# **ES**-Series

## INSTALLATION INSTRUCTIONS

Wing Seal Systems

## Material Preparation

1. Size blockout recess to correct depth and width as shown on ES-Series drawing
2. Blockout receiver should be flat and level
3. Deviations, spalls and irregularities should be addressed and repairs made in compliance with the manufacturer's specification.
4. Weather conditions should be dry, no moisture (rain or water in blockout), temperature conditions 45°F to 90°F

## Storage Conditions

1. Store at 40°F - 90°F (5°C - 32°C). For best results, condition material to 65°F - 80°F (18°C - 27°C) before using.

## Material Installation

Sandblast entire blockout recess surface.

Blow the joint clean to remove any dust or other contamination. Be certain that any high spots have been eliminated to ensure that the installed joints are slightly recessed from the concrete surface.

Roll out the Premold rubber along the side of the expansion joint blockout. Abrade the beveled edges of the Premold Seal by using a wire brush. Then wipe the surface clean with a solvent such as toluene. Note that the Premold can shrink once unrolled and allowed to relax. **Do not make any final cuts until the rubber has had time to relax and to shrink to its normal length.**

Wipe aluminum plates with methyl acetate solvent to remove any dirt or oils. Using either a brush or rag, apply a thin film of Primer #42 to the aluminum plate. Do not over prime. For maximum adhesion, sandblasting or grinding of the plate is recommended prior to the solvent wipe. Let the primer dry for 1/2 to 2 hours.

**Note:** Proper installation requires that the 980 Nosing achieve a good bond to the depth and the base of the of the concrete blockout. Therefore, care should be taken not to contaminate the concrete during the bedding procedure that follows.

Prime the blockout ledge where the bedding will be installed using Primer #10. Allow the primer to dry for 1.5 to 2 hours. It must be dry to the touch. Always allow 1.5 hours minimum for the primer to cure. You then have a 4-hour window to apply the 881 bedding sealant.

## Material Installation

Thoroughly mix the two components of the 881 bedding. Using a bulk caulking gun, ribbon the 881 bedding sealant on each side of the stem opening of the joint. The bedding is intended to level the blockout so that the plates will rest smooth and flat. Bedding must fully support the plate and provide for anticipated movement.

On one side of the stem opening, lay out a precut piece of polyethylene on to the fresh bedding to act as a bond breaker. The polyethylene sheet should not extend into the area that will receive the 980 Nosing.

Bed the aluminum plate, primed side down, into the bedding sealant. Be certain to leave 1/8" to 1/4" spacing between each plate section as you progress down the length of the joint. Utilize a section of the Premold as a template to set the plates to a proper depth. The temperature determines placement of plates within the blockout at the time of installation, and by the expected annual movement rating.

Tape visqueen over the top of the aluminum plates to keep the plates free floating under the Premold.

Place the Premold seal into the blockout making sure the seal is centered over the joint gap. Tape edges of the Premold seal and the concrete at the edge of the blockout to protect from over spill of the primer and sealant.

Apply Primer #10 to the concrete surfaces and the beveled edge of the Premold using a disposable brush. Apply just enough to wet the surface. It is important that the Primer #10 be allowed to completely dry for a minimum of 1.5 hours before installing the 980 Nosing. Following the 1.5 hour minimum drying period, there is a 4-hour window of application. After 4 hours, the surface must be re-primed.

Thoroughly mix the two components of the 980 Nosing, and caulk the expansion joint into position. Tool to a smooth finish. Note that the 980 Nosing has a relatively short work life, ensuring full cure and bond strength before movement.

**Note:** Caulking alternatively from one side to the other will avoid movement of the seal laterally in the blockout.

All butt joints must be precut to a 90 degree angle, primed, and then caulked tightly (1/8" or less) with 881 or 830 to bond one piece of Premold to the other. This operation can be done while polymeric 980 Nosing is being installed.

Pull the protective tape from the Premold and the concrete and dispose of properly.

Open to traffic after 24 hours of cure.