

Staining

By



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General Information

There are many methods of protecting your new log home. Applying a log stain is an important one. Stain helps seal the logs from moisture, repels rain and snow and helps block harmful UV rays from the sun.

A log stain can also add to the beauty of your log home.

Whatever the reason for staining your log home, it is important to know that staining the home yourself can be quite a large task. There are businesses across the country that specialize in chinking and staining log homes. If you do plan to stain your log home yourself, planning is key. Look at the weather forecast and plan to stain when you have a window of 5 to 7 days of sunny (or at least rain free) weather.

Getting Prepared

There are some important things to do and get before you stain your log home. In this section we will review important pre-staining tips.

The first thing to look at is relative cost for staining the logs yourself verses the cost (and benefit) of having a professional stain for you. It is essentially the same as comparing having a professional come paint you regular home verses painting it yourself. Generally, it is less expensive to stain your log home yourself. However, what about mistakes and appearance? There are many mistakes that can be made that may require stripping the logs and restaining or that may make the appearance not uniform.

These are issues that should be considered before you start. This is not to say you shouldn't stain your home yourself. These issues can generally be avoided with patience and preparedness.

The next thing is to choose a brand (and type) of stain to use. There are many manufacturers of stain on the market. Some stains have better UV protection than others. Some stains must be reapplied more often than others. Some stains have mixed in borate treatments.

With these different types of stains also come different application techniques. When choosing a stain, do not just look for what is easiest to apply or the cheapest, but what is also easiest to maintain and requires less future application. Read the stains literature before you buy. Unlike painting a home, staining helps preserve your log home, not just makes it beautiful.

Many stains also require that you use an end sealer on your logs. End sealer is used at the exposed cut ends of your logs (generally called the tail) to prevent weather exposure. Sealing the logs helps prevent checking cause by moisture or the lack thereof. Again, refer to both the manufacturer's requirements as well as the log package provider (some log home companies use an end sealer prior to shipping your logs).

Equipment Needed

The following equipment may be needed to stain your log home. This list is in addition to your stains, sealers, caulking and other items as required by the stain manufacturer.

- a. Scaffolding
- b. Pressure washer
- c. Tarps or drop cloths
- d. Brushes
- e. Masking (if needed)

These items are not absolutely necessary, depending on how you choose to stain, but for this instructional, are recommended.

Prep the Logs

Before applying the first drop of stain, the logs need to be prepped. Depending on the log finish (hand peeled, hewn, rough sawn or milled), preparation is key. Like painting a home, you cannot simply just start lathering on the stain without making sure the stain will adhere to the surface.

The first step in prepping the logs is to clean them of all foreign debris. The easiest method of clearing the debris is to use a pressure washer. Pressure washers should be used with caution, however, as to not damage the logs. A pressure washer used with too much pressure or too closely can dig into the logs or cause splintering. Start by cleaning a small discreet area of the home until you have reached a level of comfort with the pressure washer.

When cleaning the logs, clean from the top down. This allows the debris to run down your walls and be rinsed off as you go.

Allow your logs to dry before applying the stain. This is not just regarding the moisture from the pressure washer, but also actual log moisture content. It is recommended by most manufacturers that the moisture content of the logs be at 19% or less prior to applying the stain. There are log meters available to help you determine the moisture content by doing a "tap test." Depending on the age of the logs at the time of construction (green logs versus dead standing logs or seasoned logs) this may mean waiting weeks before you can stain, or just days.

Staining logs that have a high moisture content prevents the stain from soaking in to the logs. The more the stain is absorbed into the logs the higher the protection and the less future maintenance will be required.

Remember, 19% or less, unless otherwise specified by the stain manufacturer. Test before you stain!

The next step is caulking your logs as needed. Logs, by nature, will check. Checking is openings in the face of logs caused by aging/drying. Checking is not a bad thing unless it is in excess. A log that is 100% free of checks is more cause for alarm than one that has some checking. Generally, a log with no checking means the log is "green" or has a high moisture content.

Using a log caulking (stainable), fill large checks. Allow the caulking to cure and dry before staining so the stain will take to the caulking.

If the windows and doors have already been installed, tarp and tape off all windows and doors. As with painting a home, when staining you want to prevent staining areas that are not meant to be stained. Obviously, staining prior to your log home being dried in would be preferable, but it is not always an option.

Tarp and mask off decks and patios as well. Different stains are used on high traffic areas such as decks than stain that is applied to the logs.

Borate Treatment

Generally, the next step is treating your log package with borate. Some manufacturers may pre-treat your log package with a borate such as Penetreat. Check with your manufacturer prior to treatment to ensure you are not doing redundant work.

What is a borate treatment? Disodium octaborate tetrahydrate is a borate salt compound that is a mix of boric acid and borax. A variety of water based borate compounds can be found on the market such as Penetreat, Tim-bor, Board-Guard, etc. Borate treatments also come in oil based compounds and glycol based compounds. There are even solid compounds sold in rods that can be used.

Check with different borate manufacturers to see which type of borate will be best suited for your needs.

Borates are toxic to numerous insects and fungus. Without getting too technical, borates affect the enzymes in both insects and fungus to prevent their growth and spread.

Borate is applied in different ways based on the manufacturer's recommendations. Essentially the borate must soak as deep into the logs as possible. This means when applied the logs must be clear of debris and unstained.

It should be noted that borates prevent insects and mildew below the log surface. It is not a topical repellent. Periodic maintenance of your logs may be needed to prevent any build up on the log surface.

Allow a curing time after applying the borate treatment prior to applying stain. Again, the stain needs to be absorbed in to the logs. See the manufacturer's recommendations for curing time.

Applying the Stain

Once the logs have been cleaned, treated and allowed to dry, you are ready to begin staining.

Always follow the instructions supplied by the stain manufacturer. Most stains can be applied as follows.

The easiest way to apply a stain is with an airless power paint sprayer. This allows for an even coating. Make sure to apply a thick coat as you spray. Once an area is sprayed, back brush the area to force the stain deeper into the wood. Just spraying will only get the stain on the surface and not penetrate the wood. Generally this should be a two person job: one to spray the stain and one to back brush it in to the wood. Stain may surface dry quickly in direct sunlight or hot days so it is important to try and keep a wet edge. By letting the stain dry too quickly you may leave a distinct edge mark.

Allow the first coat to dry for 24 to 48 hours or per the manufacturer's recommendations.

Always apply a minimum of two coats. Some manufacturer's recommend 3 coats while others recommend 2 coats the first season and then adding a third coat the following season. Applying 3 coats the first season will offer better protection than just 2 coats. The key is to make sure the previous coat is completely dry before applying the next coat. If you apply stain too quickly, it will not have a chance to be absorbed into the wood.

Stain is like sun block for your logs. The darker the stain, the better UV protection it generally offers. There are also manufacturer's that recommend your third coat be a sealer like polyurethane. Again, consult the manufacturer for their recommendations.

Other Notes

There are two schools of thought when it comes to staining a log home: start at the top of the wall or the bottom of the wall.

There are advantages and disadvantages to both.

If you start staining a wall at the top, your stain will generally drip on to the unstained logs below. If left too long, these drops may actually turn into dark spots when you get to those logs.

If you start at the bottom and work your way up, the same thing may essentially happen.

We recommend starting at the bottom and working your way up. The advantage (in theory) is that the drops that fall on to the lower logs are less likely to be absorbed as deeply as if the logs were not stained. The logs below are generally wet from the stain application; this slows the absorption rate of the stain drops.

You should try and minimize dripping and when unavoidable, and brush the drops in as soon as possible to better blend it with the existing stain.

Again, we stress the importance of preparedness when staining. Do your research prior to staining. Make sure the weather will be sunny and warm. Staining is a big step in your log home and if done correctly, will last for many years.