

CE-245
09/13 Supersedes 01/99

PENNTROWEL[®] EPOXY L/F LINING SYSTEM **SILICA AND CARBON GRADE**

DESCRIPTION

PENNTROWEL Epoxy L/F Lining System is a multiple component glass mat reinforced monolithic lining system that offers the benefits of increased strength and chemical resistance by incorporating glass mat reinforcement and a multiple layer build.

PENNTROWEL Epoxy L/F has been formulated to perform in chemical immersion, as well as splash and spill, and heavy traffic environments. The system can perform well in the wide range of temperatures common to sumps, trenches, pits and vessels. **Consult Corrosion Engineering specification [CES-352](#) for complete usage and installation details.**

AREAS OF USE

PENNTROWEL Epoxy L/F is used to protect concrete and steel substrates in trenches, pits, vessels, sumps, manways, and floors - both in and out of doors that are subjected to a wide variety of corrosive agents.

NOTE: Use PENNTROWEL Epoxy L/F System Carbon Grade in hydrofluoric acid or hot caustic chemical service.

OUTSTANDING FEATURES

- Excellent physical properties.
- Extremely low absorption and shrinkage.
- Excellent chemical resistance.
- Reinforcing adds strength thus reducing the possibility of cracking.

TYPICAL PHYSICAL PROPERTIES

PROPERTY	SILICA	CARBON
Wet Density, lbs/cu. ft.	110	101
Compressive Strength, psi (ASTM C-579)	9,200	14,300
Tensile Strength, psi (ASTM C-307)	1,700	2,200
Coefficient of Expansion, in./in/°F (ASTM C-531)	3.4 x 10 ⁻⁵	3.5 x 10 ⁻⁵
Shrinkage, (ASTM C-531) @ 28 days	0.13%	0.11%
Modulus of Elasticity, psi (ASTM C-580)	8.8 x 10 ⁵	6.2 x 10 ⁵
Flexural Strength, psi (ASTM C-580)	3,100	4,500
Service Temperature Limit (Depending on chemical exposure)	160°-180° F	160°-180°F

ESTIMATING/PACKAGING THEORETICAL QUANTITIES – NO OVERAGE ALLOWANCE

STEP	PRODUCT	CODE	PACKAGING	COVERAGE
Primer	PENNTROWEL Epoxy Primer	19676	4 x 1 gal units/case	600 SF/case (150 SF/ gal) @ 11 mils WFT
Base coat for Silica Grade	PT Epoxy Resin PT Epoxy Hardener PT L/F Filler	19680 19677 19642	4 x 9.2 lb (1 gal) cans/case 4 x 0.75 lb (0.75 pt) cans/case <u>2 x 55 lb bags</u> 150 lb unit (1.36 cu ft)	262 SF @ 1/16" thickness per 150 lb unit
Glass cloth (10 oz)	L/F Reinforcing Mat	19513	38" x 400' (1200 SF) roll	1200 SF/roll
Saturant for cloth	PT Epoxy Resin PT Epoxy Hardener	19680 19677	4 x 1 gal (9.2 lb) cans/case 4 x 0.75 pt. (0.75 lb) cans/case	400 SF/case
Build Coat	Both the silica and carbon grades utilize a build coat. Use same product codes packaging and coverages as for Base coat information provided above and below.			
For PENNTROWEL Epoxy Carbon Grade, substitute the following for Base Coat and Cloth layers above				
Base Coat and Build Coat for Carbon Grade	PT Epoxy Resin PT Epoxy Hardener PT L/F Filler Carbon	19680 19677 29446	4 x 1 gal (9.2 lb) cans/case 4 x 0.75 pt. (0.75 lb) cans/case <u>2 x 36 lb bags</u> 112 Lb unit (1.1 cu ft)	210 SF @ 1/16" WFT per 112 lb unit
Reinforcing mat for Carbon Grade	Nexus® Veil	21925	48" x 500 yd (6000 SF) roll	6000 SF/roll

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 [material safety data sheets](#) 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.



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