Wabo®Crete FS Bridge Joint System
Pre-compressed, Foam-supported Silicone and Elastomeric Concrete Bridge Joint System

I. Product information:

PRODUCT DESCRIPTION:

Wabo®Crete FS Bridge Joint System is a pre-compressed, foam supported silicone joint seal installed with a two-component polyurethane expansion joint header. The system is designed to accommodate movements for +/-60% of joint opening, and rapid rates of joint movement. The Wabo®FS Bridge Joint System is comprised of a hydrophobic 100% acrylic impregnated polyurethane foam seal coated with a highway grade UV stable silicone. The foam seal is designed to be permanently bonded to the joint substrate with a user-friendly field applied Wabo®Gel Adhesive. The Wabo®Crete header is a unique mixture which monolithically bonds the expansion joint to the deck, creating a waterproof system. Wabo®Crete II absorbs traffic impact loads and evenly disperses them into the deck, while allowing the system to flex with deck loads.

PACKAGING / COVERAGE:

- Seal profiles are shipped pre-compressed in nominal lengths of 6.5 feet (2 meter) sticks
- Wabo®Gel Adhesive is a 1:1 mix and available in standard 50.72 dual cartridge kit
- Wabo®Sil Adhesive is a one-part sealant supplied in 29 oz cartridges.
- Master Seal NP100 is packaged in 10.1 oz cartridge
- Wabo®Crete is a 3-component system with a bonding agent and yields 0.6 CF per unit.
  o Part A Activator – 1/2-gallon container
  o Part B Resin – 1-gallon container
  o Part C Aggregate – 5-gallon container (60 lbs.)
  o Bonding Agent: Part A – 1 Quart and Part B – 1 Quart
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FOR BEST RESULTS:

- Do NOT allow any of the chemicals components to freeze prior to installation.
- Store all components out of direct sunlight in a clean, dry location between 50°F (10°C) and 90°F (32°C). Do not store in high humidity.
- Shelf life of chemical components is approximately 12 months (6 months for foam seal).
- Do NOT install when surface temperature is less than 40°F (4°C).

II. Surface Preparation:

GENERAL INFO:

- Temperature can affect the expansion properties of the material during installation. Material will expand faster when hot and slower when cold. Properly store Wabo®FS Bridge Seal at room temperature and out of direct sunlight.
- Prior to beginning work, field measure joint opening and inspect surrounding substrate. Verify proper seal is selected based on joint opening. Any deficiencies in joint opening must be corrected prior to beginning work. Before installation of Wabo®FS Bridge Seal tape off edges of the substrate to prevent the epoxy from coming in contact with the exposed surface. Tape should be place ½” on the vertical joint opening and 1 ½” on the exposed horizontal surface.
- Pre-condition Wabo®FS bridge Seal sticks and Wabo®Gel Adhesive 24 hrs. in advance, between 68° to 78° F. this will allow for a smoother, faster installation.

PROPERLY PREPARE SUBSTRATES:

Concrete: joint interface must be dry and clean (free of dirt, coatings, rust, grease, oil, and other contaminants), sound, and durable. Any loose, contaminated, weak, spalled, deteriorated and/or delaminated concrete must be removed to sound concrete and repaired prior to placement. Concrete substrates must be abrasive blasted to remove all laitance and contaminants which may cause bonding problems. A CSP 3-4 is recommended. Alternate method of preparation if abrasive blasting is not an option: grind substrate by means of a diamond cup wheel or Zec wheel.
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SUBSTRATES con't.:

Steel: Steel substrates must be sound and abrasive blasted SP-10, near white, immediately prior to installation. If galvanized, contact WBA for suggested guidelines.

Elastomeric Concrete and Polymer Concrete Headers: abrasive blasted to remove all latencies and contaminants which may cause bonding problems (CSP 3-4 recommended).

III. Application Procedures:

Wabo®Crete ELASTOMERIC CONCRETE INSTALLATION

• Wabo®Epoxy Bonding Agent must be used as a primer on the properly prepared concrete before beginning the installation of the Wabo®Crete II elastomeric concrete.
• Mix Wabo®Epoxy Bonding Agent Part A – 1-quart container (resin) and Part B – 1-quart container (hardener) separately in their individual containers before combining them together. Combine Part A and Part B, in a clean container. Mix thoroughly with an electric drill and Jiffy-type paddle (approximately 2 minutes) or until color consistency is developed.
• Brush apply the primer to the concrete surface and immediately begin the installation of the Wabo®Crete II elastomeric concrete. DO NOT allow the primer to cure.
• Thoroughly stir WaboCrete Part B – 1-gallon container (Resin) separately before pouring entire contents of Part B into a clean 5-gallon container. Add Wabo®Crete Part A - ½ gallon container (activator) and mix both components with a power mixer equipped with Jiffy® type paddles until well blended (approx. 30 seconds).
• Add Part C - the aggregate component (60 lbs.) to the liquid material and mix until all aggregate is coated (approximately 1 minute). This mix can be poured into the properly prepared blockout. The material will flow and self-level.
• The final blend of Wabo®Crete II elastomeric concrete is poured out of the mixing bucket and into the blockout area. Wabo®Crete II is an ambient cure material. Cure times are, therefore, temperature dependent. Cure Time (Open to Traffic):

<table>
<thead>
<tr>
<th>Temperature Range</th>
<th>Cure Time</th>
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<tbody>
<tr>
<td>70-90 °F (21-32 °C)</td>
<td>1- 1 ½ hours</td>
</tr>
<tr>
<td>50-70 °F (10-21 °C)</td>
<td>1 ½ - 2 hours</td>
</tr>
<tr>
<td>40-50 °F (4-10 °C)</td>
<td>2 –3 hours</td>
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</table>
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Wabo®FS Bridge Seal INSTALLATION SUMMARY:

- Field measure joint opening width and verify movement expectations to ensure Wabo®FS Bridge Seal material matches project joint size and needs.
- Set pressure gauge of pneumatic gun at 30 psi and adjust as high as 90 psi to control the flow of the adhesive.
- Dispense a bead of Wabo®Gel Adhesive on vertical joint interfaces and with a 2” margin trowel. Spread a 1/16” to 1/8” thin layer onto the joint faces to the depth of seal height. Avoid putting gel adhesive ½ to ¾” from top of roadway to account for seal recess and placement.
- Make any directional cuts, if not utilizing prefabricated curbs prior to removing shrink-wrap packaging, release paper and strapping.
- 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 silicone face has not been cut.
- Insert material into joint opening, leaving a minimum 1/2” reveal, always working off the lower side of the deck. If a chamfer is done on substrate, recess the joint ¾”. Join seal lengths with Master Seal NP100. Using a trowel or putty knife, spread sealant evenly and push coated ends firmly together. Wipe up any excess sealant.
- After the Wabo®FS Bridge Seal has fully expanded, tool a finish bead of Wabo®Sil Adhesive (1/4” to 3/8” bead) between the edge of the Wabo®FS Bridge Seal and the substrate on both sides. Apply Wabo®Sil Adhesive silicone at joint connections (butt splices) so that the bellows are not constrained by any excess silicone. Tool and remove any excess as needed.
- During execution of work, inspect work to assure compliance with manufacturer’s guidelines, and good construction practices.
- Protect work from contaminating substances and damage resulting from other construction operations or other causes so that sealed joints are without deterioration or damage at time of Project completion.