Expansion Joint Systems

Delastic-LS® Pourable Bridge Seals

Product Description
Delastic-LS® Sealant is a two-component, self-leveling, fast-curing, urethane sealant for use in engineered joints.

Basic Uses
Typical applications include: control joint and expansion joint systems for bridges, highways, parking structures, stadiums, plazas, water and sewage treatment facilities and other types of concrete construction. Delastic-LS® Sealant is very low in modulus and exhibits high elongation.

Advantages
A. Cures rapidly to a soft elastomer, having exceptional elastomeric properties
B. Delastic-LS® Sealant has been designed for use under extended water immersion.
C. Contains no asphalt or coal tar additives, and is among the most dimensionally stable sealants available.

Delastic-LS® Sealant Technical Data from Lab Tests

<table>
<thead>
<tr>
<th>Property</th>
<th>Test Method</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Movement Capability</td>
<td>ASTM C719</td>
<td>+100% -50%</td>
</tr>
<tr>
<td>Tensile Strength</td>
<td>ASTM D412</td>
<td>120 psi</td>
</tr>
<tr>
<td>Ultimate Elongation</td>
<td>ASTM D412</td>
<td>1500%</td>
</tr>
<tr>
<td>Hardness (Shore A)</td>
<td>ASTM C661</td>
<td>30 ± 5</td>
</tr>
<tr>
<td>Low Temperature</td>
<td>ASTM D1790</td>
<td>Pass</td>
</tr>
</tbody>
</table>

Limitations
A. Performance of this sealant is closely related to preparation, application techniques and structural behavior. Installation conditions should be as recommended by the manufacturer.
B. Install at 40°F (5°C) or above.

Packaging
Available in one-gallon containers

Applicable Standards
Delastic-LS® Sealant will meet and exceed the requirements of ASTM C920, Type M, Class 50, Use T, NT, M

Color
Gray

Delastic-LS® Sealant Installation
Preparatory Work: Thorough surface preparation, to ensure a dry, clean, sound joint edge, is essential for a good horizontal joint sealant application. All joint edges should have a tooled radius wherever possible. They should be cleaned by sandblasting, by power wire-brushing, or by grinding the edge to ensure a clean, sound substrate. Install the backer rod 3/4” below the joint surface. The Delastic-LS Sealant should be installed 1/4” below the joint surface, resulting in a material thickness of 1/2” at the top of the backer rod.
Bond Breaker: Sealant should not be applied directly over cork or fiberboard fillers, which are usually damp and not tight in the joints. These fillers should be cut out deep enough to allow insertion of proper size filler, to obtain tight backup and bond breaker. Use foam fillers as recommended by the manufacturer.

Delcrete™

Product Description: Delastic-LS® Sealant can be used with headers made of Delcrete™ Elastomeric Concrete to create a highly durable, cost-effective and watertight expansion joint system for bridges. Delcrete™ Elastomeric Concrete is a pour-in-place, free-flowing, two-part polyurethane-based elastomeric concrete. Delcrete™ has been compounded to bond in a variety of surfaces including steel and concrete. Following are the design features of the industry’s premier elastomeric concrete:

• Polyurethane chemistry
• Non-brittle over extreme temperature ranges
• Resistant to nearly all chemicals
• One-hour cure time
• Permanent, long-term repair solution

Although initially developed for the bridge rehabilitation market, the outstanding performance record of Delcrete™ has resulted in bridge owners specifying Delcrete™ Strip Seal Expansion Joint Systems for new bridge construction projects as well.

Installation: Proper installation of Delcrete™ is essential to ensure long-term performance. Therefore, a D.S. Brown technical representative or a representative of its licensed applicator shall be present on the job site during all phases of the installation. Basic installation considerations include:

• Minimum ambient and concrete substrate temperature: 45°F (7°C)
• Sandblast entire blockout, including steel rail profile, followed by a compressed air sweep
• Blockout area must be completely dry before installation

A comprehensive list of installation procedures is found in The D.S.Brown Delcrete™ Strip Seal Expansion Joint System Installation Datasheet.