



## BACKERSEAL™ Reels and Sticks

DO NOT INSTALL THIS MATERIAL UNTIL ALL MEMBERS OF YOUR CREW HAVE READ AND UNDERSTAND THESE INSTRUCTIONS. IF YOU DO NOT UNDERSTAND ANY PART OF THESE INSTRUCTIONS CALL EMSEAL AT 1-800-526-8365

# INSTALL DATA

## 1 Installation Equipment and Storage

- In addition to safety equipment required to comply with applicable Federal, state and local safety regulations, equipment to prepare and repair the joint-faces, as well as normal tools of the trade, the following are required:
  - Tape measure
  - Utility knife
  - Long-bladed, serrated bread knife
  - Stiff-bladed metal putty knife or multi-tool
  - Spray bottle filled with water
  - Acetone\*, denatured alcohol\* or other solvent\*
  - Lint-free rags, & clean paint bucket

### NOTE on Temperature Conditions:

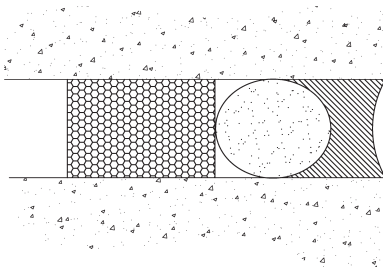
**Cold Days:** Store Sealant, off the floor, inside at above 68 °F (20 °C). It will recover (expand) slower when cold and faster when warm.

**Very Hot Days:** Keep sealant out of direct sun when temperatures greater than 60 °F (15 °C) until immediately prior to installation into joint.

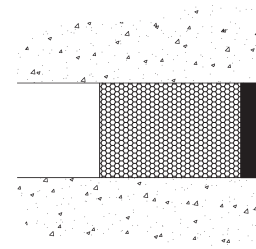
\* (Solvents mentioned or referred to are toxic and flammable. Observe solvent manufacturer's precautions and refer to Material Safety Data Sheets as well as local and federal requirements for same handling and use).

## 2 Pre-Installation

BACKERSEAL can be installed in two ways in walls and facades.



(A) Behind a traditional backer rod and liquid sealant



(B) As a backer to directly-applied low-modulus liquid sealants.

- If installing behind backer rod and liquid sealant (A), ensure joint faces are parallel and have sufficient depth to receive the full depth of the size(s) of BACKERSEAL being installed plus adequate depth for the backer rod and liquid sealant in accordance with the liquid sealant manufacturer's specifications and depth-width ratio requirements.
- If installing behind directly-applied, low-modulus liquid sealant (B), ensure joint faces are parallel and have sufficient depth to receive the full depth of the size(s) of BACKERSEAL to be installed plus at least 1/4-inch (6mm) for the application of the low-modulus liquid sealant.
- Repair spalled, irregular or unsound joint surfaces using accepted industry practices for repair of the substrates in question.
- Remove all residue of old sealants as well as any protruding roughness to ensure joint sides are smooth and unobstructed.
- Wire-brush or angle-grind, if necessary, to clean sides.
- Wipe joint faces with lint-free rags dipped in acetone, denatured alcohol other agent suitable for use on the substrates in question to ensure joint sides are free of dust, previous sealant, oils, grease, etc.
- Ensure joint sides are dry prior to installation.

## 3 Measure Joint Width

- Measure joint width opening at surface and below surface level to ensure joint sides are parallel and that the joint width measured corresponds with specified joint width and BACKERSEAL size.
- Select BACKERSEAL size corresponding to the actual size of joint to ensure correct compression and performance.

## 4 Find and Open the Correct Box

Material has been supplied to your mean- temperature field measurement of joint widths. Joint widths for material supplied are marked at the end of each box.

- Find correct box and open it.
- Compare material width marked on each stick or reel against joint width.
- BACKERSEAL is supplied in reels, or for larger joints, in “sticks”. It is precompressed to less than the joint size.

Actual material width measured in the packaging will be slightly less than the indicated joint width. If unsure of correct material selection, consult EMSEAL.

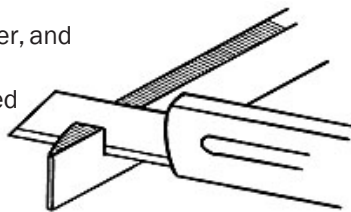
**TIP:** When working with multiple sizes of BACKERSEAL, placing a stack of reels of each size in 5-gallon buckets clearly marked with the size will keep the material organized especially when partial reels are used in the course of the work.

**Do not cut or open packaging until you have read and understand the rest of these instructions as material may expand prematurely.**

## 5 Open Plastic Packaging

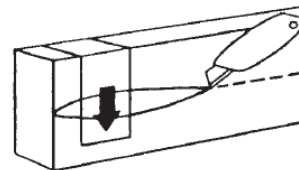
**REELS:** BACKERSEAL in reels is shrink-wrapped and held under compression by an outer tape band. A yellow strip marks the start of the material.

- When ready to install, remove and discard the shrink-wrap.
- Slit the outer colored reel wrapper by cutting the yellow marker.
- Discard the outer reel wrapper, and colored outer tape band.
- Spray a utility knife or serrated bread knife with water from spray bottle and trim the over-compressed, tapered, end off the beginning of the reel.



**STICKS:** BACKERSEAL stick material is held under compression by hardboard and plastic wrapping in sticks.

- When ready to install, slit the plastic wrapping by cutting along the hardboard.
- Discard the outer reel wrapper, and colored outer tape band. On sticks, discard the hardboard and inner release liner.



**NOTE: PARTIAL REEL STORAGE TIP:** Partial reels can be held in compression for later use by wrapping the outside of the roll tightly in duct tape.

## 6 Remove Release Liner and Insert Material Into Joint

- Peel away the clear plastic release liner to expose the sticky mounting adhesive on one face of the BACKERSEAL.
- Unroll the material and insert it into the joint to the depth to suit your installation method.
- Using a stiff-bladed metal putty knife or a multi-tool, press on the non-adhesive side to make the mounting adhesive stick to the substrate on the opposite side. This will hold the material in place while it expands to fill the joint.
- Sizing: BACKERSEAL is sized and labelled to match the joint size. It is critical to switch joint sizes as the joint size in the field changes.



**TIP:** Starting where the joint is widest, choose the material that matches this size. Unroll the material and slide it up or down the joint to where the joint gets smaller. When the material can't slide any further, leave this end sticking out of the joint about two inches and work back along the unrolled material adhering it at the proper depth as you go. Go back and join your next, smaller piece to the protruding end.

## 7 Joining Successive Lengths

- BACKERSEAL STICKS and REELS are joined at butt joints between two pieces of the same or different sizes. Press the butt ends of the adjoining sticks together firmly in the joint. The pressure-sensitive adhesive inside the foam cells will bond the two pieces together

Insert the lengths to be joined into the joint-opening in the wall. Always push the material toward the join to prevent stretching. **DO NOT PULL**—this will cause the joints to separate after the stretched material shortens over time and will result in a gap where leaks could occur.

## 8 Direction Changes and Intersections

### WINDOWS, DOORS, and Other Wall Penetrations:

- The heads and sills should be sealed first. Cut the BACKERSEAL 3/8" (10mm) longer than the opening above the head or sill opening.
- "Snake" the BACKERSEAL into the joint so that it is firmly seated against both the left and right edges of the wall opening. The BACKERSEAL will expand to seal the joint gap and will push outward to seal at its ends.
- With the head and sill material installed, insert BACKERSEAL into the joint gap along the vertical jambs. Always push the material — never stretch. *(IMPORTANT: if you stretch BACKERSEAL, it will shrink back from the corners to form a gap that will leak).*
- Cut the jamb material 3/8-inch (10mm) longer than jamb as well. "Snake" the last foot of material into the joint opening. When the BACKERSEAL expands to seal the joint, it will also push lengthwise into the side of the previously installed head and sill material. The pressure-sensitive adhesive impregnation in the foam will bond itself at these side butt joints.

### CROSSES and TEES:

- Run one piece of BACKERSEAL continuously across the intersection.
- Butt the adjoining pieces firmly into the side of the continuous piece. As with all other joins, cut the intersecting lengths 3/8-inch (10mm) longer than needed to ensure that longitudinal pressure results at the intersection.



**With time the BACKERSEAL material will expand firmly in the wall joint and adhere itself to the other substrate. Expansion is slower when cold, faster when hot.**

## 9 Apply Liquid Sealant

- Gun the low-modulus liquid sealant into the joint over the BACKERSEAL.



**NOTE:** in conventional backer rod and liquid sealant installation, BACKERSEAL would be recessed to allow for installation of the appropriately-sized backer rod.

- Using a caulk knife, tool the liquid sealant firmly against the BACKERSEAL or backer rod to complete the installation.

