

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

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

**Section 718 – Retroreflective Sheeting, NHDOT Specifications**

**QPL Category: 718.C. – Retroreflective Sheeting – Type IV**

**QPL Category: 718.D. – Retroreflective Sheeting – Type VIII**

**QPL Category: 718.E. – Retroreflective Sheeting – Type IX**

**QPL Category: 718.H. – Retroreflective Sheeting – Type XI**

**Product Requirements**

Product Description

Retroreflective sheeting shall be an unmetalized, microprismatic, retroreflective element material consisting of a smooth, durable outer surface. Adhesive backing shall be pressure sensitive, and protected by a removable, translucent, synthetic release liner.

Laboratory Test Performance

Retroreflective Sheeting shall conform to the latest version of the Standard Specification for Retroreflective Sheeting for Traffic Control (ASTM D4956) for the specified type.

**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 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: <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

Current product literature, including technical data sheets and Safety Data Sheets (SDS), relevant to the material's use, limitations, properties, storage, 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.

Manufacturer's Warranty

Certification of full manufacturer warranty as specified in, and in accordance with, the Warranty section of this document.

**Laboratory Testing**

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.

**Field Test**

Products in this category are required to be field tested through a NTPEP program. Once the program is completed, those test results will be reviewed for acceptability in conjunction with any required laboratory tests.

## **Manufacturer's Warranty**

All sheeting will come with a full manufacturer's warranty of at least 7 years and a partial manufacturer's warranty from the end of the full manufacturer's warranty period to at least 10 years, except for orange sheeting, which shall have at least a 3-year full warranty. The full warranty will cover sign replacement including materials and labor. Partial warranty will cover the supply of replacement sheeting only.

Warranty on all types of sheeting shall cover the loss of colorfastness, cracking, and any other conditions inherent to the sheeting, including inks and overlay film that causes it to be ineffective in providing the direction to the motorists as intended. Warranty shall also cover the loss of retroreflectivity to below 80% of the initial minimum values listed in ASTM D4956 for the appropriate sheeting type during the full warranty period and to below 70% of the values during the partial warranty period.

## **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 list for a period of 7 years, timed from the posting date of NTPEP's 3-year Final Laboratory/Field test data. Based on this calculation, a corresponding expiration date is assigned and shown in the QPL next to each product/series. All existing QPL supplier/manufacturers shall resubmit products to NTPEP for testing at least every 7-years, planning for sufficient lead time to complete the 3-year Final Laboratory/Field testing, and then resubmit the product to the PEU for a compliance review of all documentation prior to the product(s) expiration date.

Note: Although NTPEP 3-year Final Laboratory/Field test data is emphasized in this section, the PEU reviews all reported product data from the NTPEP testing cycle, not just the Final (third-year) data.

A grace period to 1/1/2021 was offered for products/series currently listed in the QPL with outdated, or no current NTPEP testing. The supplier/manufacturers were directed to (re)submit product/series to NTPEP for testing and submit the necessary data to PEU for review. These products will be evaluated and qualified using the range of available test results, from Initial Base Sheeting to 3-year Final Laboratory/Field test data. The grace period condition does not apply to newly submitted products with no QPL history, those products will require full 3-year Final Laboratory/Field test data through NTPEP.

Expiring, and non-compliant products in general, will be subject to removal from the QPL.

## **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:**

Chief of Materials Technology, Materials & Research

Bureau Administrator, Materials & Research