Precompressed Foam Systems (PCF™) Installation Instructions

Pre-Application Inspection

Visual inspection of expansion joint is the first task to be completed by the installer. Joint size should be field-verified immediately prior to installation. PCF™ seals are designed to be installed at the nominal joint width.

- New concrete shall have a minimum of 14 days of cure
  - Moisture content of the concrete shall be less than 5%

All formwork must be removed.

In applications where the Precompressed Foam system will be replacing an existing system, the old system must be completely removed prior to the installation of the Precompressed Foam system

- Joint components, such as armor angle or strip seal channels may remain in place but must be inspected to ensure that they are soundly secured.
- Steel profiles should be grit blasted to an SSP 8 finish or better in the bonding area.
- Any steel surfaces with a galvanized surface must have the galvanizing removed from it before application of the epoxy adhesive.
- Contact a D.S. Brown representative for any questions about epoxy adhesive or silicone compatibility with the substrate prior to installation.

Loose, contaminated, weak, spalled, deteriorated, and/or delaminated concrete must be removed to sound concrete

- Any spalls, voids, or structural cracking at joint interfaces must be repaired
- Concrete should be grit blasted to a finish between coarse sandpaper and a 1/4” profile.

Joint openings must be parallel and free of all contaminants, loose materials, dry and free of frost.

- Epoxy adhesive will not bond to water

Installation

Do not proceed with the work when temperatures are below 40°F or expected to fall below 40°F. For best results, the material should be held at 65°F for 48 hours prior to installation.

All jobsite safety rules and regulations as specified by the owner or project management are to be followed and are not superseded by any statement in this document.

Step 1 – D.S. Brown Precompressed Foam comes in 6.5-foot-long segments. Stage material by the joint to be sealed.

Step 2 – Using duct tape or other suitable masking material, tape the top edges of the rail or joint to keep them clean.

Step 3 – Mix the epoxy adhesive

Pre-mix Gel-Loc Parts A and B individually if not using entire container. Proportion equal parts by volume of Part A and Part B into a clean mixing container. Thoroughly mix using low speed drill (400 to 600 RPM) and paddle mixer for 3 minutes, scraping sides of container until a uniform color is achieved. Only mix amount of epoxy that can be used within its gel time.

Step 4 – Using margin trowels, spread a 1/16” – 1/8” layer of epoxy on each of the sidewalls.

Step 5 – Immediately after the epoxy is placed, cut the plastic wrapping off of the precompressed foam along the hardboard. Ensure that the foam seal is not cut during this step.

Step 6 – Install the first precompressed foam segment. If there is no designed termination, coat the exposed end of the precompressed foam seal with the supplied accessory silicone. The precompressed foam is compressed to be

slightly narrower than the joint width. It will begin slowly expanding immediately after it is cut out of the wrapping. Once it has expanded to the joint width, place it in the joint. It should be installed 1/2” below the deck surface. Ensure that the foam seal can suspend itself in place to avoid becoming more recessed.

Step 7 – Splice together two precompressed foam segments using the provided silicone. Apply a layer of silicone to both of the ends to be mated and press them together and into the joint simultaneously. These ends should be tightly mated with no gap between them. Spread excess silicone around the top surface both sides of the splice to ensure a watertight seal.

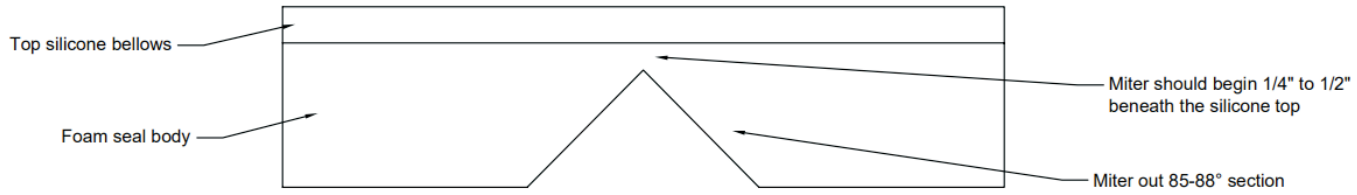
Step 8 – Inject silicone between the top of the PCF™ seal and joint wall on both sides. Tool excess silicone to ensure a water-tight bond between the seal and the joint wall.

Step 9 – Remove masking material before the epoxy cures.

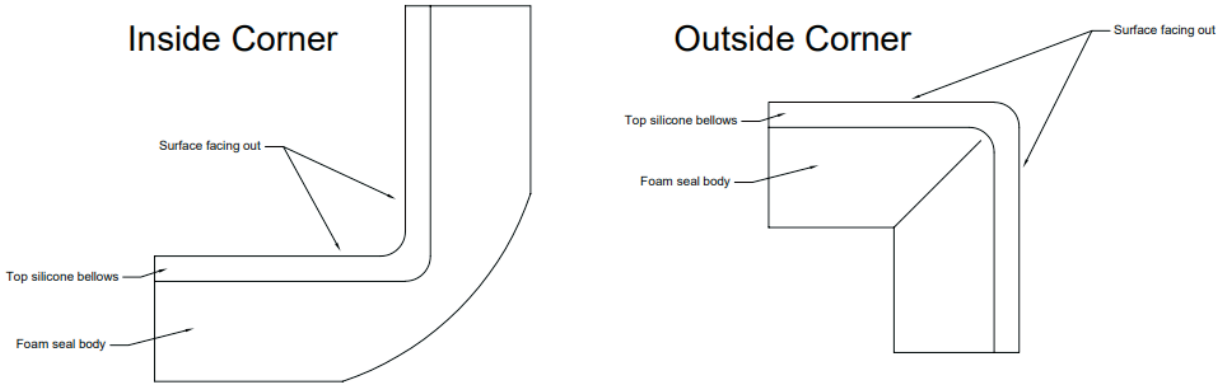
Transitions

Transitions should be made out of one continuous segment of PCF™ whenever possible. The process is the same for inside turns and outside turns:

1. Remove the segment from its compression wrapping.
2. Miter out an 85-88° angle that begins 1/4” to 1/2” below the silicone top.



3. This segment can be bent inward or outward for an inside or outside corner



4. D.S. Brown does not recommend butting the end of one segment to the top of another to create an angle. A continuous segment should be used for improved continuity to promote a water-tight seal.

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