PENNTROWEL™ 250 Surfacer

SELECTION & SPECIFICATION DATA

Type

High performance epoxy floor surfacer

Description

Penntrowel 250 Surfacer is a ¼"-3/8" heavy duty floor topping for severe temperature and thermal shock applications. Meets or exceeds ASTM C722 types A and B for chemical resistant monolithic surfacings.

Uses

- High performance flexibilized epoxy resin system for maximum temperature and thermal shock resistance. Resistant to most acids, alkalis and aliphatic solvents.
- Moderate to harsh chemical exposures
- Floors, pump pads, tank foundations, truck unloading pads
- High build thickness resists mechanical abuse

Features

- Can withstand intermittent exposures to 250°F (121°C)
- Remains structurally sound in repeated thermal cycling from ambient to 190°F (88°C)
- Dense graded filler blend, no sealing or topcoat required
- Easy to trowel apply
- Can be used to resurface and provide a finish protection layer in a single pass.
- Conveniently proportioned, easy-to-use mix kits
- Optional cold room hardener to allow curing as low as 40°F (4°C)

Limitations

Not for use beyond its chemical resistance capabilities. Consult Armor with specific questions.

INSTALLATION GUIDANCE

Reference Specification

CES-310 Penntrowel Floor Surfacer Installation Specification

Installation Guidance

Materials and substrate should be acclimated to the air temperature prior to installation. The air temperature should be between 50°F (10°C) and 90°F (32°C) during installation and cure. Installation temperature requirements can be lowered with optional Cold Room Hardener.

Mixing/Use

Mix ratio Filler:Resin:Hardener is 10.0:1.0:0.42 by weight. Empty Part A resin and Part B hardener into a clean mixing vessel and mix thoroughly using a slow speed drill with suitable blade mixer such as a Jiffler. Mix for 2 minutes minimum to insure full blending. Slowly add Part C filler until fully wetted out. Apply by flat trowel over properly primed and prepared substrate. Use of ¼" (6 mm) or 3/8" (9 mm) guide strips to maintain uniform thickness is suggested. Trowel the surface lightly to smooth and close surface. Allow to cure per cure time information below before putting into service.

Work Life

45-60 minutes at 70°F (21°C)

Cleanup

Mineral spirits

CURE TIME

Temperature	Initial Set	Full Cure
70°F (21°C)	Foot traffic 4.5 hours Light vehicle traffic 18 hours	24 hours

SAFETY

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.

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PACKAGING & ESTIMATING

Product	Code	Packaging
Resin	19634 19635	4 x 7.8 lb/3.5 kg (0.8 gal/3.0 l) cans/cs 47 lb/21.3 kg (5.0 gal/18.9 l) pail
Hardener	19632 19633	4 x 3.3 lb/1.5 kg (0.4 gal/1.5 l) cans/cs 20 lb/ 9 kg (2.5 gal/9.5 l) pail
Floor Surfacer Filler	19601	39 lb (17.7 kg) bag

Theoretical Coverage

A 356 lb/3 cu ft (162 kg/85 l) unit consists of 1 case of resin, 1 case of hardener and 8 bags of filler and will cover 144 sf (13.38 sm) at ¼" (6 mm) thickness or 96 sf (8.9 sm) at 3/8" (9 mm).

A 535 lb /4.5 cu ft (242.6 kg/127.4 l) unit consists of 1 pail of resin, 1 can of hardener and 12 bags of filler and will cover 216 sf (20 sm) at ¼" thickness or 145 sf (13.5 sm) at 3/8" (9 mm).

Storage & Shelf Life

Maintain products in original packaging and sealed until ready for use. Estimated shelf life of components is 18-24 months when stored in a dry area at 70˚F (21˚C). 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 Armor.

TYPICAL PHYSICAL PROPERTIES

Property	Typical Value
Color	Gray, special colors on request
Wet density	118 lb/ft^3 (1,890 kg/m^3)
Compressive strength, 7-day, ASTM C579	>9000 psi (62 MPa)
Tensile strength, 7-day, ASTM C307	>1,800 psi (12.4 MPa)
Flexural strength, ASTM C580	>3,000 psi (20.7 MPa)
Bond to concrete, ASTM C321	Exceeds tensile strength of concrete
Water absorption, ASTM C413	0.02%
Shrinkage, ASTM C531	0.05%
Coefficient of thermal expansion, ASTM C531	1.7 x 10^{-5}/°F (3.1 x 10^{-5}/°C)
Heat resistance, ASTM C884 modified	190°F (88°C) continuous 250°F (121°C) intermittent

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