

The Basics of Applying Capture

- 1. Read this entire brochure (CAP-002) before applying any product.
- 2. Always test the color you've chosen on a wood sample from your home using the same type of application you plan to use on your home. Allow Capture to dry about 1 hr. for full color development. (Judge color when completely dry.) If a contractor will apply the stain, make sure he matches your approved sample to ensure the right color/appearance on your home.* (Remember: stains can look different in different forms of light—if using on both the exterior and interior, sample both areas.)
- 3. Check the weather conditions prior to application. No coating should ever be applied when it is extremely hot (95°F or higher), dry and windy or when the sun is shining directly on the wall you want to stain. If rain is probable within a few hours of staining, protect walls with a plastic tarp. Check the moisture content of logs with a wood moisture meter: moisture content of the logs should be 20% or less. Surface temperature should be between 45°F and 90°F. In cooler weather, apply only when 45°F (minimum) and rising.**
- 4. All logs should be clean and dry: free of dirt, dust, grease, old coatings, oil, mill glaze or any other contaminant that could interfere with penetration and adhesion. As shown by the USDA's Forest Products Laboratories, exterior wood should be lightly sanded no more than 4 weeks before a coating is applied. This is especially true for the upper curvature of round logs and is based on USDA studies showing significant damage from UV occurring as quickly as one week on unprotected logs.
- 5. One heavy coat of Capture is recommended with the following application method: spray Capture on and immediately back-brush it into the wood (or, directly brush on), with vigorous brushing to ensure proper penetration and adhesion. Don't just brush out runs! (Apply in the shade, not in the sun, so the stain doesn't dry too fast.)

Note: If needed, add 1 or 2 pints of clean water per 5-gal. pail (stir thoroughly!) to help with brushability and to prevent drying too fast.

6. Apply one heavy coat of Cascade clear topcoat. This step adds extra protection and includes a heavy dose of powerful inhibitors that help control discoloration caused by mildew and UV absorbers to block damaging UV light. It also adds "depth" and a satin sheen to Capture. Any runs or build up of material should be brushed out before drying. Cascade is recommended for exterior use only. If you want a clear, natural finish on the interior, use Symphony. Cascade clear coat should <u>not</u> be used alone on bare wood. Two coats of Capture may be applied to vertical siding, such as cedar siding.

*Sashco will not be responsible if the application is improperly controlled.

**Massive logs retain heat and cold long after the air temperature changes.

Features

This is a two-part system: An extremely effective, attractive transparent stain followed by a weather repellent topcoat.

Extremely transparent—heavily loaded with transoxide pigments to give a natural, transparent look to the grain of the wood. Modest sheen gives "depth" to the appearance of logs (when used in conjunction with the Cascade clear topcoat); the surface seems very alive once it's clear-coated with Cascade.

Highly elastic—permitting the unavoidable movement of logs (surface expansion and contraction due to moisture and temperature changes) to occur without causing peeling and cracking, thus preserving the appearance. Other stains *claim* to be elastic—but Capture *is* actually highly elastic*. Because Capture cures to a flexible coating, it stays soft and can be scuffed and marred if logs are stained and then loaded onto a truck. We recommend Capture be applied at the final construction site.

* This flexibility permits the bridging of small cracks in

* This flexibility permits the bridging of small cracks in the surface of the wood and provides an elastic shield for the underlying wood. Virtually no other coating provides this level of elasticity.

Excellent UV protection—lab and field tests have proven the Capture System (Capture log stain plus Cascade clear topcoat) to have superb resistance to chalking, fading, cracking, peeling and loss of overall appearance.

Weather-repellent shield—Once your home is stained with Capture (and Capture has dried; dry time dependent on temperature and humidity) apply Cascade clear exterior weather repellent. This step adds extra protection against discoloration caused by mildew and damaging UV light.

Excellent adhesion—unique and proprietary formula gives Capture extreme adhesion to wood. It acts as a powerful primer for caulks/chinking by giving even more adhesion results to Log Builder or Log Jam when applied to Capture.

Easy to apply & clean up—glides right on and cleans easily with just water or soap and water right up until the time it begins to dry. Use a high-quality brush, such as a Purdy® brand, for fastest, easiest and best results. The odor is pleasant and sweet, making it very user-friendly.

How logs behave and the effects of weather

While logs have a unique charm and feel all their own, they also possess



characteristics that can lead to problems later on. Because logs are not "typical wood," like flat siding, shingles or other wood types used on the exterior of conventional homes, they must be treated differently. See the guidelines below to learn how your special home requires special treatment.

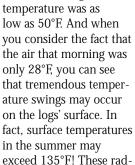
Home Design

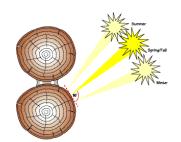
To help protect logs from the ravages of sun and water, it's strongly advised to design and build homes with large eaves and overhangs whenever possible. It's also wise to use a gutter and downspout system to keep roof runoff from flowing down walls and splashing up onto the lower courses of logs. Read below to find out how weather can affect your logs.

Sunlight and Round Logs

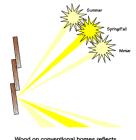
The upper curvature of round logs receives intense and powerful bombardment by the sun (see illustration). Normal vertical siding always receives sunlight at angles less than 90°, reflecting much of the energy away. However, sunlight has the chance to strike portions of the upper curvature (at any given time) head-on, full-force, at a 90° angle. This intense light not only attacks the wood and coating with high-energy, ultraviolet radiation, it also drastically heats the surface of the logs, even on cold winter days. So, the coating used must have inherent

resistance to this kind of energetic assault to avoid chalking, fading or gross disintegration. We have measured the surface temperature of logs at over 95°F when the surrounding air temperature was as





The upper curvature of logs take the full force of the sun.



Wood on conventional homes reflects away much of the sun's energy.

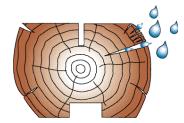
ical temperature fluctuations cause the logs to contract and expand significantly and continually.

How moisture and checks can damage your logs

Round logs are not only susceptible to sunlight; rain and snow also enter into the equation. But square logs are also subject to abuse from moisture (see

illustration at right). Logs are loaded with unavoidable cracks and holes—all of which permit moisture to penetrate the logs. The checks and cracks that occur on the "uphill" side of a log often collect large amounts of water which seep into the adjacent wood. When the sun heats the log's surface, moisture trapped in the wood near checks and holes tries to escape through the exterior coating. With enormous energy, the moisture then forces its way out, causing a heavily applied or poorly formulated coating to peel right off the logs. Most coating failures (peeling or cracking off the surface of logs) found on log homes occur in the immediate vicinity of these checks and cracks. The major problem is peeling—which usually starts at the edge of a crack or check—where the water concentration is the highest. Moisture

entering the logs not only affects the surface coating, but can contribute to the destruction of the wood itself. Water trapped in a check can freeze and expand, enlarging the crack even more. This trapped water encourages the decay of wood by providing wooddestroying fungi the necessary moisture to survive and flourish.



U.V. Attack on Clear Coatings

Most people want the most natural look possible for the exterior of their home. And it's tempting to preserve the "just built" look by using a clear coating. But in sun-drenched areas where only a clear coating is used, the logs' natural color will begin to fade after only a few months. The unattractive results of severe weathering include: chalking, fading and peeling. This phenomenon is true of all clear coatings. Why? It's impossible to load enough U.V. absorbers in any clear coating to completely protect your logs. However, the transoxide pigments in Capture, coupled with a combination of 3 ultra-violet inhibitors, deliver an exceptionally high level of protection to the underlying wood. In fact, lab and field tests have proven superb resistance to chalking, fading, cracking, peeling and loss of overall appearance. A clear coating can't even come close to these results on its own. (Sashco's clear exterior weather repellent, Cascade, is strongly recommended as a topcoat for Capture to enhance UV protection, to help prevent mildew, and to highlight the color and grain.)

Preparation

Preparation of the logs is as important as the staining itself, especially the first time a home is coated. Proper preparation can strongly determine the stain's longevity and effectiveness.

Mill glaze

A typical log surface is coated with "mill glaze"—the hard, smooth film that forms on the surface of wood when leftover tree resins and sugars are acted upon by the mechanical and heat energy from the milling process. This layer of glaze can be almost impenetrable for a coating. It must be removed before good penetration and adhesion can occur. Mill glaze occurs on all types of logs and must be removed to maximize the chances of a trouble-free and durable coating job. Mill glaze must be removed. The best methods are corn cob media blasting*, direct sanding or aggressively power-washing logs with high-pressure water. These processes will not only remove the surface glaze, they also help roughen the surface for a better coating bond.

Note: Using cob-blasting equipment, flap wheels or other sanding methods to sand the surface is an excellent way to remove this glaze while also lightly roughening the log surface for a superior coating bond. This is especially true for the upper curvature!

Hand-peeled logs

Hand-peeled logs are less prone to mill glaze since high temperatures are not common. However, hand-peeled logs exhibit a very smooth, slick surface with *some* residual tree resins and sugars present. Consequently, hand-peeled logs also need to be surface treated as above.

Skip-peeled Logs

Sometimes a "skip-peel" treatment of logs is done. This style leaves patches of dark cambium (the layer underneath the bark), on the logs' surface. These sections will eventually peel off and will take whatever coating is applied with them!

Removal: We recommend all bark and cambium be removed from the logs to allow the coating to adhere to a solid and permanent substrate.

* Contact Sashco about its cob-blasting machine, The Kernel.

Wood preservatives

We recommend a wood preservative (such as PeneTreat) be applied to logs to help protect them from attack of wood-destroying fungi and insects. However, some preservatives may contain additives that are not compatible with all stains. (Check with the manufacturer before applying.) PeneTreat is an ideal remedial treatment (available through your Sashco distributor) to protect your home against insects, rot and fungi. Let PeneTreat dry completely before applying Capture.

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.

Moisture content

It is important to know the logs' moisture content before applying any coating. The Forest Products Laboratories (operated by the U.S. Government in Madison, WI since 1911) recommends that wood be allowed to dry to a moisture content of 20% or less before applying any coating. Applying coatings to wood "wetter" than 20% can lead to moisture-induced failures. If you have questions about the moisture content of your logs, you can buy or rent a moisture meter (often available from better hardware stores and lumber yards). If the moisture content is too high, let the logs dry until the proper moisture level is reached.

Note: If logs are power-washed or wet-sandblasted, let them dry completely before applying Capture.

Wood condition

All logs should be bare, clean and dry: free of dirt, dust, grease, oil, old coatings, mill glaze or any other contaminant that could interfere with penetration and adhesion. Removal: Mill glaze should be removed by cob-blasting*, power washing, chemical washing, sanding or sand-blasting. The moisture content of the logs should be 20% or less. This should be measured with a wood moisture meter (available in professional painting stores). Tips: Wait until the roof is installed before applying the stain. (This will help protect the stain from inclement weather, and much of the construction damage normally inflicted on the coating during roof installation will be avoided.) In areas of the country where mold and mildew are especially prevalent, additional mildewcide can be added to the stain for additional resistance to those organisms (see Sashco for guidance).

* Contact Sashco about its cob-blasting machine, The Kernel.

Decks

Capture is too elastic for use on decks! However, handrails on decks should be coated with Capture, followed by a topcoat of Cascade (clear topcoat). Due to this severe exposure, more maintenance is usually required over time.

Hot, dry, windy conditions

If working under hot, dry or windy conditions, it may be necessary to add up to one quart of water to Capture. This may be especially true if spraying and back brushing. As needed, add 1 or 2 pints (up to one quart) of clean water to a 5-gallon pail to improve open time and flow-out of the stain. **Stir thoroughly** and follow application guidelines below.

Application



STEP 1 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.)

Note: If you want the caulking (Log Builder) to blend in with the stain, let the caulk dry first (dry time is dependent upon temperature and humidity); then stain with Capture.

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



STEP 2 The stain should be thoroughly stirred (preferably with a drill-driven mixing blade), making sure that all the pigment at the bottom of the pail has been dispersed. Capture should be stirred occasionally while using. Surface temperature should be between 45° and 90°F.



STEP 3 Only one heavy coat should be applied. Capture may be applied by spray** with vigorous back-brushing. (It is important to thoroughly work Capture into the surface of the wood for proper penetration and adhesion. Merely brushing out the

runs is not adequate, especially on the upper curvature of the logs where saturation is crucial.) Use a high-quality brush, such as a Purdy® brand. Two coats of Capture may be applied to vertical siding, such as cedar siding.

**Note: Since Capture dries fast, do not spray an overly large area before back-brushing.

TIP: Work horizontally. Plan to apply Capture 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 consistency will help to eliminate the possibility of lap marks. Capture dries very quickly and it's important to keep a "wet edge", without stopping, until you reach a natural break in the wall surface. 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.



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



STEP 4 Cascade Clear Exterior Weather Repellent. Apply one coat of Cascade anytime after Capture stain has dried (dry time is dependent upon temperature and humidity). This protective, clear topcoat is heavily loaded with powerful inhibitors that help control discoloration caused by mildew and UV absorbers to

block damaging ultraviolet light. Cascade also adds "depth" and a long-lasting satin sheen to Capture log stain. Any runs or buildup of material should be brushed out before drying. Cascade must be stirred during application. Cascade is rec**ommended for exterior use only.** If you want a clear, natural finish for the interior, use Symphony (Gloss or Satin). Cascade clear coat should not be used on bare wood.

Note: Optional method is to apply Cascade Clear Coat after chinking application is complete.



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 sealing (i.e., caulking and/or chinking). Let Capture (and Cascade) Caulk/Chink completely dry (dry time is dependent upon temper-

ature and humidity), then seal your home with Log Builder caulking and Log Jam chinking.

Clean up

Just use soap and water.

Storage

Containers with Capture should be stored with lids tightly secured. While Capture and Cascade are freeze-thaw stable (good through at least 5 freeze-thaw cycles), they should be stored in cool, dry conditions, above 40°F.

Keep out of the reach of children.

Maintenance

For the first 1-2 years after your home has been stained, the exterior logs' surface should be inspected regularly. During the early period in the life of the home, the checks in the logs continue to open up as they further dry out and settle onto the foundation. If severe problems are observed, they should be dealt with at the time of discovery; otherwise, see below. The majority of the recaulking and recoating should occur when the logs are at their driest, and when the checks and cracks are at their largest, so the openings can be filled with the most amount of caulk and stain. This is particularly true of the logs' uphill side. The first recaulking and recoating effort, if needed, should be attempted during August or September, 18-24 months after the new home is completed. These are the warmest and driest months for most areas of North America so it is important to work in the shade. Due to extreme weather exposure, hand rails* will usually need maintenance more often than vertical surfaces.

*Often, there is little provision made in log handrails for good water drainage out of the upper (and especially) lower horizontal rails. Consequently, handrails are prone to rot. Contact Sashco for guidance.

"Even after years, Capture looks as beautiful as it did on day one."

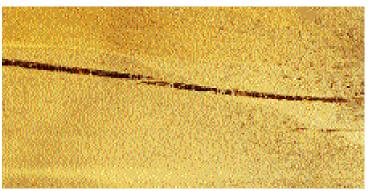
Jay Pohley, President, Pioneer Log Homes, Victor, MT



Pioneer Log Homes Model. Victor, Montana. Stained with Hazelnut.

Pretty but tough

Capture's unequalled formula allows the coating to move as your logs inevitably expand and contract. It's truly remarkable, and unheard of (until now)—an elastic coating that *stretches* with your log movement. This flexibility permits the bridging of small cracks in the surface of wood and provides an elastic shield for the underlying wood. Virtually no other coating provides this level of elasticity. So no more unsightly peeling, chalking or fading—just a beautiful coating that lasts.



Just look how Capture log stain stretches over checks.



No more unsightly peeling, chalking or fading.

Tips from the Pros

- 1. When spraying, follow these guidelines:
 - a. Use Graco airless tip #313 or equivalent.
 - b. Use low pressure. High pressure may cause the product to gel, clogging the tip.
 - c. The single coat should be sprayed and backbrushed, thoroughly working Capture into the wood.
- 2. All log cut ends should be coated several times with Capture, followed by one coat of Cascade, until the pores are sealed. These areas are the most prone to water absorption and mildew damage so they require special care.
- An unevenness of sheen, referred to as flashing, may occur on soft woods, like pine. To stop or soften this effect on interior wood, apply Symphony or a water-based sanding sealer before applying Capture. By controlling Capture's pene-

tration into the wood, a more uniform coat will result. Knotty woods are more prone to flashing than open-grained woods.

Precautionary Statements

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

Important 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 the base hereof including any implied warranty of merchantability

Technical Data:

(Not to be considered specifications)

Colors

Almond Bark, Natural, Wheat, Bronze Pine, Autumn Aspen, Hazelnut, Sequoia, Chestnut, Glacier Gray, Driftwood

Coverage Rate

One gallon of Capture log stain covers 200-300 sq. ft. on smooth surfaces and approximately 150 sq. ft. per gallon on rough surfaces. One gallon of Cascade clear coat covers 400-600 sq. ft. on smooth surfaces and approximately 250 sq. ft. per gallon on rough surfaces.

Recommended wet film thickness

3 mils

Packaging

One-gallon and five-gallon pails

Application Range

Surface temperature: 40°F minimum and rising, 95°F maximum and falling. 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.

Best Performance

Between 60°F and 90°F.

Note: When cold and/or moist nights are expected, apply coatings no later than mid-afternoon to allow adequate drying before exposure to severe conditions.

VOCs

Less than 250g/L

Compatibility

Capture is recommended for use with Log Jam, Log Builder, Cascade, Symphony and PeneTreat. It also works well with most other caulking/chinking, clear exterior & interior topcoats and borate preservatives. Contact Sashco for details and before using other products.

Dry Time

Capture dries to touch in 30 minutes (or less) in ideal weather. (45° - 90°, 50% humidity or less.)

Shelf Life

18 months from date of manufacture (minimum)

Viscosity

Brookfield, LVF, 400-600 cp, #3 spindle, 60rpm

pН

8.5-9.5

Density

9.0-9.5 lbs./gal.

Solids

30.0-33.0%

Odor

Mild, sweet

