

Architectural Finishing Options



Solar Innovations, Inc.

Liquid Painting, Anodizing,
Powder Coating, Metal Cladding,
and Wood Veneer



www.solarinnovations.com

Definitions

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 2604

AAMA 2604 is an “intermediate” application. 2604 powder coatings are formulated with super durable or modified polyester resins; ideal for balconies, railings, doors, and other high traffic/use products. 2604’s resilience makes it exceptionally resistant to wear, providing color and gloss retention for approximately 5-15 years of exposure, depending on location. AAMA 2604 is highly scratch and fade resistant. Extrusion coatings can be applied over inhibitive primers to enhance corrosion resistance in coastal and industrial applications.

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.

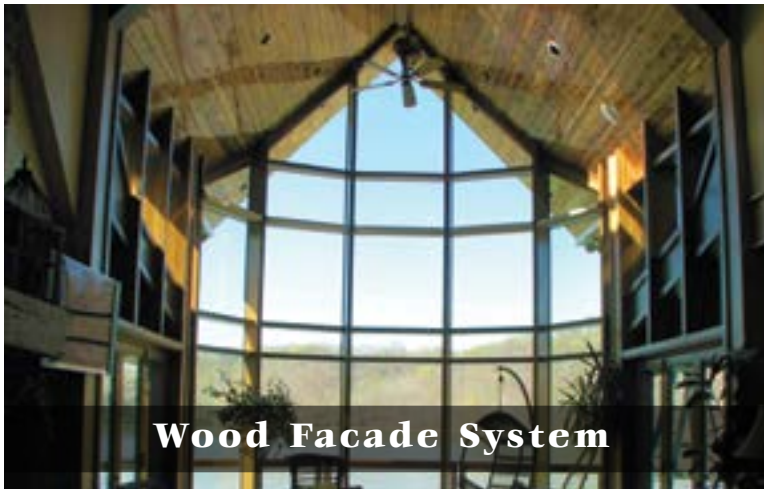


Warranties

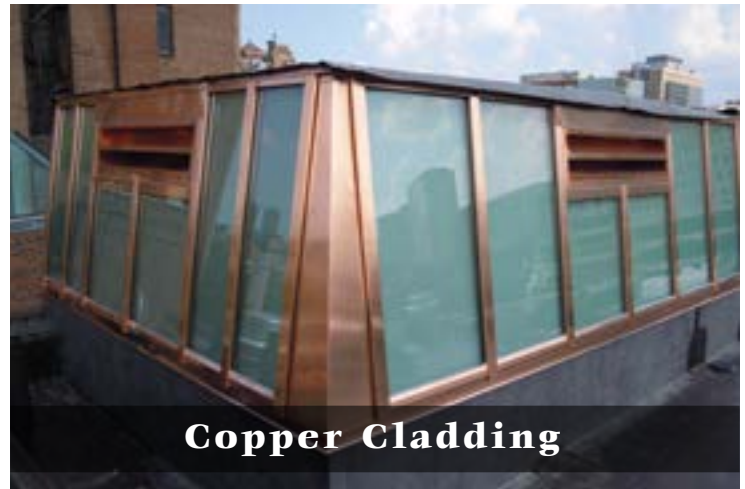
	Liquid Paint Vendor Applied	Liquid Paint Solar Applied	Powder Coat Vendor Applied	Powder Coat Solar Applied
AAMA 2603 - One Coat	5	5	N/A	N/A
AAMA 2604 - Two Coats	10	10	10	10
AAMA 2605 - Two Coats*	15	15	15	15
AAMA 2605 - Three Coats*	15	15	15	15

* Availability dependent upon color selection and application method.

Please note: Four coat and twenty year finish options may be available. Contact your SI Sales Representative for more information.



Wood Facade System



Copper Cladding

Solar Warranties

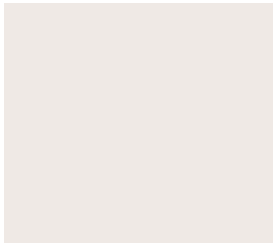
Warranties are valid only if the prescribed cleaning and maintenance guidelines from Solar Innovations, Inc. are followed.

Part	Length of Warranty
Anodizing	5 years
Aluminum Acrylic / Baked Enamel Finish	10 years prorated limited warranty for finish peeling, cracking, and bubbling
Other Finishes (Anodized and Fluoropolymer)	As provided by the manufacturer/applicator Warranties may be available for up to 20 years depending on the supplier or the application
Wood and Glu-Laminates *	10 years prorated (when finished with ICA); exterior use acceptable in Solar Innovations, Inc. approved conditions
Veneers *	5 years prorated (when finished with ICA); 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, Inc. also provides more individualized warranties depending on the specific scope of the project. Extended finish warranties may be available, depending on the supplier and the application. Please contact your Solar Innovations, Inc. representative for additional information regarding our warranties. Vendors/suppliers and customers must validate their warranties by visiting <http://www.solarinnovations.com/warranty-validation-form/> and completing the warranty validation form upon project completion.

SI Standard Colors*

Liquid Paint AAMA 2603, 2604, or 2605 OR Powder Coating AAMA 2604 or 2605



SI White



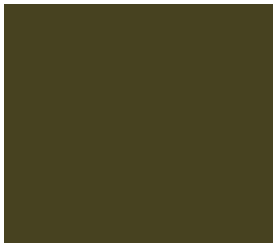
SI Sandstone



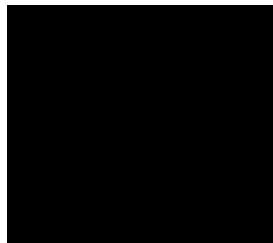
SI Natural Clay



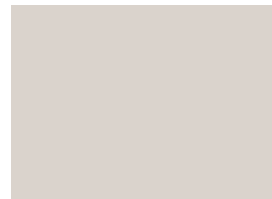
SI Hartford Green



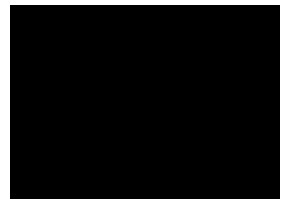
SI Bronze



SI Black



Class I Clear



Dark Bronze

SI Anodized*

Standard Powder Coat*

Powder Coating AAMA 2604 or 2605



Sea Shell White



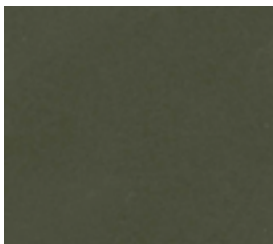
Bone White



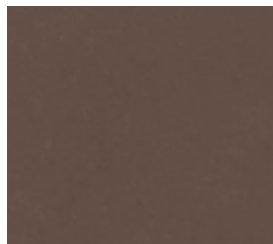
Creme



Taupe



Koko Brown



Medium Bronze



Dark Bronze



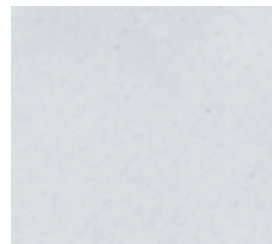
Slate Grey



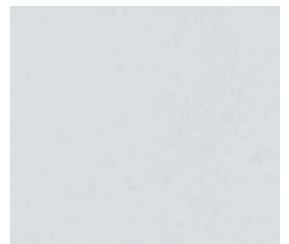
Silver Grey



Sierra Tan



Anodized Silver



Sky Grey

Premium Powder Coat*

Powder Coating AAMA 2604 or 2605



Aged Copper



Military Blue



Red Wood



Pearl Copper



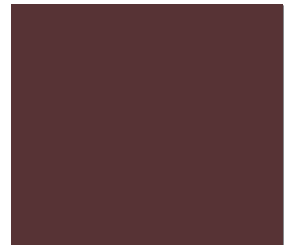
SLM Juniper



Interstate Blue



Copper



Boysonberry



DB 601 Glimmer



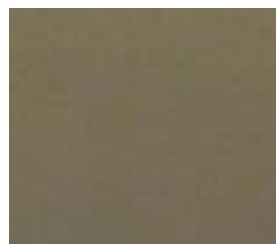
Metal Cladding*



Copper



**Lead Coated
Copper**



**304 Stainless Steel
#4 Satin Cladding**



**304 Stainless Steel
#8 Mirror Cladding**

Wood Veneering*

Clear coated samples are finished with 3 coats of ICA clear sealer and are provided for reference only.

Please note that veneer interiors are unfinished unless quoted otherwise.



Birch



Mahogany



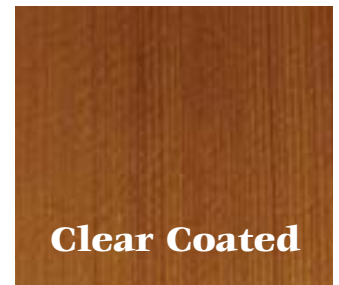
Southern Yellow Pine



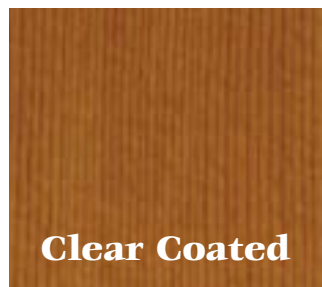
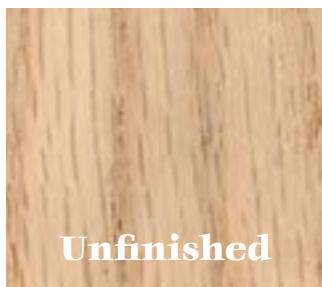
Northern White Pine



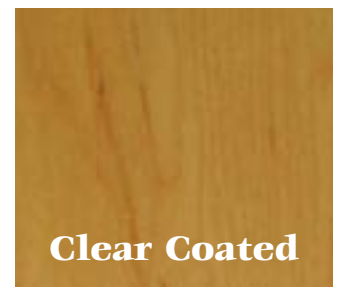
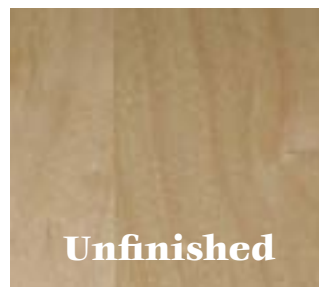
Spanish Cedar



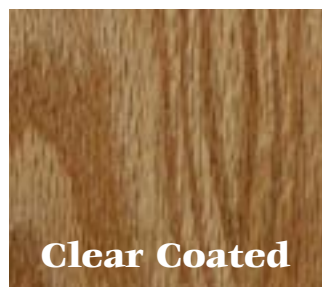
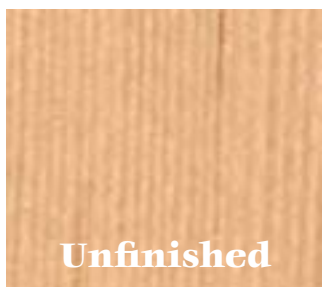
Western Red Cedar



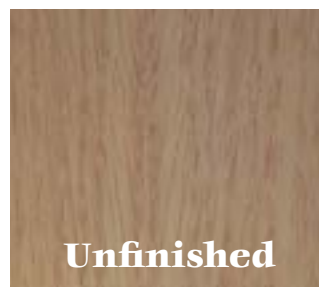
Douglas Fir



White Maple



Red Oak



White Oak

Faux Wood Powder Coat Finish*

Solar Innovations, Inc. is proud to offer a variety of faux wood finishes for internal and external use meeting AAMA 2605 standards. This finish boasts a 10 year powder coat warranty with 5 year ink warranty. Color and species options beyond those shown below are available upon special request.



Acacia 1001
DS 716 Textured
DS 402 Smooth



Acacia 1001
DS 733 Textured
DS 403 Smooth



Douglas Fir 1501
DS 716 Textured
DS 402 Smooth



Knotty Pine 2103
DS 716 Textured
DS 402 Smooth



Cherry 1402
DS 716 Textured
DS 402 Smooth



Cherry 1402
DS 733 Textured
DS 403 Smooth



Oak Assi 2501
DS 733 Textured
DS 403 Smooth



Dark Walnut 1802
DS 733 Textured
DS 403 Smooth



Teak 2601
DS 706 Textured
Mahogany Finish



National Walnut 1806
DS 706 Textured
Mahogany Finish



*Please Note:

Depending upon color selection, additional charges and increased lead times may apply. Color illustrations are shown as accurate as standard photography and printing processes allow. Final finish selection should be made from a physical sample; please contact Solar Innovations, Inc. to receive a physical sample. All product and finish options are subject to vendor availability. Solar Innovations, Inc. reserves the right to discontinue any option at any time without notice.

Additional options, including custom color match, are available; contact Solar Innovations, Inc. for details.

Simplified Care & Maintenance of Architectural 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, corrosive, or acidic, 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, e.x. 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.

Non-hazardous Environment	Clean and check every 12 months
Tropical Environment	Clean and check every 12 months
Swimming & Leisure Pools	Clean and check every 12 months
Marine Environment	Clean and check every 6 months
Industrial Environment	Clean and check every 6 months
Hazardous Environment	Clean and check every 3 months

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.

Please visit <http://www.solarinnovations.com/complete-care-instructions/> for complete care instructions.

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 Innovations, Inc.'s sales representative for further advice.