

Leading Manufacturer of High-Performance Metal Roofing, Wall & Soffit Systems

## Metal Cleaning & Maintenance Guide



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# **General Metal Cleaning & Maintenance**

One of the many benefits of a Metal Roofing & Siding System is they generally require little maintenance, but to ensure optimum long-term performance, please review the following guidelines.

#### **IMPORTANT SAFETY MEASURES TO FOLLOW:**

The use of proper PPE (personal protective equipment) clothing, gloves and eye protection, fall protection, etc. helps avoid serious injury or death. Always use solutions in an adequate ventilated area, some of the solutions listed have corrosive and toxic properties and should be handled properly to avoid serious injury or death. Metal roofing may be very slippery, which can lead to serious injury or death. It is highly recommended you source a gualified metal roofing contractor to do the inspections, and to clean your roof and/or siding to avoid serious injury or death. Follow all safety instructions listed on the solution products, cleaning tools and zinc primer; also read the manufacturer's Material Safety Data Sheet (MSDS). Always follow local and federal codes/laws. Briggs Steel, Inc. assumes no liability related to the Metal Cleaning & Maintenance Guidelines of your roofing and/or siding. Methods listed in this manual are to be used at your own risk.

#### **INSTALLATION END OF DAY GUIDELINES:**

Debris from cutting, drilling, fastening and/or other installation methods can rust guickly. To avoid rust spots on the surface of the material, the debris must be removed quickly from the product. For any scratches, use touch-up paint; when applied it should be used sparingly, to avoid any unsightly aesthetic spotting. If scratches occur in the substrate such as galvanized and/or Galvalume a zinc primer should be used to heal the scratches before applying touch-up paint. Clean panels after the completion of the roofing and/or siding system, if any caulk sealants need removed, the use of mineral spirits is permitted only to PVDF paint systems to remove and then rinse with hot or cold freshwater immediately. Do not use mineral spirits on silicone modified polyester (SMP) or other non-PVDF systems.

#### CLEAR DEBRIS FROM PANELS

The build-up of debris and vegetation such as, tree branches touching or laying on panels, leaves, weeds, grass, dust and dirt can block water runoff and clog gutters and downspouts. Ensure the roofing, valleys, siding, gutters, etc. are cleared of any accumulating debris to ensure the proper water shedding to help avoid corrosion from ponding/standing water.

#### CHECK CONDITION OF SEALANTS:

Exposed sealants may have been used to seal your roofing and/or siding penetrations and components. If there are any exposed sealants on your roof system, check that the sealant are in good condition and free of deterioration, cracks, or pinholes. If deterioration, cracks, or pinholes are present, the sealant may need to be replaced to keep the watertightness of the metal roofing and/or siding system.

#### CHECK FOR PONDING OR STANDING WATER:

Standing water can destroy the substrate, paint coating and/or metal finishes of the roofing and/or siding system if left for an extended period of time. Make sure to clear these areas of all ponding/standing water to avoid corrosion. Metal roofing finishes are not designed for ponding or standing water.

### **CHECK PANELS FOR DAMAGE & CORROSION:**

Inspect panels and components for damage, including, but not limited to, punctures, loose fasteners, damaged trim, pipe flashings, sealants, curbs, damage from pipe penetrations, damaged snow retention, etc. If repairs are needed, repair roofing in accordance with a proper installation. If touch-up paint is necessary for scratched areas, apply touch-up paint sparingly to avoid unsightly aesthetic spotting; if scratches occur in the substrate such as galvanized and/or Galvalume, use a zinc primer to heal the scratches before applying the touch-up paint. Clean panels after the completion of the roofing and/or siding system, and if any caulk sealants need removed, the use of mineral spirits is permitted only with a PVDF paint system, (then rinse immediately using the detergent method listed below in the metal cleaning section. Do not use mineral spirits on silicone modified polyester (SMP) or other non-PVDF systems.

#### CHECK EXPOSED FASTENERS:

Flashings and roof panels may be installed using exposed fasteners with self-sealing washer gasket and/or pop rivets. Check the fasteners for any signs of red rust that may appear. To avoid the red rest running onto your panels, replace any fasteners that have or show signs of red rusting. Check that the fasteners self-sealing gaskets are in good condition and have not been over driven or deteriorated from the UV rays of the sun. Rivets and fasteners should be secured tightly to the roof panels or flashing and should not be loose or backed out.

#### **MINIMIZE FOOT TRAFFIC:**

The roofing systems are not designed to handle a heavy volume of foot traffic and should be minimized to prevent damage. At least two inspections of roofing are encouraged each year, with the possible need of maintenance to follow. However, if the roof system is intended for heavy foot traffic, roof mounted walkways should be utilized. The factory-applied finish used on pre-painted steel is durable and will last many years longer than ordinary conventional field-applied paint. However, it may be desirable for cosmetic purposes to clean the finish occasionally to ensure the longevity of the paint and roof system. When exposed to dirt-laden atmospheres for long periods of time, may cause discoloration to the finish. Additionally, slight chalking will ultimately cause some change in appearance in areas exposed to UV rays from the sun. An occasional subsequent light cleaning will help maintain a good appearance.

#### **RUST SPOTTING:**

During installation, improper techniques in cutting, drilling, fastening and/or other installation methods of the pre-painted steel, can cause rust spotting. Hot chips from cutting, drilling, fastening, and/or other installation methods may embed themselves in the paint coating and/or finish. These chips can then rust and form unsightly red spots in the coating, giving the visual impression that the substrate may be rusting. It is important to brush off any chips that may have been left behind from installation that are stuck to the painted surface. A stiff bristle nylon brush may sparingly.

#### **METAL CLEANING**

It's recommended to have your roofing and/or siding panels and components inspected at least two times per year. This helps ensure paint and/or finish is in good condition, along with the many penetrations of your roof. To ensure no damage occurs to the finish, wash from the bottom to the top of the roofing and/or siding panels, this helps eliminate surface scratching. The use of a washcloth, sponge, soft bristle brush, soft bristle pad and non-abrasive pads are accepted only when necessary. In most cases you can wash metal roofing and/or siding panels with hot or cold freshwater by using a household water hose or pressure washer with low-pressure.

Certain cleaners or solvents that may be used to clean other painted and/or finish surfaces, may not be used to clean metal roofing and/or siding, as it can damage the coating and/or substrate and may void your roofing and/or siding finish and/or substrate warranty if applicable. If there are any salt deposits, you may remove it by using freshwater and rinse in affected areas. For the cleaning of natural metals requires special attention. A606-4, cold rolled, hot rolled, etc. metal roofing and/or siding applications are designed to have a natural rust finish, so cleaning with a solution should be avoided. Copper metal roofing and/or siding application naturally form a protective layer known as a patina and therefore it is not recommended to be cleaned. Zinc metal roofing and/or siding naturally form a protective layer known as patina and therefore should not be cleaned with a solution.

For areas where dirt collection is heavier or more persistent, use the following solution to clean the affected areas by mixing 1/4 cup of 5% mild laundry detergent per gallon of hot or cold freshwater using a washcloth, sponge, soft bristle brush, soft bristle pad and/or non-abrasive pads. To immediately follow the use of the solution, rinse the solution off with hot or cold freshwater. Mildew may occur in areas subject to high humidity. Mildew, algae or mold, can grow in dirt deposits, even on factory baked finishes. To remove mildew, algae, mold along with the dust/dirt particles, use the



Following solution; mix 1/4 cup 5% laundry detergent, 1 guart 5% sodium hypochlorite solution and 3 quarts of hot or cold freshwater using a washcloth, sponge, soft bristle brush, soft bristle pad and/or non-abrasive pads.

Using aggressive solvents and abrasive cleaners should be avoided, as they may damage the material finish. To clean oil, grease, tar, etc. from metal roofing or siding finish, mineral spirits are permitted, but only with a PVDF paint system (not to be used on silicone modified polyester - SMP paint finishes) and is to be applied only to the areas that are affected; do not apply to entire roof and/or siding; and then immediately following the use of mineral spirits, clean the area with a 1/4 cup of 5% mild laundry detergent and then rinse with hot or cold freshwater until solution is completely removed from the product(s). To clean rust stains use hydrochloric, citric or muriatic acid, diluted with ten volumes of freshwater, this may assist in removing rust stains from silicon modified polyester (SMP) and PVDF coated surfaces. Limit contact to five minutes. Oxalic acid solutions or acetic acid (vinegar) may be used for the same purpose. Flush with freshwater.

Caution: Always test the cleaning solutions listed in a inconspicuous area before implementing in any large scale use. Acid solutions are corrosive and toxic and should be handled properly. Misuse of any cleaning solutions and/or agents listed above may result in injury or death, and may void your finish or substrate warranties (if applicable). Any vegetation, sidewalks, etc. below your metal panels may be effected by the use of these cleaning solutions, special care should be taken to avoid damage. Check local and federal codes/laws for proper use and disposal of all toxic chemicals and cleaning products listed. Briggs Steel, Inc. assumes no liability related to the Metal Cleaning & Maintenance Guidelines of your roofing and/or siding. Methods listed in this manual are to be used at your own risk.

For more information about Metal Cleaning & Maintenance please visit: briggssteel.com/metal-cleaning