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Product Data Sheet For:

PLEXI*FLEX* 100

DESCRIPTION
Plexi*Flex 100* is a 100% solids, power-troweled epoxy resurfacer. Plexi*Flex 100* is installed at a thickness of 1/4 inch to 2 inch thick depending on erosion of concrete. It is designed to rehabilitate worn concrete and as a protective overlayment on new concrete while offering superior protection from heavy industrial traffic (impact, abrasion and compaction). The surface texture can be modified to offer varying degrees of slip and chemical resistance in wet environments.

TYPICAL USES
In heavy-duty forklift traffic aisles, high abrasion and impact areas, wet processing areas, waste water treatment facilities, pulp and paper plants, food and beverage plants, dairies, machine shops, automotive manufacturing, chemical handling areas, loading docks, and as a superior resurfacer that's easy to install.

FEATURES
Seamless, minimal odor, VOC compliant, resistant to most reagents, high impact resistance, high abrasion resistance, and variable surface textures. Plexi*Flex* 100 is available with Bio-inhibitor antimicrobial. This treatment will provide the floor with long-term protection against a broad spectrum of bacterial and fungal attack. It is formulated into the flooring system from the basecoat up through the topcoat.

Formulation
Part A (resin), Part B (activator), Part C (color pack), Part D (graded silica sand).

Durability
Plexi*Flex 100* is highly durable and performs extremely well in areas requiring high impact and abrasion resistance. Plexi*Flex 100* also works well in spillage and wet processing areas, as well as areas where sanitation and dust free environments are required. Plexi*Flex 100* is formulated to handle various degrees of chemical and thermal shock resistance. Plexi*Flex 100* offers unrivaled compressive, tensile and flexural strength with excellent abrasion resistance and hardness. It resists the most severe chemicals and adheres firmly without odor when applied to concrete that has received proper surface preparation. Additional chemical resistance is achieved by using PlexiCoat F Novalac Resin.

Appearance
Plexi*Flex 100* is available in standard colors, may be broadcast with quartz, and sealed with a variety of sealers. Likewise, the surface may be left smooth, without quartz broadcast, and top coated with epoxy or urethane resins.

Surface Preparation
All concrete substrates and other surfaces to receive Plexi*Flex 100* seamless resinous flooring systems require surface preparation. The substrate must be clean, durable, structurally sound, dry and free of grease, wax, oil or other substrate contaminates. PROPER SURFACE PREPARATION IS CRITICAL IN THE SUCCESSFUL PLACEMENT OF ALL RESINOUS FLOORING SYSTEMS. Surface preparation requires that the following factors be reviewed and acted upon:

- Decontamination
- Removal & replacement of non-durable concrete
- Repair of surface irregularities
- Creation of the proper surface profile for a mechanical bond

Surface preparation should be done in accordance with ACI 503 Recommendations, ASTM Standard Practice for Surface Cleaning Concrete for Coating and ASTM Standard Practice for Abrading Concrete ASTM D 4259. Plexi-Chemie does not recommend acid etching as a form of surface preparation because it introduces both water and acid to the substrate. Surface preparation should be done by mechanical means only. Preferred method of mechanical preparation is shot blasting and scarification. Use diamond grinders in hard to reach areas.

Priming
The use of Plexi*Glaze #4* Primer is necessary for all applications of Plexi*Flex* 100 over all substrates.

Mixing
Premix Part A (resin), Part B (activator), and Part C (color pack) in a running rotary drum mixer or a large mortar mixer. Mix parts together for approximately 30 seconds. Slowly add Part D (aggregate), and mix until a lump-free, thoroughly wetted-out matrix is obtained.

Coverage
Approximately 24 – 28 square feet per single unit at 1/4 inch.

Installation
Install Plexi*Flex 100* on primed substrate. Screed by spreader box or with a gauge rake. Immediately after placing, material must be hand-troweled or power-troweled to 1/4 inch or greater thickness. **Caution – Do not over trowel. Over troweling may cause blistering.**

Cure Rate

	55°F	**72°F**	**90°F**
Foot traffic	14-16 hrs	9-10hrs	6-8 hrs
Medium loads	20-24 hrs	12-16 hrs	8-10 hrs
Heavy / CR	96 hrs	48 hrs	24 hrs

Finish
Lightly grind Plexi*Flex 100* after curing. Allow 8 – 10 hours of cure @ 72°F after installation of Plexi*Flex 100* before installing desired topcoat.

Physical Properties

Compressive Strength	ASTM D-695	11,000 psi
Tensile Strength	ASTM D-638	3,275 psi
Abrasion Resistance CS-17 Wheel, 1 kg load	ASTM D-1044	0.10 gm loss max
Water Absorption (2 Hour Boil)	ASTM C-413	0.29%
Flexural Strength	ASTM C-580	4,200 psi
Hardness Shore D	ASTM D-2240	60 - 85
Chemical Resistance	ASTM D-1308	No deleterious effects
Heat Distortion Degrees F		150F continual 200F intermittent
Bond Strength to Concrete (dry)	ASTM D-4541	>400 psi (100% substrate failure)
Flammability	ASTM D-635	Self Extinguishing