

SELECTION & SPECIFICATION DATA

Type	Glass flake reinforced vinyl ester lining
Description	Penncoat 380 Lining is a heavy duty 80 mil glass flake filled vinyl ester lining.
Uses	<ul style="list-style-type: none"> • Chemical resistant lining for immersion service on steel. • Lining for immersion service in process vessels, storage vessels, and tanks. • Durable lining for immersion service in flue gas handling equipment such as duct work, scrubbers, or stacks.
Features	<ul style="list-style-type: none"> • Outstanding chemical resistance. • FDA compliant for immersion service in food and food ingredient containment applications such as phosphoric acid tanks. • Quick return to service.

SUBSTRATE & SURFACE PREPARATION

All	Substrate must be clean, dry and free of contaminants including soluble salts.
Steel	<p>Immersion: SSPC-SP 5/NACE No. 1, White Metal Blast Cleaning with jagged, angular profile 3.0 to 5.0 mils.</p> <p>Non-Immersion: SSPC-SP 6/NACE No. 3, Commercial Blast Cleaning with jagged, angular profile 3.0 to 5.0 mils.</p> <p>Prime steel with Penntrowel Vinyl Ester Primer.</p>
Concrete	Penncoat 380 is not suitable for application on concrete.

MIXING & THINNING

Ratio	1 gallon Part A resin : 2 fl. oz. Part B hardener. Increase dosage of hardener to 3 fl. oz. per gallon of resin to speed cure in cool conditions.		
Mixing	For optimum handling, mix at a low speed. Premix part A resin for 1 minute to loosen. Continue mixing while slowly adding 2 fl. oz. hardener per gallon of resin to the center of the pail. Power mix for 3 minutes while moving the mix blade up, down, and around the sides of the pail. Increase dosage of hardener from 2 to 3 fl. oz. per gallon of resin to speed cure in cool conditions.		
Thinning	Do not thin.		
Pot Life	50°F (10°C) 90 minutes	75°F (24°C) 60 minutes	90°F (32°C) 30 minutes
	Pot life is shorter at higher temperatures. A larger volume of mixed material will have a shorter pot life than a smaller volume.		
Cleanup	Methyl ethyl ketone or lacquer thinner		

APPLICATION GUIDANCE

Installation Conditions	Penncoat 380 Lining is formulated for ideal handling at 70°F (21°C). Materials and substrate should be acclimated to the air temperature prior to installation, and the air temperature should be between 50°F (10°C) and 90°F (32°C) during installation and cure.
Trowel	Use for application of basecoat and topcoat
Roller	Mohair with a phenolic core for smoothing only.
Airless Spray	Not suitable

CURE TIME & RECOAT WINDOW

Substrate Temperature	Initial Set	Minimum Recoat	Maximum Recoat	Full Cure
50°F (10°C)	5 hours	12 hours	7 days	48 hours
75°F (24°C)	2 hours	4.5 hours	7 days	24 hours
90°F (32°C)	1.5 hours	3 hours	3 days	8 hours

When surface temperatures exceed 95°F (35°C) or are exposed to direct sunlight, overcoating should take place as soon as coating may be walked on or handled without marring in order to avoid intercoat adhesion issues.

PACKAGING, ESTIMATING & HANDLING

Product	Code	Packaging
Penntrowel Vinyl Ester Primer Resin	19514 19515	4 x 0.75-gal (6.4 lb) can case 5-gal (43 lb) pail
Penncoat 380 Resin White	29423 29431	2.25-gal (23 lb) pail 4.5-gal (46 lb) pail
Penncoat 380 Resin Gray	29419 29427	2.25-gal (23 lb) pail 4.5-gal (46 lb) pail
CHP Hardener	19552 21922	11.2 fl. oz. (0.7 lb) bottle 1 gal (8.3 lb) can

A 4.7-gal unit consists of 2 x 2.25-gal (23 lb) pails of resin and 1 x 0.7-lb bottle hardener. Resin and hardener sold separately.

A 4.6-gal unit consists of 1 x 46-lb pail resin and 1 x 0.7-lb bottle hardener.

Theoretical Coverage 33 ft² to 67 ft² (3.1 m² to 6.2 m²) per mixed gallon yields 33 to 67 mils (838 to 1702 microns) WFT equivalent to 30 to 60 mils (762 to 1524 microns) DFT per coat with a target of 40 mils (1016 microns) DFT. 2 coats required.

Storage & Shelf Life Maintain products in original packaging and sealed until ready for use. Estimated shelf life of resin is 6 months and hardener is 1 year when stored in a dry area at 70°F (21°C). Store resin between 55°F (13°C) and 65°F (18°C) for maximum shelf life. Actual shelf life may vary with storage conditions.

If there is any question with respect to the quality of the components, check reactivity prior to use. For assistance consult with ErgonArmor.

Safety 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.

Ventilation Provide thorough air circulation during and after application until the material has cured when used in enclosed areas.

TYPICAL PHYSICAL PROPERTIES

Property	Typical Value
Color	Gray or White
Density	10.2 lb/gallon (4.63 kg/L)
Solids content	100% reactive

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