

LIQUID AND POWDER PAINT COATINGS:

High quality architectural wet applied and powder coated painted finishes are extremely durable and easily adaptable to a wide range of color palates. But even the best finishes require regular maintenance and care to ensure longevity.

Apex recommends the following cleaning and care procedures, which follow the recommendations outlined within AAMA 610: Specification for Cleaning and Maintenance of Painted Aluminum Extrusions and Curtain Wall Panels. Please contact the American Architectural Manufacturers Association or visit: <https://pubstore.aamanet.org/> to purchase a copy of this document.

As our liquid and powder coatings take on a hydrophobic state (a near Teflon® state) most coatings in temperate, mild climates will require very little maintenance. Rainfall will clean surfaces naturally and assist in keeping the surfaces' vibrancy and lustre. However, in coastal regions or in areas containing heavy industrial or air-borne pollutants, cleaning should take place at the same time as the regularly scheduled building cleaning and maintenance program (and no less than once a year). When undertaking regularly scheduled maintenance, be sure to provide added attention to recessed and sheltered areas that usually become more heavily soiled because of lack of rain washing.

General Cleaning Information:

- Ensure you have identified the finish correctly (anodized or coated finish).
- Harsh chemical cleansers should be avoided when cleaning window glass (and other building components) as they may come into contact with the coated aluminum.
- Never use paint removers or aggressive alkaline, acid or abrasive cleaners.
- Always opt for a safe, mild cleanser over a heavy-duty harsh cleanser.
- Don't dilute heavy-duty cleansers or chemicals with other cleansers or water in an attempt to make them milder. Mixing chemicals may result in dangerous toxic gas emissions, highly flammable substances or toxic substances
- Test all cleaning agents on a small concealed area first.
- Do not use abrasive materials, such as steel wool, hard bristle brushes, or chemically infused cleaning sponges (i.e., Mr Clean® MagicEraser). These materials can accelerate wear and/or harm the finishes.
- Avoid excessive scrubbing.
- Ensure cloths, sponges, and cleaning equipment is clean and grit-free
- Be aware of chemicals or cleaning products being employed near coated aluminum surfaces. Avoid drips, beading and splashes whenever possible. Remove run-downs as quickly as possible.
- It is preferable to clean metal surfaces when shaded. Do not attempt to clean hot, sun-heated surfaces since possible chemical reactions on hot metal surfaces will be highly accelerated and non-uniform. Similarly, avoid cleaning in freezing temperatures, when metal temperatures are sufficiently cold to cause condensation. Surfaces cleaned under these conditions may become so streaked and/or stained that they cannot be restored to their original appearance.
- Misuse or abuse of any of the cleaning agents listed above will result in a voiding of warranty for the surface affected.

Please note: Cleaning procedures to remove construction or accumulated environmental soils and discoloration should be undertaken as soon as possible. The type of procedure is dependent upon the degree of soiling.



Removal of Light Surface Soil

- Thoroughly rinse the soiled area with water using moderate pressure.
- If the soil remains after air-drying the surface, mildly rub the area with a clean cloth, soft-bristle brush or sponge. Continue to intermittently spray water to gently agitate the soil in an attempt to remove it.
- A 5% solution of household or commonly-used commercial detergent and water can be applied with a clean cloth, soft-bristle brush or sponge. Use uniform pressure and avoid excessive scrubbing. Detergent should be safe for bare hands.
- Ensure that the surface is rinsed well with clean water to remove all detergents prior to allowing the surface to dry. Consider joints, crevices, and horizontal surfaces that may cause cleaning solution to puddle and accumulate, ensuring all detergents and cleaners have been thoroughly rinsed off of the surface.
- Squeegees, chamois cloths, and lint-free cloths may be used to accelerate drying times.
- Do not allow detergents to dry on finished surfaces.

Removal of Stains

- A mild solvent such as mineral spirits may be used to remove grease, sealant or caulking compounds.
- In areas of high humidity, dirt and spore deposits may permit mildew growth to occur. Use the following solution when necessary to remove mildew:
 - 1/3 cup dry powdered laundry detergent (Tide®)
 - 1L sodium hypochlorite 5% solution (laundry bleach, Clorox®)
 - 3L water
- Limit contact of these suggested chemical cleansers on coatings to a maximum of 5 minutes. Flush all surfaces with water immediately after use. Ensure safety measures for proper ventilation procedures are implemented and safety gear is worn.
- Ascorbic acid (vinegar) or oxalic acid solutions may also be attempted to remove moderate stains. Flush surface with moderate pressure immediately following.

Removal of Non-Water Soluble Deposits

Solvents may be used to remove non-water soluble deposits such as tar, grease, oil, paint and graffiti.

If solvents are used, it is imperative that the surface be rinsed completely and thoroughly with clean water, then allow the surface to air dry or wipe dry with a chamois, squeegee or lint-free cloth. If solvents are not rinsed from the surface immediately following use, the warranty will be voided for the surface affected.

- Use Isopropyl (rubbing alcohol) or denatured alcohol (ethanol) to remove non-water soluble deposits.
- Limit contact of these suggested chemical cleansers on coatings to a maximum of 5 minutes. Flush all surfaces thoroughly and completely with water immediately after use.

Extreme care must be exercised when solvents are used since they may damage organic sealants, gaskets and painted finishes. Many solvents will reduce the gloss level of painted finishes and, if allowed to remain on the finish for more than a few minutes, may soften the paint and damage the coating. It is highly recommended to limit contact with solvents to as short of a period as possible.

Follow all cleaning chemical manufacturers recommendations and safety guides for cleaning methods.

Most organic solvents are flammable and/or toxic and must be handled accordingly. Avoid open flames, sparks and electrical motors and use proper ventilation and protective clothing and goggles.



ANODIZED COATINGS:

Premium anodized coatings are prevalent in architectural products and these coatings are considered to be very robust and weather-resistant. In order to maintain a like-new vibrancy and gloss appearance, certain precautions and care must be undertaken.

Apex endorses the following cleaning and care procedures, which follow the recommendations outlined within AAMA 609: Specification for Cleaning and Maintenance of Architectural Anodized Aluminum. Please contact the American Architectural Manufacturers Association or visit: <https://pubstore.aamanet.org/>.

Anodized coatings in temperate, mild climates will require very little maintenance. Rainfall will clean surfaces naturally and assist in keeping the surfaces' vibrancy and lustre. However, in coastal regions or in areas containing heavy industrial or air-borne pollutants, cleaning should take place at the same time as the regularly scheduled building cleaning and maintenance program (and no less than once a year). When undertaking regularly scheduled maintenance, be sure to provide added attention to recessed and sheltered areas that usually become more heavily soiled because of lack of rain washing.

General Cleaning Information:

- Ensure you have identified the finish correctly (anodized or painted finish).
- Harsh chemical cleansers should be avoided when cleaning window glass (and other building components) as they may come into contact with the coated aluminum.
- Never use paint removers or aggressive alkaline, acid or abrasive cleaners.
- Always opt for a safe, mild cleanser over a heavy-duty harsh cleanser.
- Don't dilute heavy-duty cleansers or chemicals with other cleaners or water in an attempt to make them milder.
- Test all cleaning agents on a small concealed area first.
- Do not use abrasive materials, such as steel wool, hard bristle brushes, or chemically infused cleaning sponges (i.e., Mr Clean® MagicEraser). These materials can accelerate wear and/or harm the finishes.
- Avoid excessive scrubbing.
- Ensure cloths, sponges, and cleaning equipment is clean and grit-free.
- Be aware of chemicals or cleaning products being employed near coated aluminum surfaces. Avoid drips, beading and splashes whenever possible. Remove run-downs as quickly as possible.
- It is preferable to clean metal surfaces when shaded. Do not attempt to clean hot, sun-heated surfaces since possible chemical reactions on hot metal surfaces will be highly accelerated and non-uniform. Similarly, avoid cleaning in freezing temperatures, when metal temperatures are sufficiently cold to cause condensation. Surfaces cleaned under these conditions may become so streaked and/or stained that they cannot be restored to their original appearance.
- Misuse or abuse of any of the cleaning agents listed above will result in a voiding of warranty for the surface affected.

Warning: Mortar, cement and other alkaline materials will quickly corrode anodic coatings if allowed to dry on the aluminum's surface.

Please note: Cleaning procedures to remove construction or accumulated environmental soils and discoloration should be undertaken promptly. The type of procedure is dependent upon the degree of soiling.

Removal of Light Surface Soil

- Thoroughly rinse the soiled area with water using moderate pressure.
- If the soil remains after air-drying the surface, mildly rub the area with a clean cloth, soft-bristle brush or sponge. Continue to intermittently spray water in an attempt gently agitate the soil and remove it.
- A mild solution of household or commonly-used commercial detergent and water can be applied with a clean cloth, soft-bristle brush or sponge. Use uniform pressure avoid excessive scrubbing. Detergent should be safe for bare hands.
- Ensure that the surface is rinsed well with clean water to remove all detergents prior to allowing the surface to dry. Consider joints, crevices, and surfaces when rinsing detergent off of the surface.
- Squeegees, chamois cloths, and lint-free cloths may be used to hasten drying times.
- Do not allow detergents to dry on finished surfaces.

Removal of Stains

- Using light and uniform pressure, rub the aluminum surface by hand using a palm size nylon cleansing pad. Thoroughly saturate soiled area with clean water and a mild detergent cleaner or pumice powder. Start at the top and work down, rubbing in the direction of the metal grain. Increase pressure, as required, but avoid scrubbing.
- A mild solution of household or commonly-used commercial detergent and water can be applied with a clean cloth, soft-bristle brush or sponge. Use uniform pressure avoid excessive scrubbing. Detergent should be safe for bare hands.
- Thoroughly rinse the soiled area with water using moderate pressure or wipe with approved solvent to remove all residue from the surface.
- Air dry or accelerate drying by using a squeegee, chamois cloth, or lint-free cloth.
- A power cleaning tool, such as an air-driven reciprocating machine fitted with cleaning pads, may be necessary for removal of unusually heavy soils. Continually drench the surface with clean water or a mild detergent cleaning solution to provide lubrication and a medium for carrying away the dirt. The machine should move in alternate vertical and horizontal strokes.
- Once power cleaning has been completed, the surface must be rinsed and thoroughly rubbed with a stiff bristle brush. Complete the cleaning process with a final moderately pressured rinse.
- Remove any residual cleanser run-down on un-cleaned surfaces to avoid staining.

Please note: Anodized surfaces should not be washed with acidic or caustic solutions.

Removal of Non-Water Soluble Deposits

- If damage persists resulting from:
 - Improper maintenance or cleaning,
 - Long-term environmental impact from sea-coast or corrosive atmosphere exposure,
 - Or long-term neglect

Touch-up paint may be required. Touch-up paint is intended to be used very sparingly to cover small blemishes (of no more than a few square inches). Prior to touching up the small area, ensure the surface is clean, and wipe the area with denatured alcohol to remove any moisture or cleaning residue.