



As an owner, you have invested time and financial resources into selecting a high performance metal wall system. Maintaining your investment will assure that you get the full benefits a metal wall system can deliver. With this comes the added responsibility of making sure that you and those you employ keep the wall system well maintained. All metal wall panels require periodic maintenance. There are certain tasks that any owner can perform in order to keep the wall system in excellent condition. Only a Metal Roofing Systems approved Installer should perform any complex repair or component addition to keep the warranty valid. In order to validate the watertight Warranty the owner must perform required periodic maintenance.

WALL MAINTANENCE GUIDELINES

General Care

Visual Inspection – Twice a year, make a complete visual inspection of the panels and look for any changes in appearance including:

Paint finish - discoloration, fade, peeling, flaking or staining

Panels - creases, bulges or bumps

Any irregularities observed during the panel warranty period should be reported immediately to Customer Relations.

Foliage - Contact with wall panels can produce scratches in the paint surface. Keep bushes and trees trimmed back from panel surfaces.

Loose Trim – Loose trim should be reattached to the building using stitch fasteners or pop rivets as required. Replacement fasteners should be of the same type and finish, and are available from Customer Relations.

Damaged Trim – Trim at wall openings (such as overhead doors etc.) can be damaged by vehicle traffic etc. Replacement trim can be obtained by contacting Customer Relations.

Sealants – Inspect exposed sealants for damage and repair/replace as required – contact Customer Relations for color matched sealants.

Weep Holes – Aluminum extrusions located at the top of window/door openings or at the bottom of walls likely contain weep holes that should be checked annually to make sure they remain open. This is necessary to make sure water properly drains out of the panel assembly.

Avoid contact with other materials

- Do not allow stored materials to come in contact with panels.
- Do not allow panels to come in contact with wood, lead or copper, or runoff from any of these materials as they may stain the panels and damage the paint finish.
- Do not allow air conditioning condensation water to drain onto panels.
- Do not allow concrete or mortar splatter to contact panels, as this will be extremely difficult to remove without damaging the paint finish.



Routine Washing – Roofing and siding should be washed with soap and water as necessary to maintain appearance. Carwash soap or a 5% solution of mild laundry detergent (such as Tide) works well for general cleaning. Use a cloth, sponge or a soft bristle brush for application. Cleaning should be done in the shade or on a mild cloudy day to minimize streaking. *Always rinse thoroughly with water.*

Do not use wire brushes, steel wool, sandpaper, abrasives or similar cleaning tools which can mechanically abrade the paint surface.

Be sure to remove all dirt, debris and metal filings from panels. Debris traps moisture against the metal causing premature corrosion. Metal filings oxidize, causing unsightly rust stains and damaging the panel finish as well the metal facings.

Sealant Removal (butyl, urethane) – Excess sealant should be removed with a solvent such as WD- 40, denatured alcohol or mineral spirits. *Caution: test solvents on a small, inconspicuous area first. Apply solvent to a clean cotton rag – and only wipe the areas of excess sealant. Do not allow solvent to soak into panel joints or flashing areas as this may damage the sealant and associated weather seals.*

Rust - Panels should be inspected for rust once a year. If rust or rust stains are found, determine the source, such as steel filings from drilled holes and remove them. Rust stains are typically removed using one of the following methods: soap and water, Soft Scrub®, Rid O' Rust® or a mild automotive polishing compound.

Concrete/mortar splatter - must be washed off immediately with a high pressure wash and mild detergent. *Warning - scrubbing the panels while mortar is present will likely result in scratches to the paint finish!*

Graffiti Removal:

Valspar has endorsed a graffiti removal system by Graffiti Removal Services, Portland, OR. Please visit the following website for more details:

<http://www.grssupplies.com/collections/valspar>

Depending on the nature of the graffiti paint, as well as the amount of time the graffiti has remained on the panels, removal may be unsuccessful. For these situations, repainting, overlayment or replacement of the affected panels may be required.



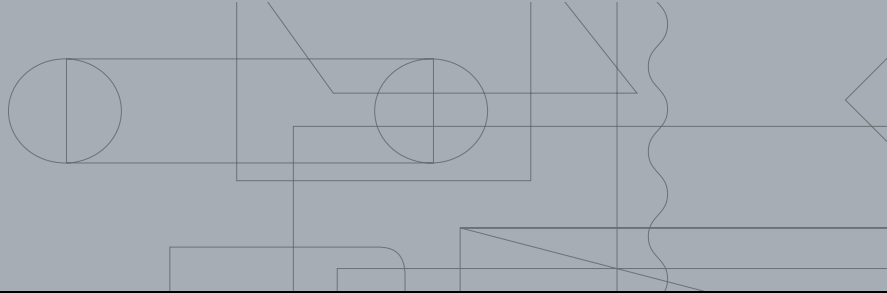
TOUCH-UP PAINT APPLICATION

Metal Roofing Systems may supply, upon request, touch-up paint with each project order. The touch-up paint may be supplied in small aerosol cans or bottles with a built-in brush applicator. The product is intended to touch-up small blemishes or exposed cut edges on fabricated components. Please be aware that touch-up paint does not have the same adhesion or durability as the factory applied coatings, and will exhibit chalking and fading characteristics at a noticeably faster rate than that of the factory applied coatings. Therefore, it is recommended that touch-up paint be used as sparingly as possible, no more than a few square inches, as any touch-up paint will become faded in contrast with the original factory applied color. When using touch-up paint, use extreme caution as excessive use may void the Watertight and Paint Finish warranties.

A. For proper performance of the touch-up paint, it is important to follow touch-up paint directions:

1. Preparation: Clean surface of any dirt, grease, oil, etc. Sand rough scratches lightly with #400 grit sandpaper. Sand only the scratched area. Remove sanding dust with a solvent dampened lint-free cloth. If painting over exposed or bare metal, priming with an automotive grade primer may be necessary.
2. Temperature: The temperature of the surface and paint should be between 68° and 92°F.
3. Application: Apply in small amounts.
4. For aerosol cans, spray into the container cap or a small cup.
5. Apply with as small an applicator brush as possible. For small blemishes, such as a surface scratch, a small brush similar to a finger nail polish brush is best. Dip the brush half the length of the bristles into the paint. Tap the brush against the side of the container but don't wipe against the lid. Hold at the handle near the base and apply light pressure with the fingertips to make the bristles slightly flex. Feather the touch-up paint into the scratch. Applying touch-up paint with a wide brush or anything larger than a small artist's brush is not recommended.
6. Clean brush with paint thinner after use.

B. For areas larger than minor blemishes, contact your Technical Coordinator.



CLEANING AND MAINTENANCE GUIDE Fluoropolymer Coatings

The molecules on the surface of Valspar's fluoropolymer coating systems are so tightly bound together that it makes them resistant to many elements found in the environment such as air pollution, acid rain and general airborne dirt.

Although Valspar factory-applied finishes are extremely durable, a periodic cleaning to remove build-ups of resins and other residue is a good idea to extend coating life. A variety of methods for removal of surface deposits are available. Simple washing with plain water using hoses or pressure spray equipment is usually adequate. When heavy deposits of dirt or other contaminants dull surfaces, stronger methods may be needed.

Two precautions: (1) do not use wire brushes, abrasives or similar cleaning tools which will mechanically abrade the coatings surface, and (2) certain cleaning agents listed below should be tested in an inconspicuous area before use on a large scale.

GROUP A

Hot or Cold Detergent Solutions

A 5% solution in water of commonly used commercial (non-industrial detergents) will not have any destructive effect on a fluoropolymer surface. These solutions should be followed by an adequate rinse of water. Use a cloth or sponge for application.

GROUP B

Solvents

Most organic solvents are flammable and/or toxic, and must be handled accordingly. Read the manufacturer's Material Safety Data Sheets (MSDS). Keep away from open flames, sparks and electrical motors. Use adequate ventilation, protective clothing, and goggles.

Solvents that may be used to remove non-water soluble deposits such as tar, grease, oil, paint, and graffiti from fluoropolymer surfaces include:

Alcohols

- Denatured alcohol (ethanol)
- Isopropyl (rubbing alcohol)

Typically, the above alcohols have no permanent effect on fluoropolymer surfaces.

GROUP C

Petroleum Solvents and Turpentine

- VM&P naphtha
- Mineral spirits
- Kerosene
- Turpentine (wood or gum spirits)

Typically, the above solvents have no permanent effect on fluoropolymer surfaces.

GROUP D

Aromatic and Chlorinated

- Xylol (Xylene)
- Toluol (Toluene)
- Perchlorethylene (Perclene)
- Trichlorethylene (Triclene)

The above solvents should be used with caution on a fluoropolymer surface. Limit contact with solvent to five minutes maximum and test before using.

GROUP E

Ketones, Esters, Lacquer Thinner, and Paint Remover

- Methyl isobutyl ketone (MIBK)
- Ethyl acetate (nail polish remover)
- Butyl acetate
- Lacquer thinner
- Paint remover (non-flammable)

The above solvents should be used cautiously on a fluoropolymer surface. Limit contact to fluoropolymer surface and test before using. Note: There are many formulations of paint remover on the market. It is possible that some will remove the fluoropolymer surface. Proceed very cautiously in use of paint remover. Metal suppliers and coating manufacturers are not responsible for damage from unrestricted use.

Graffiti

Graffiti presents a special problem because of the many possible agents used, generally aerosol paint. It is best to try soap and water first. If this is not successful, then visit the following website to obtain a graffiti removal kit:

<http://www.grssupplies.com/collections/valspar>

If none of these methods are satisfactory, it may be necessary to resort to touch up, repaint or replacement.

Valspar fluoropolymer coatings include:

- Fluropon®
- Fluropon Classic®
- Fluropon Classic® II
- Fluropon® Premiere
- Fluropon® Hardcoat
- Flurothane® II
- Flurothane® IV
- Flurothane® Coastal
- Valflon®

Chemical Solutions

Mildew: In areas subjected to high humidity levels, dirt and spore deposits can permit mildew growth to occur. The following solution is recommended to remove mildew when necessary:

- 1/3 cup dry powdered laundry detergent (such as Tide®)
- 1 quart sodium hypochlorite 5% solution (such as Clorox®)
- 3 quarts water

Rust Stains: Hydrochloric, citric or muriatic acid, diluted with ten volumes of water, may assist in removing rust stains from fluoropolymer surfaces. Limit contact to five minutes. Oxalic acid solutions or acetic acid (vinegar) may be used for the same purpose. Flush with water. Caution: Acid solutions are corrosive and toxic. Flush all surfaces with copious amounts of water after use.

Warranty

Misuse or abuse of any of the cleaning agents listed in this bulletin could result in a voiding of warranty.