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# Effect of touch-up paint

### Introduction

During manufacture, COLORBOND<sup>®</sup> prepainted steel undergoes a curing process in which the paint is baked onto the metallic coated steel substrate; while other paint systems, for example aerosol sprays, are air dried. Air-drying paints have different weathering characteristics to oven cured, prepainted products like COLORBOND<sup>®</sup> steel. Therefore, areas overpainted with air-drying paints to match adjacent COLORBOND<sup>®</sup> steel areas will weather at a different rate and vary in appearance over time (Figures 1 and 2).

# Figure 1. Irregular faded appearance of touch-up paint on roof flashing and roofing broad sheet



# Figure 2. Irregular faded appearance of touch-up paint on fencing panels



### **Repair of minor scratches and blemishes**

BlueScope does not recommend the use of touch-up paint to repair damage or scratches to the painted surface. As explained above, air-drying paints have different weathering characteristics to COLORBOND<sup>®</sup> steel, which leads to variations in appearance over time where touch-up paint has been used. BlueScope does not have a recommended method for the removal of touch-up paint. Minor scratches (< 2mm in width) should be left alone as the available metallic coating will continue to protect against corrosion providing the scratches are superficial and the metallic coating is not damaged. If scratches are more noticeable on new material, it is the recommendation of BlueScope to replace the affected product.

### **Tape off samples**

Adhesive tape can be pressed onto the surface of the defect and rapidly removed. Upon removal the tape may show retained paint on its adhesive surface. Where the tape has been removed from the material, the faded area is also removed showing the original colour underneath (Fig. 3).

### **Rubber eraser**

A rubber eraser can be used on a section of the material that has the faded appearance. This test will show the partial removal of the faded surface layer revealing the colour of the original painted surface beneath (Fig. 4).

### **Lifting flashing**

Flashings to the roof sheets can be loosened and lifted at a point where the defect appears as continuous across the two steel components. Where the flashing is raised, the faded appearance on the sheet will stop at a straight line corresponding to the fixed position of the edge of the flashing. This would also apply to areas underneath screw fasteners and side laps.

### **Summary**

COLORBOND<sup>®</sup> steel is produced on a continuous manufacturing line which does not lead to the aesthetic irregularities depicted in this Technical Bulletin. The irregular fa ded appearance is generally consistent with the use of air-drying touch-up paint. Note that some sunscreens and other chemicals can also affect the appearance of the material – see:

Technical Bulletin TB-37 Prevention of sunscreen damage, for more information.

It is known that the paint performance of COLORBOND<sup>®</sup> steel is different to that of other paint systems when both are exposed to weathering. Differences in performance include,

but are not limited to, colour durability and variable adhesion to the substrate.

The appearance of irregular faded areas, being seemingly continuous across the interface between the sheet and capping or flashing, cannot be produced during the manufacturing process of COLORBOND<sup>®</sup> steel. This is due to the fact those components utilise feedstock of different base metal thickness (BMT) and are manufactured separately. Further, the respective processing routes after manufacture, such as roll forming and slitting, are different for those components.

The application of touch-up paint, after installation of the various COLORBOND<sup>®</sup> steel components, can explain the irregular faded appearance of the COLORBOND<sup>®</sup> steel. The relative ease with which the surface layer is removed to reveal the original colour beneath (via adhesive tape and/or rubber eraser) is another indication that touch-up paint has been used.

BlueScope does not recommend or support the use of touch-up paint on COLORBOND<sup>®</sup> steel. The application of post paint treatments or systems to the material will invalidate the BlueScope Warranty\*.

### **Related BlueScope Technical Bulletins**

Technical Bulletin TB-37 Prevention of sunscreen damage

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### Figure 1. Tape-off showing colour of original painted surface beneath a removed surface layer of faded



Figure 2. Rubber eraser showing colour of original painted surface beneath a removed surface layer of faded appearance

