

## FloroChip Epoxy Colored Flake System

**Product Description:** FloroChip is a decorative flooring system comprised of multicolored flakes embedded in clear, color stable, high performance epoxy. A wide selection of standard and custom flake blends, as well as slip-resistant finishes are available.

**Typical Uses, Applications:** Ideally suited as a primer or midcoat in commercial, industrial and institutional applications, such as:

- Hospitals, clinics
- Schools and universities
- Detention and public safety buildings
- Warehouses and logistics operations
- Manufacturing plants
- Aviation and transportation facilities
- Hospitality and restaurants
- Grocery stores and retail establishments

### Product Advantages

- Attractive finish with many design options
- Seamless, sanitary and chemical resistant
- Excellent bond and resilience
- Provides a commercial grade impact resistance with exceptional strength and wear characteristics
- May be installed using the random flake or full flake distribution method over a pigmented background
- Variety of optional topcoats available for added chemical and abrasion resistance
- USDA, FDA, EPA, OSHA and ADA compliant
- Can contribute to LEED Green Building Credits

### FloroChip System Product Packaging:

- FloroPoxy 4700 Primer—
  - 4 Gallon Over Pack
  - 20 Gal Pail Set
  - 220 Gal Drum Set
- FloroPoxy 4805 Pigmented Basecoat—
  - 4 Gallon Over Pack
  - 20 Gal Pail Set
- Blended FloroChip Flakes—
  - 55 Pound Box
- FloroPoxy 4805 Clear Topcoat—
  - 4 Gallon Over Pack
  - 20 Gal Pail Set
  - 220 Gal Drum Set

System Cured Physical Properties		
Property	Test Method	Results
Compressive Strength	ASTM C579	10,000 psi
Percent Elongation	ASTM D2370	6%
Hardness, Shore A/D	ASTM D2240	100/77
Flexural Strength	ASTM D790	7,700 psi
Tensile Elongation	ASTM 2370	3,339 psi
Abrasion Resistance, Taber Abrader CS-17 Wheel, 1000 gm load, 1000 cycles	ASTM D4060	38 mg loss*
Water Absorption	ASTM C413	0.2%
Bond Strength ACI Committee #503 pg. 1139-1141	ASTM D454	>400 psi
Indentation	MIL-D-3134F	No Indentation
Water Resistance, Fed. Test Std. #141 Method 6011	ASTM D1308	No Effect
Saltwater Resistance Fed. Test Std. #141 Method 6061	ASTM B117	No Effect
Boiling Water Resistance (1 hour continuous exposure)	ASTM D2571	No Effect
Gloss, 60 Degrees	ASTM D2571	90+ *

\* Based on standard epoxy grout coat without urethane topcoat.

**Storage:** All containers should be stored at 40° F to 95°F, be kept tightly sealed and out of direct sunlight.

*Note: FloroPoxy should not be applied when floor temperature is above 90° F or below 55° F, or when within 5° F of the dew point.*

## Typical Coverage

- FloroPoxy 4700 Clear Primer: 160 SF/Gallon
- FloroPoxy 4805 Pigmented Basecoat: 100-160 SF/Gallon
- Random Flake Broadcast: 1 lb. Flakes per 200 SF
- Full Flake Broadcast: 1 lb. Flakes per 9 SF
- FloroPoxy 4805 Clear Grout Coat: 100-160 SF/gallon

**Surface Preparation:** New concrete must have a 28 day cure, and preferably a broom swept finish, prior to coating. In the case of older concrete flooring, remove all surface oils, paint, dust and debris. Prior to coating, make sure the surface is clean, passes the MVT test and the water drop test and that all surface defects have been repaired. Refer to the Florock "Preparation of Concrete" datasheet for more information on preparation and MVT before proceeding.

**1. FloroPoxy 4700 Primer Application:** Carefully read and follow instructions on FloroPoxy 4700 Technical Data Sheet. Once surface preparation is complete, apply FloroPoxy 4700 primer to the concrete floor. In a clean, dry container, blend 3 parts by volume of Component A and 1 part by volume of Component B. Mix only the amount that can be applied during the working time. Mix thoroughly for 3-5 minutes, using a low speed mechanical mixer. Transfer the mixture from the batch container to a transport container. Remix and pour entire mix from the transport container onto floor immediately. Retaining mixture in the bucket will shorten the pot life. Using a 1/8" V-notched squeegee, apply primer at a rate of 160 SF/gallon. Backroll with a 3/8" nap roller immediately after spreading.

*Note: The cure time will vary with conditions. Allow a minimum of 4 hours and a maximum of 24 hours before next step.*

## 2. FloroPoxy 4805 Pigmented Basecoat

**Application:** Carefully read and follow mixing instructions on selected FloroPoxy 4805 Technical Data Sheet, including addition of Florock Colorant, if required. In a clean, dry container, blend 3 parts by volume of clear or pigmented resin Part A with 1 part by volume of activator Part B. Using a low speed mechanical mixer, blend well for 3-5 minutes. When tinting FloroPoxy 4805 Clear, add Florock Epoxy Colorant at the rate of 1 quart colorant to a 4 gallon batch of clear epoxy. Transfer mixture from batch container to transport container and remix. Immediately pour entire mixture onto floor. Using a 1/8" V-notched squeegee spread System 4805 at 100-160 SF/gallon. Use a 3/8" roller to back-roll the coating.

**3. Flake Broadcast Application:** Allow FloroPoxy 4805 Basecoat to completely self-level before broadcasting chips. Then, wearing spiked shoes, distribute FloroChip flakes into still wet basecoat by throwing handfuls of flakes into the air and allowing them to gently fall onto the floor. Once completed and cured, sweep and vacuum as necessary to remove all excess chips before grouting. For a full flake application, calculate 1 pound chips for every 9 square feet. Continue to broadcast chips until no wet spots are visible. For a random flake application, calculate 1 pound for every 200 square feet.

*Note: Distributing flakes onto wet epoxy without waiting long enough may result in sunken or buried chips. Do not throw chips directly at floor, as this will create an undesirable pattern.*

**4. FloroPoxy 4805 Clear Grout Coat(s):** Depending on desired texture, apply 2 FloroPoxy 4805 clear shall be applied over the chips within an 8-24 hour period after the basecoat application. Figure 100-160 SF/gallon.

**5. Optional Finish Coat:** FloroThane MC 100, FloroThane MC/HT or FloroWear 7100 may be used as a finish coat over the ep. In this case one coat is sufficient.

**Application over Existing Coating:** Examine the existing coating to ensure that it is well-bonded to the concrete. Any loose coating must be completely removed. Edges where loose coating has been removed should be sanded to a feathered edge. Clean the entire floor thoroughly with detergent cleaner. The surface must be free of all dirt, oils, or other contaminants. Once floor has completely dried, sand the existing coating until a powdery residue is evident and all gloss is removed. Sweep or vacuum clean and wipe the thinner to ensure good adhesion of the new system. Any bare concrete should be mechanically prepared and primed with FloroPoxy 4700. Follow steps 1 thru 4.

*Note: When installing over existing coatings, a test patch is recommended to evaluate compatibility.*

**Please read material safety data before using product.**

## Disclaimer:

All statements and recommendations are based on experience we believe to be reliable. The use or the application of these products being beyond the control of the Seller or Manufacturer, neither Seller nor Manufacturer make any warranty, expressed or implied, as to results or hazard from its use. The suitability, risk and liability of a product for an intended use shall be solely up to the User.