

**New Hampshire Department of Transportation
Bureau of Materials & Research**

Qualified Products List (QPL) – Qualification Criteria

Section 528 – Prestressed Concrete Members, NHDOT Specifications

QPL Category: 528.A. – High Strength, Impact-Resistant, Non-Shrink Grout

Product Requirements

Product Description

High strength, impact resistant, non-shrink grouts shall be comprised of materials specifically used with pre-stressed concrete members. The grout shall be non-shrink, non-metallic, non-chloride, and non-gypsum.

Laboratory Test Performance

High Strength, Impact Resistant, Non-Shrink Grout		
Property	Test Method	Requirement
Length Change	Direct Measurement -or- AASHTO T 160	± 0.1%
Compressive Strength, 1 Hour Compressive Strength, 3 Hour Compressive Strength, 1 Day Compressive Strength, 7 Day Compressive Strength, 28 Day	AASHTO T 106*	Reported Reported 2000 psi min. 6000 psi min. ≥ 7 Day Strength
Freeze – Thaw Mass Loss / Gain	AASHTO T 161, Procedure A**	1% max.
Durability Factor	AASHTO T 161, Procedure A**	95% min.
Permeability	AASHTO T 277***	Reported

* Modified: A) The grout will consist only of the cementation material submitted for testing (i.e. no additional aggregate will be added). The grout will be mixed using the maximum amount of water and/or admixture recommended by the manufacturer. B) The mixing time shall conform to manufacturer recommendations. C) Tests shall be conducted on three specimens.

** Two specimens at 300 cycles each.

*** Three specimens tested.

Required Submissions

Only complete product submittal packets will be considered for review.

The following documents shall be sent to the Department's Product Evaluation Unit (PEU) for its review in consideration of qualifying the product for inclusion in the QPL:

QPL Product Submittal Form

The submitted form must be the current, on-line version of the form, and must be completely filled out. It can be accessed here: [Online QPL Product Submittal Form](#)

Letter of Compliance

A Notarized letter on the manufacturer's letterhead affirming the product meets all Department requirements described herein.

Product Literature

Current product literature, including technical data sheets and Safety Data Sheets (SDS), relevant to the material's use, limitations, properties, storage, mixing, application/installation, and all precautions for the product, as applicable.

Laboratory Test Results

Product submittals without the required laboratory test documentation will not be reviewed.

Laboratory Testing

The PEU only considers results from testing laboratories participating in the AASHTO Accreditation Program, product submittals shall include all Certificates of Compliance.

Product Performance Monitoring / Removal from QPL

Product field performance and the product's technical data will be monitored by the Department. If either fails to meet the criteria noted herein, the product will be immediately removed from the QPL without notice to the manufacturer.

Changes to Product Name, Manufacturer, or Formulation, of a Currently-Listed QPL Product

The PEU shall be contacted immediately when a change to any of the following is made to a product currently listed in the QPL:

- Product Name
- Product Manufacturer
- Product Formulation

For a change in the product name and/or manufacturer, the product will remain in the QPL reflecting that change only upon receipt of verification from the current or new manufacturer attesting the product formulation is unchanged. Verification shall consist of a letter signed by the manufacturer's representative.

For a change in product formulation, the PEU will determine whether:

1. The formulation change could adversely affect the product's required performance, whereupon it will be subject to removal from the QPL; or,
2. The formulation change will not adversely affect the required performance of the product for its intended use; whereupon, the product will remain in the QPL.

If at any time it is determined that a product name, manufacturer, or formulation has changed without the required notification to the PEU, the product is subject to immediate removal from the QPL at the discretion of the PEU. The product will not be re-listed in the QPL until the manufacturer provides complete, updated, information.

QPL Expiration Date / Product Test Frequency

Qualified products in this QPL section will be listed for *5 years* from the date of the most current laboratory test results documentation. Based on this date, a corresponding expiration date will be assigned and will be shown in the QPL. For the product to be listed in the QPL past its assigned expiration date, the supplier/manufacturer shall submit new laboratory test results documentation that verifies conformance with the current qualification criteria. The test results documentation shall be submitted with sufficient lead time prior to the expiration date to allow for the PEU's review. Products without current acceptable test results documentation will be removed from the QPL upon reaching the expiration date.

Product Marking and Labeling

The product label shall be marked with the information as required by the applicable specification(s).

If a product was converted and/or relabeled from its original manufacturer, the product name on all labels and all accompanying literature shall be that of the convertor or private label company.

Limitations

The Department continues to evaluate its qualification criteria as well as products that have been qualified against them, and reserves the right to revise the criteria and/or withdraw product qualification at any time for any reason without notice. Qualification of a product does not constitute an endorsement of the product, nor does it imply intent to purchase or specify the product.

Qualification Criteria Approved by:

Joseph R Blair
Chief of Materials Technology, Bureau of Materials & Research

Dennis E Herrick
Administrator, Bureau of Materials & Research