ARCHITECTURAL FINISHING OPTIONS



Liquid Paint

Conventional liquid painting has become less common due to the environmentally friendly nature of powder coating and the trace VOCs that liquid painting emits. Liquid paint is excellent when working with very specialized paint colors that require custom matching and when small quantities are required for a project. Liquid paint can be applied to any surface, but is less scratch resistant when compared to powder coat finish options. Liquid paint does not form as thick or heavy of a finish as powder coating.

Architectural Powder Coat

Powder coating is a dry film process, which uses finely ground particles of pigment and resin that are electrostatically charged to adhere to electrically grounded metal. The charged powder particles attach to the extrusions and are held there until they are fused into a uniform coating using a cure oven. Before coating, the parts are pretreated similar to a liquid coat process. The exact composition of a particular powder coating is often complex and proprietary. In general, most powder paints contain resins, pigments, fillers, and additives that create the durable, even finish.

AAMA 2603

AAMA 2603 offers high quality film integrity, color control, and mar resistance. This coating must be factory applied to properly cleaned and pretreated aluminum to achieve optimal performance.

AAMA 2605

AAMA 2605 is a high-performance exterior application that requires a zinc rich primer. Depending on the manufacturer, a 2605 powder coat may or may not utilize a fluoropolymer resin (FEVE). These finishes are resistant to moisture, weathering, ozone, and UV radiation. Perfect for projects like skylights or curtain walls that are exposed to corrosive, coastal weather or intense UV environments. AAMA 2605 is highly scratch and fade resistant. Extrusion coatings can be applied over inhibitive primers to enhance corrosion resistance in coastal and industrial applications.

Anodizing

The anodizing process is used to finish aluminum alloys and employs electrolytic oxidation of the aluminum surface to produce a protective oxide coating. The typical process includes cleaning, pretreating, anodizing, coloring (optional), and sealing the aluminum members. Anodizing is accomplished in an electrolytic cell using sulfuric acid as the electrolyte. The coating is made when a direct current passes through the positive electrode, decomposes water, and liberates oxygen at the surface of the metal. The oxygen combines with the aluminum to form the coating (a transparent and microscopically porous layer of aluminum oxide). The thickness of the coating is determined by the amount of electrical current and the length of time the aluminum is charged. The micro-pores of the anodized coating must be sealed to prevent unwanted stains. Sealing is accomplished by dipping the aluminum in a hot water solution of metal salts.

Decoral

Decoral utilizes a process that simulates a wood-grain finish to metal and aluminum materials. First, a powder base coat is applied to an aluminum extrusion. Then, the extrusion is wrapped in a material with a wood grain pattern applied to it. The pattern is transferred to the aluminum via a specialized process. The resulting product gives the appearance of true wood, but with the durability and low-maintenance attributes of aluminum. Solar Innovations offers 16 wood grain patterns to choose from.

FINISH OPTIONS



Note: Depending upon color selection, additional charges and increased lead times may apply. Extended warranties and service plans are available for an additional charge. Examples are shown as accurate as photography and printing processes allow. Final finish selection should be made from a physical sample; contact Solar Innovations* for samples. Product and finish options are subject to vendor availability. Solar Innovations* reserves the right to discontinue any option at any time without notice. Additional options, including custom color match, are available; contact Solar Innovations* for details.

CARE & MAINTENANCE FOR FINISHES



Today's high performance architectural finishes, liquid paint, powder coat, and anodize, are extremely durable, but completing simple maintenance is a smart way to protect your investment for the long haul. Similar to your car, architectural finish cleaning is easy and takes little time when completed on a regular basis. A simple, regular cleaning will minimize the effects of weathering and will remove dirt, grime, and other build-up which are detrimental to all powder coatings, liquid paints, and anodizing. Weathering generally materializes as a loss of gloss, chalking, and slight color change on unmaintained finishes.

Cleaning should start at the time the products are installed, ensuring that construction materials such as concrete, plaster, and paint splashes are removed before they have a chance to dry. Failure to remove these materials at the early stage will require the use of aggressive cleaning agents and techniques which may potentially damage the finished surface, leading to the possible voiding of finish and/ or material warranties.

Once the initial post-construction cleaning has been completed, a minimum of annual maintenance is recommended. The frequency of cleaning depends in part on the standard of appearance that is required.



Additional cleaning may be necessary depending on factors including:

- Geographic location of the building
- Harsh environments surrounding the building (high salt, alkaline, etc.)
- High/increased levels of atmospheric pollution, including salts
- Prevailing winds and the possibility of air borne debris causing finish wear (sand abrasions, etc.)
- Exposed finish areas with overhang, etc. which can cause greater risk of coating degradation than exposed areas.
- Due to the protection, wind-blown salt and other pollutants may adhere to the finish surface and will not be washed away by rainfall.
- Change in environmental circumstances during the lifetime of the building. Example: If a rural area became industrial.

In environments where high atmospheric pollution exists, such as salt spray, or a combination of the above factors, the environment is classified as hazardous and the finishes should be cleaned with far greater frequency.

The required method of maintenance is regular surface cleaning. Surfaces should be thoroughly rinsed after cleaning to remove all residue. All surfaces should be washed using a soft cloth, sponge, or a soft natural bristle brush. Both aluminum frame and glass cleaning can be carried out simultaneously.

WARNING: Do not under any circumstances use strong solvents such as thinners or solutions containing chlorinated hydrocarbons, esters, or ketones to clean the coating. Abrasive cleaners or cutting compounds should not be used. Nothing stronger than the use of white spirits is recommended to clean persistent stains. Cleaning with white spirits should be carried out in shade and during cooler temperatures using a soft cloth and gentle wiping only. It is also recommended that a small non-visible area be tested initially to ensure that no color change or damage will occur. Please contact your nearest Solar's sales representative for further advice.

WARRANTIES



Warranties are valid only if the prescribed cleaning and maintenance guidelines from Solar Innovations[®] are followed. Extended finish warranties may be available, depending on the supplier and the application. Please contact your Solar Innovations[®] representative for additional information regarding our warranties. Vendors/suppliers and customers must validate their warranties by visiting solarinnovations.com/information/warranty-validation-form and completing the warranty validation form upon project completion.

	Liquid Paint Vendor Applied	Liquid Paint Solar Applied	Liquid Paint Vendor Applied	Liquid Paint Solar Applied
AAMA 2603 - 1 Coat	5	5	NA	NA
AAMA 2605 - 2 Coats*	10-20	10-20	10-20	10-20
AAMA 2605 - 3 Coats*	10-20	10-20	10-20	10-20

*Availability dependent upon color selection and application method.

Please Note: Four-coat and twenty-year finish options may be available. Contact your Solar Innovations[®] representative for more information.

	Length of Warranty		
Anodizing	2 to 5 years standard, up to 10 years for additional charge.		
Aluminum Acrylic/ Baked Enamel Finish	5 years prorated limited warranty for finish peeling, cracking, and bubbling.		
Other Finishes (Anodized & Fluoropolymer)	As provided by the manufacturer/applicator. Warranties may be available for up to 10 years depending on the supplier or the application.		
Veneer*	2 years; not for exterior use.		
Installation*	1 year limited warranty against significant defects in installation workmanship (extended warranties may be available, ex: 2-5 years).		

*Solar Innovations® also provides more individualized warranties depending on the specific scope of the project.