

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

**Qualified Products List (QPL) – Qualification Criteria**

**Section 645 – Erosion Control, NHDOT Specifications**

**QPL Category: 645.N Item 645.45 – Permanent Channel Matting Type A**

**Product Requirements**

Product Description

Permanent Channel Matting Type A shall be a Turf Reinforcement Mat (TRM), specified for permanent protection of vegetated channels/ditches with a slope profile of 5% or less. The product shall be a long term, non-degradable TRM composed of UV stabilized synthetic fibers, filaments, nettings and/or wire mesh that is processed into three dimensional reinforcement matrices designed for permanent and critical hydraulic applications where design discharges exert velocities and shear stresses that exceed the limits of natural vegetation. The TRM shall be of sufficient thickness, strength, and void space to permit soil filling and/or retention and the development of vegetation within the matrix.

Duration of Functionality

The product shall be considered to be permanent and shall be non-degradable.

Laboratory Test Performance

<b>Permanent Channel Matting Type A</b>		
<b>Property</b>	<b>Test Method</b>	<b>Requirement</b>
Tensile Strength	ASTM D6818 (Standard Test Method for Ultimate Tensile Properties of Rolled Erosion Control Products) Mean Average, Machine Direction	800 lbs/ft or greater
Manning's Coefficient (n)	Large Scale Testing AASHTO ECP 17-01, NTPEP Evaluation of Erosion Control Products (ECP) and Sediment Retention Devices (SRD)	0.025 or greater
Vegetated Shear Stress	Large Scale Testing AASHTO ECP 17-01	12.0 lbs/ft <sup>2</sup> or greater

**Required Submissions**

*Only complete product submittal packets will be considered for review.*

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: <https://www.nh.gov/dot/org/projectdevelopment/materials/research/products.htm>.

Letter of Compliance

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

Product Literature

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

Product Sample

Submit a small product sample. The sample shall be ≤ 1 ft<sup>2</sup>, packaged in clear plastic, and labeled with the manufacturer and product names.

### Laboratory Test Results

Product submittals without laboratory test documentation will not be reviewed.

### **Laboratory Testing**

As part of the evaluation, the Department will obtain and review the required test results from the AASHTO National Transportation Product Evaluation Program (NTPEP). Visit [www.ntpep.org](http://www.ntpep.org) for information about submitting products to this program.

### NTPEP Index & Bench-Scale Test Results

The Department requires NTPEP index & bench-scale test results for all new products and for approved QPL listed products due to expire (see “**QPL Expiration Date / Product Test Frequency**” section).

### NTPEP Large-Scale Test Results

The Department requires NTPEP large-scale test results for all products. The large-scale test is typically one-time and non-cyclical. Retesting will be required if significant changes are reported in the index or bench scale results. Products will not be qualified for performance levels that exceed those in the published product literature.

### **QPL Expiration Date / Product Test Frequency**

A qualified product is listed until the expiration date noted in the QPL. Products without current acceptable index and/or bench scale results will be removed. To remain listed in the QPL, manufacturers are required to submit NTPEP laboratory test documentation verifying conformance with the qualification criteria *every 3 years*, in accordance with the current NTPEP Work Plan. Permanent Channel Matting Type A products that have not been laboratory tested in accordance with this requirement will not be evaluated.

### **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 Department's Product Evaluation Unit (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 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 Product Evaluation Unit. The product will not be re-listed in the QPL until the manufacturer provides the proper notification.

### **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 the packaging and all accompanying literature shall be that of the convertor or private label company.

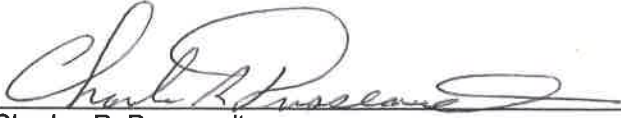
### **Limitations**

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:**



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