



## **PRODUCT DATA SHEET: CERAM-FLOOR**

### **SELF-LEVELING CERAMIC SLURRY**

**Description:** CeRam-Floor - *Self Leveling Ceramic Slurry* is a high build (40-60 mils / 1000-1500 microns), protective resurfacing system which utilizes 100% solids binder resins and a selected ceramic aggregate package to produce a self-leveling material that is easily applied with a v-notched trowel or squeegee.

CeRam-Floor - *Self Leveling Ceramic Slurry* has zero VOCs. It provides a durable, wear-resistant finish that is seamless and easy to clean. Stain resistant finish.

**Components:** Part A - Resin System Base  
Part B - Resin System Curing Agent  
Part C - Ceramic Aggregate

**Suggested Uses:** Packaging and Storage Areas                      Clean Rooms                      Forklift Areas  
Locker and Restrooms    Animal Care    Loading Docks

## **TECHNICAL DATA**

**Number of Coats:** One (1)

**Volume Solids:** 100%

**Adhesion to Concrete:** 1050 psi (7.24 MPa) - failure due to break in concrete (ASTM 4541)

**Abrasion Resistance:** 0.2 gm. loss using a CS-17 wheel, 1000 gm 1000 cycles (ASTM D4060)

**Compressive Strength:** 5144 psi (35.47 MPa) (ASTM C579)

**Tensile Strength:** 1637 psi (11.29 MPa) (ASTM C307)

**Flexural Strength:** 3267 psi (22.53 MPa) (ASTM C580)

**Hardness:** 80 (ASTM D2240 - Shore D)

**Flammability:** Self extinguishing (ASTM D6350)

**Resistance to Elevated Temperatures:** No slip or flow (MIL-L-D-3134J)

**Minimum/Maximum Dry Thickness:** CeRam-Floor - *Self Leveling Ceramic Slurry* may be routinely applied at a minimum thickness of 40 mils (1000 microns) to a maximum thickness of 60 mils (1500 microns). Increased thickness may be approved, depending on application. Contact Freecom for recommendation. Unsealed floors must be sealed with CeRam-Floor Primer applied at 1-2 mils (25-50 microns). CeRam-Floor - *Self Leveling Ceramic Slurry* may be topcoated with CeRam-Kote epoxies.

**Coverage:** Theoretical coverage of CeRam-Floor - *Self Leveling Ceramic Slurry* is 40 sq. ft. (3.72 sq. meters) per mixed gallon at 40 mils (1000 microns).

**Cure Time:** CeRam-Floor - *Self Leveling Ceramic Slurry* should cure in 10 to 12 hours depending on ambient temperature, mixing and thickness of application. Contact Freecom for more information.

**Surface Preparation:** **Concrete:** Concrete surfaces shall be abrasive blasted to remove all surface contaminants and laitance. The prepared concrete must have a surface profile equal to 40-60 grit sandpaper.  
After initial preparation has occurred, inspect the concrete for bug holes, voids, fins and other imperfections. Protrusions shall be ground smooth while voids shall be filled with a system-compatible filler. For recommendations, contact Freecom's Technical Support.

**Concrete Surface Preparation - (cont.):** **Unsealed Floors:** Unsealed floors must be first primed with CeRam-Floor primer. Prepare the surface with a scarifier or by grinding. The substrate should be free of oil, grease and salt/chloride contaminants. Cleanliness is the most important step to produce a surface that will perform or last.

Add 2.5 parts Primer Part A (resin) to 1 part Primer Part B (curing agent) by volume. Mix with low speed drill and paddle mixer for three minutes and until uniform, exercising caution not to whip too much air into the material.

Pour mixed primer onto concrete. Use a flat squeegee to distribute primer with enough material to wet the concrete. DFT will vary depending on surface preparation. Allow eighteen (18) hours to cure prior to applying the CeRam-Floor - *Self Leveling Ceramic Slurry*.

**Mixing and Application:**

Add 2.5 parts Part A (resin base) to 1 part Part B (curing agent) by volume. Mix with low speed drill and paddle mixer for three minutes and until uniform, exercising caution not to whip too much air into the material. Slowly add up to four (4) lbs of Part C (ceramic aggregate package) per one gallon of mixed epoxy. Mix with low speed drill and paddle mixer for three minutes and until uniform where no lumps remain.

Immediately pour the mixed material onto the substrate and pull out using a v-notched trowel or 1/4" rubber squeegee.

Allow material to self level 10-15 minutes. The surface should then be backrolled with a looped roller to help smooth. Use a spiny roller to aid in the release of air.

Allow to cure for 24 hours. CeRam-Floor - *Self Leveling Ceramic Slurry* may be topcoated with CeRam-Kote epoxies.

**Mixing Ratio:**

Two and one-half (2.5) parts Part A (resin base) to one (1) part Part B (curing agent) by volume. Four (4) lbs. of Part C (ceramic aggregate package) per one gallon of mixed Parts A and B.

**Climate:**

Throughout the application process, substrate temperature should be 50°F - 90°F (10°C - 32.2°C ). Substrate must be at least 5°F (3°C) above the dew point. Applications on concrete substrate should occur while temperature is falling to lessen offgassing. The material should not be applied in direct sunlight, if possible.

**Repairs:**

Call Freecom Technical Support for repair recommendations.

**Shelf Life:**

Store materials in a temperature controlled environment 50°F - 90°F (10°C - 32.2°C ) and out of direct sunlight. Keep resins, hardeners and solvents separated from each other and away from sources of ignition. One year shelf life is expected for products stored between 50°F - 90°F (10°C - 32.2°C ).

**Cleanup:**

Clean up mixing and application equipment immediately after use. Use CeRam-Kote Thinner 3. Observe all fire and health precautions when handling or storing solvents.

**Safety:**

MSDS (Material Safety Data Sheets) must be read and understood by personnel responsible for supervision and installation of CeRam-Floor materials. In particular, personal protection data should be consulted to insure safe handling. All applicable federal, state, local and particular plant safety guidelines must be followed during the handling and installation and cure of these materials.

Safe and proper disposal of excess materials shall be done in accordance with applicable federal, state and local codes.

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