

**CORROSION ENGINEERING SPECIFICATION FOR
INSTALLATION**

PENNTROWEL[®] LATEX BINDER CONCENTRATE

1. SCOPE

- 1.1 This specification governs the use of PENNTROWEL Latex Binder Concentrate as described on product data sheet CE-269.
- 1.2 Do not use concrete mixes made with PENNTROWEL Latex Binder Concentrate as an underlayment or patching compound with any vinyl ester based linings without the written permission of Corrosion Engineering.

2. SURFACE PREPARATION

- 2.1 Concrete surfaces whether new or old shall be prepared in accordance with ASTM D4258, "Standard Practice for Surface Cleaning for Coating"; ASTM D4259, "Standard Practice for Abrading Concrete"; ASTM D4260, "Standard Practice for Acid Etching Concrete."
- 2.2 New concrete surfaces to which Latex-modified concrete is applied shall be clean, sound and exhibit a roughened texture appearance, free of laitance, glaze, efflorescence and incompatible concrete curing agents or form release agents.
- 2.3 Old concrete surfaces to which the Latex-modified concrete is to be applied shall be sound, clean, fully degreased, free of laitance, efflorescence, and any incompatible chemical hardeners or sealers.
- 2.4 Concrete surfaces to which the Latex-modified concrete will be applied must exhibit a compressive strength of a minimum 3,000 psi (20.6 Mpa) when tested with a Schmidt Hammer.
- 2.5 Concrete surfaces may be damp, but any free standing water must be removed prior to application.

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- 2.6 Concrete Surface and ambient air temperatures in the working area must be at least 45°F (7°C) to minimize cure time.

3. MIXING

3.1 Use as a Concrete Mix

- 3.1.1 Typical Mix Recipe (yields about 4.6 cubic feet, or 0.13 cubic meters):

PENNTROWEL Latex Binder Concentrate -	3.5 gal. (13.25 L)
Water -	1.5 gal. (5.68 L)
Portland Cement -	94 lbs (42.7 kg)
1/16"-1/8" Graded Masonry Sand -	225 - 275 lbs (102-125 kg)
3/8" Pea Gravel -	175 - 200 lbs (80-91 kg)

- 3.1.2 Stir PENNTROWEL Latex Binder Concentrate prior to pouring in mixer. Slowly add water until uniform.

- 3.1.3 While mixer is rotating, add aggregates to the binder and continue mixing.

- 3.1.4 Slowly add Portland cement to the mix. Continue mixing until thoroughly wetted, but no more than 3 minutes.

- 3.1.5 Mix which has begun to set cannot be reclaimed. Such material must be discarded.

3.2 Use as a Concrete Admixture

- 3.2.1 When using PENNTROWEL Latex Binder Concentrate as an admixture in ready mixed concrete, use 10 -15 gals per 400 lb of cement content. Reduce water content of mix an equivalent amount.

4. PLACING

- 4.1 Prime the concrete surface with a liberal brush coating of the PENNTROWEL Latex Binder Concentrate and water mixture. The Latex-modified concrete mix must be applied over WET primer. If the primer dries or is absorbed by the concrete surface, apply another coat.

- 4.2 Concrete surfaces may be damp, but any free standing water must be removed.

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- 4.3 Mix should be placed on primed concrete within 20 minutes after mixing. Do not add additional binder-water mix after the mix has begun to set. Work quickly to avoid surface skinning. Screed the mixture evenly over the area with a magnesium or steel float.
- 4.4 For a smooth finish, steel trowel the surface within 15 minutes of floating. Lubricating trowel with the binder-water mix is acceptable, but use sparingly.

5. CURING

- 5.1 Cover the surface with polyethylene or wet burlap, and allow the mix to cure.
- 5.2 Before continuing with any chemical resistant flooring, the Latex-modified concrete should be tested with a Schmidt Hammer and exhibit a strength of at least 3,000 psi (20.6 MPa). All concrete surfaces shall exhibit a minimum tensile strength of 300 psi (2.06 MPa) as tested with a Dillon Dynamometer. Latex-modified concrete should also be tested for moisture under ASTM D-4263 "Specification Test Method for the Indication of Moisture in Concrete by the Plastic Sheet Method."

6. EQUIPMENT CLEANING

- 6.1 Clean tools and equipment with fresh water immediately after using.

7. SAFETY PRECAUTIONS / DISCLAIMER

- 7.1 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.
- 7.2 Please contact Corrosion Engineering for specific recommendations at +1-610-833-4000 or fax +1-610-833-3040.