

	
	TECHNICAL INFORMATION

CES-144
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INSTALLATION SPECIFICATION PENNCOAT™ 600 MEMBRANE

1. SCOPE

- 1.1 This specification governs the installation of Penncoat 600 Membrane (data sheet CE-144) on concrete and steel substrates.

2. SURFACE PREPRATION

- 2.1 Penncoat 600 Membrane can be applied onto concrete or steel substrates. Consult Armor for other substrates as more appropriate systems may be available.
- 2.2 The surface condition of new and/or existing concrete can vary greatly. The surface should be thoroughly inspected to identify the condition and suitability of the surface to accept the lining. An assessment and evaluation of the suitability of the surface should precede quotations, procurement, or mobilization of installation crews.
- 2.3 New concrete shall reach a minimum compressive strength of 3000 psi (20 MPa) and a surface tensile strength of 300 PSI (2.0 MPa) before the Lining is applied.
- 2.4 All cavities, stone pockets, honeycombing, and bug holes greater than 1/4" (6 mm) depth shall be filled by repairing with appropriate polymer-modified cementitious materials. Remove all form marks and protrusions such as prominent aggregate exposure, tie wires, reinforcing wires. They must be cut off below the surface and covered.
- 2.5 A concrete surface to which the Lining is to be applied shall be prepared by abrading the concrete and have a resultant surface like a medium grit of sandpaper. The surface shall have a non-glazed appearance. Remove enough material to achieve a sound concrete surface free of laitance, glaze, efflorescence and incompatible concrete curing agents or form release agents.
- 2.6 A single pass troweled finish shall be given to new concrete floors with care being taken to avoid bringing laitance to the surface. New concrete shall be cured in accordance with good practice as outlined in ACI-308 "Recommended Practice for Curing Concrete". Do not use liquid curing compounds as they may impede the bond of the lining system.
- 2.7 Consult SSPC-SP 13/NACE No. 6 for recommended surface preparation procedures on concrete.
- 2.8 For steel substrates refer to SSPC-SP#5. A 3-mil (75 µm) profile is recommended.

3. PRIMER APPLICATION

- 3.1 Do not attempt application if substrate temperature is within 5°F (2°C) of dew point, if relative humidity is greater than 95%, or below temperatures of 40°F (4°C).

- 3.2 Stir Penncoat 601 Primer thoroughly prior to application. Do not thin. Observe all safety guidelines as outlined on product labels and SDS sheets.
- 3.3 Penncoat 601 Primer should be applied with a stiff brush or roller, and work into the surface with a strong scrubbing action to thoroughly wet into and penetrate the concrete surface. Excess primer should be removed from the surface. Do not allow puddling.
- 3.4 Allow primer to dry to touch before proceeding with installation of Penncoat 600 sheet layer. Any area that has dried beyond 24 hours should be re-primed. A tack free state should be reached in 60 minutes at 70°F (21°C).

4. PENNCOAT 600 SHEET AND TAPE APPLICATION

- 4.1 Penncoat 600 Sheet Membrane is ready for application onto primed surface with no special additional preparation.
- 4.2 Apply Penncoat 600 sheet onto primed surface, peeling back release film from back side of sheet membrane as work progresses.
- 4.3 Press Penncoat 600 sheet tight into primer by use of even firm force applied with hard rollers. Remove any entrapped air bubbles as work progresses.
- 4.4 Precutting and dry fitting prior to removing release film of membrane into smaller sizes is recommended for pump pads, changes of direction, and any areas where tight or confining space limits access.
- 4.5 Penncoat 600 sheet has a 3" (75 mm) wide specially designed leading edge to allow sheet edges to be evenly aligned and butted together. After fitting sheet seams together, apply low temperature "yellow" heat (not a higher temperature blue flame) from an open flame source such as a propane torch. Carefully melt seams together to create a seamless joint.
- 4.6 All melted seams shall then be further treated by an application of Penncoat 602 pressure sensitive seam tape, which is firmly pressed into the hot membrane, and rolled smooth.
- 4.7 Penncoat 600 Membrane is ready for application immediately after application of seam tape, and cooling of seams.

5. CLEANUP

- 5.1 Rollers and other tools should be cleaned immediately after use. Solvents recommended for clean-up are methyl ethyl ketone or lacquer thinner. When using these materials read and follow the supplier's material safety data sheets.

6. STORAGE AND SHELF LIFE

- 6.1 Penncoat 600 Membrane components should be stored in a cool, dry, area and out of direct sunlight. Penncoat 600 sheet membrane and 602 tape have an indefinite shelf life Penncoat 601 Primer should be checked for suitability before using after 1 year.

7. SAFETY PRECAUTIONS DISCLAIMER CONTACT INFORMATION

- 7.1 Consult current Safety Data Sheets (SDS's) before commencement of work.
- 7.2 While 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. For all Terms and Conditions of Sale see armor-inc.com.
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