® steel, ZINCALUME® steel and TRUECORE® steel are kept dry during transit and storage. Storage location should be away from open doorways, off-ground and under cover to prevent water or condensation becoming trapped between adjacent surfaces.

If coil becomes wet, immediately process and make dry. If storage packs become wet, separate sheets and wipe with a dry, clean cloth and then place in a suitable position to enable air circulation to complete the drying process. For further details on storage of BlueScope coated steel products, refer to:

[Technical Bulletin TB-7](#) Care of BlueScope coated steel products during transport and storage

SLITTING ZINCALUME® STEEL AND TRUECORE® STEEL

Where friction drag pads are used to maintain tension during slitting/recoiling, resin dust can be generated. If drag pads are used, then appropriate pad material and pressures should be used to minimise the frictional forces. Where carpet is used as a drag pad material, BlueScope recommends a 100% wool, long-cut pile carpet.

For personal safety, it is recommended that skin contact be avoided by wearing cut resistant gloves suitable for the task. Good personal hygiene, which includes washing hands prior to eating or smoking, should be practiced. Refer to the product safety data sheet for additional information.

FORMING ZINCALUME® STEEL AND TRUECORE® STEEL

The resin film on the surface of ZINCALUME® steel and TRUECORE® steel acts as a lubricant during forming operations.

Rollforming lubricant may not be needed when forming ZINCALUME® steel or TRUECORE® steel.

If a lubricant is used, it must be a fully volatile branched chain hydrocarbon type liquid. Water-based or Kerosene-based lubricants **MUST NOT** be used.

FORMING COLORBOND® STEEL

Building products are manufactured by forming, folding and bending sheet steel from a coil of steel. These processes can apply a high level of pressure, which can impact the product, particularly pre-painted steel surfaces.

When processing prepainted steel coils, pressure marring may occur. Pressure marring is an elastic deformation of the paint and can occur on all prepainted steel finishes. It appears as a glossier area on the surface, refer to Figure 1. A pressure marred area may appear more noticeable and/or different on certain colours and finishes because of the contrast of the marred area to the unaffected area.

Pressure marring is not a permanent deformation, the areas affected are expected to return to their normal appearance upon exposure to the product in-service

Figure 1: Pressure marring is visible on this formed section of COLORBOND® steel as glossy lines on the ribs and bends



SEALING AND FASTENING COLORBOND® STEEL, ZINCALUME® STEEL AND TRUECORE® STEEL

There are specific recommendations for sealing, and fastening COLORBOND® steel, ZINCALUME® steel and TRUECORE® steel.

For further details relating to sealing refer to [Technical Bulletin TB-9](#) Sealants for exterior BlueScope coated steel products.

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For further details relating to fastening refer to [Technical Bulletin TB-16](#) Fasteners for roofing, walling and accessory products – selection guide

FIELD PAINTING ZINCALUME® STEEL

ZINCALUME® steel may be overpainted after installation. Ensure paint manufacturers' recommendations are followed. Appropriate consideration should also be given to environmental conditions, end use, location and product application. For further information, refer: [Technical Bulletin TB-2](#) Overpainting and restoration of exterior BlueScope coated steel products.

ZINCALUME® steel is also readily powder coated. For BlueScope recommendation on this issue, please refer enquiries to Steel Direct.

ADVERSE CONDITIONS

The performance of ZINCALUME® steel is superior to zinc-coated steel in the vast majority of environments. However, under certain specific conditions ZINCALUME® steel is less suitable than zinc-coated steels. These conditions are a result of particular micro-environments and include the following:

- Composite panel applications in coolrooms, refer to [Technical Bulletin TB-31](#) COLORBOND® Intramax™ steel for coolroom panels
- Contact with lead, copper and other dissimilar metals, refer to [Corrosion Technical Bulletin CTB-12](#) Dissimilar metals
- Contact with wet concrete (e.g. formwork), refer to [Corrosion Technical Bulletin CTB-16](#) Immersion
- Intensive animal shelters, refer to [Corrosion Technical Bulletin CTB-22](#) Special Service Environments – Intensive animal farming
- Some severe industrial environments (e.g. cement works), refer to [Corrosion Technical Bulletin CTB-24](#) Fertiliser manufacturing and storage buildings

In high temperature applications (>200°C) the resin coating on ZINCALUME® steel is prone to degradation, refer to [Technical Bulletin TB-33](#) ZINCALUME® steel and zinc-coated steels in high temperature and food contact applications.

RELATED BLUESCOPE TECHNICAL BULLETINS

[Technical Bulletin TB-2](#)

Overpainting and restoration of exterior BlueScope coated steel products

[Technical Bulletin TB-7](#)

Care of BlueScope coated steel products during transport and storage

[Technical Bulletin TB-9](#)

Sealants for exterior BlueScope coated steel products

[Technical Bulletin TB-16](#)

Fasteners for roofing, walling and accessory products – selection guide

[Technical Bulletin TB-31](#)

COLORBOND® Intramax™ steel for coolroom panels

[Technical Bulletin TB-33](#)

ZINCALUME® steel and zinc-coated steels in high temperature and food contact applications

[Technical Bulletin TB-34](#)

Steel building frames

[Corrosion Technical Bulletin CTB-12](#)

Dissimilar metals

[Corrosion Technical Bulletin CTB-16](#)

Immersion

[Corrosion Technical Bulletin CTB-22](#)

Special Service Environments – Intensive animal farming

[Corrosion Technical Bulletin CTB-24](#)

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1800 800 789

steeldirect@bluescopesteel.com

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