

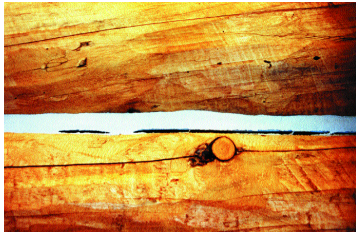


When other chinking pulls away, Log Jam holds its seal.

What is Chinking?

Chinking is the stuff that goes between the logs on many log homes. It's more than just a pretty look—chinking acts as a form of insulation and as a barrier to the elements outside. It keeps the weather outside and the comfort of your home inside.

Traditional chinkings are brittle, mortar-like substances. They often crack, crumble and pull away from logs. They, and many other chinkings available, can't absorb the movement all log homes endure. Logs shrink and swell with temperature changes, humidity changes and aging. When any chinking fails, wind and water infiltrate into your home. Log Jam keeps your home tightly sealed. (Log Jam is not intended to be used as stucco.)



Competitive brand.



Log Jam holds its seal.

Why Log Jam is better.

Log Jam is the elastic chinking that simply responds better to log movement than other chinkings. Since all logs move, this elasticity allows Log Jam to handle log movement, in any type of weather, over and over again. It stretches and compresses as logs shrink and swell—up to 100% of the original joint size ($\pm 50\%$). Yet it maintains the traditional look of mortar, without “stretching out,” so it still looks good after years of log movement.

With Log Jam, you should only have to chink once.

No one wants to re-chink time and time again. Chinking that cracks and literally pulls away from logs leaves your home vulnerable to weather, air filtration and insects. Avoid the hassles—use Log Jam for a tight seal.

Since most homes experience log movement during the first few years, Log Jam is guaranteed for ten years. So you can be assured Log Jam won't pull away from your logs. It tightly grips to all species of wood (including oily woods like cedar).

The Basics in Applying Log Jam™

Proper substrate preparation and application are imperative for product longevity. Read this Data Tec (LBR 002) and the entire label before applying any product.



1. Start with clean, sound logs that have already been treated with a preservative and stain compatible with Log Jam. (We recommend PeneTreat as a preservative and either Capture/Cascade or High Sierra Log Stain., or for interior log treatment, Symphony Clear Coat.)
2. Install a “bond-breaker,” i.e., backer rod or mylar tape.
3. Apply Log Jam by use of trowel, grout bag, bulk loading gun, or commercial machinery, such as the Sashco patented Snorkler™ Pump.
4. Tool Log Jam.

Application Tips New Construction

Joint Width: Joint width should be a minimum of 4 times the anticipated movement of the logs.

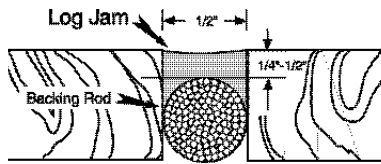
For large log joints, 1” or greater, the best practice is to apply a 1/2”

thick bead, but a 3/8” thick bead may be sufficient depending on proper joint design and the logs’ moisture content. The depth of joints less than 1” wide should be



half the width, but no less than 1/4". (Log Jam will span joints 3"-4" wide.)

These joint guidelines are to ensure sufficient Log Jam mass to absorb log movement and maintain a tight seal for an extended period of time. Regardless of the width, the depth should not be greater than 1/2".



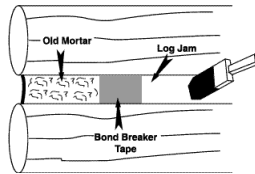
Backing Material: A backing material should be installed between logs prior to chinking. An open-cell type is recommended to speed drying. A closed-cell type is more moisture resistant. Choose based on your needs.

If round backing material is used, care must be taken to apply sufficient material over the apex of the rod so that the chinking is not too thin, making it susceptible to tearing.

Restoration

All logs should be free of dust, grease, uncured oils, and other contaminants. Remove all loose mortar.

Bond-Breaker: When using Log Jam as a restoration chinking over old mortar, a "bond-breaker" tape should be applied over the center of the existing mortar. A variety of plastic tapes may be used, such as clear mylar packaging tape or duct tape.

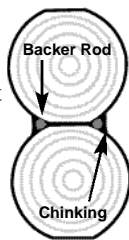


Applied to old mortar prior to rechinking, the bond-breaker provides a surface Log Jam will not stick to. When movement occurs, Log Jam will be free to stretch.

Tooling: Log Jam should be tooled to contact at least 1/2" of the bare wood surface on either side of the old mortar. This will ensure adequate adhesion.

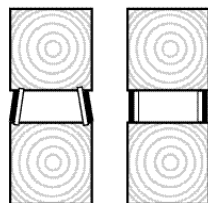
Round Logs

Be sure Log Jam has been tooled tight to the log surface. Log Jam should contact between 1/4" and 1/2" of the log surface.



Square Logs

Be sure the spline is dry and clean before applying Log Jam. Apply tape across the full face of the spline as a bond-breaker, whether it is rigid material such as masonite or wood, or non-rigid material such as styrofoam or bead board. Because the joints are often very wide (up to 4") multiple passes are often required. Log Jam should be applied to the upper and lower edges of the joint first, and if a gap exists between the two beads, fill the gap with additional chinking. It is very important to tool the bead,



especially along the upper and lower edges so that Log Jam is forced into good contact with the logs for proper adhesion.

Applying Log Jam

Surface Preparation

Surfaces: Surfaces should be clean, structurally sound, free of uncured oils, dirt and other loose materials. Log Jam may be applied to slightly damp logs if no additional water is actively rewetting the surface. Sunlight, according to the USDA Forest Products Labs, can create unsound wood in as little as 1-2 weeks—so chink shortly after good prep work is done.

Wood Treatment: A good wood coating such as Capture or High Sierra is highly recommended for exterior surfaces, and most should be applied *before* chinking. Wood sealers, preservatives, or stains should be thoroughly cured before applying Log Jam.

A few sealers (especially those heavy in wax content) may interfere with adhesion. Call Sashco for compatibility information.

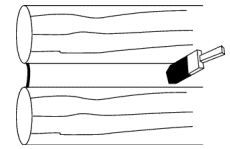
If stain is applied over cured Log Jam, the chinking will be tinted to the stain color but will be affected differently than the surrounding wood, so test before widespread use.

Surface Temperature: Surfaces should be between 40° and 90°F when applying Log Jam.

When using 5-gallon pails, Sashco's patented Snorkler™ Pumping System, grout bags, or bulk loading guns may be used. Because Log Jam contains no heavy abrasives, downtime and replacement of costly bulk equipment can be reduced.

Tooling

Log Jam may be tooled with ordinary masonry-type tooling blades of 3/4" to 1-1/2" in width. Using a spray bottle, lightly mist Log Jam with water to allow the trowel to glide over the surface when tooling. A damp polyethylene foam brush or rubber spatula also works. Log Jam should be tooled tightly to contact at least 1/2" of the log surface.



A mixture of 1 part denatured alcohol to 2 parts water can be used for misting the chinking (immediately prior to tooling) when the temperature is over 70°F. If you are working in the sun and the chinking is skinning over too quickly, straight alcohol can be used. When the temperature is lower than 70°F the alcohol is not necessary.

Cold Weather Application

The logs must be free of frost, and the surface temperature of the logs should be at least 40°F (and rising).

Tent out the walls with clear plastic and keep them warm with propane heaters. Once the surface temperature is at 40° F, apply the chinking. The chinking will flow better if the pails are at room temperature and kept warm. Make sure there is air circulation so moisture doesn't form on the logs (from the humidity created by the propane heaters) causing water damage. Some venting of the tent up high will help with this problem. Leave the tent intact, with warm air, for 2-4 days so that the chinking can start to properly skin over. Due to the cold temperature it will take much longer than normal for the Log Jam to fully cure, but it will eventually dry to a rubbery seal if left undisturbed.

"Chinking and green logs"

Be aware that there is always a high risk of the chinking pulling away from logs with "green" log construction, especially on interior applications – due to the extreme movement of the logs as they typi-

cally shrink. There are economic trade-offs when using green logs, and one of those trade offs is the cost of repairing chinking when it prematurely fails due to the extreme shrinkage of "green" logs (and thereby putting such high stress on the sealant that it greatly exceeds its elastic capabilities). The following suggestion will help reduce the amount of chinking that may need to be repaired on "green" logs.

We recommend that round backer rod material be used with green log construction. Green logs undergo not only extreme shrinkage during the first couple of years after construction, but those portions of the logs exposed to the interior atmosphere also experience very fast rate of shrinkage (because of the dry, warm air generated inside during the winter when the furnace is fired up each fall). The combination of extreme shrinkage at a fast rate greatly stresses all sealants. And, to have the best chance of withstanding such a circumstance, it is important to construct the chinking joint in as nearly an ideal way as possible. Round backer rod is a key component to ideal sealant joint design.

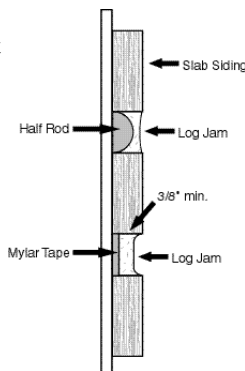
Slab Siding

1. Start with clean wood that has already been treated with a preservative and stain compatible with Log Jam. (We recommend PeneTreat as a preservative and either Capture/Cascade or High Sierra Log Stain.) The coated wood should also be well cleaned immediately before the Log Jam is applied.
2. If the structure is wrapped in Tyvek™ (or equivalent plastic wrap), you can apply Log Jam directly to the Tyvek™, but the Tyvek™ must be flat without wrinkles or folds or else these inconsistencies will telegraph through the chinking.
3. If Tyvek™ is not used, you must apply a bond breaker down the middle of the gap between the boards, i.e., mylar tape, or backer rod. If the boards are thick enough to install backer rod, we recommend that Half Rod™ backer rod be used (with the round portion of the profile facing out from the building).
4. Apply Log Jam by use of trowel, grout bag, bulk loading gun, pre-loaded cartridges, or commercial machinery, such as the patented Sashco Snorkler Pump.
5. The width of the contact surface of the Log Jam on the edges of the siding should not be less than 3/8" (to insure good adhesion) — and the Log Jam should be firmly tooled for good contact with the top and bottom siding boards.
6. Don't forget to chink or caulk (with Log Builder or Conceal) the butt joints (where moisture could otherwise gain entry in driving rains).
7. Refer to Sashco's bulletin entitled "Preventing Blisters in Chinking Material" (available free of charge by calling Sashco's toll-free number).

NOTE: Ideal joint design allows for the chinking to form an hour glass shape as in the top example with the half rod backer material. Some slab siding undergoes extreme shrinkage which can lead to some early-on maintenance of the chinking.

Round Logs: To use a foam brush, work the material smooth with a damp brush, keeping a rag handy to pick up drips of water and excess Log Jam.

Square Logs: Use a putty knife to strike off excess of Log Jam, making the joint level with the logs. Use a damp foam brush to smooth the material, keeping a rag handy to absorb drips and wipe off excess Log Jam.



Not only do these techniques give an aesthetically pleasing chinking line, they also ensure a proper seal between the Log Jam and the log surface. These procedures are easy to learn and will give professional results.

Clean-up and Disposal

Dispose of Log Jam in accordance with local regulations. Do not dispose of in drinking water supplies.

Water may be used for cleaning hands, surfaces and equipment. Toxic solvents are not required for clean-up.

Warning: Blisters May Occur

Blisters are a phenomenon commonly found in the caulking and sealant industry. They form when moisture from the chinking accumulates in voids beneath the bead and gets hot from the sun. Blisters appear as "bubbles" in the material and vary widely in size.

Shield freshly chinked walls from the sun with white tarps. If this cannot be done, keep a close eye on the chinked wall for the first 24-48 hours. If a blister begins to develop, puncture a hole in the middle of it, and gently push the material back into place. 3-5 days later, touch-up the repaired blister with Log Jam.

For more detailed information on blisters, please refer to the Sashco Savvy Bulletin entitled "Preventing Blisters in Chinking Material." Call Sashco for this Bulletin.

UL One Hour Fire Rating

When applied in accordance with Fire Resistance Directory Design No. UL519. (Call The Publications Group at 708-272-8800, extension 42612 for more information.)

- 1. Wood Logs:** Soft wood timbers with a minimum diameter of 7.0 inches. The gap between the logs shall not be greater than 2.5 inches.
- 2. Backer Rod:** Formed polyethylene backer rod used to fill the gap between wood logs and to provide support to the chinking material. The diameter of the backer rod varies with the width of the gap between logs. The backer rod may be mechanically secured to the wood logs.
- 3. Joint Treatment Material:** The chinking material is applied with a caulking gun over the backer rod and to the surface of each log adjacent to the backer rod. The minimum thickness shall be .5 inches. The maximum may be troweled to achieve a smooth finish and/or feather the edges.

Current Warranty:

10-Year Log Structure Warranty

When applied in accordance to this Data Tec, Sashco Sealants warrants Log Jam for:

- Adhesion: Log Jam will not pull away from log surfaces.
- Elasticity: Under normal log movement conditions,

Log Jam will remain elastic and will not tear, up to 100% total joint movement ($\pm 50\%$).

If Log Jam fails to perform as specified above during the warranted 10-year period, Sashco Sealants will furnish new Log Jam to repair the damaged joint areas. This warranty includes product replacement only. No other warranties are expressed or implied. Proof of purchase required. Sashco, Inc. reserves the right to inspect the structure prior to any product replacement.

Extended Warranty Available—Lifetime Limited Warranty! Call Sashco for details.

Logs Move!

Occasionally, a small number of logs on any home may undergo extreme movement due to their changing moisture

content as they come to equilibrium in their new settings as part of a log home. Most logs, as they dry (or go through the repeated process of taking on and giving up moisture), will undergo moderate levels of stress on sealants applied to them. An occasional log (randomly and unpredictably) will twist, shrink or warp—in response to changes in its moisture content—in an extreme way, moving more than any sealant can possibly handle.

When this extreme movement occurs it will cause the sealant to fail either cohesively or adhesively. If the failure is cohesive (sealant splits down the middle) then the repair is performed by cleaning the surface of the failed sealant and reapplying more. If the failure is adhesive (sealant pulls away from the substrate), then the sealant needs to be removed and completely redone.

Technical Data:

(Not to be considered specifications.)

Colors: Mortar White, White White, Buff, Tan, Gray, Woodtone Cedar

Packaging: 5-gallon straight-sided white pails and 29 oz. fiber cartridges

Water Resistance: Log Jam forms a water-resistant skin in 1-4 hours after application. This resistance depends on bead size, humidity and temperature. If applied in cool or humid weather and rain is imminent, covering the chinking with a plastic sheet may be necessary.

1-Hour Fire Rating: Log Jam passes the UL 1-hour fire rating when applied in accordance with UL File R11694-1,-2; Fire Resistance Directory Design No. UL 519.

Service Range: -30°F to 250°F

Paintability: Paintable with oil or latex stains after 1 week cure time. If giving chinking a facelift with Brush Over, make sure chinking is cured.

Compatibility³: Compatible with most sealers and preservatives, including linseed oil, borates, pentachlorophenol and copper compounds. NOTE: Some coatings contain wax or other chemicals, making adhesion difficult. Call Sashco for more information.

Shelf Life: 18 months from date of packaging.

Passes: Surpasses ASTM C834-86 (Latex Sealing Compounds); meets ASTM E-119; TT-S-00230B; ASTM G-53 (QUV Accelerated Weathering: 4,000 hours); ASTM D-638 (Max = 230%); ASTM D-638 (Tensile Strength: 38.4 psi); ASTM C-920 (12.5); NFPA 251, UL 263, meets FH requirements.

VOC: 0.28 lbs./gal; 34 g/liter

Physical Properties:

Adhesion^{1,2} (180° Peel): Call Sashco for stain compatibility with Log Jam

Cure Through Time: 3 weeks (1/2" thickness, 70°F, 50% relative humidity)

Viscosity: Approx. 200,000 cps at 10 rpm, spindle #14.

Freeze-Thaw: Passes at least 5 cycles (0°F to 70°F)

Hardness (Shore A): 36

Slump: 1/16" (Maximum) in test joint (3-1/2"H x 3/4"D) at 70°F

Stain: None

Tack-Free Time: Less than 30 minutes (70°F, 50% relative humidity)

Water Resistance: No washout (4 hours, 40°F, 50% relative humidity)

Weathering:	Washout	None
	Cracking	None
	Discoloration	Passes ASTM C834-76

Snow: Be cautious of areas where snow builds up around the structure and remains for extended periods of time. Snow removal is recommended for these areas to ensure the ultimate adhesion of Log Jam.

¹ Ultimate adhesive strength attained in 3-6 weeks depending on bead size, temperature and humidity.

² Dry adhesion is tested after 28 days room temperature cure. The average of several tests is reported.

³ Sashco will test any stain to determine compatibility with Log Jam. Just call and send us a sample of the stain you want tested. Test results available in a minimum of 6 weeks.



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