1724 - SILICONE RUBBER SURFACE CRACK SEALANT

SECTION 1724

SILICONE RUBBER SURFACE CRACK SEALANT

1724.1 DESCRIPTION

This specification covers material for sealing surface cracks previous to epoxy resin crack repair.

1724.2 REQUIREMENTS

a. Provide Type S, Grade NS, Class 50, NT or O, one-part, clear or gray, neutral-cure, silicone rubber sealant that easily extrudes in any weather and cures quickly at room temperature.

b. Provide sealant that complies with TABLE 1724-1.

<table>
<thead>
<tr>
<th>Property</th>
<th>Test Method</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tack-Free Time</td>
<td>ASTM C 679</td>
<td>3 hrs</td>
</tr>
<tr>
<td>Working Time</td>
<td>ASTM C 639</td>
<td>20-30 minutes</td>
</tr>
<tr>
<td>Peel Strength</td>
<td>ASTM C 794</td>
<td>32 lb/in</td>
</tr>
<tr>
<td>Tensile Adhesion Strength</td>
<td>ASTM C 1135</td>
<td>45 psi at 25% extension</td>
</tr>
</tbody>
</table>

c. Clean all tools and other application or mixing equipment frequently using a solvent type that is approved by the crack sealant manufacturer.

1724.3 TEST METHODS

Test the material in accordance with the ASTM standards stated in subsection 1724.2.

1724.4 PREQUALIFICATION

a. All silicone rubber sealant intended for use under this specification must be prequalified on the basis of Type, Grade, Class and Use prior to prequalification. Manufacturers desiring to supply material for KDOT jobs must submit a written request to the Bureau Chief of Construction and Materials, with the following information for each type and brand name:

   (1) Name, address and telephone number of the manufacturer. Include the name of the preferred contact person.

   (2) Brand name of the material.

   (3) Type, Grade, Class and Use of the material.

   (4) Information regarding recommended usage and application instructions.

   (5) Material Safety Data Sheets.

   (6) One copy of a certified test report prepared by a laboratory regularly inspected by the Cement and Concrete Reference Laboratory (CCRL) of the National Institute of Standards Technology or other approved reference laboratory, showing test results complying with ASTM C 920. Include evidence that the laboratory is inspected regularly.

b. The information and test reports will be reviewed by the Bureau Chief of Construction and Materials. The manufacturer will be advised as to whether or not the product is prequalified.

c. The Bureau of Construction and Materials will maintain a list of prequalified silicone rubber sealants. Products will remain prequalified as long as the formulation and manufacturing processes remain unchanged, and field experience indicates that the material functions appropriately. Failure of the material to function in the field will be cause for removal of the product from prequalified status. Products removed from prequalified status will be considered for requalification if the manufacturer can provide evidence that the cause of failure has been positively identified, and necessary formulation changes and quality control measures have been implemented to eliminate that cause. Complete prequalification testing may be required for products that have been removed from prequalified status.

1724.5 BASIS OF ACCEPTANCE

Receipt and approval of a Type D certification as specified in DIVISION 2600.