

# TimberSoy™ Natural Wood Stain

## Frequently Asked Questions

- 1. What is the soy ester dispersion technology and what are its major benefits?** Soy methyl esters are derived from an esterification of soybean oil derived from the soybean plant. The soy ester that we use is actually further derived from a waste stream by-product of vitamin E production. This long proven bio-based natural ingredient replaces conventional petroleum based solvents typically required for high solvency and great penetration characteristics. Using soy ester as the carrier and a modified alkyd resin, we incorporate water-based safety with characteristics of an oil-based technology. The major benefits of this technology include; petroleum reduction, renewable resource content, recycled content, recyclable material, biodegradable, non-hazardous, non-corrosive, non-flammable, and many more.
- 2. How much bio-based and recycled content does TimberSoy contain?** Over 40%.
- 3. Does TimberSoy meet USGBC LEED and other green certification criteria?** Yes, TimberSoy contains more green building attributes than any other stain product. Others may have low or no VOC for a low emitting material, but that's not good enough for us. We not only meet the low emitting materials criteria, we have other sustainable considerations such as; renewable resource, recycled content, innovation in design, building re-use, sustainable site development and others.
- 4. What is the coverage rate and why would there be a difference?** The average coverage may vary between 400 sq.ft./gal to over 600 sq.ft./gal. This range is typically 2-3 times more than conventional wood stain products. A coverage range all depends on the porosity of the wood species and the application method used. A highly porous wood will want to absorb more material. A harder and denser wood will absorb less. So on a highly porous substrate, you will want to better control the amount of material being applied by selecting the applicable installation method and tools.
- 5. What are the main differences between TimberSoy and Water-Based Stains?** In addition to the above superior environmental features, TimberSoy's soy ester resin technology allows the material to fully absorb into the wood to help replenish the functions of sap for better preservation and protection from premature drying and rot. With its penetrating technology, it helps highlight the natural beauty of the wood grain rather than hide or diminish its natural character unlike that of a topical film forming technology.
- 6. What are the necessary steps required to install TimberSoy?** Please obtain the most current installation guide for more complete installation details. These are the basic steps to follow: The wood substrate must be completely dry and free from oil bleed or other bond breakers. 1) Remove all sealers, finishes and stains to expose the bare wood. Sand with 80 grit up to 220 grit for the appropriate level of finish and porosity prior to staining. 2) TimberSoy Test: Apply with a wiping cloth, or stain pad applicator to observe desired color, uniformity and absorption. If applying on soft porous wood that remains blotchy, apply a light uniform coat of Acry-Soy Penetrating Sealer to act as a wood conditioner. Let dry for 30 minutes and retest with stain. If the wood is a hard dense species, you may need to allow the stain to dwell for 10-20 minutes, then wipe all remaining topical residue. If the test meets expectations, proceed with the project. Take extra precautions when dealing with reclaimed wood. This type of wood vary greatly in porosity and composition as many may contain bond breaking chemical treatments or bleed which could greatly affect the stain and subsequent topcoat finishes. Test all components thoroughly prior to full project installation.
- 7. What is the best way to apply TimberSoy?** Apply by brush, stain pad, wiping cloth, HVLP sprayer, or fine finish tip airless sprayer. Do not roll. Regardless of method, be sure to obtain full absorption by working in the stain if necessary by brush or pad. When working on floors and decks, you may even use a floor buffer with white pad to work the stain into the wood and remove topical residue in one easy step.
- 8. How long should it take to dry and what is the full curing period?** When applied properly and in normal environmental conditions, TimberSoy should be dry to touch within 30 minutes to 1 hour. If excessive material was allowed to remain topical on the surface, this would be the only cause for it not to dry in a timely manner. Horizontal application area may be walked on with protective shoe covers as soon as it is dry. Allow a minimum of 12 hours for a return to service and 5-7 days for full cure. The time up to full cure means the system may be susceptible to excessive moisture and chemicals. Dry wipe or mop cleaning only during the cure period.
- 9. Will temperature affect the installation?** All drying and curing schedules are based at a baseline temperature of 72 degrees F @ 50% relative humidity. The warmer and dryer, the faster the dry times. The colder or more humid the slower the dry times. Surface temperatures should be below 95 degrees or above 40 degrees for best results. The hotter the surface the faster TimberSoy will dry before it has a chance to penetrate. The colder the surface, the more slowly

TimberSoy will penetrate. Test surface temperatures with an infrared thermometer if conditions are in this range to properly adjust installation procedures. Choose to perform work at the coolest part of the day during the summer season and warmer part of the day during the winter season for exterior work. Store material in a temperature controlled environment.

- 10. Will moisture or tannin bleed in the wood affect the stain?** Yes on both. Wood needs to be dry and free of all oils or tannin bleed. These will affect the penetration, color of the stain and cause improper curing. Do not stain until the moisture content is below 18%. Most kiln dried wood is under 10%. If you are unsure, you can always use a moisture meter to determine actual moisture content. Tannins are most common in many cedar and redwood species. There are also many unknown conditions within many reclaimed wood products. Remove any oils or tannins with an applicable wood brightener/cleaner. To help reduce further bleed, apply a clear tannin blocker and allow it to dry. Then apply your tinted TimberSoy stain. It is advisable that until you are sure that tannin bleed is no longer a problem; only use Acri-Soy as the sealer of choice. Unlike a conventional non breathable topical sealer, Acri-Soy is a breathable system that will have a higher probability of survival and will resist blistering as it does not have a topical film.
- 11. Does TimberSoy need to be sealed?** It is recommended to add protection to your newly stained surface when you need to provide an enhanced level of repellency against dirt, water, stains, chemicals, abrasion, etc. Understanding the application, appearance, and type of environment the newly stained wood substrate will be subjected to will help you determine the most applicable finish sealer or topcoat system. Acri-Soy is our penetrating sealer that leaves a natural non-topical film finish designed to fill the pores to help repel water, oil, and other contaminants without changing the surface coefficient of friction. For interior applications where a low to high gloss sheen is desired, you may apply EcoFlorZ Decorative Floor Finish over the Acri-Soy Sealer. It is designed to provide a hard wearing sacrificial barrier with outstanding scratch and mar resistance. Eco-Tuff High Traffic Flex is our ultimate topcoat finish system for optimum traffic, chemical, and abrasion resistance with a high luster finish typically used for wood floor applications. Finish options are generally installed after 4-6 hours dry time of TimberSoy.
- 12. What can you stain with TimberSoy?** It is virtually unlimited as long as the substrate is porous. Most common wood applications are: wood decks, wood floors, fiber cement siding, log homes, wood cabinets, wood furniture wood beams, and more.
- 13. What are the color options and will they vary?** TimberSoy is available in 12 standard pre-tinted colors and are available in a tint base with individual pre-measured colorant packs that are added by the user. The colorant pack option is available at select stocking dealer locations. The colorant packs are pre-measured with a standard color of choice for each one gallon of tint base. Each pack will contain a different amount of colorant as determined by the amount required for a particular standard color. Actual colors on wood may vary when compared to display samples or color charts, as colors are dependent upon the wood species, wood color, porosity, texture, etc. The colorant pack option provides even more color control by adding less pigment to lighten the standard color or add more pigment to darken the standard color. Mixing different colorant packs will also allow the end user to customize colors as well.
- 14. What is the best way to dispense the colorant packs into the tint base?** Add a little clean water to the colorant pack and gently stir mix all colorant while making sure to scrape all material from the edges. Empty entire contents into your tint base, then mix the TimberSoy container. If using less than a one pack, more than one pack, or mixing different colorant packs you may want to measure the amount of each for future color formula reference. Never exceed 10 oz of colorant per each one gallon of tint base.
- 15. Can you over apply TimberSoy?** Yes. Every substrate will have a saturation point. Simply adding more coats to darken the color and creating film build without removing the topical residue will lead to failure. Trying to darken colors is typically the cause for this temptation. Avoid this by adjusting your color prior to staining. Order a custom tint or add an additional colorant pack to your base. This will save you time, material and minimize potential for errors. In any case, always be sure to remove any topical stain residue prior to final finishing for the best stain system available.
- 16. Will sprinklers or mist systems damage TimberSoy?** Yes. Whenever constant pressure or run-off from water sources, along with what's in the water such as chlorine, calcium, etc., these conditions will damage any coating and the substrate. If the water source cannot be redirected, select the most applicable finish to act as the sacrificial barrier in order to protect the stain and substrate from such damage.
- 17. How easy is it to re-stain or repair with TimberSoy?** If you stained with just TimberSoy or used Acri-Soy as your protective finish and it has reached its effective end of life, you simply have to degrease the surface, allow drying, then re-applying TimberSoy and resealing. If changing colors, you must determine acceptable color combinations. If you applied EcoFlorZ or Eco-Tuff Flex, remove the finish prior to blending or re-staining.