



PRODUCT DATA SHEET: CERAM-FLOOR TC-M

Description: CeRam-Floor TC-M is a high-solids, thin-film, ceramic epoxy coating system recommended as a topcoat over CeRam-Floor Primer or CeRam-Floor - *Self Leveling Ceramic Slurry*. CeRam-Floor TC-M offers an amine-blush free cured film. It also offers excellent water spotting resistance. The cured film is a shiny, slick coating that has excellent flow properties. CeRam-Floor TC-M is available in a variety of colors.

Suggested Uses: Topcoat for CeRam-Floor System

TECHNICAL DATA

Volume Solids (catalyzed):	CeRam-Floor TC-M	85% +/- 2%
VOC:	1.63 lb/gal (196 g/liter) less water	
Number of Coats:	One Coat, 8-10 mils (200-250 microns)	
Dry Film Thickness:	CeRam-Floor TC-M should be applied at a minimum of 8 mils (200 microns) with a maximum thickness of 20 mils (500 microns).	
Cure Time:	CeRam-Floor TC-M air dries to a touch-dry finish within four (4) hours at 72°F (22.2°C) and dries to a 70% cure in seventeen (17) hours. Cure times lengthen at lower temperatures and shorten at higher temperatures. Coating should be fully cured before placing into service.	
Surface Preparation:	Bonding strength depends on proper preparation of the surface to be protected for long-term performance of the product. The substrate should be free of oil, grease and salt/chloride contamination. Cleanliness is the most important step to produce a coated surface that will perform and last. If surface is contaminated or more than 72 hours old, clean the surface and sand with appropriate grit sandpaper (recommended 100 grit or rougher).	
Mixing Ratio:	Ten (10) parts of Part A to one (1) part of Part B by weight Five (5) parts of Part A to one (1) part of Part B by volume	
Mixing:	CeRam-Floor TC-M contains a high loading of ceramic particles which must be placed into full suspension with the epoxy resin prior to application. CeRam-Floor TC-M is packaged in two cans, Part A (resin and ceramics) and Part B (curing agent). Shake Part A (coating) with a Cyclone air-powered shaker or mix Part A with a paddle mixer until all ceramic particles are suspended in the resin. Time required to place ceramics into suspension varies according to temperature and length of material storage time. At 72°F (22.2°C), generally a four (4) to six (6) minute shake will place the ceramic particles into suspension. Regardless of time needed, shake all ceramic material into suspension prior to proceeding. Failure to properly mix will keep CeRam-Floor TC-M from performing or curing properly. Check the can to assure all solids are in suspension prior to proceeding to the mixing step. Combine Part A (coating) and Part B (curing agent) and <i>stir</i> until both parts are thoroughly mixed. Shaking can cause excessive heat to build up, thus causing curing problems. Stirring time is temperature dependent, but it should take only three (3) to four (4) minutes to thoroughly mix the components. No induction time is needed before application.	
Pot Life & Shelf Life:	Pot life for CeRam-Floor TC-M at 72°F (22.2°C) is one (1) hour. Colder temperatures will increase the pot life and warmer temperatures will decrease the pot life. Keep cans out of direct sunlight to prevent heat buildup. CeRam-Floor TC-M has an indefinite shelf life. Preferred storage/usage is a dry enclosed area under 85°F (29°C) /used within two (2) years. However, if stored more than two years above 85°F (29°C), call Freecom Technical Support prior to use.	

- Thinning:** Adjust viscosity with small amounts of CeRam-Kote Thinner 1 or CeRam-Kote Thinner 3. Use caution when adjusting the viscosity.
- Application:** Spray apply for best results using conventional, airless, HVLP or cup gun. The air source must be dry. The compressed air source should be outfitted with air dryers as needed to supply moisture-free air. Use pressure feed equipment such as high volume, low pressure equipment or conventional spray equipment. Airless: use reversible carbide tip with orifice size of 0.019-0.021 inches. If applying with roller, use short nap, such as ¼" (.244 mm).
- After thoroughly mixing CeRam-Floor TC-M, strain it with a standard paint strainer and pour CeRam-Floor TC-M into the spray equipment.
- Apply one coat of eight (8) to ten (10) mils (200-125 microns) WFT for a total DFT of six (6) to eight (8) mils (150-200 microns). Cure time is temperature dependent.
- Apply additional mils without incurring runs or sags if the finished product requires thicker coverage. Whenever possible, apply second coat in a cross-coat method.**
- Roller Applied:** Pour out in a ribbon fashion across area. Take a smooth roller and roll the surface until desired mils have been achieved.
- Climate:** Use CeRam-Floor TC-M only if the substrate temperature and ambient air temperature is above 40°F (4.4°C). No coating should be permitted when substrate is wet from rain or dew.
- Repairs:** If application of the coating is less than seventy-two (72) hours old and has not been exposed to contamination, repair by wiping with CeRam-Kote Thinner 1 or CeRam-Kote Thinner 3 and then re-apply CeRam-Floor TC-M. If contaminated or more than 72 hours old, first sand with appropriate grit sandpaper, then repeat repair process.
- Cleanup:** Purge and clean spray equipment within thirty (30) minutes of the final spray. Flush equipment with CeRam-Kote Thinner 1 or CeRam-Kote Thinner 3 until solvent sprays clear. Disassemble and clean equipment to manufacturer's recommendations. Material left in spray equipment will solidify and damage equipment. Use precautionary measure applicable to any catalyzed material.
- Safety:** See individual product label for safety and health data. A Material Safety Data Sheet is available upon request.

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