

# PRODUCT INFORMATION

CE-197 10/18 Supersedes 06/16

# TUFCHEM™ II SL MEMBRANE

### **DESCRIPTION**

TUFCHEM II SL Membrane is a chemically cured, elastomeric urethane asphalt membrane. It can be used as a stand alone lining to protect metal, concrete, and masonry substrates from chemical attack and physical abrasion within its limitations. TUFCHEM II SL Membrane can also be used as an underlying membrane in conjunction with chemical-resistant masonry or polymer concrete overlayments. TUFCHEM II SL Membrane is formulated to a self leveling flowable consistency to facilitate quick application on horizontal substrates with minimal trowelling and can be easily poured to the desired thickness in a single pass. TUFCHEM II SL Membrane is designed to be applied and spread with a notched squeegee and be smoothed over, achieving a finished thickness of nominal 60-125 mils, but can be applied in even greater thicknesses if desired. For complete installation instructions, consult Corrosion Engineering installation specifications CES-326 and CES-334.

#### **AREAS OF USE**

TUFCHEM II SL Membrane provides a positive barrier to structures from corrosive chemicals, gases, and moisture. Depending on the environment, it may be used as a lining for concrete or steel tanks, sumps, or stacks, or as part of a lining system in combination with chemical-resistant brickwork, inorganic monolithic linings or polymer concretes for floors, wet scrubber ductwork, vessels and tanks, etc. It is not recommended where oils greases or organic solvents are present. Typical applications include both interior and exterior chemical containment linings, clarifiers, thickeners, and tank linings. For vertical surfaces or turn-ups, consider the use of regular Tufchem II Membrane (CE-196) which is formulated with a non sag consistency.

#### **OUTSTANDING FEATURES**

- Pre-proportioned with self contained kit packaging for ease of use.
- Easy self leveling spread characteristics on flat surfaces.
- Cold applied by trowel, squeegee.
- Rubber like texture provides very good physical abrasion resistance.
- Remains elastomeric to temperatures as low as -40°F. High elongation can accommodate movement caused by thermal and mechanical stresses.
- Provides an excellent barrier to water vapor.
- Will bridge hairline cracks in concrete and masonry construction.

## TYPICAL PHYSICAL PROPERTIES

PROPERTY	TUFCHEM II SL Membrane
Color and Appearance	Black elastomeric rubber
Density	8.95 lb/US gal
Elongation at 74°F (full cure) (ASTM D412)	>140%
Primer	Concrete – use Penntrowel <sup>™</sup> Epoxy Primer Steel – use PENNGUARD <sup>™</sup> HP Epoxy Primer to prevent substrate re-rusting
Bond Strength to Carbon Steel (ASTM D412)	>125 psi
Tensile Strength at 74°F (ASTM D412)	>200 psi
Shear Strength (ASTM C273)	>75 psi
Abrasion Resistance to Sandblasting (FED-TT-C-520)	Excellent
Service Temperature: - If directly exposed - Behind chemical resistant masonry / monolithic	-40°F to 180°F -40°F to 220°F
Moisture Vapor Transmission (ASTM C96, Method E)	0.04
Mix Ratio - Component A:Component B	31:1 by volume. Mixing full units is required.
Pot Life (Approximately)	75 min @ 75°F
Cure Time @ 75°F/90°F	Tack free - 5 hours/3 hours Full cure - 24 hours/18 hours

#### ESTIMATING/PACKAGING THEORETICAL QUANTITIES - NO OVERAGE ALLOWANCE

PRODUCT	CODE	PACKAGING	COVERAGE*
TUFCHEM II SL Membrane Part A (suitable for air freight shipments)	29472	3.94 gallons in a 5.0 gallon pail	50 SF/4 gal unit @125 mils (0.125" – 1/8") 70 SF/4 gal unit @ 90 mils (0.090" - 3/32") 100 SF/4 gal unit @ 62 mils (0.060" - 1/16")  *Theoretical volume consumption. Allow a reasonable overage for pail loss and surface irregularities. TUCHEM II SL is a heavy bodied material. Customary overage allowances for paint may not apply.
Urethane Asphalt Hardener Part B (air freight shipments)	29488-499	1.1 lb (499 gram) in a 1 pint bottle	

#### SAFETY PRECAUTIONS / DISCLAIMER

Mixes and applications of this product present a number of hazards. Read and follow the hazard information, precautions and first aid directions on the individual product labels and <u>material safety data sheets</u> before using. While all statements, technical information, and recommendations contained herein are based on information our company believes to be reliable, nothing contained herein shall constitute any warranty, express or implied, with respect to the products and/or services described herein and any such warranties are expressly disclaimed. We recommend that the prospective purchaser or user independently determine the suitability of our product(s) for their intended use. No statement, information or recommendation with respect to our products, whether contained herein or otherwise communicated, shall be legally binding upon us unless expressly set forth in a written agreement between us and the purchaser/user.