

# Technical Tip

## Sealers, Stains & Topcoats

### Sealers

“Which of your products should I use to seal my log home” is a question often put to us by prospective customers. Why do so many people refer to “sealing” a log home rather than staining or finishing? Nobody talks about sealing siding or trim on a stick built home. They are either stained or painted, yet sealing is the term used by many log home owners. As it relates to log homes the term “sealing” dates back to the early 1900s. Prior to then most log homes were constructed using heartwood from old growth timber and left bare. Since heartwood is resistant to insect and decay infestations and the people who built log homes knew better than to not include porches or leave log ends sticking out beyond the roof line, the best thing for them to do was to leave the logs bare but keep them dry. That's why so many of them survive to this day.

Starting at the end of the 19 century old growth timber was no longer readily available and people started constructing log homes using second or third growth timber that was mostly sapwood. They also stopped using many of the good construction practices of their ancestors, so problems with bugs and decay began to arise. At around the same time the petroleum industry began to develop and for the first time oil and tar products became available at reasonable prices. Log home owners soon discovered that smearing some of these oil derivatives over their homes helped eliminate some of their insect and decay problems. In their minds they had “sealed” the logs, and the term has stuck with us to this day. Up to the 1950s, unless the logs were painted, log homes came in two basic colors, black and gray.

So, are any of our LIFELINE exterior finishes sealers? As the term relates to keeping liquid water from entering the wood, they all are. All of our LIFELINE stains as well as Prelude Clear Primer and Advance Topcoat all act as water repellents to keep the underlying wood dry.

### Stains

There is a misconception that our pigmented finishes alone do not act as water repellents and it's the Advance Topcoat that seals the surface. That's why many people call our Advance Topcoat a sealer but that's not an accurate description of the product. All of our stains are excellent water repellents. No, they may not bead water but they provide a polymer-film barrier that prevents liquid water from penetrating into the wood.

Calling our pigmented finishes “stains” can also be a bit confusing. The term itself implies that the wood fibers are “stained” with the colorants contained in the products. However, in the case of film forming water-based finishes the wood fibers are not impregnated with the colorants like they are when penetrating oil stains are used. If wood is painted with a latex paint no one expects the paint to impregnate the underlying wood. So if you believe that your wood is not “taking” our LIFELINE stain it's important to understand that our finishes behave more like latex paints than penetrating oil-based stains.

### Topcoats

One of the most frequently asked questions we receive about our Advance Topcoats is why don't we include the topcoat in with the stain. The answer to this simple question is that if we did, it would no longer be a topcoat. Topcoats play a specific role in protecting any finish system. Take car finishes for example. The pigmented paint provides the color and helps protect the metal from corrosion. It is formulated to adhere to the primer and retain its color. The car's clear topcoat is designed to protect the color coat from abrasion, dirt and sunlight and the only thing it has to adhere to is the color coat. Our Advance Topcoats play essentially the same role, to protect the color coats from the weather, sunlight and dirt. Although our stains have to be able to adhere to bare wood, previously applied stains, and existing topcoats, it is not necessary for Advance to adhere to bare wood since it clearly states on the label that it's to be applied only over an existing finish. Although most topcoats on the market are just unpigmented versions of stains, Advance is specifically designed as a high performing topcoat with a unique set of characteristics that have yet to be duplicated by anyone else in our industry. One of the reasons LIFELINE Advance outperforms all other topcoats is that it is designed for a very specific purpose and should never be applied to bare wood.