TECHNICAL 18



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This issue supersedes all previous issues

Guide to good practice – Processing and application of ZINCALUME® steel and TRUECORE® steel

INTRODUCTION

ZINCALUME® aluminium/zinc/ magnesium alloy coated steel is supplied with a specially formulated clear resin film. TRUECORE® aluminium/zinc 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 resin film has significant inherent benefits, its use necessitates specific recommendations associated with the processing of ZINCALUME® steel and TRUECORE® steel.

STORING ZINCALUME® STEEL AND TRUECORE® STEEL

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

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 ZINCALUME® steel and TRUECORE® steel, refer to Technical Bulletin TB-7 Care and Storage of BlueScope Steel Coated Steel Products prior to Installation

FORMING ZINCALUME® AND TRUECORE® STEEL

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

Rollforming lubricant is not typically needed when forming ZINCALUME® steel or TRUECORE® steel.

The benefits of <u>NOT USING</u> lubricant while forming ZINCALUME® steel and TRUECORE® steel include:

Reduced clean-up after processing;

- Improved final appearance; and
- Less slippery surface for roof fixers and following trades

NOTE:

Any pitched roof may be slippery and reference should always be made to the appropriate safe working codes.

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

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 to Technical Bulletin TB-2 Overpainting and Restoration of Exterior BlueScope Steel Products.

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

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 pressures should be used to minimise the frictional forces.

Some lubricants and surface treatments can cause skin irritation or sensitization. Skin contact should be avoided by wearing appropriate gloves. 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.

SEALING, FASTENING, JOINING AND WELDING ZINCALUME® STEEL AND TRUECORE® STEEL

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

For further details relating to sealing ZINCALUME® steel, refer to <u>Technical</u> <u>Bulletin TB-9</u> Sealants for Exterior Finishes.

For further details relating to fastening ZINCALUME® steel, refer to <u>Technical</u> <u>Bulletin TB-16</u> Fasteners for Roofing and Walling Products – Selection Guide.

For further details relating to the joining and welding of ZINCALUME® steel and TRUECORE® steel, refer to **Technical Bulletin TB-21** Resistance Spot Welding of BlueScope Steel Metallic-Coated Steel Sheet.

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 galvanised steels. These conditions are a result of particular micro-environments and include the following:

- Composite panel applications in coolrooms, refer to <u>Technical Bulletin</u> <u>TB-31</u> COLORBOND® Permagard® Steel for Coolroom Panels
- Contact with lead, copper and other dissimilar metals, refer to <u>Corrosion</u> <u>Technical Bulletin CTB-12</u> Dissimilar Metals
- Contact with wet concrete (e.g. formwork), refer to <u>Corrosion Technical</u> <u>Bulletin CTB-16</u> *Immersion*
- Intensive animal shelters, refer to
 <u>Corrosion Technical Bulletin CTB-22</u>

 Special Service Environments Intensive
 Animal Farming
- Some severe industrial environments
 (e.g. cement works), refer to <u>Corrosion</u>
 <u>Technical Bulletin CTB-24</u> Fertiliser
 Manufacturing and Storage Buildings

In high temperature applications (>200°C) the resin coating on ZINCALUME® steel is prone to degradation, refer to <u>Technical Bulletin</u> <u>TB-33</u> ZINCALUME® steel and Zinc Coated Steels in High Temperature Applications and Food Contact.

RELATED BLUESCOPE STEEL TECHNICAL BULLETINS

Technical Bulletin TB-2

Overpainting and Restoration of Exterior BlueScope Steel Products

Technical Bulletin TB-7

Care and Storage of BlueScope Steel Coated Steel Products Prior to Installation

Technical Bulletin TB-9

Sealants for Exterior Finishes

Technical Bulletin TB-16

Fasteners for Roofing and Walling Products – Selection Guide

Technical Bulletin TB-21

Resistance Spot Welding of BlueScope Steel Metallic-Coated Steel Sheet

Technical Bulletin TB-31

COLORBOND® Permagard® Steel for Coolroom Panels

Technical Bulletin TB-33

ZINCALUME® steel and Zinc Coated Steels in High Temperature Applications and Food Contact

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

Fertiliser Manufacturing and Storage Buildings

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

To ensure you have the most current Technical Bulletin, please go to bluescopesteel.com.au.



The information and advice contained in this Technical Bulletin ('Bulletin') is of a general nature only and has not been prepared with your specific needs in mind. You should always obtain specialist advice to ensure that the materials, approach and techniques referred to in this Bulletin meet your specific requirements.

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