

Sheds and garages

INTRODUCTION

To ensure the longevity of COLORBOND® prepainted steel and ZINCALUME® aluminium/zinc/magnesium alloy coated steel used in the manufacture of sheds or garages, the following guidelines are recommended.

MAINTENANCE

Areas not subject to the natural washing action of rainfall are known as “unwashed areas”. Some areas of a shed or garage contain “unwashed areas” such as the top of roller doors or the top of walling sheets adjacent to an eave gutter. In these regions dust and dirt tend to build up which, in combination with condensation, may lead to premature corrosion. This corrosion may be prevented with regular washing using fresh potable water, refer to [Technical Bulletin TB-4 Maintenance of COLORBOND® steel and ZINCALUME® steel](#).

DESIGN

In order to obtain optimum performance of the COLORBOND® steel or ZINCALUME® steel product, correct design and erection is essential.

Edge Detailing

It is critical that a free drip edge be maintained for all COLORBOND® steel and ZINCALUME® steel products. This is to enable moisture to drain freely from the sheared edge of the steel product. Generally a clearance of 15mm should be sufficient. This is particularly important at the base of a shed or garage wall. Please refer to *Figure 1*.

The consequence of not maintaining a free drip edge is premature corrosion. This is due to the retention of moisture at the cut edge of the steel when in contact with other materials. Bricks, pavers, concrete slabs and even other metallic products will contribute to this mechanism when installed incorrectly. Please refer to *Figure 2* for an example.

Formwork

Using the steel walling as formwork to pour the concrete slab for the shed is not recommended. This practice will cause premature corrosion due to:

- Contact with wet cement, which is strongly alkaline.
- Shrinkage of cured concrete enabling the build-up of dirt and debris in the resulting gap between the slab and the wall.
- Failure to maintain a free drip edge as outlined previously.

Gutter Design

Gutter design should ensure that moisture is allowed to drain freely from the roof and not be allowed to enter the interior of the shed or garage. Incorrect design can lead to the corrosion of interior steel components as well as damage to its contents.

Figure 1: Schematic showing simple design of free drip edge (not to scale)

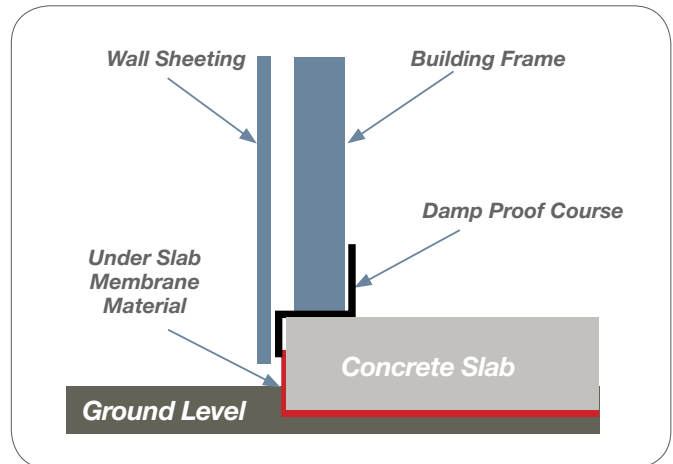


Figure 2: Corrosion due to inappropriate wall design



Figure 3: Corrosion due to soil immersion



FASTENERS

The correct selection of fastener for use in the erection of the shed or garage is of paramount importance for long term performance and aesthetics. It is recommended that Australian Standard AS 3566-2002 *Self-drilling screws for the building and construction industries* be consulted before selection of fasteners. For further information, refer to [Technical Bulletin TB-16 Fasteners for Roofing and Walling Product – Selection Guide](#).

IMMERSION

Moisture or moisture retaining materials should not be allowed to remain in intimate contact with COLORBOND® steel or ZINCALUME® steel products. Such contact will ultimately result in corrosion of the material. For more information, refer to [Corrosion Technical Bulletin CTB-16 Immersion](#).

The build-up of grass cuttings, leaves, soil from gardens, mulch, compost, sand, ashes or similar must be avoided. Failure to prevent this build-up will cause premature corrosion of COLORBOND® steel and ZINCALUME® steel due to corrosion mechanisms associated with the wet poultice held against the coated steel surface. Please refer to *Figure 3* for an example.

CHEMICAL USAGE / STORAGE

Sheds and garages are often used for the storage of various household and garden chemicals. It is well known that direct contact with some chemicals, either solids, liquids or vapours, may initiate corrosion of steel products. BlueScope Steel recommends that chemicals be contained in such a manner so as to prevent such contact.

Please refer to manufacturers' recommendations for the safe disposal of chemicals.

RELATED BLUESCOPE STEEL TECHNICAL BULLETINS:

[Technical Bulletin TB-4](#)

Maintenance of COLORBOND® steel and ZINCALUME® steel

[Technical Bulletin TB-16](#)

Fasteners for Roofing and Walling Product – Selection Guide

[Corrosion Technical Bulletin CTB-16](#)

Immersion

REFERENCED AUSTRALIAN STANDARDS

- [AS 3566-2002 Self-drilling screws for the building and construction industries](#)

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