



NEVADA DEPARTMENT OF TRANSPORTATION - RESEARCH SECTION

EXTERNAL PRODUCT/MATERIAL ACCEPTANCE CRITERIA
QPL Section 646.02.05 – LIQUID MEMBRANE

Category Description: A spray-on liquid waterproofing membrane for bridge decks. Installed between the bridge deck and the wearing surface to delay deterioration of the structure.

Primary Evaluating Section: Structures

Evaluation Criteria (adopted 09/12/2017):

| Criteria | Requirement and Test Method | Result |
|------------------------|--|-----------|
| Adhesion to Concrete | 150 psi through ASTM D-4541 (steel deck) or ASTM D-7234 (concrete deck) | Pass/Fail |
| Cure Time | 30 minutes | Pass/Fail |
| Dry Film Thickness | 110 to 120 mils through SSPC PA-2 (steel deck) or SSPC PA-9 (concrete deck) | Pass/Fail |
| Dynamic Crack Bridging | Pass at 10 cycles, -15°F, through ASTM C-1305 | Pass/Fail |
| Elongation at Break | 250% min at break, 0% damage, through ASTM D-638 Die C | Pass/Fail |
| Gel Time | 6 to 11 minutes | Pass/Fail |
| Tensile Strength | 2500 psi minimum, 0% damage, through ASTM D-638 Die C, Heat Ageing @ 160°F (4 weeks) | Pass/Fail |
| Water Vapor Permeance | 1.0 perm through ASTM E-96, Method A (Method B also acceptable) | Pass/Fail |
| NDOT Fieldtesting | Successful completion of a field test at least 2 winters in duration at an installation of NDOT's choosing | Pass/Fail |

To Begin the application process:

Go to <https://www.nevadadot.com/doing-business/about-ndot/ndot-divisions/planning/research/product-evaluation>

Complete the applications for product evaluation and field testing, attach all supporting documentation

Attach the product data sheets and technical bulletins

Attach current SDS sheets for all components of product

Attach instructions for installation

Attach list of limitations and precautions

Attach warranty information (if any)

Attach independent laboratory testing results documenting product performance in the above listed tests

Attach copies of other successful installations on bridge decks and acceptance letters from other DOT's QPL/APL

Submit the application package electronically, and print three hard copies of the application package.

Retain one copy of the application package for your records, mail the other two hard copies to:

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

DO NOT SUBMIT SAMPLES AT THIS TIME