

MaineDOT Qualified Products Acceptance Criteria

Foam Compression Joints

Overview

Cell foam compression joint systems are composed of cellular foam with a factory installed silicone seal, field-applied epoxy adhesive, and field-injected silicone sealant bands.

Manufacturers submitting a cell foam compression joint to MaineDOT shall include a signed and witnessed statement on the manufacturer's letterhead verifying compliance with the criteria listed below.

Criteria

Material shall be capable of movements of +50%, -50% (100% total) of the nominal material size. Seals shall be composed of cellular polyurethane foam impregnated with hydrophobic 100% acrylic, water-based emulsion, factory coated with highway-grade, fuel resistant silicone.

Material composition shall be free of inert fillers, waxes or wax compounds, and asphalt or asphalt compounds.

Material shall meet the following requirements when tested in accordance with the test methods listed and meet the relevant specifications of the current version of Maine Department of Transportation's Standard Specifications.

CRITERIA	TEST METHOD	REQUIREMENTS	
Foam Seal			
Temperature Service Rating	ASTM C711	-40 to 185°F (-40 to 85°C)	
Silicone Coating			
Joint Modulus	ASTM D3574 E	50 %	7 psi (maximum)
		100 %	8 psi (maximum)
		150 %	9 psi (maximum)
Flexibility	Cured sealant stable from -50 to 300°F (-45 to 149°C)		
Elongation at break	ASTM D3574 E	>1400 %	
Field-Injected Silicone			
Tensile Strength	ASTM D412	250 psi	
Elongation	ASTM D412	700 %	
Joint Movement Capability	ASTM C719	+/- 50 %	
Field-Applied Epoxy Adhesive			
Shear Strength	ASTM D732	5700	
Tensile Strength	ASTM D638	7000 psi	
Compressive Strength	ASTM D579	9100 psi	
Gel Time	ASTM C881	25 min	
Bond Strength (14 days, moist cure)	ASTM C882	2000	
Elongation at Break	ASTM D3574 E	2 %	

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PRODUCT CONFORMITY: At the discretion of MaineDOT, any shipment of product to a MaineDOT location may be tested, such as by infrared or gas chromatography, for compliance with the SDS and uniformity with the formulation of the approved product (where applicable).

NOTE: MaineDOT may require a field evaluation before final acceptance and inclusion on the Qualified Products List (QPL).

A vendor who wishes to have products preapproved for future use should contact MaineDOT's Product Evaluation Coordinator via email at NewProducts.MaineDOT@maine.gov or by calling (207) 557-1788

Submittals

Product Submittal Packets shall include a COMPLETETED:

- New Product Evaluation form
- Current Technical Data Sheet
- Current Safety Data Sheet (SDS)
- Third Party, Independent Test Results OR AASTHO Product Evaluation & Audit Solutions (formerly NTPEP) testing ID for those products requiring this testing

Incomplete submittals will not be evaluated for inclusion on MaineDOT's Product Lists.

All reports shall be issued and signed by an authorized laboratory representative. The report shall include date of testing, product name, and the physical and/or chemical requirements stated herein.

Product Changes

Any change in a product, such as formulation, shall require re-testing (through AASTHO Product Evaluation & Audit Solutions (formerly NTPEP) if required) or independent, third-party lab Manufacturers shall notify MaineDOT of products changes and resubmit as a new product for re-evaluation, failure to do so may result in removal of product from MaineDOT's QPL.

Manufacturers shall submit, for re-evaluation, an updated independent analytical laboratory report (or AASTHO Product Evaluation & Audit Solutions (formerly NTPEP) testing ID) prior to approval or purchase by MaineDOT.

Recertifications

MaineDOT requires re-certification by all manufacturers every five years (except for electrodes used for field welding which are recertified every year) to ensure that product names and formulations have remained the same since the product was originally placed on this list and

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that products are still relevant and in production. Where applicable, this shall include the most recent AASTHO Product Evaluation & Audit Solutions (formerly NTPEP) testing ID. Additionally, AASTHO Product Evaluation & Audit Solutions (formerly NTPEP) provides for retesting products. A lapse of AASTHO Product Evaluation & Audit Solutions (formerly NTPEP) testing/audit schedule as set forth in the associated workplan shall result in disqualification of the product.

Manufacturers of any products requiring MASH testing must contact MaineDOT Product Evaluation Program of any changes to their products. Manufacturers are responsible for tracking their recertification dates, reminders will not be sent. Failure to recertify products may result in removal from the QPL.

Other Information

The Department continues to evaluate its Acceptance Criteria and reserves the right to revise the criteria and/or withdraw product qualification at any time for any reason without notice.

Furthermore, the ability of a product to meet these requirements does not necessarily guarantee addition to the Qualified Products List. Reminder that, products once placed on the Qualified Products List are to be considered prequalified for use only, meaning that they have undergone preliminary review for compliance with MaineDOT, and AASHTO specifications. As with all products, final approval rests with the Designer, Project Manager, Supplier and/or Resident to determine if a product best suits the need of a particular project.

If you are experiencing difficulties reading or printing this page, or have questions regarding the Qualified Products List website, please contact the Product Evaluation Program Coordinator at (207) 557-1788 or by email at: NewProducts.MaineDOT@maine.gov