EOS-Series

INSTALLATION INSTRUCTIONS

Recommended Tools

- Electric grinder
- Soft wire wheel– 4" or 6" diameter
- Hand wire brushes
- Clean cloth rags
- Duct tape
- 8" sharp knife– hack saw
- Miter box
- Putty knives & paint brushes (disposable)

Pre-Installation Inspection

- 1. Prior to installation of the expansion joint profile, the installer will visit the site and notify the proper authority in writing of any conditions (done under other sections) that might be detrimental to the installation or performance of the expansion joint. Coordinate the installation with related work. Detrimental conditions are determined to be:
 - a) Irregularities in joint opening width exceeding 1/8"
 - b) Unsound concrete, joint opening side walls, and/ or substrate
 - c) Moisture, oil, or other contaminates
 - d) Migrating cracks to the edge of the joint opening
 - e) Construction joints intersecting perpendicular to the joint opening

Material Preparation

Preparation of Surfaces of Block-Out Recess in Deck:

1. All surfaces to receive the Econ-O-Seal compression seal profile should be dry, clean, and sound concrete free of loose, cracked, delaminated, and spalled sections. Repair any sections that do not meet these criteria. The surfaces to receive the profile shall be sandblasted to exposed aggregate. Sandblasting will increase the surface area and enhance the bond capacity of the adhesive. The sandblast process will also remove all laitance and other bond- inhibiting contaminants.

Preparation of Joint Interfaces:

- 1. Form or saw cut the groove/joint opening into the concrete to the recommended depth. Assure that the interfaces, whether concrete or steel, run parallel to each other for the length of the run. Walls should be plumb to the top surface of the concrete and should be spaced at a consistent width across the joint. Unsound concrete must be removed and repaired.
- 2. Clean dirt, stones, and standing water from the joint opening. Use a stiff bristled brush and compressed air to remove all dust. Sandblast the vertical walls of the groove to remove laitance and contaminants and increase bond area for the adhesive.



Material Installation

- 1. Immediately prior to installation, the interface walls should be blown out again.
- 2. Uncoil the seal and allow it to relax. Apply the conditioning agent to the sidewalls of the seal, and nylon brush the sidewalls to remove oxides from the surfaces in order to receive the adhesive. When done properly, the shine of the surfaces will be removed. A roughened, dull, tacky finish will be obtained. The last step of the preparation process is to rinse off the prepared sides of the profile. Wipe prepared sidewalls with alcohol soaked rags. This will remove the last remnants of the cleaning process. Dry with clean cloth rags.
- 3. Mix the adhesive to the manufacturer's specifications 1:1 ratio. Apply the adhesive to the joint interfaces. It is not necessary to draw a vacuum on the seal. Apply the adhesive to the sidewall ribs of the profile using a trowel or putty knife as the seal is installed. The ribs must be completely filled with adhesive.





- 4. Insert the profile in the gap to the proper depth. Check the ribs for proper adhesive coverage. Fill any voids. Excess adhesive should be removed with a trowel or putty knife from the top of the seal using alcohol and a clean cloth rag.
- 5. Allow the adhesive to cure twenty-four hours (at temperature 70°F). Maximum bond strength (at room temperature) is usually achieved within forty-eight hours.

Areas of glue application





EOS under stress test. 100% past the expected max width



Field Quality Control

- 1. Work that does not conform to the specified requirements must be corrected and/or replaced as directed by the manufacturer and/or engineer.
- 2. Manufacturer/installer shall supply guaranty/warranty to the owner authority, as required.

Adhesive Mixing Instructions

- 1. Open the epoxies, part "A" and "B."
- 2. Remove the contents of containers onto a two-inch square piece of cardboard or plywood.
- 3. The mix ratio is 1:1 for partial batches.
- 4. Blend the two components with a margin trowel or wide putty knife. The gray and black colors should be thoroughly blended to make an off-gray color. There should be no streaks from partially mixed components.
- 5. After material is thoroughly mixed, portions of the batch should be distributed to other workers installing the product.
- 6. As with any epoxy, **DO NOT ALLOW THE MIXED EPOXY ADHESIVE TO SET IN A PILE OR CONFINED CONTAINER** such as a pail. This will accelerate the cure and material will prematurely harden due to the thermal reaction of the two components.

