

Technical Data:

Not to be considered specifications

Colors: Applewood, Natural Spruce, Butternut, Bronze Sycamore, Tan Pine, Honey Timber, Natural Cedar, Woodtone Cedar, Redwood & Pecan.

Coverage Rate: The first coat of High Sierra Log Stain will cover 150 – 300 square feet per gallon, depending on the wood roughness. The second coat, applied within 30 min. to 2 hours after the first coat, will cover 250-450 square feet per gallon.

Packaging: One-gallon and five-gallon plastic pails (with easy-off, easy-on lids).

Application Range: Surface temperature: 40°F minimum and rising, 95°F maximum and falling. *For best performance, apply between 60°F and 90°F.* The coating should be applied and allowed to dry within this temperature range. Application and curing below the minimum risks freezing and slow drying which could lead to rain or snow damage. Application above the recommended maximum risks drying too fast, with poor penetration into the wood.

Compatibility: High Sierra Log Stain is recommended for use with Log Jam Chinking, Log Builder Caulking, Conceal Caulking, Symphony, and PeneTreat. It also works well with most other caulking and chinking products, other interior clear topcoats and other borate preservatives. *However, contact Sashco for guidance when using with other manufacturers' products.*

Shelf Life: 18 months from date of manufacture (minimum), when stored at room temperature.

VOC: Less than 350 grams/liter

Dry Time: High Sierra typically dries to the touch within 30 minutes to 2 hours, depending on the condition of the wood surface and the weather. The first coat should be allowed to dry until tack free before the second coat is applied.

pH: 8.0 – 9.5

Density: 8 – 9 lbs. / gal

Odor: Very mild, slight ammonia odor

Solids: Approximately 22% by volume (varying slightly, color to color)

Viscosity: Brookfield, LVF, 30 – 150 centipoise, #3 spindle, 60 rpm

Freeze-thaw Stability: 3 cycles minimum down to 0°F. For best stability, store at room temperature.



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Product Description

High Sierra Log Stain is one of the latest advancements in stain technology. Its unique blend of water and acrylic-modified alkyd resins not only provides a very easy stain to apply, but the cured coating is both beautiful and durable.

High Sierra Log Stain impressively penetrates properly prepared wood and is extremely resistant to UV degradation, moisture and oxidation. The high quality trans-oxide pigments enhance the natural beauty of wood grain while imparting a mellow sheen to the logs.

It is best to read Sashco's stain guide, "Keeping Your Dream Alive," for a more complete understanding of all the issues concerning the application of stain to log surfaces. Experience has shown that most coating failures are due to poor application or poor surface preparation, not actual product performance. We strongly recommend that you read this highly informative brochure prior to staining.

Fundamental Staining Application Guidelines

- Proper substrate preparation and application is imperative for product longevity. Read the entire label and this Data Tec sheet, HLS 002, before applying any product. If you have further questions, call us at 1-800-767-5656 or access our web site at www.sashco.com. High Sierra may be used on the interior, but the following instructions primarily apply to exterior use.
- Make certain that all compatibility issues have been addressed. If you are changing from one stain product to another, call the manufacturer and ask if the new product will work over the residue of the previous coating.
- If caulking or chinking may need repairing in the future, make certain that the stain is compatible with the brand of caulk or chink that is now on the structure.
- Check the weather forecast. It is best to stain within a week of fully prepping the logs, since surface wood begins to deteriorate right away from sunlight. Check for a window of opportune weather, during and after application, and try to use surface prep methods that will allow you to take maximum advantage of rare good weather.

er. No coating should ever be applied when it is cold (50° F and falling) or hot (95° F and rising), dry, windy conditions, or when the sun is shining directly on the wall you want to stain. For the most part, the south and west walls should be coated in the morning and the east and north walls in the afternoon, working counter to the sun, to avoid surfaces being too hot.

- Clean the logs to remove dirt, dust, grease, old coatings, pollen, chemicals (i.e., bleach residue), unsound wood fibers, etc. In general, the best cleaning or stripping techniques are the mechanical methods: corncob blasting, non-woven pads, sanding, etc. because further finishing work can proceed right away. Another benefit of dry mechanical methods is that the resulting textured log surfaces can provide longer stain durability - especially on the upper curvature of logs. Wet cleaning methods can work when properly done, like chemical stripping and/or power washing, but valuable time and favorable weather can be lost while waiting for the wood to dry out again.
- It may be desirable to lighten the color of the cleaned wood. If so, use a product like CPR wood cleaner and brightener: follow manufacturer's instructions.
- If the logs are cleaned down to bare wood, apply PeneTreat wood preservative. Allow to dry before applying stain. The moisture content of logs must be 19% or less before applying a coating according to the USDA Forest Products Research Laboratories. Use a moisture meter to avoid guessing and, possibly, guessing wrong. If your home is in an area of high humidity, or is subject to localized regions of high moisture, add additional mildewcides to the stain used on the exterior. Check with Sashco for recommendations.
- "Box" (or mix together) pails that may have different lot numbers. This will help ensure uniformity of color. Stir thoroughly, if possible, with a drill-driven mixer, to disperse all pigment evenly, and stir the stain periodically throughout application.
- Use the recommended application methods from the manufacturer.



Work horizontally, starting with the top 3-4 logs, until you reach a natural break in the wall surface: i.e., windows, doors, log butt joints, etc. Continue in a similar pattern to the bottom of the wall. Clean any drip marks that may occur on lower logs to avoid overlap marks. It is generally best to vigorously brush the stain into the wood, especially on the upper curvature of the logs, even if the stain is sprayed. Stain, if compatible with caulk or chinking, should be brushed into checks and cracks to help prime them for the sealants that will be applied later.

- If it is necessary to stop in the middle of a log, “feather out” the stain, trailing it off into nothing to help minimize lap marks. When you return, “feather in” the stain before resuming down the length of the uncoated section of the log.
- Spraying is a fast method for getting stain on the walls, but vigorous back brushing ensures proper penetration and adhesion of coatings. Plan enough time to allow for this important step.
- Be prepared to cover the walls with plastic sheeting in case inclement weather moves in. Freshly applied coatings should not be exposed to rain or snow showers for at least several hours or a day or two, depending on the coating.

Surface Preparation

It is important to know moisture content before applying any coating. Per the Forest Products Research Laboratories, the moisture content of the logs must be 19% or less before applying a coating. As with any finishing product, the surface must be clean and free of surface conditions that would prevent penetration of the stain. CPR Log Cleaner and Brightener is best used on bare wood to remove dirt and tough stains like rust, mold, tannins, discoloration of the wood caused by sun exposure and mill glaze. Previous coatings or unsound wood that may inhibit stain penetration can best be removed by corncob blasting (i.e., Sashco’s “Kernel” cob blaster) or sanding; chemical stripping and/or power washing can also be used but extra care is required in their use*.

*Call Sashco for more information.

Wood Preservatives

Once the logs or wood surfaces are clean and sound, apply a wood preservative for protection from attack by wood destroying fungi and insects. We recommend PeneTreat, a borate-based wood preservative. If you select another preservative, please check with the manufacturer before applying to make certain that it is compatible with High Sierra Log Stain. **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 just before application to ensure control of surface mildew. Check with Sashco for recommendations.

Application



Weather

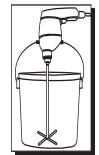
STEP 1 Check the weather. High Sierra Log Stain can be applied to wood surfaces with a temperature as low as 40°F (but rising), but this is the extreme and should be avoided if possible. Avoid working in direct sunlight or applying product to logs that have a surface temperature of 95°F and rising. The ideal temperature range for application is between 60°F and 90°F. Protect the coating with plastic sheeting if rain is expected within 6 hours of application (or longer if the weather is cool and/or humid).



Preserve

STEP 2 All homes should be chemically protected from insects, rot and fungi. If using PeneTreat, or another borate-based product*, it must be applied to logs **prior to staining**. If this step is missed, the home must be stripped of any coating and then the borate-based product (PeneTreat) can be applied to protect the bare logs. Borate-based products can be applied to bare wood only.

*Check with Sashco or an authorized Sashco distributor before using other borate products.



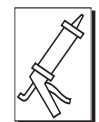
Mix Stain

STEP 3 The stain should be thoroughly stirred (preferably with a squirrel cage mixing blade), making sure that all the pigment at the bottom of the pail has been dispersed. High Sierra should be stirred frequently while using. Since there is always a chance of small color differences between lots of stains (like lot variations in carpet or drapes), it is important to make sure before starting a job that containers of stain with different lot numbers be “boxed” or inter-blended before using. This will help ensure uniformity of color even when different lot numbers are used.



Apply two coats

STEP 4 High Sierra is a 2-coat system. For best results, application is 2 heavy coats sprayed and then *vigorously* back-brushed (to greatly help penetration). Longer stain durability can be achieved if the log surfaces, especially the upper curvature of the logs, have been well textured, e.g., roughened by cob blasting. The second coat can be applied as soon as the first coat has largely penetrated into the surface and is tack free. This can be within about 30 minutes, or as long as 1-2 hours (or more), depending on the porosity, moisture content and the temperature of the wood. Please note that lighter colors of stain will require more frequent re-staining.

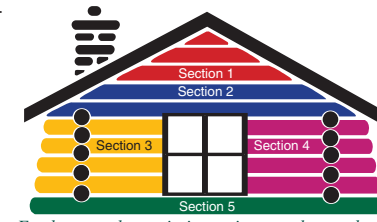


Caulk/Chink

STEP 5 For best results (because finish coatings on wood act as a primer for sealants) and ease of application, stain and clear-coat before caulking and/or chinking. Let High Sierra Log Stain completely dry

(dry time is dependent upon the porosity, moisture content and the temperature of the wood), then seal your home with Log Builder or Conceal caulking and Log Jam chinking. Or, if you want the caulking (Log Builder or Conceal) to blend in with the stain, let the caulk dry first (dry time is dependent upon temperature and humidity); then stain with High Sierra Log Stain.

TIP: Work horizontally. Plan to apply High Sierra to one wall at a time, starting at the top and working completely across 3-4 logs high. When the top 3-4 logs are stained, then move down the wall to the next 3-4 logs. Continue in a similar pattern to the bottom of the wall, working around doors and windows as shown in the diagram. Clean any drip marks that may occur on lower logs to avoid overlap marks. This technique will help to eliminate the possibility of lap marks. High Sierra Log Stain has an open time similar to that of oil-based stains, allowing more time to work with the product before it begins to dry at the surface. This will greatly help with eliminating or minimizing brush or lap marks during application. It is still important to maintain a wet edge and vigorously brush the product out after applying with a sprayer, especially during application of the first coat. Good staining practice is to work horizontally until you reach a natural break in the wall surface, i.e., windows, doors, log butt joints, etc. If stopping in the middle of the log is necessary, simply “feather out” the stain when you need to stop in the middle of a wall, trailing it off into nothing to help minimize lap marks. For best results, stain in sections as shown in the above diagram.



For best results, stain in sections as shown above.



Feathering Technique, use only if stopping in the middle of a log is unavoidable.

Clean Up

While still wet, tools and equipment can be cleaned with soap and water or ammonia-based cleaners, like glass cleaner or household ammonia. If allowed to dry, mineral spirits or stronger solvents will be required.

Storage

Tightly secure lids and store in moderate, dry conditions, between 40°-90°F for best shelf stability.

Maintenance

Walk around your home and inspect the coating each spring and fall. Areas where checks have opened up that are 1/4" or greater on the upper curvature of the logs need to be caulked. Keeping the moisture out of checks will help extend the life of your stain. Log Builder and Conceal caulking are compatible with High Sierra. Request a Log Builder or Conceal Data Tec sheet for details on how to caulk checks properly.

Next, look for any bushes or trees that have grown close to the building and cut them back. Look for water patterns on the home from lawn sprinklers, for example, and move sprinkler heads as required, or repair gutters and down spouts as needed.

During your inspection, give special attention to all handrails. Handrails receive extreme weather exposure and will usually need more maintenance than vertical surfaces. Also, log handrails often don’t have good water drainage out of the horizontal rails, particularly the lower rail. Consequently, handrails are prone to rot. Contact Sashco for further guidance.

Periodic cleaning of the logs will also extend the life of the coating by removing fungi that might grow on dirt that has accumulated on the log surfaces (especially on the lower courses of logs). CPR, mixed to the cleaning strength solution, is an ideal product for this use.

Maintenance coats of stain are needed when there are areas of erosion down to bare wood, when water repellency has diminished, or if the sheen has weathered and dulled significantly. You must clean the logs first, allow them to dry, and then apply one or, if needed, two coats of stain. Cascade clear coat can also be used for improved appearance and durability.

Precautionary Statements

Read MSDS for this product (available from Sashco or Sashco’s authorized distributors). **Keep away from children and animals.**

Notice

Because of many varying conditions affecting use and application, manufacturer warns buyer that these conditions may impair or vary the results and effects of the use of this product. Therefore, application and performance of this product are not guaranteed. Neither the manufacturer nor the seller shall be liable in respect to any injury or damage suffered by reason of use of this product for a purpose not indicated on the label or when used contrary to the directions or instructions herein. There are no warranties which extend beyond the description on this container or related literature, including any implied warranty of merchantability.