

TECH BULLETIN

Wet Storage Stains

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WET STORAGE STAINS

Wet storage stain is corrosion that occurs when metals are in prolonged contact with water without exposure to air flow. The symptoms of wet storage stain are a white powder on the surface of the panels, delaminating paint, or red rust. Unpainted Galvalume may show a darkening of the surface.

Coil applied coatings are relatively thin and designed to protect the galvanized or Galvalume coated steel from normal atmospheric or light industrial environments. Increasing the film thickness using either additional primers or thick film coatings will increase the performance for more aggressive environments. They are not designed for continuous exposure to water.

The Insulated Metal Panels' packaging is designed for shipping, handling, and short term storage at the site. Packaging protects the bundles from moisture, but is not totally water or vapor tight. Rain during transport and condensation during storage will allow water accumulation in the bundle. Long term, outside storage of panels in the bundles makes wet storage stain a possibility.

Best practice is to install the panels soon after they arrive at the site and follow the storage instructions shown in the installation guides. The bundles can be stored outside for several months or longer. However, it is impossible to predict how long the panels can be safely stored due to the variability of weather conditions. In damp or wet climates the panels should not be stored on site more than 2 months before installation. If long term storage of the panels is necessary, they should be stored inside to keep the packaging from deteriorating from UV exposure and wet storage corrosion.

If there are concerns with wet storage stain, the panel can be inspected. If a white powder is found along the panel surface, this is an early sign of wet storage stain or white rust. As the wet storage stain becomes more acute, the paint will delaminate from the panel surface and in the last stage the panel will show red rust.

If the panels have wet storage corrosion, the finish warranty is void. The finish can be restored using a suitable coating system, but a factory finish warranty will not be available.

