



This document is intended to assist metal roof owners in the maintenance and protection of the metal roof system through periodic maintenance and routine inspections. In order to insure that the metal roof system performs as designed and achieves a long lasting aesthetic appearance. Please use this guide to develop a comprehensive maintenance program.

## 1.1 Roof Drainage:

- Remove all debris from roof and gutters.
- Do not install or allow anything on the roof which will trap or hold moisture or result in ponding water.
- Ensure proper drainage from rooftop HVAC equipment

## 2.1 Foot Traffic

Foot traffic should be kept to a minimum. Any persons on the roof should always walk on panel flats and in locations with structural support. No foot traffic should be allowed on trim, panel seam, flashing or gutters, as this could cause damage to those components. Always remove all metal shavings, metal scraps that can become embedded in shoes and cause scratching of the metal roof panels. All roof visitors should sign a log book, indicating the date, name and reason for access.

## 3.1 Dissimilar Materials

Do not allow the roof to come into contact with or water runoff from dissimilar materials such as copper, lead, or graphite. Failure to do so can cause corrosion and will void both the finish and watertightness warranties.

## 4.1 Paint Finish Maintenance (Kynar 500 or Hylar 5000)

Simple washing with plain water using hoses is typically adequate. Surfaces with heavy deposits of dirt or other contaminants, stronger methods may be needed.

Two precautions:

- (1) Do not use wire brushes, abrasives or similar cleaning tools which will scratch the surface.
- (2) Cleaning agents listed below should be tested in an inconspicuous area before use on a large scale.

### A. GROUP A: Hot or Cold Detergent Solutions

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



## B. GROUP B: Solvents

Most organic solvents are flammable and/or toxic and must be handled accordingly. 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 (tar, grease, oil, paint, graffiti, etc.) from fluoropolymer surfaces include:

### Alcohols

- \* Denatured alcohol (ethanol)
- \* Isopropyl (rubbing alcohol)
- \* Methanol (wood alcohol)

Note: methanol is toxic

The above alcohols have no permanent effect on fluoropolymer surfaces.

## C. GROUP C: Petroleum Solvents and Turpentine

- \* VM&P naphtha
- \* Mineral Spirits
- \* Kerosene
- \* Turpentine (wood or gum sprits)

The above solvents have no permanent effect on fluoropolymer surfaces.

## D. GROUP D: Aromatic and Chlorinated

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

Note: Perchlorethylene and Trichlorethylene are toxic

The above solvents should be used with caution on fluoropolymer surface and in contact with solvent to five minute maximum and test before using. Flush all surfaces with copious amounts of water after use.



## E. GROUPE: Ketones, Esters

- \* 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 of 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 supplier and coating manufacturer are not responsible for damage from unrestricted use. Flush all surfaces with copious amounts of water after use.

## F. Graffiti:

Graffiti presents a special problem because of the many possible agents used, generally aerosol paint. It is best to try the less active solvents first (Solvent Group A, B, C and D), then try stronger solvents (Solvent Group E). If none of these are satisfactory, it may be necessary to resort to touchup, repaint or replacement, depending on the extent of the damage.

## G. Chemical Solutions

### **Mildew:**

In areas subject 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 acid or muriatic acid, diluter with ten volumes of water, may assist in removing rust stain 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 above will result in a voiding of warranty for the surface affected.**