

PRODUCT DESCRIPTION

FP FUSION BASE 2050 is a two-component, 100% solids fast-cure epoxy designed for professional concrete floor coating systems requiring accelerated return to service. Its self-leveling formula creates a smooth, seamless, high-gloss surface with strong adhesion, excellent mechanical performance, and resistance to wear and common chemicals. FP FUSION BASE 2050 may be installed as a clear or pigmented coating and may also be paired with metallic pigments to create decorative finishes.

KEY BENEFITS

- Fast-cure formulation for accelerated installations
- Smooth, seamless, high-gloss finish
- Excellent adhesion to prepared concrete
- Strong chemical and abrasion resistance
- 100% solids formulation
- Clear, pigmented, and metallic finish options

PRIMARY APPLICATIONS

- Commercial and retail flooring
- Industrial facilities and warehouses
- Decorative and metallic floors
- Institutional and educational buildings
- Healthcare and residential projects
- Time-sensitive interior flooring installations

PACKAGING AND TECHNICAL DATA

Property	FP FUSION BASE 2050
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	25-30 minutes
Pot Life	10-15 minutes
Solids Content	100% by weight and volume
VOC	31-45 g/L
Shelf Life	12 months unopened; protect from temperature extremes

PHYSICAL PROPERTIES

Property / Test Method	Typical Result
Bond Strength - ASTM D4541	>300 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	6,500 psi
Compressive Strength - ASTM D695	12,000-13,000 psi
Coefficient of Friction - ASTM D1894	0.5-0.7
Fire Rating - ASTM E84	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.

FAST-CURE DETAILS

Temperature	Foot Traffic	Light Traffic	Full Cure	Recoat Minimum	Recoat Maximum
50°F	N/A	N/A	N/A	N/A	N/A
68°F	1 day	2 days	7 days	6 hours	24 hours
86°F	12 hours	36 hours	5 days	3 hours	24 hours

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 and surface imperfections 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 required profile. Prime porous surfaces and repair cracks or imperfections before application.

MIXING

Pre-condition materials to at least 50°F before use. Mix each component separately for a minimum of 2 minutes to evenly suspend solids. Pour Part B into Part A at the required 2A:1B volume ratio and mix for at least 3 minutes with a low-speed drill at 300-450 rpm. Scrape the bottom and sides of the container at least once to ensure a homogeneous blend. Mix only the amount that can be installed within the 10-15 minute pot life.

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.
- Protect from moisture, condensation, and water during the first 24 hours of cure.
- Color may change in areas exposed to regular ultraviolet light.

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. For eye contact, rinse immediately with water for at least 15 minutes and obtain medical attention. Consult the Safety Data Sheet before handling or use.

IMPORTANT NOTICE

This information is believed accurate and applies only to the identified material. The user must confirm suitability, perform job-site testing, and follow the current Safety Data Sheet and application instructions. Florida Polymer Products Corp. assumes no liability for direct, indirect, consequential, economic, or other damages beyond product replacement or refund as provided in the applicable purchase agreement.