AUTHORIZATION PROCEDURES AND ACCEPTANCE CRITERIA FOR TYPE A AND AL JOINT SEALS

The following procedures are required to authorize Type A and AL joint seals for inclusion on the California Department of Transportation (Caltrans) Authorized Material List (AML) before incorporation into construction projects. This program is administered by the Chemical Testing Branch. The sealant must meet the performance and acceptance criteria before inclusion on the AML.

Authorization of Type A and AL Joint Seal requires the following:

1. For new products, the manufacturer will provide:
   A. Letter of intent specifying the type of product, applications, and contact information.
   B. Authorized Material List Submittal Form TL-9502. For more information, please follow the link: <https://dot.ca.gov/programs/engineering-services/product-evaluation-program>
   C. Manufacturers product data sheet.
   D. Safety Data Sheet.
   E. When directed to do so, send a sample of the material for our testing.

2. Performance and acceptance criteria:
   A. The sealant must be a 2-component silicone type that withstands a ±50 percent movement.
   B. The sealant must be self-leveling and cure rapidly enough to not flow on grades up to 15 percent.
   C. When tested under California Test 435, the sealant must comply with the requirements shown in the following table:

<table>
<thead>
<tr>
<th>Quality Characteristic</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Modulus at 150 percent elongation (psi)</td>
<td>8–75</td>
</tr>
<tr>
<td>Recovery (inches, max)</td>
<td>21/32</td>
</tr>
<tr>
<td>Notch test</td>
<td>Sealant must not fail completely in adhesion or cohesion</td>
</tr>
<tr>
<td>Water resistance</td>
<td>Loss of bond, 1/4-inch max</td>
</tr>
<tr>
<td>Ultraviolet exposure</td>
<td>No more than slight cracking or checking</td>
</tr>
<tr>
<td>Cone penetration (mm)</td>
<td>4.5–12.0</td>
</tr>
</tbody>
</table>
3. Send submittal requirements to the Caltrans Transportation Laboratory at:

Caltrans
Attn: Mitra Rafiei (Type A and AL Joint Seals)
Chemical Testing Branch
5900 Folsom Boulevard
Sacramento, CA 95819

A. When the submittal package has been evaluated and reviewed, the Department will notify the manufacturer of the findings. When any discrepancies are resolved to the satisfaction of the Department, the material will be placed on the AML.
B. The authorization of Type A and AL joint seals is valid for 2 years from the date it is placed on the AML.
C. The Department reserves the right to sample and to remove the product from the AML at any time.

4. Reauthorization:

A. Six months prior to a product’s listed reauthorization date, Manufacturers need to contact the Chemical Testing Branch.
B. Manufacturers shall submit a sample of the product and a letter confirming that the Type A and AL joint seals formulation has not changed.
C. When confirmed that the joint seal has not changed and still meets the performance and acceptance criteria, the AML reauthorization date will be changed to the new date.

Please allow up to 90 days for evaluation of samples once received.

If you have questions about Type A and AL joint Seals, authorization requirements and acceptance criteria, please contact Mitra Rafiei at (916) 227-7917 or by e-mail at <Mitra.Rafiei@dot.ca.gov>.