



# Poly-Soy™

## Installation Guide

### Optional Tools & Supplies:

#### Professional Mechanical Equipment

Pressure Washer, Floor Buffer, Commercial Wet/Dry Vacuum, High Volume Low Pressure (HVLP) Sprayer, Airless Sprayer with Fine Finish Tip, Floor Fans.

#### Manual Applicators

18" T-Bar Heavyweight Floor Coater, Microfiber Mop, 16" NylFoam Pad Applicator, Lambswool Applicator, 18" Paint Tray, 1/2" Lint Free Roller, Super Fine Roller, Fine Finish Pad Brush, High Quality Brush.

May be used on Interior or Exterior Porous Substrates: Concrete, Masonry, Wood, Stucco, Plaster, Fiber Cement, Adobe, Brick Pavers, Natural Stone, and more.

### The Function of Poly-Soy Protective Clear Topcoat Finish:

Poly-Soy is an eco-friendly polyurethane alternative technology that provides a moisture and stain resistant topcoat finish. It is virtually odorless and utilizes a soy ester dispersion technology with vegetable based urethanes for maximum penetration and bonding. Poly-Soy is intended to provide a penetrating seal while leaving a thin topical barrier to help extend substrate protection. Poly-Soy may be used for light to medium interior or exterior applications and is available in a satin or gloss sheen finish. Poly-Soy may also be tinted with universal colorants for use as a glaze or faux medium for a wide variety of artistic uses.

### Surface Preparation:

Proper surface preparation is critical to a successful long term and beautiful installation. **Surfaces must be clean, porous, and free from all potential bond breakers such as oils, tannins, grease, moisture and other repelling contaminants.** Degrease- We recommend degreasing with our bio-based Soy-It Concentrated degreaser to remove all oils, residues, and contaminants from the surface. Apply Soy-It liberally at 1:1 heavy duty, 10:1 medium duty or 20:1 light duty. Power Wash or apply and rinse by hard bristle brush or floor machine with an applicable stripping pad. Use a wet/dry vacuum to extract the solution and allow to completely dry.

### Application Methods:

Always perform sample tests using your desired method to determine repeatable spray techniques, strokes, rolls, etc that delivers the applicable amount of material without puddling or leaving undesirable lap marks. Poly-Soy must be applied in very thin coats to the point of simply wetting the surface with the applicable installation tool.

HVLP/Airless Sprayers: Adjust airflow and volume to a fine mist spray that delivers a uniform and puddle free application. Dilute with up to 10% water if necessary for optimum flow. If puddles occur, simply back roll with an applicable low nap fine roller or work the material into the surface with a microfiber mop, sponge or rag. For fine wood finishing, sand each coat with the applicable grit sandpaper or 3M type sanding pad, after the 2-4 hour dry period.

18" Heavyweight T-Bar Floor Applicator: Pour Poly-Soy in a straight line along a starting wall or line. Angle the T-Bar slightly as you walk pulling the T-Bar. The weight of the bar will distribute the sealer in a thin coat while moving excess away from the path for your return pass creating a 3-4" pattern. Once establishing a 3-4' strip, use the T-Bar and work material into the substrate at a 90° cross pattern. Do not leave puddles or signs of lap marks. Work the material into the substrate.

16" NylFoam Pad/Lambswool Applicator: Pour Poly-Soy into an 18" paint tray. Evenly saturate pad then apply in 3' wide passes in a thin even coat to ensure that you avoid creating puddles or lap marks. Continue the process by overlapping the wet edge making sure to level the material avoiding thicker coats at each wet edge pass.

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Super Fine Rollers: Pour Poly-Soy into an applicable sized paint tray. Evenly saturate the roller, and then apply in uniform passes in a thin even coat to ensure that you avoid creating puddles or lap marks. You are simply wetting the surface to create a uniform finish. Continue the process by overlapping the wet edge making sure to avoid puddles or lap marks.

Fine Finish Foam Pad or Brush: Since a brush application is generally used for smaller areas and more delicate finishes, extra care should be observed to eliminate excessive brush marks. Pour Poly-Soy into a paint tray. Saturate the brush evenly and blot out excess material. Brush on material with smooth, consistent pressure to simply wet the surface. Be sure to level material for even distribution and leveling of the product. IG.PolySoy.1009

It is imperative to follow recommended dry times and proper thin film application to avoid improper curing of the material. Poly-Soy is sandable between each coat to provide enhanced bonding and increased level of high quality finish appearance.

## Poly-Soy Application:

Always test for compatibility and follow all manufacturer dry time instructions prior to full project application. It is recommended to install a minimum of 2 thin coats for best results and not to exceed 3 coats unless the substrate is extremely porous or your tests confirm suitability for your intended use. If the surface is extremely porous, you may want to apply Acry-Soy Sealer as your first coat to maximize spread rate and minimize the number of Poly-Soy topcoats.

Apply in thin coats avoiding puddles. **Concrete:** Apply by fine tip Airless, HVLP sprayer or manual application. When using manual applicators, be sure to work the material into the surface. Using the Heavy-Weight T-Bar, Micro-Fiber, or NylFoam pad allows faster installation and helps ensure the proper thin film application. The more dense the surface, the more critical it is to avoid over application. Depending on the density and whether or not the surface was properly profiled, one coat of Poly-Soy may be all it can take. **Wood:** Wipe or remove any excess topical stain residues before application. Apply by fine tip airless, HVLP sprayer or manual application. Sand between coats for optimum finish.

Allow approximately 2-4 hours intercoat dry time between coats. You want each coat to have adequate drying and hardness to maximize distinctive layers of protection. Otherwise, premature or over application of topcoats will emulsify with the previous coat making it a thicker one coat application that may have difficulty curing. More is not better, nor necessary with Poly-Soy. To expedite drying time to the lower recommended limits for indoor applications, introduce air flow and circulation by using fans.

## Dry Time & Curing Process:

If applying over a newly installed SoyCrete or TimberSoy stain installation, make sure these systems have had a minimum of 6 hours dry time. When applying Poly-Soy allow approximately 2-4 hours between coats. Higher humidity and/or lower temperatures will increase these dry times. The surface may be suitable for normal foot traffic or use within 24 hours, but not recommended prior to 12 hours. Premature and unpredictable traffic or use may compromise the curing process and possible reapplication may be required. Allow approximately 5-7 days prior to vehicular traffic to avoid hot tire pick-up. Full curing of the installation is approximately 5-7 days depending on environmental conditions. Avoid accumulation of standing water or washing with chemical detergents during the curing period.

## Basic Troubleshooting:

White Residue- We recommend shutting off all irrigation that may affect an outdoor installation during the curing period. Avoid installation of Poly-Soy during rainy forecasts for outdoor installations. Poly-Soy has a very fast resistance to moisture exposure, however, all precautions should be observed to minimize risks of negative effects. If Poly-Soy is subjected to standing water before the full chemical cure, it is possible to witness a white milky substance. If this occurs, simply allow it to dry and reabsorb into the surface naturally. Wiping or cleaning this substance will remove the uncured Poly-Soy. Determination of uncured Poly-Soy may require buffing and/or sanding with an applicable pad or sanding disc to remove top layers and open the pores to allow further evaporation of the material.

Lap Marks- These are caused by over application of product, improper technique or applicator tool used. Lap marks are puddled material formed at the wet edge that was too heavy to self level. When observed during installation, simply level the material with an applicable roller or work material into the surface with a microfiber mop or pad. If

you have allowed the material to dry with lap marks, you must sand the coat with a sanding disc. The sanding disc grit level required is dependent on the degree of repair. It is always best to start with finer grit 220 or above and work your way down if extreme marking occurred.

### **Topcoat Finish Care:**

Avoid using chemicals to clean the surface during the curing period and up to 14 days. Surfaces may be subjected to normal foot traffic or use within 12-24 hours depending on environmental conditions. Use caution and avoid dragging equipment, furniture, etc. over any floor finish. Standard maintenance cleaning requires only the use of water and/or neutral cleaner. We recommend the use of microfiber wet/dry mops for a chemical free maintenance of your newly sealed floor. You may also use a floor buffer with a polishing pad as part of your floor maintenance program. When signs of wear becomes visible, you may either recoat the entire surface area repeating the installation steps, or simply perform spot repairs by light sanding and cleaning then applying Poly-Soy to the area being repaired.

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