

## Applying LIFELINE™ Finishes Over Penetrating Oil-Based Stains

We often get asked if it is acceptable to apply a LIFELINE™ finish systems over an existing oil-based stain. This will depend on several factors including how many coats were applied, how long the stain has been on the walls and which oil-based stain was used. In general, it is best to remove any existing competitive finish before applying LIFELINE™. All too often, a homeowner does not know what stain is on their walls or how many coats were applied. In many cases the motivation for wanting to apply over an existing stain is to avoid the cost and effort of stripping the surface down to bare wood. However, this approach comes with increased risk. Especially with a water-based, high-performance film-forming finish like LIFELINE™. Let's look at some of the individual parameters that should be considered.

### Appearance

Perma-Chink's LIFELINE™ stains are transparent. Any discolorations or residual pigmentation that is on the wood will show through our finish systems. With few exceptions, our finishes have little or no hiding power. Once our LIFELINE™ system has been applied, the final color of the LIFELINE™ stain will be altered by the color that was originally on the surface. If you are dissatisfied with the final look, it can be quite costly and time consuming to remove the finish, address the discolorations, and refinish the wood surface.

### Adhesion

How much residual oil is still in the wood and is it enough to interfere with the adhesion of LIFELINE™ stain? These are questions that are just about impossible to answer. A small test area may quickly determine that there is a problem. If a problem is not revealed within days, there is no way to tell what may happen over an extended period of time. We have seen several issues that were directly attributed to the prior application of an oil-based stains. Peeling occurred around checks and micro-fissures, because they were flooded with an oil-based product during the staining process. Although most of the oil has evaporated from the surface of the logs, the checks retained enough oil to reduce the adhesion of a water-based film.

### **Blisters**

If several coats of an oil-based penetrating stain have been applied to a wall within a few years, the underlying wood can become so saturated that it may take a long time for the oil to evaporate. Then a homeowner decides to change to a quality finish like LIFELINE™. In preparing the surface, pressure washing with water or a mild detergent may appear to have removed most, if not all, of the oil and colorants.



The wood may look clean and bare, but in reality the old oil carriers may still be in the top layer of wood. With the application of the first coat of LIFELINE™ these oils are now trapped in the wood. Yes, water vapor can permeate our finishes. However, oil molecules are much larger and can not pass through, reducing the films ability to transmit water vapor in and out of the wood.

Weather can also play a role. If the days stay cool and cloudy until the entire finish system is applied and cured, there is a good chance that nothing of consequence will occur. But if the sun heats up the wall while the finish is still soft and pliable, the oils contained in the wood will begin to evaporate creating blisters in the finish. This can occur after the first coat, second coat or the entire finish system has been applied. One thing that these types of problems have in common is that they typically show up within a week after application.

If you plan to apply LIFELINE™ after having applied a penetrating oil-based stain, what is the best way to minimize the chance of forming blisters? The product to use is S-100 Finish Remover. S-100's formulation includes a strong and aggressive detergent package that will help make the residual oils water soluble and easier to remove/wash away from the wood surface. Once the finish is removed using S-100, allow the surface to remain bare for a couple of months to allow any remaining oil to evaporate. When you are ready to stain, wash the surface with Log Wash, allow it to dry and apply the first coat of LIFELINE™.