

**CE-259M**

**11/12 Supersedes 08/06**

### **PENNCOAT<sup>®</sup> 331 / 331MR LINING**

#### **DESCRIPTION**

PENNCOAT 331 is a 0.8-1.0 mm lining system based on premium grade novolac vinyl ester resin polymer chemistry. It utilizes a peroxide based curative for maximum chemical resistance, as well as flake fillers for reduced permeation. For chemical containment applications it is applied in two coats of 0.4-0.5 mm WFT (wet film thickness) per coat. A third coat may be applied where a thicker lining is desired. For spray applications or immersion service such as a tank lining, PENNCOAT 340 may be specified, which is applied by spray in two coats of 0.55-0.63 mm WFT per coat for a total lining thickness of 1.1-1.25 mm. When the crack bridging advantages of a glass mat reinforcement are desired, the optional PENNCOAT 331**MR** (*Mat Reinforced*) may be specified, which utilizes a chopped strand glass mat reinforcement in the primer layer. **Consult Corrosion Engineering specification [CES 259](#) for complete installation details.**

#### **AREAS OF USE**

Concrete lining within its chemical limits for foot and light fork truck service, and chemical splash and spillage. For interior and exterior applications. Ideal as a secondary containment lining.

Immersion service as a tank lining within chemical and thermal limitations.

PENNCOAT 331 / 331MR is also suitable as an internal lining to protect ductwork, stacks, and associated air pollution control and flue gas conveying equipment from corrosive acids and fumes

#### **OUTSTANDING FEATURES**

- Excellent resistance to acids, alkalis, and solvents.
- PENNCOAT 331 / 331MR is flake filled, resulting in significantly improved permeation ratings compared to non-flake filled systems.
- PENNCOAT 331**MR** utilizes a chopped strand glass mat reinforcement in the primer layer to minimize crack transmission from the substrate.
- Installed easily by brush, roller or spray.

**TYPICAL PHYSICAL PROPERTIES**

<b>PROPERTY</b>	<b>PENNCOAT 331 / 331MR</b>
Standard Colors	Grey. White is not stocked, but available upon special order.
Primer	Concrete: PENNTROWEL® Vinyl Ester Primer (CE-138) Steel: None is required for adhesion, but Vinyl Ester Primer is recommended to hold blast profile
24 hour tensile bond strength:	Sandblasted steel: 10.3 MPa Concrete: greater than the tensile strength of concrete
Maximum service temperature:	82°C in chemical immersion depending upon chemical environment. 176°C in flue gas service.
Viscosity (mixed material)	8300 - 8700 cps @ 20°C
Wet Density	1.25
Mix ratio - Resin : Hardener by volume	64:1
Abrasion Resistance - Taber	75 mg loss/1000 cycles with 1000 gram (CS-17) Wheel
Moisture permeability	0.0015 perm-inch (ASTM E96)

**ESTIMATING/PACKAGING THEORETICAL QUANTITIES – NO OVERAGE ALLOWANCE**

<b>PRODUCT</b>	<b>CODE</b>	<b>PACKAGING</b>	<b>*COVERAGE (WFT Theoretical)</b>
331 Resin Grey	50102	29 Kg Pail	1.0 kg/m <sup>2</sup> @ 0.8 mm
331 Resin Grey	50107	4 Kg Can	1.25 kg/m <sup>2</sup> @ 1.0 mm
331 Resin White	--	White is available on request. Contact CED for details.	*All coverages are theoretical and do not include pail loss, surface irregularities, curing reduction, and typical overage allowances.
331 Resin White	--		
CHP Hardener	50108	200 cc Bottle	
	50109	400 gram Bottle	

**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.



Corrosion Engineering | 300 Stevens Drive, Suite 310, Lester, PA 19113  
 +1-610-833-4001 Phone | +1-610-833-3040 Fax | corrosion-engineering.com