



Keeping the Dream Alive

Sashco's Complete Log & Wood Home
Finishing Guide

We're here to help....



You want to enjoy your dream home for many, many years to come. That's why we've created this booklet – to give you all the detailed information you need to maintain your home's appearance and re-apply stain as necessary. We also want to show you how to easily rejuvenate an existing log or wood home with a new coat of stain. Log and wood homes don't have to be more difficult to care for than conventional homes, you just need to know what to look for and the steps to take to keep your dream alive.

Follow these simple, helpful steps and maintaining your home will be easy and affordable throughout the years.

If you're looking to build a new log home, be sure to ask about our Start Right program. It's the best way to put a good maintenance foundation on your home while the logs are still "fresh" with nothing on them. And it comes with Sashco's exclusive 3 year warranty.



If you have any additional questions, please contact us because we're here to help.



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**Call Customer Service
1-800-767-5656**

Helpful terms to know:

Bond Breaker

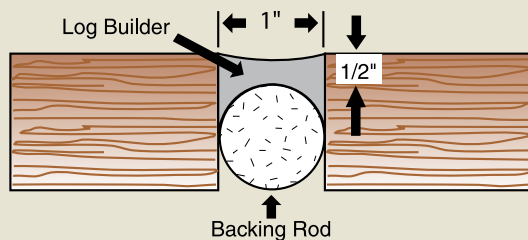
Used behind a sealant to provide proper joint design.

There are generally 2 types:

Backer Rod: foam rod, either round or trapezoid shape, that is inserted into the joint before sealants are applied.

Tape: clear packing tape and duct tape are the most common bond-breaker tapes. They are typically applied over old mortar chinking or house wrap underneath the chink line.

Proper Joint Design: Depth = 1/2" width



4 times the anticipated movement of 1/8"

Caulking (Sashco's Conceal® and Log Builder® are both caulks.)

Sealant used in cracks and checks smaller than 2" wide.

Often blends in with stain color.

Check

A crack in the face of wood, especially logs, that is created as the wood dries.



Chinking (Sashco's Log Jam® and Chinker's Edge® are both chinking.)

Sealant used to give that old-time mortar look. Generally used in joints 1"–5" wide and contrasts with the stain color.

Felting

Wood "fuzz" created whenever some sort of blasting (media or power washing) has been done.

Finishing Products

A general category referring to all products used to finish a wood home interior or exterior, including wood preservatives, stains, sealants, etc.

Sealing

Filling in cracks, checks and gaps to prevent air, moisture and insect infiltration. Types of sealants are chinking and caulking.

Stain (Sashco's Capture®, High Sierra® and Transformation® are all stains.)

A type of coating. Paint, varnish, clear coat, stains, etc. are technically all *coatings*. Most wood and log homeowners use a stain, which deposits color but allows the grain to show through.

Tannins

Naturally occurring chemicals in wood that can leave dark brown stains on the surface if/when extracted. They can be unsightly but do not affect the structure of the wood.

UV

Ultra violet. Refers to the type of radiation the earth naturally receives from the sun.

THINGS TO REMEMBER

Wood is beautiful and rustic, but it must be protected to retain its beauty. Sun, wind, moisture and insects can all wreck havoc on your wood home and rob you of the charm of living in a wood home.

Construction & Location

The style and location of your home can affect stain longevity and the amount of maintenance required for your home.

Eaves, porches, proper drainage and the position of your home on the lot all come into play. Do whatever is reasonable to ensure these guidelines are followed (easier on new homes still in the design phase, but many of these are easy to install on older homes, as well).

- Use large eave overhangs. A minimum of 24" is good, and 36" is even better.
- Install gutters, down spouts and generous flashings (where appropriate) to direct moisture away from the wood.
- Use covered porches to help protect the wood from moisture and sun damage.
- Keep the wood at least 18" above the ground.
- Don't let leaking spigots or sprinklers spray water directly onto your wood.
- Keep plants a minimum of 18" away from your wood. This goes for mulch and other organic ground cover, which can be a breeding ground for insects.

- Use trees to shade the east, west and south sides of your home from direct sunlight and heat. Make sure the trees aren't so close that insects and residual moisture can drop down onto your walls. And be sure to consider the tree canopy at maturity. Plant new trees far enough away to accommodate appropriate space between your home and the tree, and consider cutting it back or relocating older trees for the same reason.

The key is to minimize exposure to soil, insects, moisture and sunlight.



CHOOSING A STAIN

Choosing a stain doesn't have to be a daunting task. Just remember: compatibility first, performance and color second.

1. Compatibility

If your home is already stained, stain compatibility is a huge issue because not all stains are compatible with one another – nor with all sealants. For new construction, you must select a stain that will be compatible with caulking and chinking. When you consider that an average 2,200 sq. ft. ranch style log home has literally one mile of log joints, many of which will need to be sealed at some point in time, adhesion compatibility with the stain you use is critical.

2. Stain Types and Performance

There are three different types of stains available to you. Keep in mind that not all stains are created equal, and how deep a stain penetrates doesn't necessarily equate into better performance. The best value for your dollar may be in a more expensive stain that has been formulated for a specific type of application, i.e. decks, logs, wood siding, etc. With all types, good prep is important to get the maximum longevity. Sashco recommends going with a surface stain or a shallow penetrating stain, both of which afford your home the greatest protection and long-term performance. The three types of stains are discussed below:

- **Surface Stains** (Sashco's Capture and Cascade system falls into this category):

- Little, if any, penetration into the first layer of closed wood cells.
- Rely on adhesion and elasticity for performance



- Good for use on most wood surfaces – handrails and vertical surfaces
- Should not be used on roofing shingles and does not perform well on decks
- Quality brands have good longevity

- **Shallow-Penetrating Stains** (Sashco's Transformation and High Sierra fall into this category):

- Penetrates into wood about 1-3 cells deep
- Good for use on vertical wood surfaces
- Should not be used on roofing shingles
- Quality brands have good longevity



- **Deep Penetrating Oil Stains:**

- Can penetrate as much as 1/4" or more into wood
- Good for decks, hand-rails and roofing materials
- Not compatible with most other finishing products (sealants in particular)
- Appearance is short-lived, even with frequent re-application

3. Finally Choosing a Color

Color is a sensitive issue! It's important to request samples and test several different stains and colors to ensure you get the color you have dreamed of.

Sashco recommends that you stay away from clear stains. Why? In sundrenched areas where only a clear stain is used, the wood's natural color will begin to darken after only a few months. While you're not alone in wanting to keep as natural a look as possible, clear coatings that promise to preserve the "just built" look are misleading. It's impossible to load enough UV absorbers in any clear stain to sufficiently protect your wood. And even though the stain may still be repelling water, dark yellow and gray discoloration of the wood is a sure sign that the UV absorbers have lost their effectiveness.

We recommend you stick with high quality, UV absorbing stains loaded with pigments – which is where you get the majority of your UV protection – and follow these testing procedures to make sure you get it right before you start:

- Read the stain manufacturer's application instructions.
- Apply the stain sample to **your home** (not just a scrap of wood that is lying around) to be certain that you get the color you want. Due to the extreme transparency of most wood stains, the color of the stain will be influenced by the color of the underlying wood.

- Prep the color testing area using the same method that you will use on the entire home. (For example, if you plan on media blasting, media blast that section. If power washing, power wash that section.)
- Apply the sample using the same application method you plan to use on the entire home. (If directions say to spray apply the stain, be sure to spray apply the sample stain.)
- Allow the sample to dry at least 24 hours for full color development.
- If working with a contractor, don't allow the contractor to stain until you have thoroughly discussed and demonstrated the look you want. Show him/her the sample.
- Don't stain the entire home before you verify that you're achieving the look you want. It is best if you can be on-site when staining starts.

YOU CHOSE YOUR STAIN— NOW WHAT?

Now that you've chosen that perfect color of stain, it's time to make sure the wood is ready to be stained. Before you can dive into applying the stain, it's best to understand the criteria for any long-lasting finish job. Below are the five prerequisites every wood home owner should know as they start the staining process:

1. Clean Wood

Don't take short cuts here. Absolutely bare, clean wood is essential for effective stain application and adhesion. These common items will make wood unclean:

- Mill glaze
- Dirt
- Mold/Mildew
- Pollen
- Bird droppings
- Grease
- Oil
- Wax
- Peeling finishes (old stains, paints, clear coats, etc.)
- And many others!

All of these things must be removed prior to applying any finishing products. Refer to the "Prep Time" section for details on how to get your wood clean.

2. Sound Wood

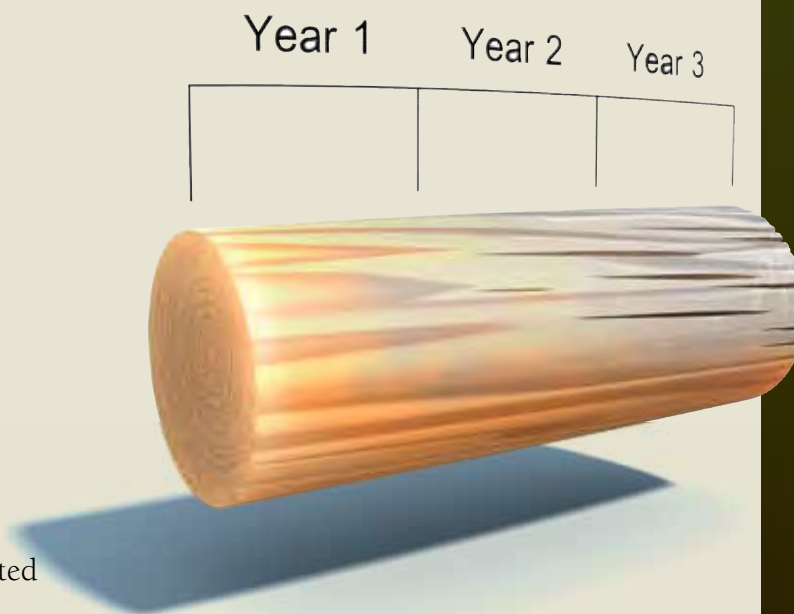
Your wood should be in the best possible condition prior to staining. Research reported by the USDA Forest Products Laboratory

and other investigators around the world has conclusively shown that bare wood exposed to sunlight for as little as 1 week can suffer enough damage to the surface wood cells to significantly reduce the adhesion of paints and stains —leading to premature failure. And your wood is exposed to lot more than sun!

So what are the main causes of unsound wood?

Weathering

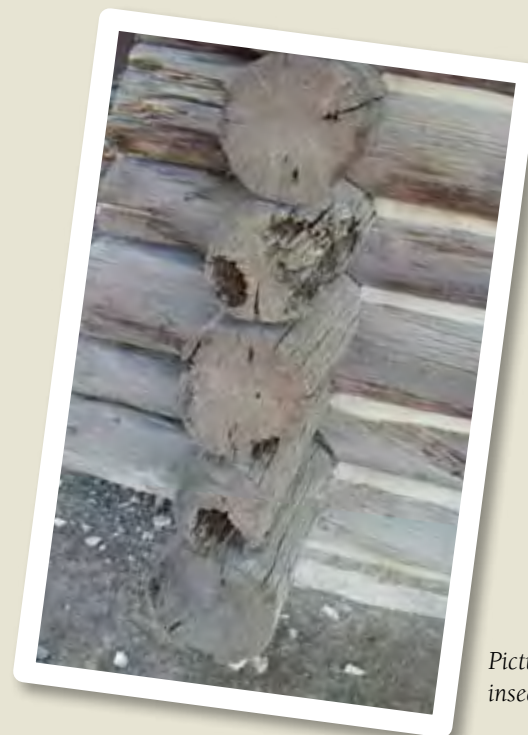
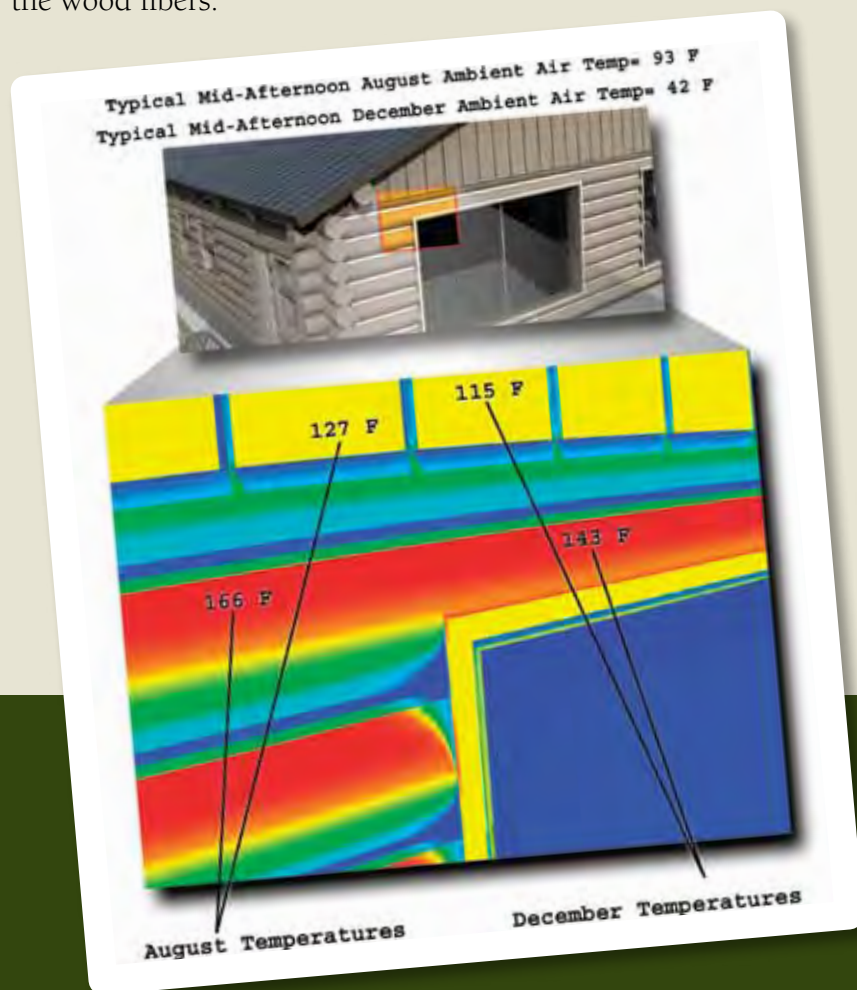
Sun, moisture, wind and insects all contribute to the creation of unsound wood (loose wood fibers). You'll see your wood go from its bare, light color to an amber yellow (or yellow undertone), to a gray. All weathered wood must be removed prior to applying finishing products to give those products the best adhesion to the wood and greatest longevity.



The aging process of wood.

Sunlight & Round Logs

All wood can be damaged by UV rays, but the upper curvature of round logs receives more intense exposure from the sun. This intense light attacks the wood and anything on it (including your stain!) with high-energy, ultraviolet radiation and drastically heats the surface of the logs, even on cold winter days. Radical temperature fluctuations like those described in the graphic below cause the logs to contract and expand at a significant and constant rate, stressing and eventually breaking down the wood fibers.



Picture of rotted and insect infested logs.

Rot and Insect Infestation

Severe rotting or insect infestations can occur to the point that the structural integrity of the home is affected. Rot must be removed and the cause remedied. Wood or log replacement or re-facing may be necessary. However, most homes just need a face-lift. Insect infestations must be eliminated and the wood inspected for structural integrity before moving forward with finishing.

Take a look at the log surface temperatures compared to the ambient air temperature. Notice that vertical siding receives sunlight at angles less than 90°, reflecting much of the energy away. Not on logs! Sunlight has the chance to strike portions of the upper curvature head-on, full-force, at a 90° angle. In fact, some logs may exceed 170°F in the summer!

Deteriorated Older Coatings

Many older wood homes have an old stain, paint or clear coat on them and most homeowners don't know what brand or type of stain it is. Unless that old paint or stain is in good shape, it's best to completely remove it. Removing it exposes the sound wood underneath. The new stain adheres much better to the sound wood and you get greater longevity out of the stain. (In some instances a new stain can be used over the old. Contact Sashco to discuss your particular circumstances.)

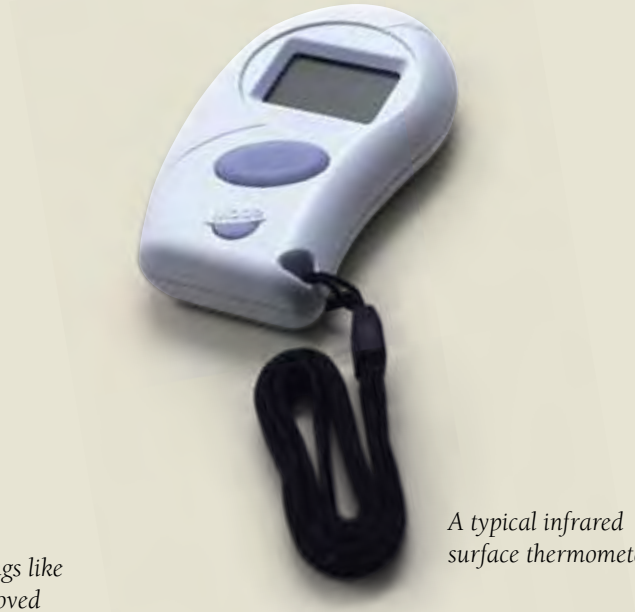
All weathered, UV damaged and rotted wood should be removed, along with any old stains and paints, to provide you with the optimal surface for future stain adhesion and performance. The "Prep Time" section discusses in-depth how to do this.



Deteriorated coatings like this need to be removed before re-staining.

3. Warm Wood

Your wood and the air temperature should not be extremely hot or cold at the time of application. If wood is too hot, the stain may dry before proper penetration has occurred. On the other hand, cold wood can cause products to freeze and prevent proper penetration. Avoid applying stain or sealants in direct sunlight. Use a surface thermometer to make sure the temperature is within the recommendations made by the product manufacturer.



A typical infrared surface thermometer

4. Dry Wood

Wood must be dried to a moisture content of 19% or less, and the drier, the better.

Use a wood moisture meter to avoid guessing! Too much moisture can cause a number of issues, such as:

- *Peeling and flaking.* As the excess moisture is vaporized and tries to escape the wood, it will stress the stain, leading to peeling and flaking.
- *Poor adhesion.* Any finishing product applied to a moisture-laden surface will have a hard time getting good adhesion from the get go, obviously affecting protection.
- *Mold, mildew and rot.* All of these moisture-induced problems can be expensive to fix and will re-occur if their causes are not determined and remedied.

Keep in mind that wood, especially logs, is loaded with unavoidable cracks and holes –all of which permit moisture to penetrate the wood. The checks and cracks that occur on the upper curvature of logs collect water, which seeps into adjacent wood. The sun then heats up this moisture and it tries to escape. If it can't easily escape, it will force its way out, leading to problems. In addition, water trapped in a check can freeze and expand, causing the crack or check to expand even more and expose more wood,

a virtual open house invitation to wood-destroying fungi and insects. The “Time to Stain and Seal” section discusses in detail how to seal your home from moisture infiltration.

5. Textured Wood

Simply put, the more textured an exterior wood surface, the longer the stain will last. This is especially true on the upper curvature of logs. The texture allows the wood to take on much more stain. This, in turn, provides greater overall protection. Media blasting is the preferred preparation method to achieve this textured surface.

The “Prep Time” section discusses in detail how to prep your wood to get a textured surface.



Smooth wood vs. Textured Wood – stain will adhere much better to the textured wood on the right, improving performance and longevity.



PREP TIME

The walls are in place and the roof is installed (for new construction), and you now know the pre-requisites for a good staining job. It's time to prepare your wood for staining. Substrate preparation is the most critical step in achieving stain longevity. As Kurt Denman of Benjamin Moore stated in the February 2007 edition of *Coatings World* magazine, "I cannot emphasize enough how critical proper preparation is to realize a successful staining project. It's the ultimate determinant on how long the beauty of a job lasts." Properly preparing the wood from the get-go will save you both time and money down the road.

Cleaning the Wood

Before you apply any type of stain to logs or wood, the surface must be clean and free of any dust, debris, unsound surface wood, cambium, bark and mill glaze. Most wood surfaces are coated with "mill glaze" — the hard, smooth film that forms on the surface of wood when leftover tree resins and sugars react to the mechanical and heat energy from the milling process. Because this layer of glaze can't be penetrated by stains, it must be removed to ensure good stain penetration and adhesion. The best overall cleaning methods are:

Media blasting with crushed glass or corn cob media. Crushed glass is especially good at removing stubborn stains, either fresh or old, and tends to leave less "felting" (wood fuzz), reducing and possibly eliminating the amount of secondary prep that may be necessary. This method also leaves the most desirable wood color.



Before

After

This is the best method for log home prep.

Power washing with secondary prep. Power washing, when done properly, allowed to thoroughly dry and followed by good secondary prep (sanding, Osborn brushes, Buffly pads, etc.), can produce a good result. Ask us for more details on proper power washing.



Before

After

This is the best method for wood siding prep.

Hand sanding. The best tools for this are Osborn brushes or a 60- to 80-grit sand paper. This method doesn't always leave the ideal wood texture for exterior finishing – the wood can be too smooth, which can impede stain adhesion – but is better than chemical cleaning, as it is dry prep. It is a great method to use for interior staining where a rough texture is not necessary and the smoother texture it leaves makes interior cleaning easier.



Before

After

Power washing with chemicals, followed by secondary prep. It's always best to avoid chemicals, if possible, as they can be hard to neutralize and can later affect stain adhesion if not completely removed from the wood. That said, chemicals are sometimes needed to remove old, stubborn stains and/or to remove discoloration from tannins, age and UV damage. Always start with the least harsh chemical cleaner and move on to something more harsh only if necessary. It is also important to test your selected chemical cleaner, no matter which one it is, on the target wood. This is because it is not possible to always predict what color effects may occur!



Before

After

Below is a brief discussion of the most popular types of chemical cleaners, their strengths and weaknesses. They are listed in order of most gentle to most aggressive:

1. Sodium Per Carbonate (Oxygen Bleach)

(Sashco's CPR® Cleaner and Brightener falls into this category)



Pros:

- Environmentally friendly and safest to use
- Disassociates into hydrogen peroxide, soda ash & water – that's all!
- Won't aggressively corrode metal fasteners
- Little affect on stains applied if not totally rinsed off
- Kills mildew and strongly bleaches most types of wood

Cons:

- Can't be used on un-aged redwood or other high-tannin woods (causes discoloration)
- More expensive than other cleaners/bleaches
- Residual soda ash can appear as whitish patches underneath a stain if not well rinsed

2. Trisodium Phosphate (TSP)

This cleaner is usually combined with chlorine bleach

Pros:

- Readily available
- Inexpensive
- Good cleaner

Cons:

- No bleaching action
- Residual TSP can interfere with stain adhesion

3. Chlorine bleach

Pros:

- Strongly bleaches all types of wood
- Inexpensive
- Readily available
- Kills mildew

Cons:

- Chlorine gas can be released if mixed with other household chemicals (Chlorine gas can be hazardous or fatal)
- Kills plants, especially new growth
- Can degrade wood cells
- Very corrosive to metal fasteners (nails and screws)
- Can affect adhesion of stain if not completely rinsed from the surface

4. Oxalic Acid

Pros:

- Particularly good at removing tannin stains
- Best choice for Redwood (other types discolor Redwood)
- Best choice for removing rust stains

Cons:

- Does not kill mildew
- Is a poison & must be handled very carefully
- Must be thoroughly rinsed and neutralized to avoid a host of negative effects (poor adhesion, discolored wood, and others)

Secondary Prep

Don't forget this step! When properly done, most blasting methods are going to create at least some "felting" – wood fuzz – that should be removed prior to applying any finishing products. All of that wood fuzz will eventually fall off. If there's stain that was applied to that wood fuzz, it will simply fall off with the fuzz, leaving a mottled look and leaving those areas exposed to the elements. In addition, sometimes blasting can raise the grain a bit too much and make the wood coarser than most like it. While the coarse texture is good for stain adhesion, it makes for a rougher look and darker stain, both of which are not always aesthetically pleasing.

The best tools to use to remove this felting and make the texture a bit smoother are Osborn brushes or Sashco's Buffy Pad system, both of which attach to a variable speed grinder. Of course, random orbital sanders with 60- or 80-grit sandpaper will work, but will be more time consuming and don't always do as good a job.



Felted Wood



Sashco's Buffy Pad System



Osborn Brush

Preservatives

Applying some type of wood preservative to your home is like taking out an inexpensive insurance policy. These preservative products are mostly borate-based and are designed to protect your wood from rot and wood ingesting insects. Adding this affordable step at the beginning can save you many headaches down the road, including the time and money it costs to replace damaged wood.

There are two main types of whole-home preservatives on the market: borate-based powders that are mixed with water and sprayed on your home (like Sashco's PeneTreat®) and borate-based products in a glycol carried formula that are applied directly out of the container. Recent research suggests there is no difference in penetration between water-carried products like PeneTreat and their glycol counterparts, but glycol preservatives are more expensive. Why pay more for the same protection?

PeneTreat

Applying PeneTreat is easy! You simply spray or brush the liquid mixture on your wood prior to staining. (And keep in mind that wood preservatives can only be applied to bare, stain-free wood.)



Borate Rods

Borate-based rods, such as Cobra™ Rods, are available in a variety of sizes to fit any application. These rods are ideal for placement in areas of wood homes that are at higher risk for decay, such as: base wood courses, corner construction, exposed purlins, rafters or overhangs, exposed log railings, and below windows, doors, or dormers—especially when regularly subjected to high volumes of water. They are very easy to install: simply drill a hole, install the rod, and seal with caulking. As always, be sure to follow the manufacturer's recommended placement instructions.



Log cross-section showing an installed borate rod.



Cobra™ Rods come in various sizes.

TIME TO STAIN AND SEAL

It's finally time to stain! If you've followed all the steps for proper preparation, you're ready to stain. The latest advancements in stain technology and application techniques allow most anyone to properly stain a home. Keep your dream alive for years to come by following the manufacturer's application guidelines and follow the simple rules outlined below.

Optimal Conditions

Every stain manufacturer prints the optimum application temperatures and weather conditions on their literature. It is wise to follow their instructions carefully.

Stains should not be applied at extreme temperatures (hot or cold), as previously discussed in "Warm Wood".

It helps to start staining in the morning on the south and west sides of the home, while the wood is at its coolest point. Stain the north and east sides of the home in the hotter parts of the day, as shown in the pictures at the right.

Also try to avoid applying stain right before or right after extreme weather. For example, staining 24 hours before a major rain storm will not allow enough time for most stains to properly dry. This could lead to the stain getting "washed off" the wood

by the rain. Or, if high winds are expected, the stain may dry too quickly, or excessive amounts of sand and dust may stick to the fresh stain. (A light breeze is obviously OK, and in many cases is a welcome relief from the heat!)



Shadows at 7:00 a.m. in the morning



Shadows at 5:00 p.m. in the afternoon

STAINING YOUR HOME

Boxing Stain

There is always a chance of small color differences between lots of stains (like lot variations in carpet or drapes); therefore, it is important to make sure before starting a job that containers of stain with different lot numbers are “boxed” or interblended before using. This will help ensure uniformity of color even when different lot numbers are used.

Additional Fungicides

In areas with high moisture exposure, it is advisable (for exterior use only) to add an additional loading of fungicide to the stain and any finishing clear coat just before application to control surface mildew. We recommend Stay Clean I/E with all of Sashco's stains.

Application Techniques

Pay attention to the number of coats recommended for your stain. Both color and gloss can vary greatly from one coat to the next. Regardless of which stain you have selected, the best staining method is usually to spray and vigorously back brush.

Some may desire to brush on the stain. If this is the case, be sure to stick with the manufacturer's coverage rates. If you end up with a lot of left over stain, you probably haven't applied enough and should brush on another coat. Making sure you apply enough stain ensures proper UV protection.

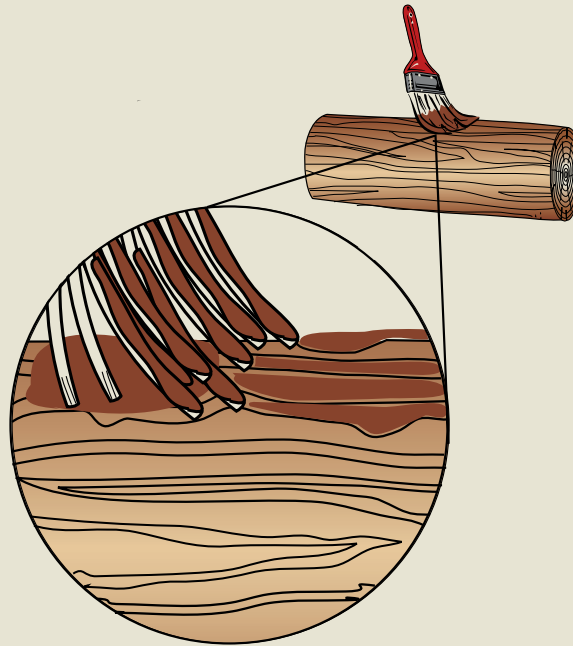


1 coat (left) vs. 2 coats (right) – it makes a difference!



Back Brushing

Don't skip this step, and be prepared to get a workout! Back brushing will work the stain into all the tiny checks and crevices characteristic of wood. This will help the stain to adhere better to the wood, by anchoring it onto the wood surface. This results in a longer-lasting finish that will require less maintenance over time.

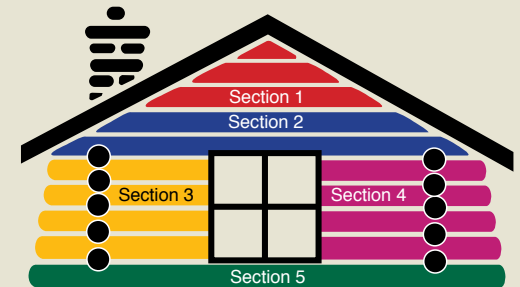


Back brushing anchors the stain for optimal performance.

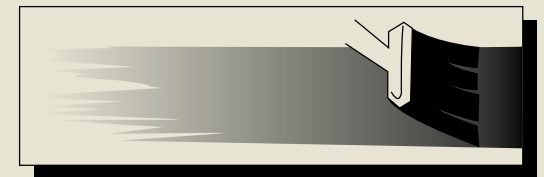
Avoiding Lap Marks

Maybe you've seen homes that look "striped." That look is a result of spraying and not brushing out the excess product that overlapped onto the previously sprayed section. Lap marks are usually a result of poor application techniques.

To avoid lap marks, it's best to work horizontally and in sections. If brushing, minimize lap marks by keeping a wet edge and "feathering out" the stain—trailing it out into a ragged "nothing."



For best results, stain in sections as shown above.



Feathering Technique: use only if stopping in the middle of a wall is unavoidable.

Sealing Your Home

All wood will shrink, move and change shape in its life, leaving behind openings both in the wood itself (known as “checks”), as well as between the courses on a log home. This means that every home will require sealing in at least some areas at some point in time. It’s important to pay close attention to checks, cracks and other openings, as they act as troughs for water from rain and snow, funneling water to the interior of the wood and possibly the home, which can lead to a number of other problems. In general, any opening $\frac{1}{4}$ ” or larger, and especially in the corners and upper curvature of logs, should be sealed.

Logs in particular are a different “breed” of wood. Make sure the sealants you select have been formulated for use on log structures. This means they need to be flexible enough to handle the

stress and strains of the extreme expansion and contraction, characteristic of log homes. When a high-quality sealant is properly applied, it won’t ever need to be re-done unless there is unusual and, unpredictable movement of the wood.

At initial application, let the stain completely dry, then apply a high-quality sealant that is compatible with your stain. Why after staining? For a couple reasons:

- The stain acts as a primer for the caulk. The caulk will adhere much better to the stain than to bare wood.
- The stain provides an added barrier of protection in the joint. Should that joint open up more over time and stress the caulk, the stain is there to repel water until you can seal the joint again.

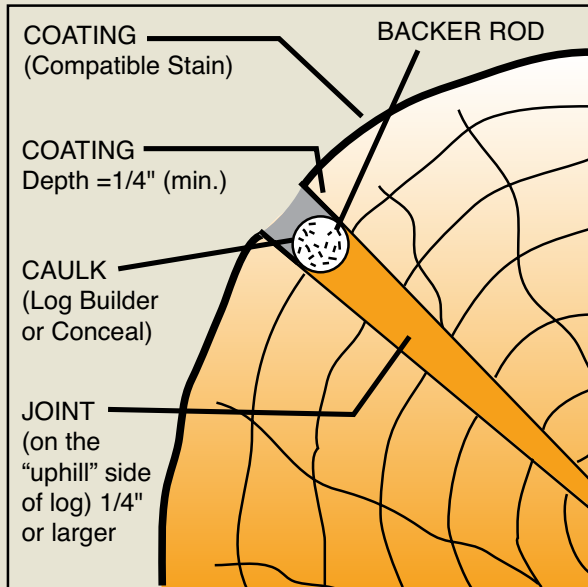
For ideal treatment of checks and cracks, be sure to follow these simple steps:

- 1) Thoroughly clean the inside surfaces of the check (where the caulk will be in contact) to remove dirt and unsound wood.
- 2) Stain the wood with a product that is compatible with caulking and chinking, making sure it seeps into the check.
- 3) Insert backer rod in all checks $\frac{1}{4}$ ” wide or larger to the appropriate depth (no more than $\frac{1}{2}$ ” deep, no less than $\frac{1}{4}$ ” deep).



*Chinked Logs
& Open Check*

- 4) Gun the caulking into the check.
Sashco's Log Builder or Conceal are ideal for this application.
- 5) Tool the caulk to ensure good adhesion to the wood.



Maverick Logs

On most any log home, a small number of “maverick” logs may undergo extreme movement. This movement is a natural part of the logs adjusting to their new settings. Moderate movement is normal, but the occasional maverick log can randomly and unpredictably twist, shrink or warp in response to moisture changes, moving more than any sealant can possibly handle. When this extreme movement occurs, it will cause the sealant to fail either cohesively or adhesively. To repair this damage, follow these instructions:

- Cohesive failure (sealant splits apart): Simply clean the surfaces of the failed sealant and reapply more.
- Adhesive failure (sealant pulls cleanly away from the wood): Remove the sealant completely and re-apply.



Cohesive failure of chinking



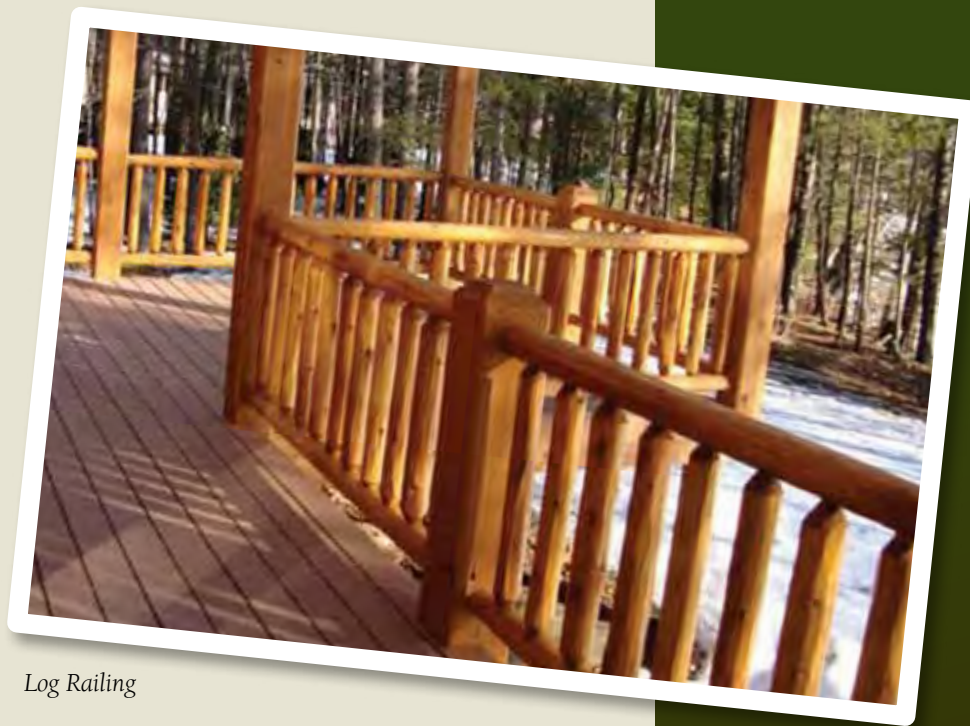
Adhesive failure of chinking

Extreme Exposure:

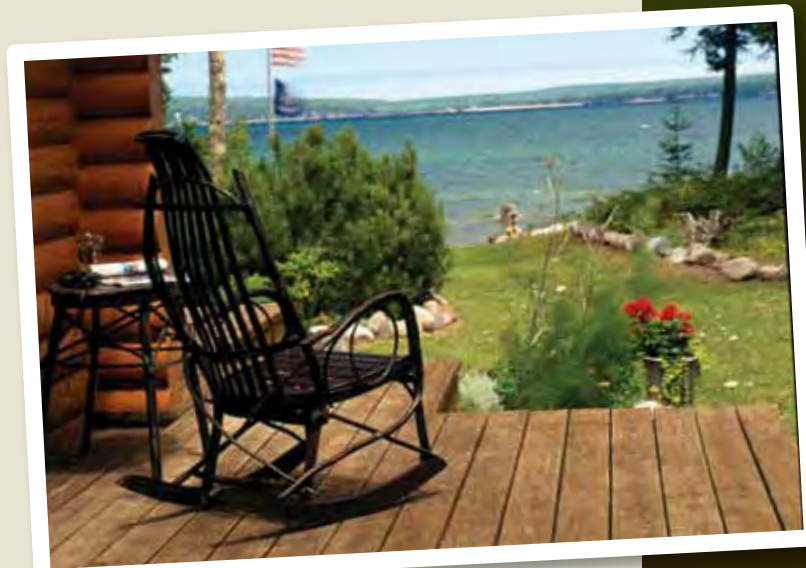
Deck, Railing & Fence Care

Outdoor decks, hand rails and fences require specialized care because of the extreme and unrelenting exposure to weather they must endure. All the same preparation instructions given earlier should be followed when prepping any of these surfaces, but more frequent maintenance inspections will be required, along with more frequent maintenance itself.

Typical log-spindle hand-rails are particularly vulnerable to decay because they are often built and assembled with non-draining holes that easily and quickly accumulate water, creating perfect rot conditions. If such a situation exists for you, then it is wise to retrofit such features by drilling drainage or weep holes and inserting borate rods to give some added insurance. Contact Sashco for instructions detailing these recommendations.



Log Railing



Wood deck

INTERIOR FINISHING

Have you ever tried to run a cloth over unstained wood? It's horrible! It catches on the wood, doesn't remove the dust and ultimately makes a bigger mess. Finishing the interior wood means hassle-free cleaning and a constant warm glow for added ambience. And best of all, interior finishing needs to be done only once. Routine cleaning – wiping down cobwebs, dust that settles, fingerprints, etc. – is all that's needed to maintain the finish and keep the wood looking like new.

You can apply just a clear coat, or a coat of stain followed by a clear coat. The pros and cons of both are discussed below.

Follow these simple steps to prep and finish your interior wood:

1. Prep the Wood

Clean any mold or mildew.

If the wood has any mold or mildew growing on it, use a mild cleaner (such as Sashco's CPR) in its mildest solution to clean the wood. Thoroughly rinse to neutralize the cleaner and allow the wood to dry. Be sure to protect any flooring or other fixtures from runoff.

Remove any yellowed or gray wood.

The easiest and safest way to prep interior wood is to sand or buff it down. As with exterior finishing, it is necessary to remove yellowed and/or gray wood. An Osborn Brush, Sashco's Buffy Pad system or 60- to 80-grit sandpaper are the best tools for this kind of work. Do NOT "spot prep". Sanding one area and not another will result in a blotchy look. It is important to do an entire area to get an even appearance.

2. Apply Stain

(Sashco's Capture and High Sierra stains are good interior stains.)

Applying one light coat of stain is a good idea if you have large windows that allow a lot of sunlight to get into the home, or if you're concerned about "picture frame effect" happening. Picture-frame effect happens when a picture covers a part of the wall and the surrounding wood is exposed to UV radiation. The surrounding wood will turn yellow, while the wood underneath the picture remains the original wood color. On the interior, only one light coat of stain is sufficient to protect against this phenomenon, although you can certainly apply more than one coat to achieve a richer, darker color. As always, be sure to get samples and test an inconspicuous area to ensure you get the look you want.

3. Apply a Clear Coat

(Sashco's Symphony is an interior clear coat.)

A clear coat is a must, whether you stain or not, and is the final step in achieving that smooth surface for easy cleaning. It also brings out the grain of the wood to help give it that warm glow. Two coats are best. Get samples of the different sheens available and test to make sure you get the look you want.



Wood home interior finished with Sashco's Symphony clear coat

MAINTAINING THE DREAM

Regular maintenance is the often-forgotten ongoing step in wood home finishing; however, it is one of the most important steps that results in cost savings (and fewer headaches) through the years.

Routine Inspections

Preventative maintenance saves time and money, so it is good practice to inspect your home each spring and fall. This involves walking around your home and paying close attention to the stain's appearance. It's a good idea to take along a rough sketch of your home to write down areas that need maintenance, and taking pictures will help give you a point of reference so you can easily re-locate some of those smaller maintenance needs as you move forward with work.

What to Look For

Download Sashco's handy Log Home Inspection Guide from our website. This pamphlet lists a number of issues to watch for. Note any problems on the sketch or checklist, then decide what kind of maintenance is needed. You can handle most maintenance issues. If you're not the DIY type, visit the Find A Contractor page on our website at www.sashco.com for names of contractors



who specialize in log and wood home care and can do the work for you.

The sun-exposed sides of your home – usually south and west walls – will require more frequent maintenance than other parts of the home. The majority of work, especially caulking and staining, should be done when wood is very dry and checks are very large. This allows the stain to effectively seep into the openings, and then the caulk to be applied at the check's widest point, helping maintain a tight seal and providing for the maximum protection and least amount of follow up maintenance.

Stain Maintenance

Any time your stain needs to be maintained, be sure to clean the walls first. Surface preparation is important before staining, as well as when maintaining it. Most manufacturers will include stain maintenance recommendations in their literature. Follow their recommendations and contact them if you have any questions.

In most cases, stain that is still in fairly good shape (meaning little peeling, flaking, or fading, etc.) can simply be spot prepped and re-applied. With several products, all that's required is a re-application of a top coat.

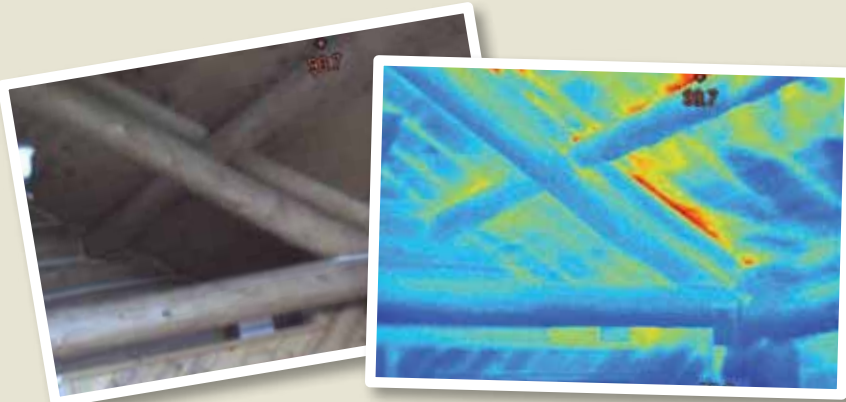
And keep in mind that, just like conventional stick-built homes have to be scraped down and re-painted, your wood home will eventually need to be re-stained over time. And just like paint on stick-built homes, regular maintenance will prolong the life of your stain, saving you time and money down the line.

Checks/Cracks Maintenance

As your home loses moisture, new checks and cracks may appear. There will be more of this in the first few years of a new home, less as the home ages and comes to its moisture equilibrium in its environment. Be sure to fill anything $\frac{1}{4}$ " wide or larger with a high-quality elastic caulk made specifically for log and wood homes. In addition, it's possible for cracks and checks that were previously caulked to open further. Inspect all of them and be sure to re-apply caulking to those checks and cracks as necessary.

Time for a Thermographic Survey?

If you're feeling drafts or seeing moisture coming into your home but haven't been able to pinpoint the entry location, bring in a professional who will be able to perform a thermographic survey. These surveys help pinpoint where the air and moisture are getting in so you can get them properly sealed. A survey like this can help save you money on those heating and air conditioning bills. Contact Sashco for names of contractors who perform this work.



Normal Photo

Photo taken with Thermographic camera

RESTORING HOPE

Most older wood homes can be salvaged – that is the beauty of wood as a building material. Just a few cells down, underneath the grayed, deteriorated surface is (usually) good, sound wood waiting to be restored to its prior beauty.

Restoring an older neglected wood or log home may be costly, but it can be brought back to life. Simply follow the steps in this book and restore your dream.

We're Here for You!

We hope you found this step-by-step book to be informative, and that you'll use it as an easy reference guide for finishing and maintaining the look of your dream home. If we missed one of your questions, please contact us.

Our goal is to ensure you start right so your home looks great and lasts forever.



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**Call Customer Service
1-800-767-5656**



Timberframe home in Redmond, WA stained with Sashco's Transformation stain in Goldtone Medium.



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