



PRODUCT INFORMATION

CE-266
04/20 Supersedes 10/18

PENNCOAT™ 221 LINING

DESCRIPTION

Penncoat 221 Lining is an 80 mil high functional novolac epoxy flake filled lining formulated for trowel application on horizontal, vertical, and overhead surfaces. For most applications, two coats are recommended at 40 mils WFT per coat. Use with Penntrowel Epoxy Primer (CE-139) on concrete substrates. No primer is required for adhesion to prepared steel substrates. Consult ErgonArmor specification CES-342 for complete installation details.

AREAS OF USE

- Chemical resistant lining for concrete or steel structures
- Chemical immersion, secondary containment, or splash-and-spill service
- Flooring, including floors subject to truck traffic
- Flue gas desulfurization plant ductwork and stacks, up to 250°F (120°C)

OUTSTANDING FEATURES

- High functional novolac epoxy resin offers excellent chemical resistance
- Flake fillers yield low permeability
- Sag resistant up to 40 mils per coat on verticals
- May be spark tested on metal substrates
- Suitable for trowel application on vertical, overhead, or horizontal surfaces
- 100% reactive, no VOCs

TYPICAL PHYSICAL PROPERTIES

PROPERTY	PENNCOAT 221 Lining
Color of cured lining	White or gray. First coat is suggested as a different color than second coat as a visual aid during application. Certain chemical exposure may cause loss of gloss or color change, this does not indicate degradation of the lining.
Taber abrasion, CS-17 wheel, 1000 gm load, 1000 cycles	59
Barcol hardness (Shore D)	>85
Flexural strength (ASTM C580)	>5000 psi
Adhesion, 7-day	Sandblasted steel - >2000 psi Concrete - greater than concrete tensile strength
Tensile strength, 7-day ASTM C307)	>2500 psi
Mix ratio of resin: hardener	3.0: 1.0 by weight 2.5: 1.0 by volume
Maximum service temp	180°F (82°C) wet in splash and spill 250°F (120°C) in flue gas environments
Work life/tack free time/complete cure time:	at 50°F (10°C) - 55-75 minutes/10-12 hours/72 hours at 70°F (23°C) - 35-45 minutes/6-7 hours/48 hours at 90°F (32°C) - 20-30 minutes/4-5 hours/24 hours

ESTIMATING/PACKAGING THEORETICAL QUANTITIES – NO OVERAGE ALLOWANCE

PRODUCT	CODE	PACKAGING	COVERAGE*
Penncoat 221 Resin White	19587	1.8 gal (18 lb) pail	1 x 2.5 gallon unit of basecoat consists of 1 x 1.8 gal pail resin, and 1 x 0.7 gal pail hardener and will cover 100 sf per unit at 40 mils WFT.
Penncoat 221 Resin Gray	19585	1.8 gal (18 lb) pail	
Penncoat 221 Hardener	19586	0.7 gal (6.0 lb)	1 x 2.5 gallon unit of topcoat consists of 1 x 1.8 gal pail resin, and 1 x 0.7 gal pail hardener and will cover 100 sf per unit at 40 mils WFT.

*Theoretical coverage only, does not include allowance for pail loss, surface irregularities, and typical overage allowance.

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 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. For all Terms and Conditions of Sale see ergonarmor.com.

