# **ColorCoat System** Installation Guide



Advanced Polymer Technology (APT) has prepared this installation guide to aid in the application of the Laykold Advantage 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 ColorCoat system components are supplied as concentrates. Each component must be mixed appropriately prior to installation. Mixing can be performed in a low-speed mixing tank or in clean 55-gallon drum using a  $\frac{1}{2}$ " (minimum) heavy-duty drill (7 amps minimum) fitted with a stainless-steel mixing blade/shaft (shaft 1/2" x 36" long; blade 8  $\frac{1}{2}$ " 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 ColorCoat Component	Maximum Dilution Material to Water	Silica Sand Requirements Mesh size/#s per gallon of concentrated material
Laykold Poly Primer or Laykold Epoxy VTB Primer	None	See Technical Data Sheet
Laykold Acrylic Concrete Primer	1:3	None
Laykold Deep Patch	None	See Technical Data Sheet
Laykold Acrylic Resurfacer*	1:0.7	60-80 / 10-17 #'s per gal.
Laykold ColorCoat Concentrate - Texture Mix	1:0.6	Based on ITF Classification
Laykold ColorCoat Concentrate - Finish Mix	1:1	Do not add sand

\*Laykold NuSurf may be substituted in lieu of Acrylic Resurfacer and is recommended for use over new asphalt pavements, cushioned systems and slip sheet crack repair systems. See NuSurf technical data sheet for mixing details.



# Pot Life

The pot life is set at a temperature of 68°F. Pot life will vary with temperature.

Laykold Component	Pot Life
Laykold Poly Primer	40-50 minutes
Laykold Epoxy VTB Primer	15-20 minutes

All other ColorFlex components are water-based acrylics. Excess material may be resealed and stored in a cool dry environment for future use. Shelf life is approximately 1 year.

## **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.

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 Laykold Deep Patch technical data sheet for additional mixing details and application instructions for filling various sized cracks.

For applications over asphalt or new concrete, the asphalt should be allowed to cure a <u>minimum</u> of 14 days and concrete should be allowed to cure a minimum of 30 days and be free of any residual moisture. Excessive moisture levels can be determined by taping a 1 yd2 (1 m2) clear piece of plastic over the substrate with duct tape. Be sure that all the edges of the plastic are sealed with duct tape. Leave the plastic approximately 30 minutes and check for condensation under the plastic. If water appears, repeat the test every 30 minutes until the plastic remains dry.

For applications over existing concrete, mechanical methods (shot blasting, sandblasting, or hydro blasting) are recommended to produce a clean and lightly textured surface. When hydro blasting, allow 24 hours for substrate to dry completely. Prior to applying each layer of the Laykold ColorCoat system, make sure the previous layer is clean and dry.





# Primer (Concrete Only)

When installing the Laykold system over concrete, Laykold Masters Bond-Kote should be used as a concrete adhesion promoter and diluted 1 part LM Bond-Kote to 5 parts water. Diluted material should be applied with a high-quality roller or squeegee. When using Laykold Masters Bond-Kote as a concrete adhesion promoter, the concrete surface should be mechanical abraded to a CSP3 profile to ensure proper adhesion (minimum requirements are medium broom finish and acid etching). LM Bond-Kote is applied at the following consumption rate, 0.09 kg/m<sup>2</sup> (0.02 gal/yd<sup>2</sup> or 450 ft<sup>2</sup>/gal) of undiluted material.

When the RH test exceeds 75% relative humidity levels, or for concrete with less than 30-day cure - contact APT for proper use of the Laykold Epoxy Concrete Primer – or reference TDS for proper handling, preparation, and application.

## Filler (1-2 coats as needed)

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/yd<sup>2</sup> (0.29-0.40 kg/m<sup>2</sup> - 129-180 ft<sup>2</sup>/gal) of undiluted Laykold Acrylic Resurfacer per coat. NOTE: If the asphalt is very porous, an optional 2nd application of Laykold Acrylic Resurfacer may be applied. Each coat should be completely dry before applying subsequent coats. Laykold NuSurf is an acceptable substitute for Laykold Acrylic Resurfacer and is highly recommended for use on new asphalt pavements, older asphalt pavements with hairline surface cracking, slip-sheet/free-floating surfaces and/or repair methods and over cushioned courts.

# **Textured Colorcoat Concentrate (2 coats)**

#### Laykold MS2 – ITF Classification 2

Apply two coats of Laykold ColorCoat Concentrate textured 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, 25 to 35 gallons (95-115 kg) of potable water and 300 to 450 pounds (135-203 kg) of clean, bagged silica sand (60 to 80 mesh). The application rate shall be 0.05-0.07 gal/yd<sup>2</sup> (0.29-0.40 kg/m<sup>2</sup> - 129-180 ft<sup>2</sup>/gal) of undiluted Laykold ColorCoat Concentrate per coat. Each coat should be completely dry before applying subsequent coats. Laykold ColorFlex is a highly recommended substitute for ColorCoat Concentrate on cushioned courts.

#### Laykold M3 – ITF Classification 3

Apply two coats of Laykold ColorCoat Concentrate textured 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, 25 to 35 gallons (95-115 kg) of potable water and 300 to 450 pounds (135-203 kg) of clean, bagged silica sand (80 to 100 mesh). The application rate shall be 0.04-0.05 gal/yd<sup>2</sup> (0.23-0.29 kg/m<sup>2</sup> - 180-225 ft<sup>2</sup>/gal) of undiluted Laykold ColorCoat Concentrate per coat. Each coat should be completely dry before applying subsequent coats. Laykold ColorFlex is a highly recommended substitute for ColorCoat Concentrate on cushioned courts. **ColorCoat System Installation Guide** 



#### Laykold MF4 – ITF Classification 4

Apply two coats of Laykold ColorCoat Concentrate textured 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, 25 to 35 gallons (95-115 kg) of potable water and 300 to 450 pounds (135-203 kg) of clean, bagged silica sand (80 to 100 mesh). The application rate shall be 0.04-0.05 gal/yd<sup>2</sup> (0.23-0.29 kg/m<sup>2</sup> - 180- 225 ft<sup>2</sup>/gal) of undiluted Laykold ColorCoat Concentrate 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/yd<sup>2</sup> (0.17-0.23 kg/m<sup>2</sup> - 225-300 ft<sup>2</sup>/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.

## 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 drying 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 a **minimum** of 14 days and concrete substrates is a minimum 30 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).
- » 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.

# ColorCoat System Installation Guide

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.

all safety data sheets and technical data sheets before using any of the Laykold/Laykold I

Please read all safety data sheets and technical data sheets before using any of the Laykold/Laykold Masters Primers. For complete and latest warranty and product information, please visit www.sportgroup.com/laykold.

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