

# TimberSoy<sup>tm</sup>

## Installation Guide

### Optional Tools & Supplies:

Professional Mechanical Equipment-  
High Volume Low Pressure (HVLP) Sprayer, Solo HD Pump Sprayer, Wood Sander, Floor Buffer, Pressure Washer, Commercial Wet/Dry Vacuum, Floor Fans.

Manual Applicators-  
16" Floor Coating Foam Pad, 18" Paint Tray, 3/8" Lint Free Roller, B & D Self Priming Stain Stick, Stain Pads, Sponges.

Miscellaneous Tools & Supplies-  
Masking Tape, Painters Tape, Mop & Bucket, Clean Rags.

*Do not use a conventional nap roller as TimberSoy is a penetrating technology where you do not want to leave a topical film.*

### Surface Preparation:

Proper surface preparation is critical to a successful long term and beautiful installation. Surfaces must be clean and free of any sealers, waxes, or coatings for proper penetration. Check the surface for porosity by spraying water. If the water beads or fails to penetrate right away, you have a coating substance that requires removal.

1. Degrease- We recommend degreasing with our bio-based SoyFast Concentrated degreaser to remove all oils, residues, and contaminants from the surface. Apply liberally at 1:1 heavy duty, 10:1 medium duty or 20:1 light duty. Power Wash clean or apply and rinse by hard bristle brush. Use a wet/dry vac to extract the solution and allow to dry.

2. Sanding/Stripping- Sanding is the most efficient and quickest method of surface preparation. If you have spot areas of coating materials or simply can't sand due to limiting conditions, we recommend our heavy duty bio-based SoyGreen PolyStripper or similar to remove any paint, coating, waxes, or sealers that may prohibit penetration. Apply liberally with a HD pump sprayer or by roller and allow to dwell for 10 minutes to 12 hours depending on the age, type, and thickness of coating material. Always test a small area to establish the most effective dwell time prior to full application. For large area applications most will find it convenient to apply and allow to dwell overnight. Remove by power washer, floor scraper, or squeegee as applicable. Degrease area well with SoyFast as described in reference 1.

Always test a small area prior to full installation. Approximate spread rate is between 400-600 square foot per gallon depending on the application method and porosity of the substrate. You may purchase 2 ounce sample jars to test for actual colors on your wood species. Porous wood species will tend to be darker. (See Tips)

### Application:

Mask areas not intended to be stained. Note: If necessary, you may dilute the product with up to 10% clean water and mix well. Keep in mind, diluting the product will lighten the original color slightly and lower the solids content. Avoid puddling or the temptation to apply thick coats like paint. Application method and material rate will affect the stain color.

HVLP Sprayer Application: Set HVLP gun to a fine mist spray. Find the optimum pressure between 20-50 psi. If using a Black & Decker or similar electric portable unit, the stain tip will generally produce a favorable spray setting. Apply in a thin even pattern and avoid puddling. If puddling occurs, back-roll with a 3/8" lint free nap roller. If you require darkening your stain color, build up to your desired color with additional thin coats. Allow 30 minutes to 1 hour between coats to observe actual color prior to applying additional coats.

Manual Applicator: 16" NylFoam Applicator- Pour TimberSoy in a large 18" paint tray and saturate pad evenly. Apply TimberSoy moving from left to right or right to left in 3' passes. Work the stain into the wood substrate for a thin even coat. Do not allow TimberSoy to puddle. All topical stain must be worked into the substrate.

Black & Decker Stain Stick- Using the filling tube, siphon TimberSoy to capacity. Apply in small sections along wood planks and work from left to right or right to left. Make sure to work in all stain removing lap marks or topical stain.

Sponge or Stain Pad Applicator- Pour TimberSoy in a bucket or paint tray. Lightly saturate the applicator and rub or wipe the stain into the surface until dry.

Wiping Pad or Cloth- Slightly saturate applicator with TimberSoy. Apply as a wiping stain and rub into the wood surface ensuring an even thin coat application. Spread as far as the stain will go until dry. Repeat the process until finished. Make sure you wipe all excess stain for proper drying and curing prior to finish coat application.

Note: Regardless of the method used, the main objective is to not leave any topical accumulation of TimberSoy. Be sure to wipe or back-roll any excess for proper drying and curing. Topical stain will attempt to dry on top of the surface rather than within. Such dried topical stain cannot penetrate and will leave the finish tacky. To remedy this, simply wet area and wipe or buff surface to remove the topical excess.

### **Application Tips:**

To lighten colors, simply dilute the stain with up to 10% water. If your wood species is very porous, you may dilute up to 25%. You may also apply TimberSoy, then spray a light water mist and gently wipe excessive stain from the surface to lighten.

To darken colors, simply allow the first coat to dry usually within 30 minutes to 1 hour. . All stain colors will tend to dry darker than immediate appearance. Apply additional coat(s) as desired to darken.

If these tips do not reach your desired color tone, you may consider a custom tint to meet your desired results.

### **Drying Time of TimberSoy:**

TimberSoy will generally dry to the touch within 1 hour depending on environmental conditions. Colder climates and high humidity will prolong drying times. When applying additional coats over the 1st coat, be sure to wear socks or protective shoe covers to avoid marks or contamination of the stain coat. Apply additional coat as desired. TimberSoy requires approximately 6 hours to dry prior to applying Acri-Soy Clear Finish Sealer. Premature application of the sealer may loosen TimberSoy that has not fully penetrated into the surface.

You may expedite the drying time and also effectively even the TimberSoy installation by buffing the stain application. Buff with a medium coarse (blue or red pad) after approximately 30 minutes of the stain application. Test a small area prior to full buffing to ensure TimberSoy has penetrated sufficiently. This buffing method will enhance the penetration and drying time significantly. Acri-Soy Sealer application may be applied as soon as 1 hour after the buffing process.

### **Acri-Soy Sealer Application:**

Apply Acri-Soy after the recommended dry time of TimberSoy. Choose from two Sealer finishes. Satin Sealer- A matte finish, penetrating sealer. Gloss Sealer- A low gloss penetrating sealer. The sealer application is recommended to provide a lock-in protective barrier that protects your wood surface and provides a lock-in barrier against moisture and staining. Most applications will require only a single coat. It is recommended to install a minimum of 2 coats for automotive and high traffic areas for maximum protection. Allow approximately 1 hour intercoat dry time between sealer coats.

### **Specialty Finishes:**

For an eco-friendly polyurethane and lacquer alternative, apply Poly-Soy Clear Finish Topcoat. You may apply Poly-Soy directly over TimberSoy after a 6 hour dry time. Or, for the most durable protective system, apply Poly-Soy over Acri-Soy after a 6 hour dry time. Poly-Soy is available in Satin or a High Sheen Gloss finish and is applied in two coats. For heavy duty or high commercial traffic environments, apply the Eco-Tuff High Traffic Clear Coat System. Both of these topcoat systems offer years of topical protection against abrasion, weathering, stains, moisture and UV.

## Basic Troubleshooting:

Lap Marks or Over Saturation of Stain- If you experience undesirable marks or topical stain accumulation that has begun to dry, simply spray water over the area and buff the area to spread the stain as desired.

Tackiness of TimberSoy- If TimberSoy remains tacky even after 12 or more hours, it is a result of improper penetration due to lack of substrate porosity or over-application. If there is no place for the stain to go, it will simply stay on the top surface and try to cure. If there is enough porosity in the wood surface, test a small area by applying Acri-Soy by spraying onto the surface and back-roll. Allow to dry for approximately 1 hour. The solvency of Acri-Soy may assist in breaking down TimberSoy to fully penetrate the surface. If tackiness is gone, you may apply Acri-Soy as usual. If the tackiness is not resolved, Call Eco Safety Products for technical assistance.

White Residue- We recommend shutting off any irrigation that may effect an outdoor installation during the curing period. For unexpected rainfall, TimberSoy has an inherent water repellency chemistry to withstand unexpected rainfall or standing water during installation as long as it was installed properly and allowed to dry for at least 12 hours. Avoid installation of Acri-Soy during rainy forecasts for outdoor installations. If Acri-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 Acri-Soy. Should this happen, simply re-apply Acri-Soy to the affected area.

## Stain 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 within 12-24 hours depending on environmental conditions. Use caution and avoid dragging equipment, furniture, etc. over the sealed surface during the curing period. 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 stained floor. If you apply a specialty finish coat, follow all manufacturer floor finish care instructions. It is highly recommended to inspect the sealer for effectiveness every 2-3 years or as needed to extend the life and beauty of your wood stain. Proper care and surface protection will provide years of decorative style and beauty.

*Install TimberSoy™ with confidence!  
Install the world's leading eco-friendly bio-based permanent penetrating stain!*