

Fiberglass Overlay System Installation Guide



Advanced Polymer Technology (APT) has prepared this installation guide to aid in the application of the Laykold Fiberglass Overlay surfacing 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 Fiberglass Overlay system components are supplied in concentrated form. Each component must be mixed appropriately prior to installation. Mixing 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”). Materials should be mixed 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. The mixing ratio for each product is listed below:

Laykold Fiberglass Overlay 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 Acrylic Resurfacer – Fiberglass Glue	2 parts to 1 part	Do not add sand
Laykold Acrylic Resurfacer – Filler Coat	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 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: Laykold QualiCaulk and/or Laykold Crack Filler are acceptable substitute crack filling materials.

FIBERGLASS INSTALLATION

Fiberglass Specifications

- Description: 36" Yellow Resin Coated Fiberglass Fabric made with flexible filaments of glass, 20X10 mesh
- Weight: 1.6-2.0 oz/sqyd
- Thickness: 0.005" average
- ASTM D-1688-86 Type III

Fiberglass glue batch mix shall consist of 55 gallons (260 kg) of Laykold Acrylic Resurfacer and 27.5 gallons (89.5 kg) of portable water. The application rate shall be 0.05-0.07 gal/yd² (0.28-0.40 kg/m² or 132-180 ft²/gal) of undiluted Laykold Acrylic Resurfacer. Apply one coat of Laykold Acrylic Resurfacer using a 24", 30", or 36" ate shall be wide 70 Durometer flexible rubber squeegee.

Roll fiberglass out the length of the court ensuring to overlap the edges by 2" to 3" and from roll to roll 2" to 3" into the wet Laykold Acrylic Resurfacer. Once cured, apply a second coat of Laykold Acrylic Resurfacer. The application rate shall be 0.05-0.07 gal/yd² (0.28-0.40 kg/m² or 132-180 ft²/gal) of undiluted Laykold Acrylic Resurfacer. Apply Laykold Acrylic Resurfacer using a 24", 30", or 36" ate shall be wide 70 Durometer flexible rubber squeegee.

NOTE: Laykold NuSurf, Laykold NuSurf G2, and LM Bond-Kote are acceptable alternatives for tacking the fiberglass.

NOTE: If any wrinkles develop during the application of fiberglass, try to pull out during the tack down process. If unable to pull out, allow the Laykold Acrylic Resurfacer to completely dry and sand the wrinkles flat using a palm sander or orbital standup floor sander.

FILLER COAT (2 coats)



Apply two (2) coats 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 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 and Laykold Colorflex are acceptable 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 (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 it is anticipated.
- 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.