# **Technical Data:**

(Not to be considered specifications)

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Color: Tan, Woodtone, White Pine, Dark Brown, Gray, Redwood, and Black

Packaging: 10.5 oz. plastic cartridges, 29 oz. fiber cartridges, and 5-gallon straight-sided pails. (Not all colors are available in all sizes.)

Water Resistance: In most conditions, Log Builder forms a water resistant skin within 4 hours, depending on humidity and temperature. If applied in temperature lower than 50°F and/or in relative humidity higher than 70%. Log Builder must be covered with plastic sheeting for 3-5 days before exposure to rain.

**Application Range:** 40°F - 120°F (Surface temperature). Ideal range: 50°F - 90°F.

Service Range: -30°F - 250°F

**Paintability:** Log Builder is paintable with latex coatings in 4 hours, with oil-based coatings in 5 days.

**Compatibility:** Log Builder will adhere to woods treated with most preservatives including borates\*\*, pentachlorophenol, and copper compounds. Log Builder is also compatible with insulating glass sealants and most building materials, including foam insulation.

Shelf Life: 18 months from date on carton when stored at room temperature.

**Specifications:** Passes C834-76, the performance requirements of TT-S-00230B and ASTM C-920. Meets FHA requirements.

\*\* Some borate wood preservatives contain glycols or other agents that could interfere with adhesion. Sashco's PeneTreat contains no glycols.

VOC: 4% by weight, max.

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

**Warning:** This product contains a chemical(s) which is reported by the State of California to cause birth defects or reproductive harm.

**Extrusion Rate:** 1100 g/min (1/8" orifice at 40 psi)

**Freeze-Thaw:** Passes 5 cycles (0°F - 70°F)

Hardness (Shore A): 38 (21-day cure)

Elongation @ Break: 550%

Solid Wt. %: 79%

Solid Vol. %: 71%

**Tack-Free Time:** Less than 1 hour

Stain: None

**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 Builder.

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

The data reported here are believed to be reliable. No warranty is made or implied concerning the accuracy or the results obtained from their use.



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#### The Sealant Made for Log Structures



## **Log Builder Caulk**

All logs move, so Log Builder was specifically designed to absorb most log movement. Most movement occurs within the first few years, when logs lose the majority of their moisture causing them to shrink and the joints to expand. That's why it's crucial to use Log Builder from the start. If the logs are extremely "green" (with very high moisture content) it is often best to wait several months before caulking. Since it stretches and compresses up to 100% of the original joint size and stays *elastic*, Log Builder won't crack, peel or pull away from properly prepared logs. Instead, it creates a tight seal to keep water, dust, bugs and wind from seeping into your home-for many years. Log Builder is the smooth sealant for milled and hand-crafted log structures.

## **Fundamental Caulking Application Guidelines:**

- Proper substrate preparation and application are imperative for product longevity. Read this entire Data Tec (LBR 002) before applying any product.
- Make certain there is compatibility between your stain and Log Builder. We recommend Sashco's Capture/Cascade, High Sierra Log Stain or Transformation Stain for exterior applications and Symphony Interior Clear Coat for beautiful long-term protection. Best results are obtained when Log Builder is applied to clean, stained wood. Call Sashco for guidance if in doubt.
- Check the weather forecast. Finishing products are bestapplied in moderate weather conditions, i.e., out of direct sunlight, in dry conditions and warm.
- Check the *log* surface temperature. The *ideal* application range is between  $50^{\circ}$ F -  $90^{\circ}$ F.
- It is always best to use a bond breaker (usually backer rod) before caulking. Sashco always advises the use of backer rod, especially if the home is new and/or the logs are subject to significant movement. If a bond breaker is not used, then expect more caulking repairs.
- Tool Log Builder to help ensure good contact with the log surfaces, especially to the upper log; this will greatly aid adhesion.
- Ideal sealant depth is 1/2 of the joint width, but no less than 1/4".
- Assemble tools and equipment:
- Backer rod
- Caulking guns
- Trowels, spatulas, or foam brushes for tooling

- Clean water and rags
- Plastic sheets to cover the caulking if wet weather moves in
- Staple gun & staples
- If you have any questions about application, please call us before proceeding at 1-800-767-5656.

#### **Application** Surface Preparation

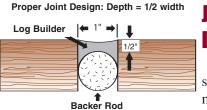
Best results are obtained when Log Builder is applied to wood that has been previously coated with a compatible stain, e.g. Sashco's Capture/Cascade, High Sierra Log Stain or Transformation Stain, and Symphony Interior Clear Coat for beautiful long-term protection. If newly stained, the coating should be thoroughly cured before Log Builder's application. If the stain is older but still intact, clean the log surfaces thoroughly to remove dirt, pollen, bird droppings, and other surface contaminants.

The USDA Forest Products Laboratory and other researchers around the world have recently reported that surface wood exposed to sunlight for as little as 1-2 weeks can become significantly damaged and unsound which may lead to premature adhesive failure of coatings. Such surface wood damage has the potential to harm adhesion. Once bare wood has been properly cleaned and prepped to remove unsound wood, Log Builder should always be applied as soon as possible.

Some coatings that contain high levels of wax must only be applied *after* Log Builder has been applied and allowed to cure. Additionally, coatings that are based on non-drying oils, like motor oil, should never be used in combination with Log Builder-neither before nor afterwards-since such oils can migrate to the bondline and destroy adhesion. Sashco maintains a list of some of the treatments, which should be applied *after* applying Log Builder, making sure Log Builder is thoroughly cured. Check with Sashco for a more complete listing of compatible coatings.

Sashco can also test the compatibility of stains. Please allow a minimum of 6 weeks for testing. Call Sashco for more information.

If a stain is applied over Log Builder, it will typically be tinted the stain color, but will be affected differently than the surrounding wood. Test appearance before widespread use.





larger than 2", and 4 times the anticipated joint movement. For example, if you anticipate log movement of 1/8", bead width should be about 1/2".

For joints 1" or more, the depth should be 3/8" to 1/2". The depth of joints less than 1" wide should be half the width but no less than 1/4". (Joint depth, overall, should be between 1/4" and 1/2".)

### **Methods of Application**

When using 5-gallon pails, Sashco's patented Snorkler<sup>TM</sup> Pumping System, grout bag, or bulk loading guns may be used. Use a caulking gun when using either the 29 oz. or 10.5 oz. cartridges of Log Builder. Log Builder requires no heating prior to application but will dispense easier when kept warm before use.

When using a cartridge, cut the spout at a  $45^{\circ}$  angle to desired bead size. In severe conditions (under 50°F and/or 70% humidity), full rain resistance may take longer. Cover exterior walls with plastic if rainfall is expected within 24 hours after installation (especially if it will be a long, sustained rain). Not recommended for continuous submersion or areas exposed to foot or vehicular traffic.

#### **Stacking Application**



Stack the next log and repeat.

prior to stacking.

Don't allow caulk to skin over

Apply a bead(s) according to the log home manufacturer's instructions.

#### Swedish Cope Logs



1. Gun Log Builder into clean, stained joints.



2. Tool to ensure a tight seal to the top and bottom of the caulk line leaving at least 1/4" depth of caulk in the center of the joint.\*

#### Milled Tongue & Groove Logs with a Caulk Well



1. Install backer rod into the caulk well of clean, stained logs.



2. Gun Log Builder over the backer rod.



3. Tool to ensure a tight seal to the top and bottom of the caulk line.

\*NOTE: Use a bond breaker (i.e., backer rod) when significant log movement could occur. When movement is known to be minimal (as with many older homes) using backer rod is still best, but usually less critical.

### Toolina

Log Builder should be tooled directly after application to ensure good adhesion and a smooth looking bead. Log Builder may be tooled with ordinary masonry-type tooling blades, a wetted finger, or a damp polyethylene foam brush. Work the material smooth, tooling Log Builder tightly to the surfaces, keeping a rag handy for clean up.

## **Checks and Cracks**

Because of the logs' tendency to take on water from rain and snow through cracks and checks, it is important to pay close attention to these openings and prep and seal them properly. Note: Most small checks should not be caulked. Only the larger ones, which admit the greatest volume of water, (1/4" or larger) should be sealed with backer rod and caulk.

#### **Checks**



1. Install backer rod into a clean, stained check to the appropriate depth. (See Fundamental Application Guidelines.)



2. Gun Log Builder over the backer rod.



3. Tool Log Builder.



#### **Clean-up & Disposal**

Clean excess product off surfaces (before it cures) with a putty knife and/or a damp rag. Dispose of Log Builder in accordance with local regulations. Do not dispose of in drinking water supplies. Water may be used for cleaning hands, surfaces and equipment. Solvents are not required for clean-up.

#### Maintenance

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 apart), then the repair is performed by simply cleaning the surfaces of the failed sealant and reapplying more. If the failure is adhesive (sealant pulls cleanly away from the substrate), then the sealant usually needs to be removed and completely redone.

#### **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 this container or related literature including any implied warranty of merchantability.

#### **Lifetime Limited Warranty**

Sashco Sealants warrants that Log Builder will stretch up to 100% of original joint size  $(\pm 50\%)$  and will not pull away or center tear when applied in accordance to the Log Builder Data Tec (LBR-002). If you are dissatisfied at any time with Log Builder's performance in these areas, return proof of purchase to Sashco. Limited to product replacement only.