

QPL 5 JOINT SEALERS AND FILLERS

SECTION A. COLD POUR (ONE COMPONENT JOINT SEALER)

PROCEDURES

GENERAL

This evaluation procedure outlines the Department's approval process for silicone materials used for sealing longitudinal and transverse joints and random cracks in Portland cement concrete pavement.

SPECIFICATIONS

TDOT 905.05, section (b), part 2

PROCEDURE

A completed Product Evaluation Form, MSDS sheets, if applicable, product data information and sample of the product being tested must be submitted to the Division of Materials and Tests.

The manufacturer shall submit a sample of the product and informational material along with certified test results from an independent lab stating that the material meets the above specifications. In addition, the Department also reviews the products' ability to bond to hardened concrete and flexibility in below freezing temperatures.

SECTION B. COLD POUR (TWO COMPONENT JOINT SEALERS)

PROCEDURES

GENERAL

This evaluation procedure outlines the Department's approval process for materials used for sealing joints in Portland cement concrete pavement and bridge decks.

SPECIFICATIONS

None

PROCEDURE

A completed Product Evaluation Form, MSDS sheets, if applicable, product data information and sample of the product being tested must be submitted to the Division of Materials and Tests.

The Department will review the products' ability to bond to hardened concrete and flexibility in varying temperatures. A minimum elongation of 600% will be required. Flexibility will be measured by mixing the product according to the manufacturer's recommendations and filling a 1" gap between two concrete cylinder halves. The material will be allowed to cure according to manufacturer's recommendation prior to pulling to determine elongation.

NOTE: This procedure is currently under review by the Department for modification.

SECTION C. HOT POUR JOINT SEALERS

PROCEDURES

GENERAL

This evaluation procedure outlines the Department's approval process for materials used for sealing longitudinal and transverse joints and random cracks in Portland cement concrete pavement and asphalt surfaces.

SPECIFICATIONS

TDOT 905.05, section (a)
ASTM D6690

PROCEDURE

A completed Product Evaluation Form, MSDS sheets, if applicable, product data information and sample of the product being tested must be submitted to the Division of Materials and Tests.

Product approval is based on certifications that the material meets the applicable TDOT specifications.

SECTION D. WATER ACTIVATED POLYURETHANE FOAM GROUTS

PROCEDURES

GENERAL

This evaluation procedure outlines the Department's approval process for foam grouts used for sealing voids to stop water infiltration.

SPECIFICATIONS

None

PROCEDURE

A completed Product Evaluation Form, MSDS sheets, if applicable, product data information and sample of the product being tested must be submitted to the Division of Materials and Tests.

Product approval is based on mixing in accordance with manufacturer's recommendations and confirming that the material expands to form a ridged foam.

SECTION E. PREFORMED JOINT FILLERS (BITUMINOUS AND NON-BITUMINOUS)

PROCEDURES

GENERAL

This evaluation procedure outlines the Department's approval process for preformed joint fillers(Bituminous and Non-bituminous) for use in expansion and construction joints in accordance with the Standard Specifications.

SPECIFICATIONS

TDOT 701.06 and 905.01

PROCEDURE

A completed Product Evaluation Form, MSDS sheets, if applicable, product data information and sample of the product being tested must be submitted to the Division of Materials and Tests.

Product approval is based on Departmental testing for compliance with AASHTO M 213 and AASHTO M 153.