Installation Procedure

Last Updated: September 2020

Wabo®FS Bridge Seal
Pre-compressed, Foam-supported Silicone Bridge Expansion Joint System

The following installation procedure is very important and must be fully understood prior to beginning any work. To ensure proper installation and performance of expansion joint system the following actions must be completed by the installing contractor. **Failure to do so will affect product warranty.**

1) Carefully read and understand installation procedure. Contact WBA's Technical Service Department at (800) 677-4922 for product assistance.
2) Inspect all shipments and materials for missing or damaged components and hardware. Contact Customer Service at (800) 677-4922 with WBA's order number and invoice for prompt assistance.
3) Inspect substrate or adjacent construction for acceptance before beginning work. Report unacceptable construction to the project manager for scheduled repair work.
4) Review WBA shop drawings for project specific detailed information if Engineering services were purchased at time of order.

Information provided herein, including but not limited to, any drawing, design, photograph, graphic, or statement(s) ("Materials") are proprietary and the property of Watson Bowman Acme Corp. ("Company"). Reproduction, translation, or reduction to any electronic medium or machine readable form, in whole or part, is strictly prohibited, except for the express purpose for which it has been furnished, without prior written consent of Company. All Materials contained herein are provided by Company for information purposes only. Company reserves the right to amend or withdraw any information contained in the Materials without notice. All technical or other advice by Company, whether verbal or written, concerning products, or the use of products in specific situations ("Advice") is given by Company and is used at the User's own risk.
Health & Safety

During the installation of any Watson Bowman Acme product, appropriate personal protective items should be worn at all times, including but not limited to the following:

- Proper work clothing
- Safety glasses
- Safety boots
- Gloves
- Hard hat

Local rules and regulations regarding safe work environments and health should be followed.

Product Components

The following components are required for the installation of this product:

<table>
<thead>
<tr>
<th>Model</th>
<th>P/n</th>
<th>“A”</th>
<th>“B”</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>FS-050</td>
<td>#50100</td>
<td>½”</td>
<td>1-1/2”</td>
<td>6.5’</td>
</tr>
<tr>
<td>FS-075</td>
<td>#50101</td>
<td>¾”</td>
<td>1-1/2”</td>
<td>6.5’</td>
</tr>
<tr>
<td>FS-100</td>
<td>#50102</td>
<td>1”</td>
<td>2”</td>
<td>6.5’</td>
</tr>
<tr>
<td>FS-125</td>
<td>#50103</td>
<td>1-1/4”</td>
<td>2”</td>
<td>6.5’</td>
</tr>
<tr>
<td>FS-150</td>
<td>#50104</td>
<td>1-1/2”</td>
<td>2”</td>
<td>6.5’</td>
</tr>
<tr>
<td>FS-175</td>
<td>#50105</td>
<td>1-3/4”</td>
<td>2”</td>
<td>6.5’</td>
</tr>
<tr>
<td>FS-200</td>
<td>#50106</td>
<td>2”</td>
<td>3”</td>
<td>6.5’</td>
</tr>
<tr>
<td>FS-225</td>
<td>#50107</td>
<td>2-1/4”</td>
<td>3”</td>
<td>6.5’</td>
</tr>
<tr>
<td>FS-250</td>
<td>#50108</td>
<td>2-1/2”</td>
<td>3”</td>
<td>6.5’</td>
</tr>
</tbody>
</table>

Wabo®FS Bridge Seal
(Refer to chart below for size and part number)

- FS-275 #50109 2-3/4” 3” 6.5’
- FS-300 #50110 3” 3” 6.5’
- FS-325 #50111 3-1/4” 3” 6.5’
- FS-350 #50112 3-1/2” 3” 6.5’
- FS-375 #50113 3-3/4” 3” 6.5’
- FS-400 #50114 4” 4” 6.5’
- FS-425 #50115 4-1/4” 4” 6.5’
- FS-450 #50116 4-1/2” 4” 6.5’
- FS-475 #50117 4-3/4” 4” 6.5’
- FS-500 #50118 5” 4” 6.5’
Pre-Installation Notes

Temperature can affect the expansion properties of the material during installation. Material will expand faster when hot and slower when cold.

**Installation Tip:** In cold temperatures, store material (Preconditioned) 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 (38°C). Material is best stored between 65°F (18°C) and 75°F (24°C). From an installation standpoint, the best working temperature of the material is 65-75°F (18°-24°C).

Installation

Prior to beginning work, installer shall inspect for proper joint interface and ensure that joint opening has enough depth to accept the Wabo® FS Bridge Seal. Verify joint opening as called for on chart. Deficiencies in joint opening must be corrected prior to beginning work, such as spalled edges and protruding objects to ensure a clean, smooth, dry surface for installation of Wabo® FS Bridge Seal. Recommended Concrete Surface Profile is 2-4.

<table>
<thead>
<tr>
<th>Model</th>
<th>Joint Opening</th>
<th>Joint Opening</th>
</tr>
</thead>
<tbody>
<tr>
<td>FS-050</td>
<td>½”</td>
<td>FS-275</td>
</tr>
<tr>
<td>FS-075</td>
<td>¾”</td>
<td>FS-300</td>
</tr>
<tr>
<td>FS-100</td>
<td>1”</td>
<td>FS-325</td>
</tr>
<tr>
<td>FS-125</td>
<td>1-1/4”</td>
<td>FS-350</td>
</tr>
<tr>
<td>FS-150</td>
<td>1-1/2”</td>
<td>FS-375</td>
</tr>
<tr>
<td>FS-175</td>
<td>1-3/4”</td>
<td>FS-400</td>
</tr>
<tr>
<td>FS-200</td>
<td>2”</td>
<td>FS-425</td>
</tr>
<tr>
<td>FS-225</td>
<td>2-1/4”</td>
<td>FS-450</td>
</tr>
<tr>
<td>FS-250</td>
<td>2-1/2”</td>
<td>FS-475</td>
</tr>
<tr>
<td></td>
<td></td>
<td>FS-500</td>
</tr>
</tbody>
</table>
Before installation of Wabo®FS Bridge Seal, tape off edges of the substrate to prevent the epoxy from coming into contact with the exposed surface.

Apply a 1/8” coating of epoxy to both sides of the joint substrate using a 2” margin trowel to a depth of the foam plus 1/2”. The epoxy must still be wet upon installation of Wabo®FS Bridge Seal. The working time for the epoxy is about 30 minutes at 60°F (16°C) (Less if warmer, More if colder).

MIX EPOXY
1. Epoxy adhesive may be used in the >40°F (5°C) to 95°F (35°C) temperature range.
2. Place static mixing tip on cartridge. Place cartridge in dual cartridge pneumatic caulking gun.
3. Every time a new static mixing tip is used, pull trigger and dispense until epoxy turns green to ensure monolithic mix. Once this is determined, you are ready to start applying epoxy to the substrate.

APPLY EPOXY
1. Run a bead of epoxy on vertical face of substrate, spread with a 2” margin trowel, approximately 1/8” thick. Avoid placement of epoxy in the top ½” from grade down in joint opening on both sides.

TIPS
1. Do not apply Epoxy until ready to install the expansion joint.
2. Pre-condition Wabo® Gel Adhesive 65-75°F (18-24°C) 24-hrs ahead of time.
3. Recommend a small air compressor for the dual cartridge pneumatic caulking gun. Air pressure ranges from 30psi-90psi depending on viscosity of the gel adhesive. Adjust psi to control flow of material. Use higher psi for more viscous materials (cold). Use lower psi for less viscous materials (hot).
4. For every +17°F, (+8°C) the epoxy cures twice as fast.
5. For every -17°F, (-8°C) the epoxy twice as long to cure.

Important Note:
Make any cuts to Wabo® FS Bridge Seal before removing the clear shrink wrap packaging. Please refer to Step 6 for proper splicing techniques. For directional changes, please refer to Step 6A for Instructions.

All starting and ending pieces must be square to the termination point.

NOTE: At all splice locations, contractor shall apply a bead of the NP 100 or NP 150 Sealant supplied to ensure a water tight splice connection. Spread bead with trowel on each interface evenly over end. Join pieces together, make sure it is a snug fit.
For “L” Transitions, cut the material at a 45-degree angle and for “T” and “X” Transitions, simply “Butt” the material together. Install with a slight compression to hold in place.

**NOTE:** At all splice locations, contractor shall apply a bead of the Wabo®Sil supplied, across the top of each splice to ensure a water tight splice connection.
Remove tape from edges of substrate. When fully prepared to install Wabo®FS Bridge Seal, cut the shrink wrap packaging. Be prepared to install the material immediately once the packaging is removed to prevent the material from expanding past the joint width.

**Note:** When removing shrink wrap packaging, cut along Masonite Form. This is to ensure that the colorable Silicone Face has not been cut.

All ends are to be capped with NP 100 or NP 150 prior to installation of seal into joint. If seal expands wider than joint opening, simply and gently squeeze seal and insert into joint opening. **DO NOT** force seal into joint opening. Doing so will squeegee the epoxy off the face of the joint opening.

Remove shrink wrap packaging, Masonite forms and release paper. After installation, if there are any mitered joints with a hole or void, use Wabo®Sil to fill and seal the joint.
Install the material starting at one end of the joint working towards the other end of the joint. Make sure not to pull, twist or stretch the material in the process of installation. Backer rod (15-20% larger than the joint opening) can be used to aid in installation of the material.

Run a 1/2" bead of Wabo®Sil Adhesive on top of seal on each side once installed (see figure below). After running beads, tool the material, especially during colder temperatures.
Note: at all exposed terminated ends (including any and all Factory Transitions), apply a liberal coat of Clear Flexible Sealant to the entire surface of the Foam terminated end(s). Doing so will ensure proper moisture resilience. Do not coat faces of the Wabo®FS Bridge Seal with the Clear Flexible Sealant that will come in contact with epoxy.
Repair Procedure

Please follow the repair procedure below for when the FS Bridge Seal happens to fall down before or after the Epoxy curing process.

R1  Slide a large knife or trowel along the bond line as shown above and remove the affected section of FS Bridge Seal. Exercise care not to destroy the seal while trying to separate the seal from the Epoxy Bond Line.

R2  Once the seal has been carefully removed from the concrete, the fastest way to remove the old epoxy is to use a concrete cutting saw with a diamond blade. When you run the diamond blade along the epoxy line, the blade will remove the epoxy and prep the surface as well.
After the seal and old epoxy has been removed, please follow the installation procedure for instruction on re-installing the FS Bridge Seal product.

Follow us on social media for industry news, new product announcements & more: