

Product Data Sheet For:

PLEXIGARD

Shop Floor

PRODUCT DESCRIPTION

PlexiGard Shop Floor is an exceptional resurfacing 1/8th inch Self-Leveling Epoxy Slurry System that is a combination of pigmented PlexiGlaze IFF 100% solids epoxy, fine aggregate filler and a flint shot broadcast which is comprised of natural quartz sand (30 mesh). This self-leveling system is monolithic and extremely durable with thicknesses ranging from 1/8” to 1/4” after full broadcast. PlexiGard Shop Floor is ideally suited for those areas that are subject to physical traffic, heavy chemical abuse, or heavy loads/high impact. It is available in three different formulations: standard, flexible, and high chemical resistance.

Standard SHOP FLOOR uses Standard Primer, PlexiGlaze IFF Floor Finish Resin Glaze as a binder resin, fine aggregate SL filler, Dry Silica Sand for slurry and Dry Silica Sand for (30 mesh) for broadcast. Lock Seal coat CR epoxy tailored to the desired color. Slip resistance is regulated by the amounts of topcoats. Level 1 is with one lock coat and Level 2 is smoother with 2 lock coats of PlexiGlaze IFF Floor Finish plus polyester urethane top coat or water-based urethane.

Flexible SHOP FLOOR uses PlexiFlex 100, a hybrid epoxy/urethane matrix as a binder and is designed to withstand heavy loads, dropping tools and the absorbing impact along with abrasion resistance.

High Chemical Resistance Shop Floor uses PlexiCoat F Novolac resin where higher thermal and chemical resistance is required. Very good chemical resistance to acids and solvents. In addition, exhibits higher heat resistance where required.

AREAS OF USE

- Manufacturing and Industrial Areas
- Food Processing Areas
- Animal Care
- Fire Stations
- Labs and Pharmaceutical Plants
- Machine Shops
- Loading Docks
- Traffic Aisles
- Mechanical Rooms
- Mezzanines
- Warehouses

FEATURES

- Low Odor
- Meets USDA, FDA, and OSHA Standards
- Superior Chemical Resistance
- 2:1 Ratio by volume
- Non-Blushing/Non-Waterspotting
- Low Viscosity

INSTALLATION

Surface Preparation

Surface must be free of oils, grease and other surface contaminants. All previously painted surfaces must be shot-blasted and other patch material must be removed mechanically. All surface preparation by mechanical means only. No acid etching.

Priming

All areas should be primed with PlexiGlaze #4 prior to application.

Joints

All expansion joints in the slabs need to be treated and filled with PlexiPatch QC.

APPLICATION

PlexiGard Shop Floor is applied as a slurry broadcast 1/8th inch to 3/16th inch thickness. Allow to cure as required and then apply 15 mils of 100% solids floor finish lock coat (PlexiGlaze Floor Finish). Final topcoat to be 3 mils of Polyester Urethane or Water-based Urethane..

PHYSICAL PROPERTIES

Compressive Strength	ASTM D-695	17,540 psi
Tensile Strength	ASTM C-307	2950 psi
Tensile Elongation	ASTM D-638	>7%
Flexural Strength	ASTM C-580	4180 psi
Bond Strength to concrete		≥400 psi Concrete Fails
Impact Resistance	MIL D-3134	Withstands 16 ft lbs without cracking, delamination or chipping
Abrasion Resistance	ASTM D-4060, Tabor C17, 1,000 cycles	70-90 mgs lost

Antimicrobial Resistance		Passes
Flammability	ASTM D-635	Self-extinguishing (Class 1)
Water Absorption	ASTM D-570	0.020%
Hardness (Shore D)	ASTM D-2240	80-85

CHEMICAL RESISTANCE

Reagent	Standard Cycloaliphatic	Flex 100 Epoxy Urethane	PlexiCoat F (Novolac)
Acetic Acid 30	R	R	R
Acetone	NR	R	R
100% Acetic	NR	NR	R
40% Amine Hydroxide	R	R	R
Benzene	NR	S	R
Chromic 15-29%	R	R	R
Ethylene Glycol	R	R	R
HCL 30%	R	R	R
Methelene Chloride	N	S	R
Nitric Acid 10%	N	N	R
Tri Sodium Phosphate	R	R	R
Tri Chloroethelene	N	S	R
Xylene	NR	R	R

R=Resistant
NR=Not Resistant
S=Splash

CAUTION
Always read Safety Data Sheets and wear proper protection as required when handling resinous materials.