

## Common Quality Issues That Are Not Linked To BlueScope's Coated Steel Material

### OBJECTIVE

This Fact Sheet serves as a reference on commonly observed quality issues or defects that are not related with the performance of BlueScope's coated steel material.

### TYPE OF COMMON QUALITY ISSUES / DEFECTS

#### 1. Contact with swarf particles



#### Description

This is one of the most common signs of rust which is wrongly attributed to the failure of a coated steel, which we call "swarf stains". Swarf refers to steel debris arising from abrasive cutting using friction saws, and abrasive disks of steel products. The swarf particles will not be immediately noticeable but, if left on the surface for days, the particles will start rusting leading to the examples shown in the above photos. These stains are too often mistaken as the rusting of the roofing sheets.

#### Recommendation

To remove the swarf particles or rectify any damage caused by the swarf particles, you may refer to BlueScope's Technical Bulletin (TB-5): Swarf staining as published on our [website](#).

## 2. Chemical damage



### Description

General detergent like the household detergent is normally harmless when used in conjunction with BlueScope's coated steel products. There are countless types of chemicals used for different purposes, such as their usage as a cleaning solution. However, if you intend to use a specific chemical for a specific purpose, please confirm with the chemical provider that it will not attack the elements (zinc, aluminium, or steel) and that it is suitable to be used.

### Recommendation

It is a good practice to establish a regular routine for washing exterior of BlueScope's coated steel products, which you may refer to BlueScope's Technical Bulletin (TB-4): Maintenance of Exterior BlueScope Coated Steel Products published on our [website](#). If you observed splash marks such as the above photo and they cannot be removed by wiping, chances are there has been a splash of concentrated chemicals that is reactive to the surface. To rectify the damage, you may consider concealing the splash marks by applying a layer of paint, which you may refer to BlueScope's Technical Bulletin (TB-2): Overpainting and restoration of exterior BlueScope coated steel products as published on our [website](#).

### 3. Mechanical damage



#### Description

You should not see a scratched or dented roofing sheet upon its arrival at your site, because it would have been rejected during the manufacturing process. Regardless, if you still observe mechanical damages on the end-product when it is installed onto the building, then you may reach out to your installer.

#### Recommendation

To determine what method to rectify surface scratches, you may refer to BlueScope's Technical Bulletin (TB-2): Overpainting and restoration of exterior BlueScope coated steel products as published on our [website](#). But if the mechanical damage has perforated the roofing sheet, we recommend a replacement.

#### 4. Failure to provide free water drainage



##### Description

Stagnant water can mean water that is retained by medium such as concrete or soil, and it can also mean literal stagnant water due to pooling effect. Either way, coated steel will not perform desirably when it is subjected to stagnant water, as shown in the above photos. Typically, we would refer to the coated steel as being in an “immersion” state, where it is immersed in water.

##### Recommendation

This problem can only be rectified if the component is replaced, and a change of design/installation approach is employed to actively avoid stagnant water. For more information about immersion, please refer to BlueScope’s Technical Bulletin (CTB-16): Immersion as published on our [website](#).

## 5. Contact with corroded fasteners



### Description

Fastener is one of the most crucial components to hold down your roofing sheets, where failure of fastener in term of corrosion could lead to roofing detachment. Therefore, choosing of fastener is equally as important as choosing your roofing sheets! We have seen fasteners rusting and spreading the rust onto the roofing sheets.

### Recommendation

To determine the selection of fastener in terms of longevity, you may refer to BlueScope's Technical Bulletin (TB-16): Fasteners for roofing, walling and accessory production – selection guide as published on our [website](#). In case you see rusted fasteners, we recommend you reach out to your installer to replace them.

## 6. Fungus stains



### Description

The growth of fungus on the exterior building surface is common in tropical region, especially in environment that is humid and cooling.

### Recommendation

There is yet any known solution to prevent the growth of fungus on the roofing sheets, however you may refer to BlueScope's Technical Bulletin (TB-27): Identification of fungus in the field and recommendations for its removal as published on our [website](#) for the recommended method to remove the fungus.