

CE-269
12/13 Supersedes 11/01

PENNTROWEL[®] LATEX BINDER CONCENTRATE

DESCRIPTION

PENNTROWEL Latex Binder Concentrate is a single component SBR (styrene butadiene rubber) latex additive for Portland cement mortar or concrete mixes. Concrete mixes modified with PENNTROWEL Latex Binder Concentrate typically exhibit higher compressive, tensile, and flexural strengths when compared to untreated concrete. Concretes treated with PENNTROWEL Latex Binder Concentrate will also set quicker, and have significantly improved adhesion to existing cementitious substrates. **Consult Corrosion Engineering specification [CES-269](#) for complete installation details.**

AREAS OF USE

- Mixes made with PENNTROWEL Latex Binder Concentrate can be used to repair or patch worn or deteriorated concrete floors, stairs, or pump bases.
- Smooth, level, or slope concrete slabs prior to the installation of Corrosion Engineering lining systems. PENNTROWEL Latex Binder Concentrate may be used in concrete that will be further protected with the following Corrosion Engineering systems: PENNTROWEL Floor Surfacer Systems, THINSET[®] Adhesive, TUFCEM[®] II Membrane, PENNGUARD[®] Adhesive/ Membrane, PENNTROWEL L/F Systems, and PENNCOAT[®] Membrane/Lining Systems.
- Setting bed for brick/tile masonry.

OUTSTANDING FEATURES

- Higher compressive, tensile, and flexural strength compared to regular sand/ cement mixes.
- Fast strength development - allows for quick installation of subsequent lining system on repaired concrete without costly down time.
- Easy workability.
- Excellent adhesion to properly prepared substrates.
- Better resistance to freeze/thaw cracking than Portland cement concretes. Excellent for indoor and outdoor applications.

TYPICAL PHYSICAL PROPERTIES

PROPERTY	PENNTROWEL Latex Modified Concrete (Typical)
Wet Underlayment Density	137 lbs / cu ft (2195 kg/m ³)
Tensile Strength (ASTM C-307)	7 days: 820 psi (5.6 MPa) 28 days: 910 psi (6.3 MPa)
Compressive Strength (ASTM C-579)	12 hours: 1600 psi (11.0 MPa) 7 days: 5850 psi (40.2 MPa) 28 days: 5950 psi (40.9 MPa)
Required Cure Time Before Installation of Lining	12-36 hrs - varies with ambient temperature and humidity
Adhesion to Concrete (ASTM C-321)	Greater than the tensile strength of concrete
Water Absorption (ASTM C-413)	2.3%
Coefficient of Thermal Expansion (ASTM C-531)	5.6 x 10 ⁻⁶ /in/in/°F (10.0 x 10 ⁻⁶ cm/cm/°C)
Shrinkage (ASTM C-531)	Ultimate 0.15%
Flexural Strength (ASTM C-580)	1500 psi (10.3 MPa)
Modulus of Elasticity (ASTM C-580)	1.3 x 10 ⁶ psi (8963 MPa)
Solids Content	47%
Color	Slightly darker than normal concrete

ESTIMATING/PACKAGING THEORETICAL QUANTITIES – NO OVERAGE ALLOWANCE

PRODUCT	CODE	PACKAGING	COVERAGE - (Typical Mix recipe)										
PENNTROWEL Latex Binder Concentrate	19556	55 gal (208L) drum (465 lb)	<table> <tr> <td>PT Latex Binder</td> <td>3.5 gal (13.2L)</td> </tr> <tr> <td>Water</td> <td>1.5 gal (5.7L)</td> </tr> <tr> <td>Portland Cement</td> <td>94 lbs</td> </tr> <tr> <td>1/16" - 1/8" Graded Sand</td> <td>225 - 275 lbs</td> </tr> <tr> <td>3/8" Pea Gravel</td> <td>175 - 200 lbs</td> </tr> </table> <p>The above mix will yield approx 4.6 cubic feet.</p> <p>When used as an admixture in ready mix concrete, use 10 -15 gals per 400 lb of cement content. Reduce water content of mix an equivalent amount.</p>	PT Latex Binder	3.5 gal (13.2L)	Water	1.5 gal (5.7L)	Portland Cement	94 lbs	1/16" - 1/8" Graded Sand	225 - 275 lbs	3/8" Pea Gravel	175 - 200 lbs
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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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