

SELECTION & SPECIFICATION DATA

Type	Furan resin laminate membrane
Description	Furalac Membrane is a reinforced laminate membrane. It is applied as a in multiple layers to achieve a nominal 1/8"-3/16" (3-4.5 mm) thickness to protect suitably prepared concrete or steel substrates. It consists of the following components: Penntrowel Epoxy Primer, Tufchem II parting layer, a reinforcing mat, 2 furan resin saturated laminate layers and a neat top coat.
Uses	<ul style="list-style-type: none"> • Install as a membrane under acid-resistant brick and polymer concretes • Suitable for solvent containment applications • Chemical transfer stations • Tal oil reactors, black liquor tanks • Trenches, sumps and pits • Spent acid storage tanks • Use as a component layer in concrete vessel linings under acid brick.
Features	<ul style="list-style-type: none"> • Broad chemical resistance including organic solvents • Fast cure, quick turnaround • Suitable for exposure to hydrofluoric acid, fluoride salts and hot caustics • Low permeability • Multi layer application insures pinhole free lining • Bridges hairline cracks in concrete • Shelf life stable
Limitations	Care must be taken when using in enclosed areas. Not for use beyond its chemical resistance capabilities. Consult ErgonArmor with specific questions.

INSTALLATION GUIDANCE

Reference Specifications	CES-295 Furalac Membrane installation specification	
Installation Conditions	Materials and substrate should be acclimated to the air temperature prior to installation, and the air temperature should be between 50°F (10°C) and 90°F (32°C) during installation and cure.	
Mixing/Use	The Furalac Membrane system is applied in layers. Tufchem II 1 is a single component material and is first applied by roller onto a suitably prepared and primed concrete substrate. Chopped strand mat is embedded into the wet membrane as additional reinforcement. Once allowed to set, a saturating layer of Furalac membrane is applied onto the primer layer and glass mat is laid into it. This step is repeated again, and then the system is sealed with a final neat top coat of catalyzed resin/hardener. Mix the Furalac Resin and Hardener at a rate of ½ cup of hardener to 1 gallon of resin. A 1 gallon can of hardener is sufficient to catalyze 32 gallons (6 x 5 gallon) of resin.	
Work Life	10-20 minutes	
Cleanup	Mineral spirits	
<u>CURE TIME</u>		
Temperature	Initial Set	Full Cure
70°F (21°C)	30 minutes	2 hours
<u>SAFETY</u>		
Safety	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 safety data sheets before using.	
Ventilation	Provide thorough air circulation during and after application until the material has cured when used in enclosed areas.	

PACKAGING & ESTIMATING

Product	Code	Packaging
Penntrowel Epoxy Primer	19676	4 x 1-gal unit case
Tufchem II Membrane	19683	4 gallon unit
Furalac Membrane Resin	24343 24344	5 gallon (50 lb) pail 55 gallon (500 lb) drum
Furalac Membrane Hardener	24345	4 x 1 gallon cans/cs
1.0 oz chopped strand mat	19639	50" x 125 yard (1500 sf) roll
1.5 oz chopped strand mat	19640	50" x 88 yard (1056 sf) roll

Theoretical Coverage

Penntrowel Epoxy Primer: 200 - 250 square feet (18.5 - 23.2 m²) per mixed gallon on concrete
 325 - 525 square feet (30.2 - 48.8 m²) per mixed gallon at 3 - 5 mils on steel
 Tufchem II Membrane: 100 sf/gal at 60 mils
 Furalac Resin/Hardener: 1 mixed gallon of resin/hardener will cover 11 sf when used as a saturant for the 2 layers of 1.5 oz glass mat and the 1 layer of 1 oz mat
 Chopped strand mats: per the roll size

Storage & Shelf Life

Maintain products in original packaging and sealed until ready for use. Estimated shelf life of components is 18-24 months when stored in a dry area at 70°F (21°C). Actual shelf life may vary with storage conditions.

If there is any question with respect to the quality of the components check reactivity prior to use. For assistance consult with ErgonArmor.

TYPICAL PHYSICAL PROPERTIES

Property	Typical Value
Color	Black
Shore D hardness	>80
Coefficient of thermal expansion	1.1 x 10 ⁻⁵ /in/in/°F
Flexural strength, psi	3200
Service temperature	250°F (120°C)

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