



In an effort to share valuable information with you, attached are general cleaning and maintenance guidelines for coated aluminum. It is always recommend the method of cleaning be tested first on a small low vision or low traffic area of the building before going ahead with the complete building.

PROTECTING AND REPAIRING THE FINISH

These recommendations are intended to assist architects, contractors, owners, building managers, etc., who are concerned with the care and maintenance of painted &/or anodized architectural aluminum. The information contains suggested methods as an aid in establishing safe, sound cleaning and maintenance procedures.

TODAY'S HIGH QUALITY PAINTED AND ANODIZED FINISHES ARE EXTREMELY DURABLE. But even the best finish needs a little TLC; and with the most careful treatment of the windows, curtainwall, or storefront during installation and daily use, occasional damage will occur.

This article discusses the recommended care of painted or anodized finishes on architectural metal and looks at three levels of concern: Care and Cleaning, Minor Repairs, and More Complex Refinishing.

THE CARE AND CLEANING OF PAINTED MATERIAL: Today's factory applied heat-cured painted finishes are durable and very colorfast. The Kynar and Hylar based products that meet the AAMA 2605 specification and/or ASCA 96 with trade names such as Duranar by PPG, Fluoropon by Valspar or Trinar by Akzo-Nobel are warranted to retain their color and gloss level for many years. However, to assure that they retain their original beauty, even these highly durable finishes should be cleaned occasionally. When selecting a cleaning solution use mild soap solutions that are safe for use with your bare hands such as those products that one would use to wash a car. Avoid the use of strong acid or alkali cleaners as they may damage the finish.

Solvents no stronger than mineral spirits or denatured alcohol may be used to remove grease, sealants or other materials. Never mix cleaners or cleaners and solvents as the resultant mixture can cause harmful or even dangerous results. Do not use abrasive cleaners or materials such as steel wool or abrasive brushes, which can also harm the surface.

Once heavy soil, grease or sealant is removed the mild soap solution should be applied with a soft cloth, sponge or soft brush. Rinse the surface thoroughly with clean water and dry with a soft cloth.

In coastal areas where the finish is exposed to salt spray or in areas containing heavy industrial pollutants the cleaning should take place on a regular basis. For example cleaning the painted finish can be scheduled as a part of the regular maintenance program for glass cleaning.

CLEANING ANODIZED MATERIAL: Anodized material has an extremely hard surface that is very colorfast and mar resistant. The Class I clear or color anodized finishes applied by a computer automated, high quality commercial anodizer specializing in architectural finishing will provide consistent color and long product life in a variety of applications.

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.

Severely soiled anodized surfaces can be cleaned a little more aggressively than painted surfaces. For example, slight scuffmarks and rub marks on an anodized surface can be removed with a mild abrasive pad such as the Scotch-Brite pad. Use the pad to remove the mark, then clean the surface using the mild soap solution. Rinse the surface thoroughly with clean water and dry with a soft cloth.

As with painted surfaces, in coastal areas where the finish is exposed to salt spray or in areas containing heavy industrial pollutants the cleaning should take place on a regular maintenance program.

FIELD TOUCH UP: It is almost a given that some damage will occur and touchup work will be required during or after installation. But the good news is that both painted and anodized surface damage can be easily repaired if the damage is slight such as a scratch or rub mark. Minor painted surface damage can be sanded prior to touchup painting with excellent results. For scratches or gouges use a relatively course grit paper to remove the damage, then use progressively finer paper to remove the sanding marks, finishing with a 180 to 220 grit paper.

Sanding of anodized material that is going to be touched up is not recommended. The anodized surface is aluminum oxide, which is generally harder than the sandpaper. Some rub marks on an anodized surface can be removed with a mild abrasive pad such as the Scotch-Brite pad prior to touch up painting.

Custom finishers usually supply a limited amount of touch-up paint with the project material. Touchup paint is supplied in small aerosols or bottles with a built in brush for easy application and is to be applied very sparingly. It is intended to cover small blemishes or to touchup exposed cut ends on fabricated parts. It is not intended for use on large areas of more than a few square inches. The color will closely match the factory applied painted or anodized finish, however the finish is not as hard nor performance the same as the baked on finishes. After cleaning the area to be touched up, wipe the area with denatured alcohol to remove any moisture or cleaning residue and apply the touchup per the finisher's instructions. Use caution as excessive use of touch up paint may void the original finisher's warranty.

CORRECTING MORE SEVERE DAMAGE: (Calling in the Pros) At times a window, curtain-wall or storefront frame will become damaged or discolored beyond the point where simple field touchup will correct the problem. Damage can result from a variety of sources including final cleaning of the building facade without proper protection of the aluminum surfaces, environmental impact from sea-coast or corrosive atmosphere exposure, long term neglect, or selection of the wrong finish at the time the material was finished and fabricated. (For example specifying a dark bronze or bright blue or red baked enamel on a framing material or panel exposed to the exterior elements.)

The large, full service finishing companies like Linetec in Wausau, employ field service professionals who are trained in the proper preparation and application of field applied architectural finishes. Coatings that meet AAMA 2605 specifications and which can be field applied are available to these professionals.

The highly specialized coatings, known as ADS Systems, can be tinted to match nearly any existing or desired painted or anodized finish color.

Special cleaning and pretreatment procedures are critical to achieve the desired long-term results. The paint must also be formulated to closely match the characteristics of the existing finish, particularly if only a portion of the existing surfaces will be refinished. Specifically, the new coating should be formulated to have approximately the same fade or chalk characteristics as any exposed original finish so that the entire project will have a uniform appearance for many years.

Completion of a field repair can be handled in several ways, but in general, will begin with an initial contact with the field service professional to describe the problem. The scope of a field-refinishing project varies greatly, involving anything from a single door or window to a building elevation or an entire building. Usually, for all but the simplest repairs, the field service professional will recommend a site visit to examine the problem.

Following the site visit the field service professional will prepare a quotation for the work to be completed and also a sample color chip for approval. At times preparation of an on site sample for approval (a single door, panel or window) will be recommended. Following acceptance of the quotation and samples and preparation of a contract for the work to be completed, the work will begin. Field repairs can generally be performed at temperatures above 50 degrees Fahrenheit. The field service professional will handle all of the details such as permits, sidewalk protection and barricades.

Contracting for the services of a professional who specializes in the refinishing of architectural metals will assure that the work is completed using the correct methods and proper materials, assuring satisfaction with the long term results guaranteed.

AAMA Cleaning and Maintenance Guides can be purchased through their website by selecting one of the following choices at www.aamanet.org

Cleaning and Maintenance Guide for Architecturally Finished Aluminum

This guide outlines methods, equipment and materials applicable for cleaning architecturally finished aluminum after construction and for subsequent periodic maintenance. Methods outlined are intended for use on anodized or painted architectural products whether rolled or extruded shapes, including window and door frames, store fronts and entrances, curtain walls, mullions, columns, panels, hand rails, flag poles and hardware. (609 & 610-02)

Voluntary Specification for Anodized Architectural Aluminum

Specification describes test procedures and requirements for high performance (Class I) and commercial (Class II) architectural quality aluminum oxide coatings applied to aluminum extrusions and panels. Anodized finishes, either clear, integral color or electrolytically deposited color, produced in either batch or continuous coil process, are covered. Now includes performance requirements of AAMA 604.2, AAMA 606.1, AAMA 607.1 and AAMA 608.1 which are no longer available. (611-98)