Removal of Metal Filings

from surfaces of coil coated metal panels



Metal filings should be removed from the surface of roofing panels as soon as possible to avoid the appearance of rust stains and scratches

Metal debris from sawing, drilling and other construction processes should always be brushed or blown from painted metal panels during installation. Otherwise, the metal filings will quickly rust on the surfaces where they were deposited. Red rust of the metal filings may cause stain or discoloration on the surface of the panel, whether it is bare or painted, and cause appearance issues.

Since these baked finishes are composed of resins and pigments which can be adversely affected by strong chemicals, extreme care should be exercised in any removal activities.



Example of red rust on the surface of a painted metal panel, caused by metal filings

It is very important that all cleaners and procedures, as listed below in Steps A through D, be first tested on a less visible area, to determine if there are any potentially negative effects of the cleaning process.

Cleaning should not be attempted if there is any damage, such as abrasion, scuffing, dulling, burnishing, etc., done to the film in the test area. The following sequential procedures are suggested:

- a.) In situations where the panels have been recently installed, the metal debris can be brushed from the surface with a soft bristle brush or broom. If metal debris is adhering to coated panels, then removal may be possible by picking or with the use of a small pair of pliers.
- b.) If possible, the use of compressed air may be a suitable alternative to brushing the surface. Working from the highest point down to the lowest point on the metal panels. Suitable eye protection will be needed to prevent metal debris from contaminating eyes.
- c.) If Step A and B fails to address the problem in a satisfactory manner, a slightly more aggressive approach would be to powerwash the metal debris-containing surface. This cleaning procedure should be limited to a powerwash rated at 3,500 psi or less. Higher pressures may cause damage to the coating.
- d.) In those situations where the prior three approaches are not viable options and where the metal debris has started to form red rust stains or discoloration and removal is deemed necessary, first try washing with mild soapy water or a mild household cleaner such as Simple Green®, or other non-toxic biodegradable cleaner. Sometimes the use of a minimally abrasive Teflon-type scrub pad, such as Scotch-Brite Non-Scratch Scrub Sponges, gives just enough physical action to succeed. After cleaning, follow with a clean water rinse to remove residue.

Please note: Repeated rubbing with abrasive cleaners and/or pads is likely to result in a scuffed surface, which will not only be unsightly, but will also decrease the service life of the factory finish and void warranty coverage. The longer that the factory applied, baked enamel surface has been in service, the more susceptible it will be to damage caused by procedures designed to remove undesirable deposits from its surface. It is therefore important that all cleaners and procedures be first tested on a less visible area, to determine the potential effects of cleaning.

Cleaning should not be undertaken if there is any damage, such as abrasion, scuffing, dulling, burnishing, etc., done to the film. Such damage automatically voids warranty coverage. Also, the older the



The same panel, after red rust has been removed by gently scrubbing the surface using a mild cleaner and pad

original surface, the greater will be the likelihood that the "cleaned" area will result in a somewhat different appearance, due to the removal of dirt and natural degradation materials from the cleaned area.

For more information, please contact:

Akzo Nobel Coatings Inc. 1313 Windsor Ave. Columbus, OH 43211

614.294.3361



coilcoatings.akzonobel.com/us

We're pioneering a world of possibilities to bring surfaces to life for well over 200 years. As experts in making coatings, there's a good chance you're only ever a few meters away from one of our products. Our world class portfolio of brands including Dulux, International, Sikkens and Interpon - is trusted by customers around the globe. We're active in more than 150 countries and have set our sights on becoming the global industry leader. It's what you'd expect from the most sustainable paints company, which has been inventing the future for more than two centuries.

For more information please visit www.akzonobel.com

© 2021 Akzo Nobel N.V. All rights reserved.

Revision Date: February 2021