

## QCML Criteria

### Hot Applied Rubberized Asphalt Waterproofing Membrane System

#### General Requirements

The membrane waterproofing system shall consist of:

- Primer
- Hot poured rubberized asphalt membrane consisting of a single component hot applied asphalt
- Protective covering

The primer shall meet the requirements of Subsection M9.09.1 of the Standard Specifications.

The membrane shall be able to bridge live cracks up to 1/8 inch in width and meet the criteria specified in Table M9.08.3-1.

The protective covering shall be rolled asphalt sheets conforming to ASTM D6380, Type II.

#### Membrane

PROPERTY	TEST	REQUIREMENTS
Solids Content		100%
Flash Point	AASHTO T 48	≥ 500°F
Flexibility	ASTM D5329	No delamination or cracking
Penetration	ASTM D5329	at 77°F ≤ 110 at 122°F ≤ 200
Permeance	ASTM E96 Water Method, Procedure B	≤ 1.0 perms
Softening Point	ASTM D36	≥ 176°F

#### Material Qualification

A manufacturer requesting approval of a hot applied rubberized asphalt membrane shall furnish to the Research and Materials Section the following:

1. The membrane system material specifications including product performance data.
2. Certified independent test reports demonstrating conformance to Table M9.08.3-1.
  - a. The independent lab shall be recognized by the National Cooperation for Laboratory Accreditation (NACLA) in Construction Materials Engineering and Testing (CMET) or an equal program approved by Research & Materials. All testing shall be performed by one independent lab unless approved by the Engineer.

- b. Independent test reports must be dated within two years from the initial submission. Samples for all required testing shall be fabricated at the same time. Test reports shall denote the lot of material as well as the sample fabrication and testing dates. All submittals shall be certified to be in conformance with the manufacturer's instructions. Systems qualified by MassDOT per the performance criteria shall be considered for placement on the MassDOT QCML.
3. A detailed summary of successful installations that have occurred in the United States, including owner contact information, design and construction details (substrate type & condition, membrane system components, hot mix asphalt overlay thickness and mix details, etc.), year constructed, tests performed, performance monitoring and/or testing, and any other additional information requested by the Department.

A demonstration of the product's installation and performance may be required to be qualified by MassDOT.

All submittals shall be certified to be in conformance with the manufacturer's instructions. Systems qualified by MassDOT shall be considered for placement on the MassDOT QCML.

Once approved, the waterproofing system will be listed on the MassDOT QCML. The product shall remain on the approved list for five (5) years unless one of the following occurs:

- If the product's technology changes. If the product formulation or technology changes, the Manufacturer shall notify MassDOT RMS.
- MassDOT RMS determines that the product no longer meets the minimum requirements.

A written request for re-approval must be submitted to the Department at least 90 days prior to the expiration date for the product to remain on the QCML. The manufacturer will be required to submit certified test reports demonstrating conformance to the specification.