

STEEL WALLING PRODUCTS – SELECTION GUIDE

TECHNICAL BULLETIN TB-1b

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PERFORMANCE OF STEEL WALLING

Like steel roofing, the performance of steel walling can be influenced by a number of factors, including the environment. In the case of walling, the most important factor to be aware of is unwashed areas.

Unwashed Areas

Since walls are vertical surfaces, they can be sheltered from general rain washing, particularly towards the top of the wall, adjacent to overhanging eaves. In these regions, dust and dirt that would otherwise be washed away by rain, tends to build up. Condensation can be absorbed by the dust and dirt leading to an increase in the time that the material surface is in contact with sufficient moisture to cause corrosion (ie. time of wetness). When the build-up of dust and dirt includes marine salts, and/or other pollutants, unwashed area corrosion is further exacerbated.

Design

Modern building design often incorporates large overhanging eaves, verandahs and walkways in combination with COLORBOND® steel walling. The designer must understand the responsibility inherent in the inclusion of such areas and either minimise their extent, select the appropriate COLORBOND® steel product (refer Table 1) for the application or incorporate a stringent regular maintenance routine after construction.

Wall cladding installed in a horizontal orientation creates inherent unwashed areas which may hold dust and dirt. Accordingly, a more regular maintenance program than quoted in Table 1 is required.

Consideration also needs to be given to ensuring the wall cladding is installed in such a way that it does not create an immersion situation - refer to Corrosion Technical Bulletin CTB-16 "Immersion".

Product Selection & Maintenance

The potential for corrosion to occur in unwashed areas can be minimised by regular washing with fresh clean water. Table 1 serves as a guide for the selection of an appropriate walling product. In combination with a regular maintenance program, this should provide optimum performance and longevity. Additional information can be found in TB-4 "Maintenance of COLORBOND® steel and ZINCALUME® steel" and fastener selection should be in accordance with TB-16 "Fasteners for Roofing and Walling Product – Selection Guide".

Table 1: Walling Products Selection Guide

DISTANCE FROM MARINE ENVIRONMENT	RECOMMENDED WALLING PRODUCT/S	MINIMUM MAINTENANCE INTERVAL
0m - 500m	COLORBOND® Stainless steel	6 months
501m -1000m	COLORBOND® Ultra steel	6 months
> 1km	COLORBOND® Metallic steel COLORBOND® steel ZINCALUME® steel	6 months

NOTE

- i) Absolute performance is subject to local conditions including, but not limited to, prevailing winds, and presence of unwashed areas.
- ii) Distance is as measured to the high water/tide mark.
- iii) Table 1 applies to salt marine influences only. For installations subject to severe or heavy industrial conditions, it is essential to contact BlueScope Steel Direct for advice on the appropriate product.

The information and advice contained in this 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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