
1. PURPOSE

- 1.1 The purpose of this document is to establish typical guidelines for installation of Willseal® STC. The techniques involved may require modifications to adjust to jobsite conditions. Consult your local Willseal or Tremco Sales Representative or Tremco Technical Services for specific design requirements.
- 1.2 Willseal STC is used as an interior joint seal that blocks sound, dust, drafts, heat, and cold in interior spaces, such as offices, quiet rooms, lobbies, and conference rooms.

2. SCOPE

- 2.1 This document will provide the necessary instructions for installation of Willseal STC to qualify for a manufacturer's warranty.

3. AVAILABILITY

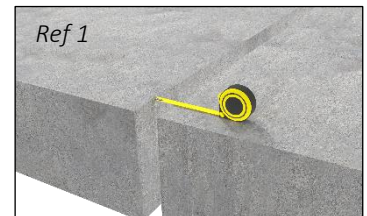
- 3.1 Willseal STC is available in joint widths ranging from ½" to 6" and come as individual sticks (6.5 ft lengths) from your authorized Tremco distributor, or any Tremco or Willseal Sales Representative. Custom sizes are available upon request. For more information contact Customer Service by phone at 800-274-2813 or email custserv@willseal.com.

4. STORAGE

- 4.1 Store materials in a dry, enclosed area, making sure materials are off the ground and out of direct sunlight.
- 4.2 Material will expand faster when hot and slower when cold. In cold temperatures, store material in a heated area 24 hours prior to installation. In hot temperatures, store material out of direct sunlight and not in an enclosed storage container where temperatures may exceed 100 °F (37.8 °C).

5. MATERIAL SIZING

- 5.1 Joints must be sized every 5 to 7 ft (1.5 to 2.1 m) to ensure the gap opening is uniform along the full length of the joint. See Ref 1.
- 5.2 Allow sufficient depth, when determining joint size, to be able to recess the foam material a minimum 1/2 to 3/4 inch (12.7 to 19.0 mm) into the joint. See Ref 2.



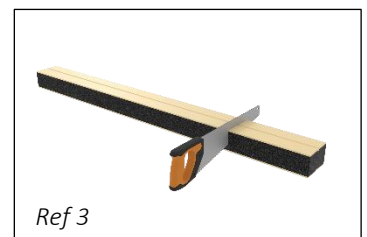
6. MATERIAL PREPARATION

- 6.1 Store material at a minimum of 68 °F (20 °C) for a minimum of 24 hours prior to installation, regardless of temperature at location of installation.
- 6.2 Use a sharp foam knife to cut the material. Be sure to cut so that all starting and ending pieces are square to the termination point. Tip: Apply mineral spirits to the knife for a smoother cut. See Ref 3.



7. SUBSTRATE PREPARATION

- 7.1 Verify that the joint is clean, sound, and will provide an appropriate surface for installation of the joint sealant.
- 7.2 Use compressed air to clean any loose debris from the joint.
- 7.3 Apply water or alcohol to a clean cloth and wipe the joint walls to the depth of the sealant material plus 1".
- 7.4 Verify that the joint is uniform.
- 7.5 Check the material for appropriate length, width, and depth. Supplied material should be approximately 10% larger than the intended joint opening.
- 7.6 Joint depth must allow for the installed material to be recessed 1/4" from the substrate surface.

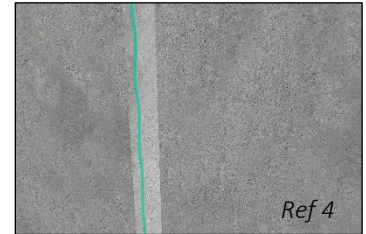


8. SEALANT INSTALLATION

8.1 Verify that the material is cut square at both ends for proper seams; all pieces must be square to each other and to the termination points. Tip: Apply mineral spirits to the knife for a smooth clean cut.

For Joints Under 4"

- 8.2 When fully prepared to install, apply a 1/16" to 1/8" coating of the supplied silicone adhesive accessory to both joint walls using a 1" margin trowel to a depth of the sealant material. See Ref 4.
- 8.3 The supplied silicone adhesive accessory must still be wet upon installation of Willseal STC. The working time for the supplied silicone adhesive accessory is approximately 20 to 30 minutes depending on the temperature.
- If the supplied silicone adhesive accessory cures on the surface of the substrate before installation, the substrate surface must be abraded, and the supplied adhesive accessory must be reapplied.



For Joints 4" and Up

- 8.2 Prepare epoxy by mixing Part A and Part B together in a separate container.
- Transfer the entire contents of Part A (resin) and then Part B (hardener) into a clean, empty container. **Part B must ALWAYS be added to part A, and mixed in a 1:1 ratio.**
 - Mix the material thoroughly with a low speed (approximately 300 rpm) drill or jiffy mixer.
 - Mix parts A and B until a homogenized color is achieved, leaving no streaks of either color.
 - Transfer the mixture to another clean container to avoid any leftover residue from streaking the final mixture.
 - Epoxy Tips
 - The epoxy will not cure when the temperature is below 40°F (4.4°C).
 - For every +17°F (-8.3°C), the epoxy cures twice as fast.
 - For every -17°F (-27°C), the epoxy takes twice as long to cure.
 - Greater volume = less time to cure, smaller volume = more time to cure. A technique to increase the pot life of the epoxy is to split up the mixed material into smaller units.
 - Mix only the required amount of epoxy that will be used within a 30 minute timeframe to prevent the epoxy from curing prematurely.
- 8.3 When fully prepared to install, apply a 1/16" to 1/8" coating of the supplied epoxy mixture to both joint walls using a 1" margin trowel to a depth of the sealant material. See Ref 5.
- The epoxy must still be wet upon installation of Willseal STC. The working time for epoxy is approximately 20 to 30 minutes depending on the temperature.
 - If the epoxy hardens on the surface of the substrate before installation, another coat of epoxy can be applied within 2 hours. After 2 hours, the substrate surface must be abraded to eliminate the amine blush that occurs during the final cure.
- 8.4 Begin installation at bottom of the joint and work upwards using butt seams. See Ref 6.
- Do not excessively push or pull the material as this will cause it to stretch, resulting in possible damage.
- 8.5 Use a blunt putty knife or your hand to compress the opposite side of the material and slide it into the joint. Be careful not to tear the material during the process of compressing it into the joint. **NOTE:** Use of sharp tools could cause damage to the joint sealant material.
- 8.6 Silicone coating should be flush with, but not protruding above, the substrate surface.



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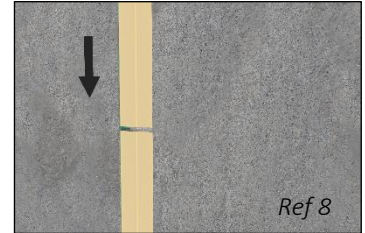
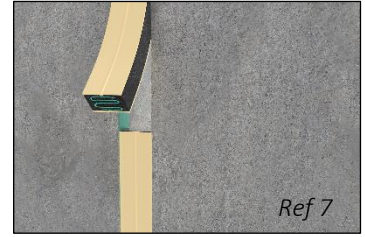


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9. SEAMS AND FINISH

- 9.1 Verify that the new piece of material is cut square and not at an angle to the previous piece installed. Apply supplied joint splice adhesive to the butt end of the new piece of material. See Ref 7.
 - a. Do not apply joint splice adhesive to the faces of the product that are in contact with the sidewall adhesive.
- 9.2 Make sure the seams are flush against each other and then push the pieces together into the joint. See Ref 8.
 - a. Butt seam all “T” and “+” intersections.
- 9.3 Once the joint is installed, run and tool a ¼” bead of the supplied silicone along both sides of the face of the joint along the substrate face.
- 9.4 Run and tool the supplied silicone accessory over all seams and transitions to allow for a clean, aesthetic finish.
- 9.5 Remove any excess adhesive material left on the surface of the material substrate; do not allow the excess adhesives to cure.



10. LIMITATIONS

- 10.1 Willseal STC should not come into contact with hydrocarbon solvents and/or corrosive chemicals. STC is not intended for joints submerged in water, moving joints, or traffic rated joints. Over-compression of STC can result in greater loading that might exceed the design of certain substrates.

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