



NEVADA DEPARTMENT OF TRANSPORTATION - RESEARCH SECTION

EXTERNAL PRODUCT/MATERIAL ACCEPTANCE CRITERIA
QPL Section 646.02.04 – SHEET MEMBRANE

Category Description: Necessary to protect bridge deck from deterioration due to moisture infiltration through bituminous overlays, sheet membranes offer a cost-effective alternative to liquid membranes and polymer concrete.

Primary Evaluating Section: Structures

Evaluation Criteria (adopted 09/14/2022):

Criteria	Requirement and Test Method	Result
Thickness	65 mils, direct measurement/manufacturer certification	Pass/Fail
Adhesion	Fully adhered to bridge deck per NDOT Standard Specifications	Pass/Fail
Water Vapor Permeance	1.0 perm, ASTM E-96 (Method A or B)	
Pliability	No cracking or splitting at 180 degree bend w/ ½” mandrel at -10 deg F, ASTM D146	Pass/Fail
Puncture Resistance	150 lbf, ASTM E154	Pass/Fail
Elongation at Break	100%, ASTM D882	Pass/Fail
Tensile Strength	1000 psi, ASTM D882	Pass/Fail
Application Review	Sufficient documentation provided with application to demonstrate product’s performance	
NDOT Field Testing	Successful completion of a field test at least two winters in duration at an installation of NDOT’s choosing	Pass/Fail

To Begin the Application Process:

Read these instructions in full. Gather all application materials and save them as pdfs prior to initiating application. Go to <https://www.dot.nv.gov/doing-business/about-ndot/ndot-divisions/planning/research/product-evaluation> and locate the application for product evaluation link at the bottom of the page. This will launch in another window. Complete the application for product evaluation and attach the following documentation: Technical data sheets and SDS for all components of product, independent laboratory testing results documenting product performance in the above-listed tests, instructions for installation, list of limitations and precautions, warranty information (if any), and a list of other Departments of Transportation (DOTs) who have added the product(s) to their qualified products list. Application package must include a representative list of prior installations by other DOTs. If this list is detailed enough and includes contact information for personnel who can verify the installation and subsequent performance of product, NDOT Structures Division may consider waiving the NDOT field testing requirement. This is at their sole discretion.

If you have difficulties with your online application you may choose to submit a hard copy of your entire application package, including completed application for product evaluation and an electronic duplicate of all materials on a USB or disc. Mail this to:

Product Evaluation Coordinator
Nevada Department of Transportation
1263 S. Steward Street, C803
Carson City, NV 89712

DO NOT SUBMIT SAMPLES