

Rust Suppression System Installation Guide



Advanced Polymer Technology (APT) has prepared this installation guide to aid in the application of the Laykold Rust Suppression system. Any references to consumptions are approximate due to variations in site conditions and application techniques. Before starting any work, the applicator should thoroughly review this installation guide and all system component technical data sheets.

MIXING OF MATERIALS

Laykold Rust Suppression system components are supplied in concentrated form except for Laykold Poly Primer, which is supplied as a 2-component kit. Each component must be mixed appropriately prior to installation. Mixing of water-based products can be performed in a low-speed mixing tank or in a clean 55-gallon drum using a ½” (minimum) heavy-duty drill (7 amps minimum) fitted with a stainless-steel mixing blade/shaft (shaft 1/2” x 36” long; blade 8 ½” x 5”). Laykold Poly Primer should be mixed in container provided using a jiffy paddle. Mix all materials at a low speed (400 - 600 rpm) taking care not to introduce air into the product. Mix until material is consistent in color and texture. Mixing ratios for each product are listed below:

Laykold Rust Suppression Component	Maximum Dilution Material to Water	Silica Sand Requirements mesh size/#'s per gallon of concentrated material
Laykold Deep Patch	See Technical Data Sheet	See Technical Data Sheet
Laykold Poly Primer	This is a 2-component polyurethane product. Do not add water	See Technical Data Sheet for sand broadcasting details (5-7#'s per 100 ft ²)
Laykold Acrylic Resurfacer*	1 part to 0.7 part	60-80 / 10-17 #'s per gal.
Advantage Laykold**	4 parts to 1 part*	Do not add sand
Laykold ColorCoat Concentrate – Finish Mix	1 part to 1 part	Do not add sand

SURFACE PREPARATION

Prior to application, the existing surface must be thoroughly cleaned, sound, dry, and free of oils and other bond inhibiting contaminants. Spalls, delamination, potholes, scaling, pop outs, and other defects in the substrate must be addressed and all projections must be leveled (sanded or scraped) prior to the commencement of the surfacing applications.



Once the surface has been thoroughly cleaned and is free of all loose material, dirt, or dust, the court shall be flooded and allowed to drain a minimum of 30 minutes and a maximum of 1 hour. Any area that holds water (birdbaths) in a depth greater than 1/16 inch (1.6 mm or the thickness of a nickel) shall be outlined and patched.

Surface Leveling: Birdbaths shall be leveled using a Laykold Acrylic Deep Patch court patch slurry. Prime area to be patched with a 50/50 mixture of Laykold Acrylic Deep Patch and water. Primer shall be brushed into place and allowed to dry prior to patching. Patch mix shall consist of Laykold Acrylic Deep Patch, 50-mesh sand and Type 1 Portland Cement. Mix as per manufacturer directions.

Note: Laykold Poly Primer (Patch Mix) is an acceptable substitute for leveling material.

Crack Filling: Cracks shall be cleaned, primed, and filled using Laykold Acrylic Resurfacer if cracks are 1/16 inch or less. If greater than 1/16 inch, Laykold Acrylic Deep Patch court patch slurry shall be used to fill cracks. Refer to the Laykold Deep Patch technical data sheet for additional mixing details and application instructions for filling various sized cracks.

Note: QualiCaulk and/or Laykold Crack Filler are acceptable substitutes for crack filling.

PREVIOUSLY COATED ASPHALT

Sand or scrap flush any heaving pyrite areas and patch.

NEW OR UNCOATED ASPHALT

Apply one coat of Laykold Acrylic Resurfacer using a 24", 30" or 36" wide 70 Durometer flexible rubber squeegee. Batch mix shall consist of 55 gallons (260 kg) of Laykold Acrylic Resurfacer, 30 to 40 gallons (115-130 kg) of potable water, and 600 to 900 pounds (270-400 kg) of clean, bagged silica sand (60 to 80 mesh). The application rate shall be 0.05-0.07 gal/yd² (0.29-0.40 kg/m² - 129-180 ft²/gal) of undiluted Laykold Acrylic Resurfacer.

NOTE: Laykold NuSurf is an acceptable alternative to Acrylic Resurfacer.

LAYKOLD POLY PRIMER RUST SUPPRESSION COATING

Apply one coat of Laykold Poly Primer (Qualipur 152) with a high-quality medium nap roller or airless spray unit. Laykold Poly Primer (Qualipur 152) is supplied ready to mix as a 2-component polyurethane product. Pour entire contents of component B into component A and mix with a jiffy paddle and low speed drill (400-600 rpm). Do not incorporate excessive air into the product. Mix for two minutes. Apply a uniform film at a steady pace to avoid formation of air bubbles or pooling of product. The application rate shall be 0.03-0.04 gal/yd² (0.17-0.20 kg/m² or 225-275 ft²/gal). While the primer is wet, seed to refusal with over-dried quartz aggregate sand (20-40 mesh) at a rate of 5 lb. per 100 ft² (0.25 kg/m²). Allow to cure for 4-6 hours before proceeding with additional coatings.

NOTE: Once Laykold Poly Primer has cured, sweep and/or blow off excess loose sand.

FILLER COATS (1 to 2 coats as needed)

Apply one to two (2) coats as needed of Laykold Acrylic Resurfacer using a 24", 30" or 36"



wide 70 Durometer flexible rubber squeegee. Batch mix shall consist of 55 gallons (260 kg) of Laykold Acrylic Resurfacer, 30 to 40 gallons (115-130 kg) of potable water, and 600 to 900 pounds (270-400 kg) of clean, bagged silica sand (60 to 80 mesh). The application rate shall be 0.05-0.07 gal/yd² (0.29-0.40 kg/m² - 129-180 ft²/gal) of undiluted Laykold Acrylic Resurfacer per coat.

NOTE: Laykold NuSurf is an acceptable Acrylic Resurfacer alternative.

TEXTURED COLOR COATS (2-3 coats)

Laykold M3 – ITF Classification 3

Apply two coats of Advantage Laykold factory textured color using a 24", 30" or 36" 50 Durometer flexible rubber squeegee. Batch mix shall consist of 30 gallons (170 kg) of Advantage Laykold and 6.5-8.5 gallons (25 to 32 kg) of potable water. The application rate shall be 0.06-0.07 gal/yd² (0.41-0.47 kg/m² - 130-150 ft²/gal) of undiluted Advantage Laykold per coat. Each layer should be completely dry before applying subsequent layers.

Laykold MF4 – ITF Classification 4

Apply two coats of Advantage Laykold factory textured color using a 24", 30" or 36" 50 Durometer flexible rubber squeegee. Batch mix shall consist of 30 gallons (170 kg) of Advantage Laykold and 6.5-8.5 gallons (25 to 32 kg) of potable water. The application rate shall be 0.06-0.07 gal/yd² (0.41-0.47 kg/m² - 130-150 ft²/gal) of undiluted Advantage Laykold per coat.

Apply one coat of Laykold ColorCoat Concentrate finish batch mixture using a 24", 30" or 36" 50 Durometer flexible rubber squeegee. Batch mix shall consist of 55 gallons (260 kg) of Laykold ColorCoat Concentrate and 55 gallons (210 kg) of potable water. The application rate shall be 0.03-0.04 gal/yd² (0.17-0.23 kg/m² - 225-300 ft²/gal) of undiluted Laykold ColorCoat Concentrate per coat.

Each coat should be completely dry before applying subsequent coats. Allow topcoat to cure a minimum of 24 hours before applying game lines.

NOTE: Laykold Colorcoat Concentrate or Colorflex are acceptable color coat alternatives.

GAME LINES (1-2 coats as needed)

All lines are to be marked using masking tape according to U.S.T.A. and A.S.B.A. specifications. Wait a minimum of 24 hours after final Color Coat before applying any line primer or line paint. Prime masked lines with Laykold Line Prime and allow to dry until primer becomes clear. Apply one to two coats as needed of Laykold Textured White Line

Paint using a paint brush or roller. Remove masking tape immediately after lines are dry. Allow lines to dry a minimum of 24 hours before allowing play on court.

COVERAGES

Actual coverage rates are dependent upon a variety of factors relative to the field application. The installer must assess the conditions prior to ordering material. Allowances



must be made for waste in mixing, pouring, and field conditions.

LIMITATIONS

- Minimum cure time for asphalt substrates is 14 days.
- Do not apply over damp or wet substrates.
- Do not apply coatings if extremely high humidity prevents drying.
- Do not apply to surfaces during the out-gassing of vapor.
- Minimum application and curing temperature 50°F and rising (10°C). A minimum temperature of 50°F must be maintained during the entire installation process to include 24-hours before and after the installation.
- Maximum substrate temperature 130°F (54°C).
- Substrate temperature must be a minimum of 4° above the dew point.
- Do not apply during inclement weather or when rain is anticipated within 24-hours before/after applications.
- Water used in all mixtures shall be fresh and potable.

Acrylic, all-weather tennis and athletic surfacing systems are designed and used to visually enhance asphalt and concrete substrates while providing a desired surface texture, surface pace and/or speed of play. Laykold systems and system components may be used to level surface depressions, fill substrate cracking, smooth surface roughness and make other such adjustments to a new or existing surface/substrate. However, acrylic all-weather tennis and athletic surfacing systems are NOT capable of solving the problems and/or forces associated with cracked, deteriorating, or damaged substrates.