

BDOC01 Wet Storage Damage on Pre-painted Roofing from Scaffold Support

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The NZMRM recommend against using roofing profiles to support staging. Wet Storage damage caused by incorrectly supported scaffolding is not covered by manufacturers' warranties.

Ideally, scaffolding should be erected and removed before the installation of a lower roof, or sections of the roof may be temporarily removed to allow the scaffolding to be supported by the floor below. Alternatively, scaffold structures above the roof can be cantilevered off the ground or building structure.

Where none of these alternatives are practical, it is the responsibility of the scaffolder and the main contractor to ensure that the scaffold support structure does not cause physical or chemical damage to the roof. Scaffold should be supported from the ribs and separated from the roof surface by a resilient, inert, non-absorbent, PH neutral, and compatible material. Carpet does not necessarily fit this criteria.



Materials or plant should never be supported from the pan



Typical corrosion failure from scaffold support on pans

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Pre-painted steel roofing consists of steel hot-dip coated with an aluminium/zinc/magnesium alloy (AM) which in turn is covered with a passivation layer, an anti-corrosive primer, and a top coat of oven baked enamel.

Each of these layers perform different, integrated functions. The top coat provides colour and UV protection for the under-layers, the primer gives electro-chemical protection to the substrate, while the passivation pre-treatment ensures adherent and stable alloys are formed on the metallic surface. Therefore, all organic coating layers on AM material are designed to be breathable.

When air is excluded from the surface of metallic coated or pre-painted metal roofing in wet conditions, bulky, volatile and non-adherent compounds are formed on the metallic surface. This results in blistering of the paint and the appearance of white powdery corrosion compounds on the paint surface. The speed in which this happen cannot be predicted, as it is dependent on numerous inter-related influences including the nature of the entrapping material, temperature, time of wetness, and ambient environment.

There is no stipulated "safe" period of exposure, it is up to the main contractor to minimise time of exposure and monitor the condition of the under-lying material on an ongoing basis. Localised evidence of white powdery deposits and paint blistering on specific areas of roof upon which scaffolding has been staged, is clear evidence of wet storage corrosion.

Yours Sincerely,

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Editor Metal Roofing and Wall Cladding Code of Practice