

# Care and Maintenance of Exterior Aluminum Clad Products

Our aluminum clad products are finished with high quality materials which are designed to provide excellent weathering protection. Kolbe places a very high level of importance on the proper care, maintenance, and cleaning of all products and finishes. Aluminum clad products require care prior to, during, after the installation process, and during the recommended cleaning and maintenance periods. Please review this entire document to understand the proper maintenance of your newly purchased products to ensure continuous warranty coverage.

#### **UPON PRODUCT ARRIVAL**

Upon arrival of your window and door products, a general inspection should be made of the clad finish. During the installation and lifetime of the product, the exterior finishes can be marred, scratched or dented by rough conditions, installation processes, harsh chemicals or neglect. Such conditions usually affect only the surface finishes and do not reduce the service life of the aluminum. However, the marks resulting from such mistreatment may and can compromise the film integrity of the exterior finish. Due to these factors, Kolbe recommends professional cleaning companies be employed to perform the initial cleaning process of your products. Over the life of the product, the exterior surfaces of the window or door unit will collect contaminants such as salt deposits, soil, and dirt. In addition, heavy industrial deposits may occur which will dull the surface; additionally materials from construction can soil the surface. Local atmospheric conditions, as well as the building location within a geographical area quite naturally have an impact on the cleanliness as well. Additionally, corrosion due to salt accumulation can extend under paint if not cleaned through a regular maintenance program.

#### **EXTERIOR FINISH MAINTENANCE**

Rainfall should not be considered sufficient to keep exterior surfaces clean and free of contamination. A sweet water rinse (tap water) is especially important in high salt environments and in heavily industrialized and foggy regions where frequent cycles of condensation and drying tend to leave a buildup of atmospheric salts and dirt. Some areas of the building may become more heavily soiled due to lack of rain washing, and they may have frequent and longer periods of exterior condensation in protected areas, increasing the adhesion of the soil, dirt, and salt accumulation. Areas to watch for these issues include: where products have been installed under overhangs or where sheltered product conditions exist. Periodic maintenance helps prevent the long-term accumulation of soil, dirt, and salt which will accelerate the weathering of the finish. The more frequently the aluminum is cleaned, the easier and less costly maintenance will be in the future.

# REQUIRED CARE AND MAINTENANCE

- A general cleaning of all surfaces and edges of the aluminum on a bi-annual basis is necessary. Depending on local conditions more frequent cleaning is required to prevent buildup of soil, dirt, salt or industrial deposits.
- Clean units at times when they are shaded, ideally on a mild, cloudy day, and never clean glass surfaces in extremely hot weather.
- Never allow stucco or other concrete materials, corrosives, solvents, or wet packing material to set on exterior finished surfaces as they may permanently damage the surface.
- A tap water rinse from the top down is recommended prior to the application of any cleaner application.
- All surfaces should be cleaned with a soft wet cloth, very soft brush, or sponge with mild unscented soapy water ruled safe for bare hands, which is non-abrasive, and contains less than 0.5% phosphate. The washing should be done with tap water with uniform pressure (DO NOT USE A HIGH-PRESSURE

- SPRAY NOZZLE). Clean from the top down, cleaning first with a horizontal motion and then a vertical motion. (Apply cleaners only to an area that can be conveniently cleaned without changing position.) The surface must be thoroughly rinsed with tap water and dried. It may be necessary to sponge the surface while rinsing, particularly if cleaner has dried on the surface.
- Run-down of cleaner (from any operation) to the lower portions of the building should be minimized and these areas should be rinsed as soon as possible and as long as necessary to lessen streaking. Do not allow cleaning chemicals to collect on surfaces or "puddle" on horizontal surfaces. Cleaning residues may result in long term damage of the paint finish if not fully rinsed.
- DO NOT USE HARSH SOLVENTS OR CHEMICALS, CAUSTIC OR ABRASIVE CLEANERS. At no time should muriatic acid, paint removers or acetone be used.
- DO NOT USE A METAL SCRAPER OR ABRASIVE PADS.

#### Care and Maintenance of Exterior Aluminum Clad Products

- Any scratches, chips, areas of abrasion, or corrosion to the exterior coating must be repaired immediately.
- If unwanted surface debris remains on the aluminum cladding after a water-soluble cleaning has been performed, a mild solvent cleaner may be required. However, because solvents can affect the sealants and have the potential to cause chalking, they should be used with caution to avoid detrimental effects to the sealant or caulking and to avoid staining of the painted surface. If a solvent is required, the preferred solvent is isopropyl (rubbing alcohol) or mineral spirits. These solvents should be used with a soft cloth and applied and used in a circular motion while applying moderate pressure. Additionally, Kolbe recommends that the solvent's product labeling be referenced for specific product safety and use instructions. Any solvent used should first be tested on an inconspicuous area of the extrusion. A thorough clean water rinse should be performed after all solvent cleaning. If the frames or sash still have debris and further cleaning is required, please refer to AAMA Publication 610.1 on the cleaning and maintenance of painted aluminum extrusions from which many of these requirements were taken.

Kolbe may require your maintenance records be submitted if a claim is filed.



#### OTHER PRODUCT CONSIDERATIONS WHILE CLEANING

- Make sure all weep slots and drain holes in door sills are unclogged. Due to orientation and installation in a building, door thresholds and window sills are especially susceptible to surface debris accumulation and corrosion if not kept clean.
- Lubricate hardware components, roller assemblies, and tracks as outlined in our CARE AND MAINTENANCE OF WINDOW AND DOOR HARDWARE informational bulletin.

- Always keep stainless steel parts that are exposed to the elements clean and dry.
- DO NOT ALLOW SPRINKLER SPRAY TO REACH WINDOWS OR DOORS.
- Inspect sealant around the exterior perimeter of the unit, remove any loose sealant, and apply new sealant.

#### HIGH SALT CONCENTRATION AREAS

Conditions in high salt concentration areas (an area is deemed a High Salt Concentration area if the structure is located within 5,000 feet of a saltwater shoreline at mean high tide and/or other saltwater source) are very corrosive. Units installed in a Coastal or High Salt Concentration regions/areas require the exterior of the finish and unit to be inspected and cleaned as described by these Care and Maintenance requirements at least every three months and more frequently if necessary to prevent buildup of salt deposits. Salt and other corrosive or abrasive substances must not be allowed to build up on the exterior surfaces or components of the products. (Please note: Periodic waxing with a high-quality car wax to the extrusions may prolong the finish life. If you choose to wax, do not apply the wax without cleaning the extrusion first).

## TOUCH-UP OF CLADDING FINISH

While the "touch-up" paint (spray or liquid) which is available from Kolbe matches closely in original color, the application is not the same as when it is "factory applied" and will therefore have a different "wear-ability". That is, it will not have the same wear life as the factory-applied product and may fade at a different rate as the factory-applied finish. This will not be considered a warranty issue. Touch-up products should only be applied for minor service-related issues by qualified technicians. It carries no warranty for field application on parts which are simply painted to match color, etc.

- Follow the above cleaning recommendations before attempting any paint touch-up.
- Air temperature should always be at least seventy (70) degrees Fahrenheit before any touch-up is attempted.
- If there appears to be peeling of paint or if there is a deep gouge in the paint or metal, sanding may be necessary. A 240-grit sandpaper to start with will speed the feathering process and always finish with 400 or greater grit sandpaper. If the problem appears to be just a nick or minor flaw, no sanding should be needed, and a brush touch-up should be used. In most cases, when refinishing aluminum, the "old" finish must have the existing surface "de-glossed" at a minimum for the new finish to be able to stick.
- Kolbe offers two types of touch-up paint. One is an aerosol paint and the other is a small brush applicator touch-up paint.

#### Care and Maintenance of Exterior Aluminum Clad Products

#### Applying touch-up paint with a brush:

- This product is a small bottle with an attached brush. You do not have to clean the brush after using. Put the brush back in the bottle and close the cap tightly. Try to store this paint out of direct sun and extreme temperature changes.
- Shake the paint up for at least a couple of minutes by hand.
   This ensures that the paint will match better and that the solvents are completely blended in the paint to give you proper application and flow out.
- Always remember with touch-up, light coats will fill better and a smoother touch-up will result.

## Applying paint with touch-up spray can:

- The same cleaning and sanding procedure as explained above applies.
- The immediate surface surrounding the area to be painted should be masked off for at least 12", and the entire area should be lightly sanded as described above. Try and keep the area needing touch-up as small as possible. Spray touchup paint is not intended to be used for painting long lengths of cladding.
- · Use a tack cloth to remove any dust or lint.
- In most cases, when refinishing aluminum, the "old" finish must have the existing surface "de-glossed" at a minimum for the new finish to be able to stick.
- If the area to be painted is more than ¼" by 1", a primer should be used only on the bare sanded aluminum area.
   Most hardware stores will carry a multi-metal primer. Some primers need to be sanded before top coating, and others do not. Read the label for proper application.

- Shake spray can completely, following the directions on the can for at least two minutes to ensure the paint is thoroughly agitated.
- Apply a light coat using smooth strokes and overlapping 50% on each pass. Wait at least 5 to 10 minutes between each coat. The first coat should almost be touchable before applying the second coat.

A minimum of two coats should be applied. Be sure to overlap the spray pattern 50% to insure an even finish coat. If a third coat is required wait until the second coat is tacky but not completely dry. This will give you the best finish without running the paint.

 When done spraying, always tip the can upside down and spray until the nozzle is clear. Clean the tip with a good paint thinner. Store the paint out of direct sunlight and try and keep it from extreme temperature changes.

#### ANODIZED ALUMINUM CARE AND MAINTENANCE

- Much like painted surfaces, an anodized finish should be cleaned using mild soap solutions to retain its original beauty. Products that are safe for use with bare hands, including most commercial cleaning products can be safely used. The cleaning solution should be applied with a soft cloth, sponge or brush. Avoid the use of strong acid or alkali cleaners.
- The cleaning process to be used is the same as listed above.
- Unlike painted surfaces, slight scuff marks and rub marks on an anodized surface can be removed with a mild abrasive pad such as the 3-M Scotch-Brite™ pad. Use the pad to remove the mark, and then clean the area using the mild soap solution. Rinse the surface thoroughly with clean water and dry with a soft cloth.

