PLEXI-CHEMIE

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Product Data Sheet For:

PLEXI*FLOOR* EPOCRETE

Epoxy-Cement Slurry for Resurfacing
and for Water Vapor Transmission Elimination

Description:

Plexi*Floor* EpoCrete is a three component, water based, solvent-free, moisture tolerant epoxy high performance cementitious self-leveling slurry mortar. It is particularly formulated for leveling and for the necessary preparation of slabs with excessive water vapor transmission rates @ thicknesses of 120-160 mils. EpoCrete is also used as a resurfacer or self-smoothing screed for damp, green or saturated surface dry concrete slabs. Plexi*Floor* EpoCrete must be sealed with the proper Plexi-Chemie epoxy primer system to form a long term vapor barrier. Plexi-Chemie recommends Plexi*Glaze* #4 Primer/Sealer.

Advantages:

- Water based, solvent free and odorless
- Excellent adhesion.
- Waterproof, but will allow water vapor to pass through it.
- Prevents osmotic vapor transmission over damp substrates.
- Modulus of elasticity and coefficient of thermal expansion comparable to concrete.
- Acts as a leveling layer under epoxy systems.
- Resurfacer for repair and maintenance.
- Outstanding penetration on problem surfaces.
- Can be over coated with 100% solids epoxy resin systems without causing delamination.
- VOC compliant, no solvents, eco-friendly.
- Can be applied to "green concrete."

Packaging:

- Component A: 2.85 lb. (gallon container)
- Component B: 6.95 lb. (gallon container)
- Component C: 42.5 lb. (bag- powder)

Coverage:

Primer: Plexi*Floor* EpoCrete component A&B -1.25 gallons.

Self-leveling Mortar*:* Plexi*Floor* EpoCrete: A+B+C covers 40-45 sq. ft. at 100 mils.

Patching Mortar: See ProCrete 1000 for more information.

Colors:

Grey cement color (if tinting is required, add Plexi*Floor* color pack).

Surface Preparation:

Prepare concrete by mechanical means only. Shot blast, scarifying and diamond grinding are the required preparation methods. No other preparation method is acceptable for the long term success of any floor. Substrate must be free of all contamination or bond breaking substances including but not limited to dust, latency, curing compounds, coatings, sealers, oil or grease. All spalled or deteriorated concrete should be removed by chipping hammers then patched with an epoxy patching material such as Plexi-Chemie's ProCrete 1000 patching system.

Installation Guidelines:

Priming: Use Plexi*Floor* EpoCrete primer at 200-250 sq. ft./gallon. Avoid puddling.

Mixing: Mix full batches only. Self-leveling A&B resins should be mixed with a Jiffy type mixer at low speed, as not to create air entrapment, for about 60 seconds. Continue adding aggregate until batter consistency is achieved and continue to deliver subsequent mix to maintain fresh batches.

Application: Primer should be applied using a squeegee and back roll with 3/8" nap roller to eliminate ponding at 200-2500 sq. ft. /gallon. Allow primer to become tack free.

Self-leveling Slurry: Immediately after mixing the slurry, use a screed rake to obtain correct coverage. Then, level with spike roller to ensure uniform thickness and to remove and air. Allow to cure, then proceed with the desired epoxy systems.

Storage and Shelf Life:

1-2 years when stored at 70°F or below.

Cleaning and Maintenance:

Do not expose Plexi*Floor* EpoCrete to any chemicals until the full curing time of 7 days has passed. Regular cleaning and maintenance will prolong the life of all polymer-flooring systems, enhance appearance and reduce any tendency to retain dirt.

Safety:

Safe storage, handling, and use dictate that adequate health and safety precautions are observed with this product. User is specifically directed to consult the current Material Safety Data Sheet for this product as well as precautions contained on product labeling.

Limitations:

- Check that the relative humidity is not above 85% and the substrate must be at least 5°F above the dew point.
- Material temperature must be at 65°-70°F for a minimum of 24-48 hrs.
- Do not apply below 50°F.
- Do not mix more than can be applied.
- Do not overwork material.
- Do not extend with water or solvents.
- Do not exceed thicknesses of material to 125-185 mils.

Typical Physical Properties:

Compressive Strength	ASTM C-579	1 day: 3200 psi 3 days: 7450 psi 28 days: 9800 psi
Adhesion Pull Test	ASTM D-7234	>536 psi (break in concrete) 24 hrs.
Heat Resistance Limitation	Continuous Exposure	220°F
Tensile Strength	ASTM C-307	2,800 psi
Coefficient of Thermal Expansion	ASTM C-531	1.5×10^{-5} °F
Coefficient of Friction	ASTM D-2047	.73 dry .65 wet
Resistance to Fungi Growth	ASTM G-21	passes, rating of one
Impact Resistance	ASTM D-2794	no visible damage or deterioration >160 inch-pounds
Flexural Strength	ASTM C-580	3,800 psi
Modulus of Elasticity	ASTM C-469	1.8×10^{5} psi
Water Absorption	ASTM C-413	<0.1%
Abrasion Resistance	ASTM D-4060 CS-17 Taber @ 1000 cycles	.12 grams loss
Resistance to Elevated Temperatures	MIL-D-3134	No slip or flow
Adhesion	ASTM D-4541	>500 psi 100% concrete failure, exceeds concrete
Flammability	ASTM D-635	Self-extinguishing
Hardness	ASTM D Shore D-2240	80-85
VOC Content		0 g/l
Cure Time @ 70º F Full Service		6 Hours Foot Traffic and 16 hours Full Service
Working Time @ 70º F		20 Minutes
Slip Resistance Index	ASTM F-1679	>1.0