

## Product Data Sheet

### DESCRIPTION:

4420 FS is a four-component, urethane flooring system. 4420 FS is a screed rake applied slurry system, with broadcast aggregate, installed at ¼ inch (250 mils). 4420 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.
- 16 Mesh Aggregate For Aggressive Slip Resistance

### USES:

- Food Production Plants
- Oven And Fryer Lines
- Coolers and Freezers
- Forklift Aisle-ways
- Chemical Spill Containment Areas
- Industrial Production Facilities

### SUPPLEMENTAL PRODUCTS:

- 3000 VS Vertical Surfaces and Coves
- 3300 CR Veil Coat Chemical Resistant Sealer
- 1000 CS Pigmented Topcoats
- 3000 FLEX
- Fibercoat - Reinforced Wall Coating

### PROPERTIES:

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

<b>Shelf Life:</b>	6 months (store at minimum temperatures of 50°F) <4420 Part A and B may crystallize below 50°F>	<b>Solids by Content:</b>	Weight: 100% Volume: 100%
<b>Flexural Strength (ASTM C-580)</b> <resin>:	1,900 psi	<b>Colors:</b>	Gray, Red, Black
<b>Coefficient of Thermal Expansion:</b>	1.1 x 10 <sup>-5</sup> in./in./°F	<b>Indentation (MIL-D-3134F):</b>	No Indentation
<b>Impact Strength:</b>	120 in./lbs.	<b>Flammability:</b>	Does not support combustion
<b>Modulus of Elasticity (ASTM C-580):</b>	1.7 x 10 <sup>5</sup> psi		

### PACKAGING AND COVERAGE:

- 4420 FS Mortar** – packaged in batches, - supplied by the UNIT - consisting of the following -
- 4 batch unit** – covers approximately 115 square feet at ¼ inch (250 mils).
- 4 containers - Part A (resin)
  - 4 containers - Part B (hardener)
  - 4 bags - Part C (chemical resistant aggregate)
  - 100# - Part D (broadcast aggregate)
- 20 batch unit** – covers approximately 575 square feet at ¼ inch (250 mils).
- 20 containers - Part A (resin)
  - 20 containers - Part B (hardener)
  - 20 bags - Part C (chemical resistant aggregate)
  - 500# - Part D (broadcast aggregate)

**SURFACE PREPARATION:**

4420 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.

Mortar: Empty the entire contents of Part B and Part A into a pail and mix thoroughly for two minutes. Slowly add the entire contents of Part C (aggregate) and the three components, (Part A, B, and C) for an additional two minutes. Pour the entire batch onto the floor immediately after mixing spread appropriately. If mortar is allowed to sit in the mixer the working time of the system

**APPLICATION:**

DO NOT APPLY 4420FS IF THE 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. Do not apply 4420 FS when substrate temperature is below 60°F (16°C). Pour mortar mixture in a ribbon on the floor, spread evenly with a screed rake, and back-roll with a looped roller to smooth any irregularities in the film. Leaving a wet edge for the next batch, broadcast the Part D aggregate into the freshly troweled surface. Repeat process until entire floor is covered. After 4420 has hardened overnight (approximately 12-18 hours), sweep off excess Part D from broadcast coat. Unless otherwise specified, the 4420 flooring system is designed to follow the existing contour of the floor.

**CURE TIME:**

4420 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 4420 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. 4420 FS Material Safety Data Sheets are available upon request.

**Warning:**

***4420 FS may crystallize when exposed to temperatures below 50° Fahrenheit for extended periods of time. 4420 FS should not be exposed to freezing temperatures. The prepackaged mortar is 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.

**Milamar Coatings, L.L.C.**

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