

Product Data Sheet

DESCRIPTION:

4100 FS is a three-component, urethane flooring system. 4100 FS is a flowable slurry system installed at 1/8 to 1/4 inch (125-250 mils). 4100 FS is U.S.D.A. acceptable for food processing plants, and has excellent resistance to thermal shock, many acids, caustics, detergents, and other corrosive materials.

ADVANTAGES:

- Thermal Shock Resistant
- Prepackaged, Applicator Friendly
- Excellent Adhesion
- Short Down Time – Quick Cure
- Easy to clean, U.S.D.A. acceptable.
- Chemical Resistant
- Environmentally safe.

USES:

- Food Production Plants
- Pharmaceutical Facilities
- Bakeries
- Coolers and Freezers
- Forklift Aisle-ways
- Chemical Spill Containment Areas
- Industrial Production Facilities

SUPPLEMENTAL PRODUCTS:

- ICO LV FC Primer – Recommended Primer
- 3000 VS Vertical Surfaces and Coves
- UltraPrime
- Fibercoat - Reinforced Wall Coating
- PM550 Urethane Coating

PROPERTIES:

Compressive Strength (ASTM C-579) <resin>:	8,100 psi	Bond Strength (ASTM C-321):	350 psi; 100% concrete failure
Tensile Strength (ASTM D-638) <resin>:	950 psi	Working Time at 75°F (24°C) (ASTM C-308):	20-30 minutes

Shelf Life:	6 months (store at minimum temperatures of 50°F) <4100 FS Part A and B may crystallize below 50°F>	Solids by Content:	Weight: 100% Volume: 100%
Flexural Strength (ASTM C-580) <resin>:	1,900 psi	Colors:	Gray, Red, Black
Coefficient of Thermal Expansion:	1.1×10^{-5} in./in./°F	Indentation (MIL-D-3134F):	No Indentation
Impact Strength:	120 in./lbs.	Flammability:	Does not support combustion
Modulus of Elasticity (ASTM C-580):	1.7×10^5 psi		

PACKAGING AND COVERAGE:

4100 FS Slurry– packaged in batches,
- supplied by the UNIT - consisting of the following -
1 batch unit – covers approximately 30 square feet at 3/16 inch (187 mils), consisting of the following -

- 1 container - Part A (resin)
- 1 container - Part B (hardener)
- 1 bag - Part C (chemical resistant aggregate)

20 batch unit – covers approximately 600 square feet at 3/16 inch (187 mils), consisting of the following -

- 20 containers - Part A (resin)
- 20 containers - Part B (hardener)
- 20 bags - Part C (chemical resistant aggregate)

SURFACE PREPARATION:

4100 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 mechanically abraded with a scarifier, shot blaster, or like equipment, to remove surface laitance. A good bonding tooth, the texture of 60 grit sandpaper, is desired for proper adhesion to the substrate.

MIXING:

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

Primer: Mix ICO Primer LV FC Part A and Part B for 2 minutes with a low speed jiffy mixer, or equivalent. Try not to whip in air when mixing.

Slurry: Empty the entire contents of Part A and Part B into a pail and mix thoroughly for two minutes. Slowly add the entire contents of Part C (aggregate) and continue mixing the three components, (Part A, B, and C) for an additional two minutes. If mortar is allowed to sit in the mixer the working time of the system will be reduced.

APPLICATION:

DO NOT APPLY IF RELATIVE HUMIDITY IS ABOVE 85%. Substrate temperature should be 65°-80°F (18°-26°C) during installation, and for 28 days thereafter for complete cure.

Primer:

Pour entire contents of mix onto floor in a continuous ribbon. Slowly move and level the mixture with a flat squeegee then back roll with a medium nap phenolic core roller to remove any squeegee marks. Apply at 1000 square feet per 4 gallon kit. Make sure to wet entire surface but do not allow to puddle. Coverage will be approximately 250 sq.ft. per mixed gallon at 6 mils wet (6 mils DFT). Allow to cure 5 hours at 72°F prior to applying 4100FS.

Slurry: Do not apply 4100FS when substrate temperature is below 60°F (16°C). Immediately after mixing pour the entire batch onto the floor and spread evenly with a screed rake. Using a porcupine or spike roller, backroll to smooth any irregularities. If slurry is allowed to sit in the mixer, the working time of the system will be reduced. Unless otherwise specified, the 4100 flooring system is designed to follow the existing contour of the floor.

CURE TIME:

4100 FS will harden to foot traffic in 8-12 hours at 75°F (24°C). Maximum chemical resistance and physical properties will be attained after 28 days at 75°F (24°C).

CLEANUP:

Cured or hardened 4100 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. 4100 FS Material Safety Data Sheets are available upon request.

Warning:

4100 FS may crystallize when exposed to temperatures below 50° Fahrenheit for extended periods of time. 4100 FS should not be exposed to freezing temperatures. The prepacked components are NOT freeze / thaw stable.

Limited Warranty

Milamar Coatings products are manufactured to be free of defects in material and workmanship in meeting the properties specified on its individual Product Data Sheets. Users and installers of Milamar Coatings products are solely responsible for determining the suitability of the products for specific product applications. Milamar Coatings makes no Warranty or Guarantee, express or implied, including warranties of fitness, design compatibility or merchantability, for any particular use and shall have no responsibility or liability, including direct, indirect or consequential damages, due to injury, delay or third party claims for installation or repair. Likewise, Milamar Coatings assumes no liability of any nature for products that are adjusted in the field or that do not utilize all specified Milamar Coatings components. Should any Milamar Coatings product be proved to be defective within one year from the date of shipment, Milamar Coatings will, at its sole discretion, replace the material; issue a credit to the customer's account; or provide a cash refund for the initial, paid purchase price of the material. Potential claims regarding product quality must be received in writing by Milamar Coatings within 30 days of the discovery of such potential defect. This Warranty is exclusive of all other warranties, expressed or implied, and may only be adjusted in writing, signed by an officer of Milamar Coatings, L.L.C.

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