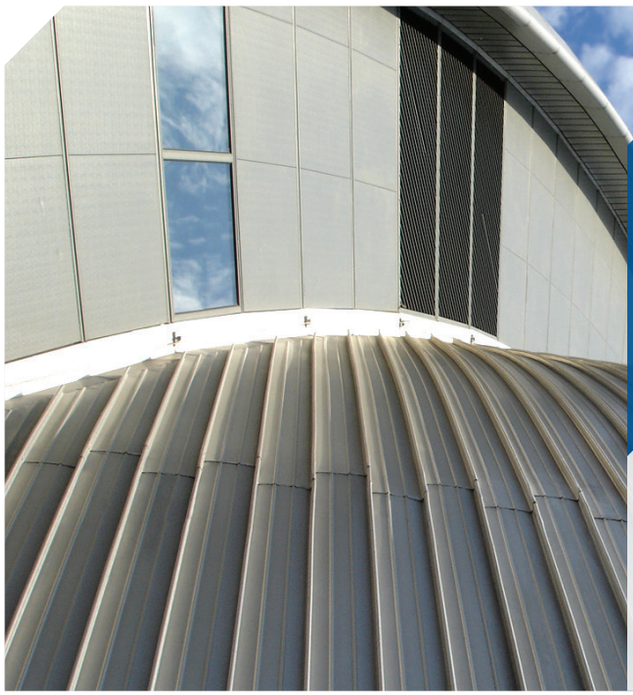
AkzoNobel

Care and Maintenance

of TRINAR®, CERAM-A-STAR®, POLYDURE® and ALUM-A-DURE® factory-applied finishes



The factory-applied functional or decorative finish is a baked-on coating designed to give troublefree performance for years, with little service required.

This brochure serves as a guide to maintaining the aesthetic and protective properties of the coating. It is important to read this brochure thoroughly and completely before attempting to clean, touch-up or repaint factory-finished building panels.

It is the user or their agent's responsibility to select materials and implement procedures specific to the safe, proper and compliant use of cleaning agents, paints and solvents mentioned below.

Cleaning painted surfaces

While factory-applied finishes are so durable that they will last many years longer than ordinary paints, it is desirable to clean them thoroughly on a routine basis. Apparent discoloration of the paint may occur when it has been exposed in dirt-laden atmospheres for long periods of time. Slight chalking may also cause some change in appearance in areas of strong sunlight.

A good cleaning will generally restore the appearance of these coatings and render repainting unnecessary. An occasional light cleaning will also help maintain an aesthetically pleasing appearance.

To maintain the original finish of the coated product, the only regular maintenance necessary is that of annual washing. Mild solutions of biodegradable cleaner or household ammonia will aid in the removal of most dirt, and the following are recommended levels:

1.) One cup of Simple Green®, or other non-toxic biodegradable cleaner, which contain less than 0.5% phosphate, dissolved into two gallons of warm water. NOTE: The use of detergents containing greater than 0.5% phosphate is not recommended for use in general cleaning of building panels. NEVER BLEND CLEANSERS OR DETERGENTS WITH BLEACH.

2.) One cup of household ammonia dissolved into five gallons of water (room temperature).

Working from the bottom to the top of the coated panels, the panels may be washed with either solution. The use of a well-soaked cloth, sponge, brush (with very soft bristles) and clean water rinse is advised. Do not use a pressure washer.

We do not recommend the use of scouring powders or industrial solvents, since these agents may damage the film. Solvent-containing cleaners such as Fantastic®, however, are very effective and can be used without concern.

If mildew or other fungal growth is a problem and cannot be removed as outlined above, household bleach, mixed at a concentration of one cup of bleach to five gallons of water, along with one cup of a mild soap (e.g., Ivory) to aid wetting, is recommended.

Once the coated product is washed, thorough rinsing with clear water is necessary to eliminate the possibility of residue. Failure to remove all residues from these cleaning steps may damage the film.

Repainting of coated metal panels including metal roofing building panels

To repaint your factory-finished metal panels, great care must be taken to prepare the factory-applied surface and to carefully assess the adhesion between this well-prepared surface and the coating to be used to repaint the surface.

Field painting of TRINAR, CERAM-A-STAR, POLYDURE and ALUM-A-DURE finishes often requires special considerations. Oil-based Alkyd house paint must not be applied over factory-applied finishes. This entire section must be carefully read before attempting field repainting of building panels.

A. Surface preparation

Any metal panel surface to be repainted must be properly prepared to assure the continued performance of the coating system. The following five problem areas must be addressed before the repainting process can begin:

1.) Dirt and mildew

Dirt, loose chalk and mildew must be removed as recommended by the cleaning method outlined in the section, "Cleaning Painted Surfaces." Heavier dirt accumulations, which must be addressed prior to repainting, may necessitate the use of a dilute solution of Spic and Span® (1 cup into 5 gallons of warm water). NOTE: Detergent containing greater than 0.5% phosphate is recommended only as a preparation prior to re-painting. Do not use such detergents for routine cleaning.

Always rinse the surface thoroughly to remove any of the agents used in the cleaning procedure. Residual cleaners left on the surface will damage the adhesion of the newly applied paint system.

2.) Surface imperfections

Minor scratches, which have not left the metal substrate exposed, can be lightly sanded or buffed to create a smoother surface. Care must be taken, however, not to expose the substrate. Once this exposed condition exists, the likelihood for rusting is greatly increased. Should the metal substrate be observed during this operation, see the following paragraph.

3.) Exposed metal and rust

Exposed metal minimum surface preparation is Hand Tool Cleaning per SSPC-SP2i and use of a primer specifically designed to protect any exposed galvanized steel metal from corrosion.[1] Care must be taken, however, not to destroy the galvanized surface. Before priming the metal panel, test for adequate intercoat adhesion (see Section 2 of the Repainting section). Allow sufficient time for the primer to dry before applying the topcoat.

For severely rusted metal panels the recommended preparation is SSPC-SP7ii – Brush-Off Blast Cleaning. AkzoNobel's Water-Based Epoxy Maintenance Coat, or a maintenance primer designed for use on hot dipped galvanized steel, is recommended to protect the metal panel from further rusting.

4.) Additional surface preparation required for new metal panels

There may still be a layer of factory-applied wax on the surface of the metal panel if it has been installed within the last two years. This material is used to protect the panels during forming and transit, and failure to remove this material will result in poor intercoat adhesion with resultant peeling or flaking of the new coating.

To remove this wax, it will be necessary to lightly scuff the surface with a GRAY (not green) 3M Synthetic Steel Wool pad (equivalent to “000” steel wool) saturated with soapy water. A final wipe and rinse should be done using clean water only, to remove any loose dust or soapy film. Once this procedure is completed, perform the adhesion test in Appendix A to assure that acceptable adhesion is evident. If poor adhesion is still observed, repeat step #4.

It is imperative, of course, that the factory finish itself not be removed during this process. It is necessary to once again test the intercoat adhesion according to Appendix A. If the test results still indicate poor intercoat adhesion, DO NOT PROCEED! Contact your metal panel supplier immediately.

[1] AkzoNobel’s Water-Based Epoxy Maintenance Coat, WA9C32800/GW9C32796 or equivalent primer specifically designed for adhesion to galvanized steel.

B. Repainting

1.) Paint

After the metal panels have been properly prepared, they must be coated within 24 hours. (See section D for coatings supplied by AkzoNobel for professional application) As an alternative, exterior acrylic latex DTM (direct to metal) paint may be used. Oil-based Alkyd house paint must not be applied over factory-applied finishes. Before repainting the metal panels, however, it is imperative that the intercoat adhesion be ascertained. See the following section.

2.) Testing for adequate intercoat adhesion

Only after the surface has been carefully prepared and the intercoat adhesion between the repaint material and the metal panels is known to be acceptable should you proceed in repainting your metal panels. Without sufficient intercoat adhesion, delamination after long term exposure may be encountered. (See Appendix A that describes a method to ascertain the intercoat adhesion properties.)

NOTE: It is the sole responsibility of the person doing the repainting to ascertain if acceptable intercoat adhesion is being achieved. AkzoNobel is not responsible for any intercoat adhesion failure or any other unsatisfactory condition result from field coating application to factory-painted panels, either immediately or over time.

3.) Minor scratch touch-up with CERAM-A-CRYL® II

Review section A for surface preparation requirements before using CERAM-A-CRYL II to touch-up minor defects.

Brush Application

CERAM-A-CRYL II coatings are formulated for fast drying and are not ideally suited for brush application in large areas. However, they can be used successfully for spot or scratch touch-up repair and for small area painting. Apply CERAM-A-CRYL II, as supplied, without reduction, as you would any other brushable coating. Work quickly to smooth out brush marks before the coating dries. Use EXP5050, Reducing solvent for cleanup.

4.) Minor scratch touch-up with TRINAR AQUA

Review section A for surface preparation requirements before using TRINAR AQUA to touch-up minor defects.

Brush Application

TRINAR AQUA coatings are formulated for fast drying and are not ideally suited for brush application in large areas. However, they can be used successfully for spot or scratch touch-up repair and for small area painting. Apply TRINAR AQUA, as supplied, without reduction, as you would any other brushable coating. Work quickly to smooth out brush marks before the coating dries. Use Methyl Ethyl Ketone solvent for cleanup.

WARNING: Enforce NO SMOKING and remove all sources of ignition when EXP5050, Reducing Solvent, CERAM-A-CRYL II and TRINAR AQUA coatings are used.

C. Additional precautions and other recommendations

CERAM-A-CRYL II and TRINAR AQUA coatings contain petroleum distillates. Wash hands thoroughly after use. Keep all containers away from heat, sparks and flame. Use only with adequate ventilation. Avoid breathing CERAM-A-CRYL II and TRINAR AQUA vapor or mist and prolonged or repeated contact with skin.

Keep closures tight and containers upright to prevent leakage. In case of spillage, absorb and dispose of all materials in accordance with applicable government regulations.

D. AkzoNobel repaint coatings

If you are considering repainting your building, a family of premium coatings has been developed by AkzoNobel to assure the long-term performance of your metal structure.

CERAM-A-CRYL II: silicone-modified acrylic topcoat

CERAM-A-CRYL II is a highly durable coating recommended for repainting non-corroded, weathered metal panels. The coating system is comprised of a Silicone-modified Acrylic coating, intended for use as a one-coat or two-coat material applied over factory-prepainted panels. Obtain a copy of the CERAM-A-CRYL II, Silicone-modified Acrylic Repaint Finish application guide for additional information.

TRINAR AQUA: fluoropolymer topcoat

TRINAR AQUA is an extreme high durability coating recommended for repainting non-corroded, weathered metal panels. The coating system is comprised of a polyvinylidene fluoride polymer modified with acrylic, intended for use as a two-coat material applied over factory-prepainted panels. Obtain a copy of the TRINAR AQUA, Water-based Air-dry Fluoropolymer application guide for additional information.

Water-Based Epoxy Maintenance Coating – WA9C32800 and GW9C32796

Two component primer/sealer designed for application over prepainted and bare metal substrates. Maintenance Coat is recommended for sealing aged plastisol coatings, cut edge corrosion, priming metal building roofs and side walls. Intended to be topcoated with AkzoNobel CERAM-A-CRYL II or TRINAR AQUA topcoats. Obtain a copy of the Water-Based Epoxy Maintenance Coating application guide for additional information.

Gray Tiecoat – VA0C31630 and UC0C31631

Designed to provide optimum adhesion to newly erected metal panels. Gray Tiecoat is recommended for metal panels that have less than two years' exposure to the environment. Intended to be topcoated with AkzoNobel CERAM-A-CRYL II or TRINAR AQUA topcoats. Obtain a copy of the Gray Tiecoat application guide for additional information.

Appendix A - evaluating intercoat adhesion

1.) After properly cleaning the surface to be repainted, paint a 4" x 4" area with the repaint material according to the manufacturer's instruction. Allow to dry completely before proceeding.

2.) Use a utility knife to cut a two-inch "X" into the repaint coating.

3.) Place a three-inch strip of Scotch® 610 tape over the "X" and rub 10 times with heavy pressure leaving a half inch of tape free for removal.

4.) Pull the tape back over itself at a 180º angle.

5.) Examine the tape and the metal panel for any signs of paint removal.

If the tape removes more than 1/16" of the repaint material from the "X" cut, the intercoat adhesion is inadequate.

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i SSPC-SP2 – Hand Tool Cleaning

Hand Tool Cleaning removes all loose mill scale, loose rust and other detrimental foreign matter. It is not intended that adherent mill scale, rust and paint be removed by this process. Mill scale, rust and paint are considered adherent if they cannot be removed by lifting with a dull putty knife.

Before hand tool cleaning, remove visible oil, grease, soluble welding residues and salts by the methods outlined in SSPC-SP1iii. For complete instructions, refer to Steel Structures Paint Council Surface Preparation Specification No. 2

ii SSPC-SP7 - Brush-Off Blast Cleaning

A Brush-Off Blast Cleaned surface when examined without magnification, shall be free of all visible oil, grease, dirt, dust, loose mill scale, loose rust and loose paint. Tightly adherent mill scale, rust and paint may remain on the surface. Mill scale, rust and coating are considered adherent if they cannot be removed by lifting with a dull putty knife. Before blast cleaning, visible deposits of oil or grease shall be removed by any of the methods specified in SSPC-SP1iii or other agreed-upon methods. For complete instructions, refer to Joint Surface Preparation Standard SSPC-SP7/NACE NO. 4.

iii SSPC-SP1 – Solvent Cleaning

Solvent Cleaning is a method for removing all visible oil, grease, soil, drawing and cutting compounds, and other soluble contaminants. Solvent cleaning does not remove rust or mill scale. Change rags and cleaning solution frequently so that deposits of oil and grease are not spread over additional areas in the cleaning process. Be sure to allow adequate ventilation. For complete instructions, refer to Steel Structures Paint Council Surface Preparation Specification No. 1.

AkzoNobel

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We supply the sustainable and innovative paints and coatings that our customers, communities – and the environment – are increasingly relying on. Our world class portfolio of brands – including Dulux, International, Sikkens and Interpon – is trusted by customers around the globe. We're active in more than 150 countries and have set our sights on becoming the global industry leader. It's what you'd expect from a pioneering paints company that's committed to science-based targets and is taking genuine action to address globally relevant challenges and protect future generations.

For more information
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