

**DESCRIPTION:**

3100 FS is a four-component, slurry type, monolithic epoxy flooring system, trowel applied at a minimum 1/8 inch. 3100 FS is U.S.D.A. acceptable for food processing plants and has excellent resistance to most acids, caustics, detergents and other corrosive materials. The skid resistant texture of the 3100 FS, is excellent in wet areas where slippery conditions can create a safety hazard.

**ADVANTAGES:**

- Prepackaged - Easy To Use
- Excellent Adhesion
- Slip Resistant Surface
- Short Down Time – Quick Cure
- Easy To Clean – U.S.D.A. Acceptable
- Chemical Resistant
- Environmentally Safe.

**USES:**

- Walkways
- Wet Process Areas
- Chemical Spill Containment Areas
- Hazardous Areas Around Machinery
- Mezzanines
- Stairs and Landings

**SUPPLEMENTAL PRODUCTS:**

- 3300 Flooring System  
Pitching and Filler
- 3000 VS  
Vertical Surfaces and Coves
- 1000 CS - Pigmented Industrial Topcoat
- 3000 Flex - Expansion Joint Filler
- Fibercoat Coating System  
Reinforced Wall Coating

**PACKAGING AND COVERAGE:**

3100FS is packaged in "Kits" consisting of 4 batches.

**4 Batches – 3100FS – Mortar** – cover approximately 100 square feet at 1/8" (125mils), consisting of the following -

- 4 containers – Part A (resin)
- 4 containers – Part B (hardener)
- 4 bags – Part C (chemical resistant aggregate).
- 1 bag – 40# – Part D (broadcast aggregate).

Topcoat Recommended – PF&L 1000CS at a coverage rate of 80 square feet per gallon.

**PROPERTIES:**

<b>Compressive Strength</b>	11,500 psi ASTM C-579 (resin)
<b>Tensile Strength</b>	1,750 psi ASTM D-638 (resin)
<b>Flexural Strength</b>	3,500 psi ASTM C-580 (resin)
<b>Bond Strength</b>	Greater than 350 psi ASTM C-321 100% concrete failure
<b>Coefficient of Thermal Expansion</b>	1.4 x 10 <sup>-5</sup> in./in./°F
<b>Impact Strength</b>	100 in./lbs.
<b>Indentation</b>	No indentation MIL-D-3134F
<b>Abrasion Resistance</b>	41 milligrams ASTM D-1044
<b>Flammability</b>	Does not support combustion
<b>Water Absorption</b>	0.056% ASTM C-413
<b>Working Time at</b>	20-30 minutes 75°F (24°C) ASTM C-308
<b>Shelf Life</b>	1 Year
<b>Colors</b>	Red, Gray, Black
<b>Solids by Content</b>	By Weight 100% By Volume 100%

**SURFACE PREPARATION:**

3100 FS may be installed only on clean, sound substrates.

Concrete:

New concrete must be cured a minimum of 28 days. All coatings, oils, grease and unsound concrete must be removed. Concrete surfaces must then be acid etched, scarified or shot blasted to remove surface laitance. A good bonding tooth, the texture of 60 grit sandpaper, is desired for maximum adhesion, with removal of all surface glaze.

Metal Surfaces:

Blast the surface to near white SSPC-SP10-70 or NACE No. 2 using a Venturi blast nozzle with 100 psi air. To produce the proper 4 mil anchor profile, the blast media should be properly graded, clean, sharp, and angular, similar to Humble Abrasive Flint #7 (6-30) mesh, or Steel Grit (HG25).

**MIXING:**

Prior to starting, materials should be stored at 70°F (21°C) for at least 48 hours.

**Mortar** - Empty entire contents of Part B into Part A and mix thoroughly for 2 minutes. Slowly add the entire contents of Part C and mix for another 1-1/2 to 2 minutes.

As with all two-component systems, apply immediately after mixing, as the exotherm will increase over time.

**APPLICATION:**

Substrate temperature should be 65°-85°F (18°-29°C) during installation and for 96 hours thereafter for complete cure. Do not apply 3100 FS when floor temperature is below 60°F (16°C). Pour the entire batch onto the floor as soon as blended, to avoid settling of aggregate, and spread with a clean steel trowel positioned at a 15 degree angle. After each batch, wait 5-10 minutes to allow material to flow. Evenly broadcast Part D (aggregate) over newly laid surface, allowing no shiny spots to show through. Allow for a wet edge of approximately 2 feet for the next batch to connect to. Unless otherwise specified, this floor is designed to follow the existing contour of floor.

Optional topcoat can be applied within 2-4 hours (at 75°F (24°C)).

**CURE TIME:**

3100 FS will harden to foot traffic in 6-8 hours at 75°F (24°C). Maximum chemical resistance will occur after 96 hours of cure time at 75°F (24°C).

**CLEANUP:**

Cured or hardened 3100 FS will bond to practically all surfaces and is extremely difficult to remove. Clean all tools and mixer immediately after use with acetone or other solvent based cleaners.

**SAFETY:**

Avoid skin contact. If eye contact occurs, flush with water and consult a physician immediately. Keep work areas well ventilated. Never seal a container of mixed Part A and B as the continuing exothermic reaction may cause container to explode. 3100 FS Material Safety Data Sheets are available upon request.

**NOTE:**

Refer to 3100 FS Instruction for use.

**IMPORTANT NOTICE TO PURCHASER:**

**The following is made in lieu of all warranties, expressed or implied. Seller and manufacturer's only obligation shall be to replace such quantities of the product proved to be defective. Neither seller nor manufacturer shall be liable for any injury, loss or damage, direct or consequential arising out of the use of or inability to use the product. Before using, user shall determine the suitability of the product for his intended use, and user assumes all risks and liability whatsoever in connection therewith. The foregoing may not be altered unless written authorization is received from PROTECTIVE FLOORINGS AND LININGS, A DIVISION OF A. W. CHESTERTON.**