CST & CST(DS)-Series INSTALLATION INSTRUCTIONS

Material Application

For use in **horizontal joints**. Double sided silicone coating available upon request.

Recommended Tools

- Tape Measure
- Sharp Knife
- Miter Saw
- Duct Tape
- Clean Cloth
- Isopropyl Alcohol
- Caulking Tool
- Jiffy Mixer
- Margin Trowel
- Mineral Spirits
- 2 Empty, Clean Containers

Material Sizing

1. Joints must be sized every 5-7 feet (1.524-2.137 meters) to ensure gap opening is uniform and depth is sufficient for the supplied material.





NOTE: Allow sufficient depth for the material to be recessed 1/8"–1/4" in the joint.

Material Preparation

- 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.
 - **TIP:** 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.
- 2. Store materials in a dry, enclosed area. Make sure materials are off the ground and out of direct sunlight. **Substrate** is to be 50 degrees or higher for installation.
- 3. Use a miter saw to make any cuts to the seal before removing the clear shrink packing. All starting and ending pieces must be square to the termination point.
 - **WARNING:** Install the material directly after removing the shrink packaging to ensure the material does not expand past the joint opening.
- 4. Use a sharp knife to make any cuts after the clear shrink packaging and wooden boards have been removed.



TIP: Apply mineral spirits to the knife for a smoother cut.



Joint Preparation

- 1. Verify that the joint is clean, sound, and will provide an appropriate surface for installation of the joint sealant.
 - a. Use compressed air to clean any loose debris from the joint.
 - b. Apply water or alcohol to a clean cloth and wipe the joint walls to the depth of the seal-ant materials plus 1".
- 2. Verify that the joint is uniform and repair any spalls prior to installation.
- 3. Apply duct tape to both edges of the substrate face to prevent the epoxy from contacting the deck surface.
- 4. Check the material for appropriate length, width, and depth.
 - a. Supplied material should be pre-compressed to a size smaller that the intended joint opening.
 - b. Joint depth must allow for the material to be recessed 1/4" from the substrate surface.

Epoxy Preparation

- 1. Mix Part A and Part B separately.
- 2. Transfer the entire contents of Part A (resin) and then Part B (hardener) into a clean, empty container. Mix the material thoroughly with a low speed (approx. 300 rpm) drill or jiffy mixer.

WARNING: Part B must always be added Part A, and mixed in a 1:1 ratio.

- 3. Mix until the black and white is evenly blended leaving no streaks of either color.
- 4. Transfer the mixture to another clean container to avoid any leftover residue from streaking the final mixture.

TIP: Mix only the required amount of epoxy that will be used within a 30 minute timeframe to prevent the epoxy from curing prematurely.

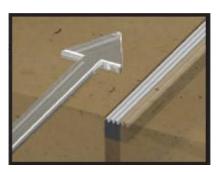
EPOXY TIPS:

- 1. The epoxy will not cure when the temperature is below 40°F.
- 2. For every $+17^{\circ}$ F the epoxy cures twice as fast.
- 3. For every -17°F the epoxy cures twice as slow.
- 4. Greater volume = less time to cure.
- 5. Smaller volume = more time to cure.
- 6. A technique to increase the pot life of the epoxy is to split up the mixed material into smaller units.



Sealant Installation

1. Begin installation at one end of the joint and work to the opposite end using butt seams.

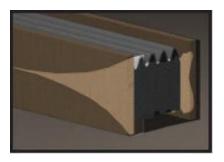


- 2. When fully prepared to install, apply a 1/16" 1/8" coating of the epoxy mixture to both joint walls using a 1" margin trowel to a depth of the sealant material plus $\frac{1}{2}$ ".
 - a. The epoxy must still be wet upon installation of the seal. The working time for the epoxy is approximately 30 minutes depending on the temperature.
 - b. If the epoxy hardens on the surface of the substrate before installation, another coat of epoxy can be applied within 8 hours. After 8 hours, the substrate surface must be abraded to eliminate the amine blush that occurs during final cure.



WARNING: Pay attention to the direction of insertion marked on the packaging.

3. Cut the shrink packaging along the edge of the masonite strapping.



NOTE: If stick sizes larger than the standard 5' LF is ordered (XL marking after product name), do NOT cut shrink packaging completely off. Cut open 5' LF sections at a time and install material working your way down. This will prevent the foam from expanding past the joint opening size.

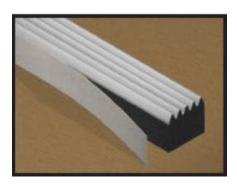
WARNING: Be prepared to install the material immediately once the packaging is removed to prevent the material from expanding past the joint width.

4. Verify that the material is cut square at both ends for proper seams. All pieces must be square to the termination point.



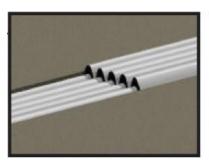
Sealant Installation

5. Remove the white release liner on both sides of the seal.



WARNING: Make sure not to pull, twist, or stretch the material in the process of installation to avoid tearing the white release liner.

- **6.** Initially, position seal 1/8" above the deck surface. Once the material is partially expanded in the joint, it can then be installed to ½" below the surface of the joint using a putty knife or margin trowel.
 - a. Wedges can be used to aid installation. Remove the wedges once the material begins to expand and before the epoxy cures.





Seams

- 1. Verify that the new piece of material is cut square and not at an angle to the previous installed piece.
- 2. Apply flexible sealant to the butt end of the new piece of material.

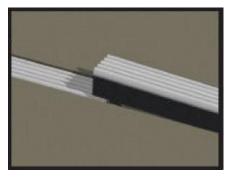
WARNING: Do not apply flexible seal to the faces of the seal that are in contact with epoxy.

TIP: If crew size permits and two lengths of material can be prepared, the ends to be seamed can be held above the deck surface and the mitered pieces can be pushed down into the joint together.



Seams

3. Overlap extra material (approx. 1/2" -1") at seams and splices to ensure that the seam is in compression after installation.



4. Butt seam all 'T' and '+' intersections.

NOTE: After installation, if there are any mitered joints with a hole or void, use the supplied flexible seal to fill and seal the joint.

Finish

- 1. Tool the Dow 888 over all seams and transitions using a small caulking tool.
- 2. Evenly spread the Dow 888 on exposed seams to allow for a clean, aesthetic finish.
- 3. Use supplied Dow 888 caulking to apply side beads along both sides of the joint.
- 4. Remove any excess flexible seal or epoxy left on the surface of the material or substrate.
 - **WARNING:** Do not allow the flexible seal or epoxy to cure before removal.
- 5. Remove the blue painters tape from the substrate surface.

