

**CE-312**

**09/13 Supersedes 09/08**

### **PENNCOAT<sup>®</sup> 401C LINING**

#### **DESCRIPTION**

PENNCOAT 401C is a conductive/static dissipative, two component, room temperature cured silicon based polymeric lining. On concrete, it is applied to 20 - 25 mils, in two 10 -12.5 mil WFT (wet film thickness) coats. On steel it is installed in two coats at a recommended thickness of 14-16 mils WFT (2 x 7-9 mils coat). It offers the chemical and temperature resistance of inorganic silicon chemistry with the ease of application and cost effectiveness of conventional organic linings. PENNCOAT 401C is a unique thermosetting silicon polymer which cures with conventional epoxy chemistry yielding highly cross-linked polyether linkages. The absence of problematic hydroxyl and ester groups makes PENNCOAT 401C resistant to a broad range of corrosive chemicals, including 98% sulfuric acid, and chlorinated solvents. PENNTROWEL<sup>®</sup> Epoxy Primer is recommended for use under PENNCOAT 401C on concrete substrates. **Consult Corrosion Engineering specification [CES-264](#) for complete installation details.**

#### **AREAS OF USE**

PENNCOAT 401C is an electrically conductive lining suitable for use in areas, where discharges of static electricity pose particular risk of fire, explosion, or product damage such as:

- Solvent Handling Areas
- Explosives Production Facilities
- Electronic Manufacturing

PENNCOAT 401C offers exceptional chemical resistance due to its very dense polymeric cross-linking and absence of problematic hydroxyl and ester groups formed in epoxy and vinyl ester linings.

#### **OUTSTANDING FEATURES**

- Chemical resistance of silicon chemistry with application ease of epoxy chemistry.
- Ambient temperature cure. Easy to apply by brush, roller or spray.
- Service temperature range of -80° F to 200°F.

**TYPICAL PHYSICAL PROPERTIES**

PROPERTY	PENNCOAT 401C
Color	Black
Density (mixed unit)	11.0 lbs/gal
VOC content (mixed unit)	108 g/l (0.9 lbs/gal)
Solids by weight	95.5% (±2%)
Pot life	60 min (75°F)
Water absorption (30 days at 88°F) (ASTM D570)	0.89%
Impact test (ASTM D2794)	130 in. lbs.
Flash point (TCC)	53°C (127°F)
Pull off strength (ASTM D4541)	2,800 – 3,100 psi
Hardness (ASTM D2583)	78 -80 Barcol
Conductivity (surface resistivity)	10 <sup>2</sup> – 10 <sup>7</sup> ohm/square
Cure time (75°F)	24 hrs for foot traffic 3 days for vehicle traffic

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

PRODUCT	CODE	PACKAGING	COVERAGE*
PENNTROWEL® Epoxy Primer	19676	4 x 1 gal units/case	640-800 SF/case (160 -200 SF/gal) @ 8 -10 mil WFT on concrete
PENNCOAT 401C Kit		5-gal kit	<p>1 x 5 gal kit consists of 1 pail resin and 1 bottle catalyst.</p> <p>On steel, coverage will be 900-1100 SF per pail (180-230 SF/gal) @ 7-9 mils WFT per coat. 2 coats recommended.</p> <p>On concrete, a 5 gal unit will theoretically cover 665 SF @ 12 mils WFT (133 SF/gal). A rough concrete substrate can significantly reduce coverage on the order of 25%. 2 coats recommended (20 mils DFT).</p> <p>* Coverages are theoretical and may vary with substrate roughness.</p>

**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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