

PRODUCT DESCRIPTION

FP SHIELD UV 100 is a two-component, 100% solids epoxy coating designed for concrete floor systems where improved resistance to ultraviolet exposure is desired. Its self-leveling formula creates a smooth, seamless, high-gloss surface with strong adhesion, durable mechanical performance, and resistance to common chemicals. FP SHIELD UV 100 may be installed as a clear or pigmented coating and may also be paired with metallic pigments to create decorative finishes. It is suitable for commercial, industrial, institutional, and residential concrete floors requiring dependable performance and enhanced color stability.

KEY BENEFITS

- Enhanced resistance to ultraviolet exposure
- Smooth, seamless, high-gloss finish
- 100% solids, solvent-free formulation
- Good chemical and physical resistance
- Easy-to-clean surface resistant to moisture
- Clear, pigmented, and metallic finish options

PRIMARY APPLICATIONS

- Industrial facilities and warehouses
- Commercial and retail spaces
- Decorative and metallic floors
- Institutional and educational buildings
- Healthcare and residential projects
- Interior areas receiving moderate UV exposure

PACKAGING AND TECHNICAL DATA

Property	FP SHIELD UV 100
Kit Size	3 US gallon kit
Components	Part A: 2 gallons Part B: 1 gallon
Color	Part A: upon request Part B: clear to amber
Mix Ratio by Volume	2A : 1B
Recommended Thickness	Primer: 6-8 mils Finish coat: 8-12 mils
Coverage at 8 mils	Approximately 200 sq. ft. per gallon
Slurry Coverage	Approximately 125 sq. ft. per gallon at 12 mils with 50% silica
Trowel Coverage	Approximately 60 sq. ft. per gallon at 24 mils with 85% silica
Gel Time at 77°F	50-60 minutes
Solids Content	100% by weight and volume
VOC	Not specified
Shelf Life	12 months unopened; protect from moisture, sunlight, heat, cold, and ignition sources

PHYSICAL PROPERTIES

Property / Test Method	Typical Result
Bond Strength - ASTM D4541	268 psi (substrate rupture)
Water Absorption - ASTM D570	0.3%
Abrasion Resistance - ASTM D4060	0.10 g (CS17, 1000 g, 1000 cycles)
Tensile Strength - ASTM D638	5,500 psi
Compressive Strength - ASTM D695	6,800 psi
Elongation - ASTM D638	6.7%
Surface Burning Characteristics	Flame spread: 5 Smoke developed: 94 (Class A)

Typical values are based on laboratory testing and are not intended as guaranteed specifications. Field conditions, substrate profile, temperature, humidity, and application technique may affect performance.

CURING DETAILS

Temperature	Foot Traffic	Light Traffic	Full Cure	Over Primer	Second Coat
50°F	N/A	N/A	N/A	N/A	30 hours-3 days
68°F	24 hours	3 days	7 days	12 hours-2 days	24 hours-2 days
86°F	16 hours	2 days	5 days	6 hours-1 day	16 hours-1 day

SURFACE PREPARATION

Existing Concrete. The surface must be clean, sound, dry, and mechanically prepared by shot blasting, abrasive blasting, or diamond grinding. Remove all oils, sealers, curing compounds, waxes, fats, laitance, and other bond-breaking contaminants. Do not apply to wet substrates. Check chloride, moisture, and pH conditions before application. Prime porous concrete with a compatible Florida Polymer epoxy primer. Repair cracks, spalls, and surface imperfections with a compatible Florida Polymer repair material before coating.

New Concrete. Allow new concrete to cure for a minimum of 30 days. Concrete should achieve at least 3,625 psi compressive strength after 28 days and at least 218 psi tensile pull-off strength. Mechanically prepare the surface to remove laitance and create the profile required for the coating system. Prime porous surfaces and repair cracks or imperfections before application.

MIXING

FP SHIELD UV 100 is supplied in factory-proportioned quantities. Empty the entire contents of Part B into the Part A container and mix slowly for 3 minutes until uniform. Avoid unnecessary air entrapment. Scrape the sides and bottom of the container at least once with a straight-edged tool to ensure a homogeneous blend. Apply between 59°F and 82°F with relative humidity below 80%. Mix only the amount that can be installed within the available working time.

APPLICATION

Apply the mixed product evenly to the prepared surface using a rubber squeegee or gauge rake, then back-roll to obtain a uniform coating. Avoid puddles and excessive build-up.

CLEANING

Clean tools and equipment immediately with a cleaner suitable for epoxy materials. Wash exposed skin carefully with warm, soapy water. Once cured, the product can be removed only by mechanical means.

RESTRICTIONS

- Substrate temperature must remain between 59°F and 86°F during application and curing.
- Maximum relative humidity during application and curing is 85%.
- Substrate moisture content must be below 4% when the coating is applied.
- Do not apply to porous surfaces where moisture transmission may occur during application.
- Avoid exterior use on substrates at ground level unless the complete system is approved for that exposure.
- Protect from moisture, condensation, and water during the first 24 hours of cure.
- Although formulated for improved UV stability, some color change may occur with prolonged ultraviolet exposure.

HEALTH AND SAFETY

Avoid skin and eye contact and do not breathe vapors. Wear safety glasses, chemical-resistant gloves, protective clothing, and appropriate respiratory protection when ventilation is inadequate. Use only in a properly ventilated area. In case of skin contact, wash with soap and water. For eye contact, rinse immediately with water for at least 15 minutes and obtain medical attention. If respiratory irritation occurs, move the affected person to fresh air. Remove contaminated clothing and wash before reuse. Consult the Safety Data Sheet before handling or use.

IMPORTANT NOTICE

The statements, recommendations, and technical information in this document are believed to be accurate and reliable. The data applies only to the material identified and may not remain valid when used with other materials or under conditions outside the manufacturer's control. The user is responsible for confirming product suitability, performing job-site testing, and following the current Safety Data Sheet and application instructions. Florida Polymer Products Corp. assumes no liability for direct, indirect, consequential, economic, or other damages beyond replacement of the product or refund of the purchase price as provided in the applicable purchase agreement.