

## EXCELLENCE IN POLYMER FLOORING

### Florostone™ Decorative Epoxy Floor Slurry & Cove Systems

**Product Description:** A revolutionary new type of decorative epoxy flooring, Florostone™ combines a sanitary, high performance traffic surface with modern, upscale aesthetics in an economical, quick-turnaround system. The innovative formula enables faster application using fewer installation steps and man hours, when compared to epoxy-quartz flooring. In addition, the surface allows for virtually undetectable repair of minor damage when needed. Florostone™ offers cost-effective commercial/ institutional flooring with impressive durability and beautiful designer style.

**Typical Uses, Applications:** Ideally suited for institutional and commercial applications, such as:

- Pharmaceutical and life science campuses
- Hospitals, clinics, nursing homes
- Aviation, aerospace hangars, terminals
- Detention and public safety facilities
- Restaurants, retail stores, offices
- Museums, public spaces, government buildings
- Universities, schools, dormitories

**Product Advantages:**

- Lustrous decorative appearance
- Time-saving, highly economical installation
- Wide range of standard and custom colors
- High gloss or satin finish, and choice of slip-resistant aggregate
- Self-leveling system can help restore worn concrete and protect new slabs
- Sanitary, monolithic surface allows for easy and effective cleaning
- Integral cove base option
- Antimicrobial additive available
- USDA, EPA, OSHA, ADA Compliant
- Allows for virtually undetectable repair

**Floor Kit Packaging:**

- Florostone™ Resin – 2 Gallon Kit
- Florostone™ Decorative Filler – 25 Pound Box

**Floor Kit Coverage Rates:**

- 60 mils (1.5 mm), spread rate is 80 SF/kit (7.4 m<sup>2</sup>/kit)
- 70 mils (1.8 mm), spread rate is 70 SF/kit (6.5 m<sup>2</sup>/kit)
- 80 mils (2.0 mm), spread rate is 60 SF/kit (5.5 m<sup>2</sup>/kit)

Cured Physical Properties		
Property	Test Method	Results
Compressive Strength	ASTM C579	14,000 psi
Tensile Strength	ASTM C2370	7,300 psi
Flexural Strength	ASTM D790	12,500 psi
Indention	MIL- D-3134F	No Indention
Shore Hardness	ASTM D2240	Shore A – 90
		Shore D – 70
Water Absorption	ASTM C413	0.2%
Adhesion Bond Strength	ASTM D454	>400 psi
Abrasion Resistance, CS-17 Wheel, 1000 gm load, 1000 cycles	ASTM D4060	0.11 gm
Water Resistance Fed Test Std. #141, Method 6011	ASTM D117	No Effect
Boiling Water Resistance, 1 Hour	ASTM D2571	No Effect
Impact Resistance	ASTM D3134	> 160 in./lb.

**Cove Kit Packaging:**

- Florostone™ Cove Resin – 2 Gallon Kit
- Florostone™ Decorative Filler – 25 Pound Box

**Cove Kit Coverage Rates:**

- 4-Inch (10.2 cm) Cove, spread rate is 150 LF/kit (45.7 LM/kit)
- 6-Inch (15.25 cm) Cove, spread rate is 100 LF/kit (30.5 LM/kit)

**Storage:** All containers should be stored at 40° F to 95° F (4.4° C to 35.0° C), be kept tightly sealed and out of direct sunlight.

*Note: Florostone™ and FloroPoxy should not be applied when floor temperature is above 90° F (32.0°) or below 55° F (12.8° C), or when within 5° F (2.5° C) of the dew point.*

**Floor 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 Guide” for more information on preparation and MVT before proceeding.

**Patching:** Prior to applying the FloroStone™ material, inspect the floor for imperfections and cracks. Patch these areas with FloroGel, FloroBuild or similar Florock product. Divots less than 1/4-inch deep do not need to be patched, as the FloroStone™ will cover these areas.

**Joints:** Moving joints should be filled with Florock Elastomer 6500 or may be honored post-installation. Non-moving joints can be filled with FloroGel or similar Florock product.

**Primer Application:** Once surface preparation is complete, apply FloroPoxy 4700 pigmented primer. This not only helps ensure good system adhesion, but also provides a homogeneous-colored base over which FloroStone™ will be applied. In a clean, dry container, blend 3 parts by volume of Resin Part A with 1 part Activator Part B and pigment with the Florock Epoxy Colorant of choice in accordance with colorant instructions. 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 flat squeegee, apply at desired thickness. Backroll with a 3/8” nap roller.

*Note: If outgassing, pinholes or fisheyes occur, re-prepare area and apply an additional coat of primer to address. Outgassing or pin holes must be remedied before proceeding with flooring installation.*

*Note: If FloroStone™ Cove is to be installed, prime the wall and broadcast a light seed into the vertical wet primer prior to cove installation. A coving strip SHOULD NOT be used, as it will show through. Instead, use tape to create the top edge of the cove. The tape can be removed after the cove has been installed. Cove installation takes place AFTER the FloroStone™ coating layer has been installed on the floor, and before the topcoat.*

### **FloroStone™ Floor Kit Mixing:**

1. Pour FloroStone™ Part B (0.5 gallon fill) into the 5 gallon container (1.5 gallon fill) of Part A. Blend thoroughly for 3 minutes using a low speed mechanical mixer (Jiffy® Mixer ES is the approved

mixing blade).

2. While continuing to blend the liquids, slowly pour in the Part C - FloroStone™ Decorative Filler. For efficient pouring, simply cut off a corner of the Part C bag with a pair of scissors. Continue mixing until all 25 lbs. of Part C filler have been emptied into the container. Then, continue mixing for an additional 2 minutes *after* all the Part C filler has been added. When completed, 25 lbs. of FloroStone™ Filler will have been mixed into 2 gallons of blended FloroStone™ liquids and the batch pail will contain approximately 3 gallons (Jiffy® Mixer ES is the approved mixing blade).

*Note: Jiffy® Mixer ES is the approved mixing blade. Do not use a larger blade, which can entrap air into the blended material, causing micro-bubbles to form on the surface of the cured system.*

*Note: Proper mixing is essential for product performance. Do not short mix, use improper ratios, or dirty or improper mixers when blending product.*

*Note: Make sure to move mixing blade throughout the container to ensure complete blending of the filler. Do not whip air into the mixture.*

### **Floor Application:**

1. Immediately pour entire contents from the container onto the floor. The bucket can be scraped to remove all material as the filler scrapes the sides during mixing to ensure no free resin are present. Retaining mixture in the bucket will shorten the pot life. After the first mix is applied, be sure to pour the next mix of material into the wet edge of the previous application.

2. Using an 18-inch wide, 3/8-inch V-notched steel rake head (Kraft® Double-Notch Rake, part number GG595, is recommended) or a 1/2-inch V-notched hand trowel held at a 33-45 degree angle, apply at a coverage rate of 60-80 SF per mixed kit (1.5 m<sup>2</sup>-1.9 m<sup>2</sup> per mixed kit).

3. Wearing spiked shoes, backroll with a clean porcupine nap roller after the material has flowed out.

*Note: After placing FloroStone™, the product may initially look as if it will not flow out. This is normal. Allow product at least 5 minutes to self-level before backrolling with a porcupine roller.*

*Note: Avoid sliding in the wet FloroStone™ surface while wearing spiked shoes, as this will create a void. To repair wet surface imperfections, gently slide a marginal trowel across the marks caused by the spikes and then backroll with the porcupine roller.*

*Note: The body coat may be applied without using spiked shoes.*

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### Cove Installation:

FloroStone™ Cove installation takes place after the FloroStone™ Floor coating layer has been installed—and before the topcoat installation. The clear topcoat will be applied to both the floor and the cove at the same time.

**Tools:** Use a coving trowel that is 2-inches taller than the cove height being installed.

**Coving Trowel Preparation:** Using duct tape, wrap the top edge of the coving trowel with a minimum of 8 layers of duct tape. This will produce a lip to hold the coving trowel off the wall roughly 40-80 mils.

Hold trowel against wall and measure how far out the radius ends from the wall. Using this measurement, drop a tape line along the floor, parallel to the wall. This will act as a stopping point for the bottom of the cove.

Tape from the top (wall) and bottom (floor) will be removed after the cove is installed. This will leave a feather-edged transition on the floor and a 40-80 mils protrusion on top. The top edge can be sanded to remove any imperfections and then caulked to leave a nicely finished edge. The bottom edge can be lightly sanded to create a nearly invisible transition from cove to floor.

### FloroStone™ Cove Material Mixing:

1. Pour FloroStone™ Cove Part B (0.5 gallon fill) into the 5 gallon container (1.5 gallon fill) of Part A. Blend thoroughly for 3 minutes using a low speed mechanical mixer (Jiffy® Mixer ES is the approved mixing blade).

2. While continuing to blend the liquids, slowly pour in the Part C - FloroStone™ Decorative Filler. For efficient pouring, simply cut off a corner of the Part C bag with a pair of scissors. Continue mixing until all 25 lbs. of Part C filler have been emptied into the container. Then, continue mixing for an additional 2 minutes *after* all the Part C filler has been added. When completed, 25 lbs. of FloroStone™ Filler will have been mixed into 2 gallons of blended FloroStone™ Cove liquid and the batch pail will contain approximately 3 gallons (Jiffy® Mixer ES is the approved mixing blade).

*Note: Jiffy® Mixer ES is the approved mixing blade. Do not use a larger blade, which can entrap air into the blended material, causing micro-bubbles to form on the surface of the cured system.*

*Note: Proper mixing is essential for product performance. Do not short mix, use improper ratios, or dirty or improper mixers when blending product.*

*Note: Make sure to move mixing blade throughout the container to ensure complete blending of the filler. Do not whip air into the mixture.*

### Cove Application:

1. Immediately start to hang the blended FloroStone™ Cove material, using a hand trowel or margin trowel to rough out the cove form. Pot Life on the mixed cove material is at least 30 minutes, and in some conditions, may be up to an hour.

2. Using the properly prepared coving trowel, strike the pre-hung coving material.

**Tip:** FloroStone™ Cove material is applied using a slightly different technique than when installing a typical “built” cove, where the installer compresses the material to create the desired shape. *The FloroStone™ Cove should be handled more like a caulk. It is to be smoothed with the coving trowel, not compressed.*

After the first strike, clean the trowel and apply solvent to the trowel. Take the solvent-lubricated trowel and smoothen the cove.

3. When complete, remove tape lines from the top and bottom of the cove.

### Recommended Topcoat and Additional Slip-

**Resistance:** After floor and cove have cured hard, sand the surface lightly until all gloss is removed and a powdery residue is evident, using 80-100 grit sandpaper or screens. Lightly sand the cove by hand to remove any imperfections. A palm sander may be used. Carefully vacuum, followed by a tack rag, to ensure all residue is removed. Then, apply a clear coat of FloroThane MC, FloroThane MC/HT, FloroSpartic or FloroWear 7100, in accordance with product technical data sheet instructions.

*Note: Take special care to avoid sanding too deeply into the cured system, as this can result in lightening the color of some areas. This is especially important on darker colored floors.*

*Note: Adding glass beads to topcoat will greatly enhance the overall appearance.*

*Note: DO NOT wear spiked shoes during installation of topcoat. They will mar the surface. If spiked shoes must be worn at this point, wear rubber spiked shoes (similar to golf shoes).*

**Instructions for Use Over Existing Coatings:**

Examine the existing coating to ensure it is well-bonded to the concrete. Any loose coating must be completely removed. Edges 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. After the 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 with xylene to ensure good adhesion of the new system.

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

**Repairing Minor FloroStone™ Surface Damage:**

1. Identify the damaged spot. Tape off the surrounding area to protect it.
2. Remove damaged material using a router with a straight carbide-tipped bit.
3. Vacuum the routed area, followed by a clean tack rag.
4. Using FloroStone™ Decorative Powder - Part C, dust the perimeter of the area to be repaired.
5. Mix FloroStone™ Part A and Part B at a 3:1 mix ratio for 3 minutes. For every 1 ounce of blended FloroStone™ Parts A+B liquid, add 44.3 grams of FloroStone™ Part C Powder. Mix for an additional 2 minutes.
6. Pour the blended, 3-component FloroStone™ mixture into the area to be repaired.

Liquid Physical Properties			
Property	M0-116 Part A	U0-161 Part B	Decorative Powder
Flash Point	>200 F	>200 F	>200 F
Weight per Gallon	9.52 lbs	8.25 lbs	N/A
N.V.W.	100%	100%	N/A
N.V.V.	100%	100%	N/A
Blended Components			
Mix Ratio of Liquids By Volume	3:1 (Part A: Part B)		
Blended Solids	100%		
VOC, Blended	0 gpl		
Blended Viscosity	1,000 cps		
Pot Life (resin only)	24 minutes		
Pot Life (with decorative filler)	24 minutes		
Cured Hard*, Foot Traffic, Neat Resin	12 hours		

*\*Cure times vary with conditions. Allow a minimum of 12 hours and a maximum of 24 hours before next step.*

7. Strike the area using a 1/8-inch V-notched trowel, held at a 10-20 degree angle, to remove excess material. Wipe the surrounding area clean, as required.
8. Allow to cure overnight and lightly sand the next day to level area if needed.
9. Apply topcoat to the repaired area and carefully feather edges into the surrounding surface.

*Note: Please consult your Florock Representative or Technical Service for further details.*

*Note: There is no limit on how many times an area can be repaired.*

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**Please read Safety Data Sheets before using products.**

**DISCLAIMER:**

All statements and recommendations above are based on experience we believe to be reliable. The use or 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.

<b>Florostone™ Chemical Resistance Prior to Urethane Topcoat Application</b>	
<b>Reagent</b>	<b>Spot Test Results</b>
Sulfuric Acid 10%	1
Sulfuric Acid 25%	1
Citric Acid 10%	1
Lactic Acid 10%	1
Acetone Acid 10%	1
Sugar Solution 10%	1
Isopropyl Alcohol	5
Acetone	5
Ammonia	1
Brake Fluid	4
Sodium Chloride 20%	1
MEK	5
JP-4 Jet Fuel	2
1-1-1 Trichloroethane	1
Methylene Chloride	5
Mineral Spirits	1
MIBK	5
Skydrol®	5
Tincture of Iodine	1, S
Water	1

Rating Scale: Spot Test, ASTM D1308;  
Pencil Hardness Test, ASTM D3363  
 1 - Excellent. No change in pencil hardness  
 2 - Very Good. 1 Unit change in pencil hardness  
 3 - Good. 2 Units change in pencil hardness  
 4 - Fair. 3 Units change in pencil hardness  
 5 - Poor. 4 or more Units change in pencil hardness  
 S - Stains