

Mortartec Ceramico



PRODUCT PROFILE

GENERIC DESCRIPTION

Epoxy Modified Mortar

COMMON USAGE

Epoxytec Mortartec Ceramico is a highly advanced, formulated epoxy blend incorporating cutting-edge epoxide technology with proprietary engineered curing, combined with a specific balance of Portland cement, high density graded silica aggregate, and synthetic fibers to produce one of the most coveted mortars in the industrial market today. Once cured, it results in a smooth mortar application with the one of the hardest mortar surfaces in the industry. Designed to take early topcoats of epoxy coatings without the need for further preparation. Mortartec Ceramico is industrial-grade and exhibits excellent performance properties with incredible adhesive properties, enhanced barrier sealing capabilities assisting with minimizing outgassing.

COLORS

Gray

COATING SYSTEM

PRIMERS

Self-priming

TOPCOATS

Series 451, 454, 456, 457, Uroflex, Uroflex 61.

SURFACE PREPARATION

CONCRETE

Allow new cast-in-place concrete to cure a minimum of 28 days at 75°F (24°C). Verify concrete dryness in accordance with ASTM F 1869 "Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride" (moisture vapor transmission should not exceed three pounds per 1,000 square feet in a 24 hour period), F 2170 "Standard Test Method for Determining Relative Humidity in Concrete using in situ Probes" (relative humidity should not exceed 80%), or D 4263 "Standard Test

Method for Indicating Moisture in Concrete by the Plastic Sheet Method" (no moisture present). Prepare concrete surfaces in accordance with NACE No. 6/SSPC-SP13 Joint Surface Preparation Standards and ICRI Technical Guidelines. Abrasive blast, shot-blast, water jet or mechanically abrade concrete surfaces to remove laitance, curing compounds, hardeners, sealers and other contaminants and to provide a minimum ICRI-CSP 5 surface profile.

CMU

Allow mortar to cure for 28 days. Level protrusions and mortar spatter.

PAINTED SURFACES

Not recommended.

ALL SURFACES

Must be clean, dry and free of oil, grease and other contaminants.

TECHNICAL DATA

VOLUME SOLIDS

100%

RECOMMENDED DFT

Parge Coat: 1/16" to 1/4" (62.5 to 250 mils) per lift; 1" (1000 mils) maximum thickness

Feather-Edge Capable: 1/32" (31.25 mils)

CURING TIME

Temperature	To Recoat	To Touch	Full Cure
77°F (24°C)	3 hours	3-4 hours	36 hours

VOLATILE ORGANIC COMPOUNDS (VOCs)

0.00 lbs/gallon (0 grams/litre)

THEORETICAL COVERAGE

1,604 mil sq ft/gal (39.3 m²/L at 25 microns). See APPLICATION for coverage rates.



TECHNICAL DATA (cont.)**NUMBER OF COMPONENTS**

Three: Part A (epoxy), Part B (amine) and Part C (cement blend).

PACKAGING

	Part A	Part B	Part C	Yield (mixed)
UniPack †	1 gallon jug	16 oz jar	40 lb bag	2.73 gallons (10.3 L)

† All components are packaged in a 5 gallon pail.

STORAGE TEMPERATURE

Minimum 40°F (4°C) Maximum 110°F (43°C)
For optimum handling and application characteristics, all material components should be stored or conditioned between 70°F to 80°F (21°C to 27°C) 48 hours prior to use. Protect Part A and Part B from freezing; discard if frozen. Protect Part C from moisture; store in dry environment off ground.

TEMPERATURE RESISTANCE

(Dry) Continuous 170°F (77°C) Intermittent 200°F (93°C)

SHELF LIFE

12 months at recommended storage temperature.

FLASH POINT - SETA

>230°F (110°C)

HEALTH AND SAFETY

This product contains chemical ingredients which are considered hazardous. Read container label warning and Safety Data Sheet for important health and safety information prior to the use of this product. **Keep out of the reach of children.**

APPLICATION**COVERAGE RATES**

Thickness	Coverage/Kit (0.39 ft ³) (theoretical)
1/16" (62.5 mils)	70.1 sq ft (6.51 m ²)
1/8" (125 mils)	35.1 sq ft (3.26 m ²)
1/4" (250 mils)	17.5 sq ft (1.6 m ²)
1/2" (500 mils)	8.75 sq ft (0.81 m ²)
3/4" (750 mils)	5.9 sq ft (0.55 m ²)
1" (1000 mils)	4.4 sq ft (0.41 m ²)

MIXING

Pour liquid Part B into a new empty bucket. Any remaining Part B shall be removed by adding 3 to 5 oz. (88.7 to 147.9 ml) of liquid Part A, re-sealing lid and shaking quart can for 5 to 10 seconds; pour contents into bucket. Add remaining liquid Part A into bucket and blend for 30 seconds. Under agitation, slowly sift Part C powder into the mixed liquids taking care not to deposit entire contents of Part C at once. Mix for 2 minutes or until the cement-sand is thoroughly wetted and a smooth consistency is achieved. **Important: Do not add additional Part C.**

THINNING

If Mortartec Ceramico begins to thicken in pail during use, drill mix for an additional 20 to 30 seconds to drop the viscosity. Do not add additional water.

Hand Application: Do not add water.

Low-Pressure Spray Application: To transfer the material, may thin up to 6 oz. (177.4 ml) per kit. **Note:** Use only potable water.

APPLICATION

When using Mortartec Ceramico, surface should be "pre-wet" or dampened with potable water to a Saturated Surface Dry (SDD) condition; the concrete is darkened by water but there is no pooling on the surface. Do not oversaturate the surface.

APPLICATION (cont.)

APPLICATION EQUIPMENT

Mortar Hawk, steel, stiff concrete finishing trowels, broad knives and rubber floats are recommended.

APPLICATION

For troweling inside and outside corners, the use of a radius or margin trowel is recommended. Material can be transferred to the surface by utilizing hydraulic spray equipment (i.e. WIWA 410 9:1 or 600 12:1 pump, Graco M680 Mortar Pump 10:1, Graco ToughTek Piston Pump) followed by troweling to seal the material. No special ACI 308 curing requirements - ambient cure only. For a smoother finished appearance, trowel licks may be reduced by using a 1/4" (6.35 mm) nap roller cover lightly dampened with water over the sealed Ceramico material. **Note:** If white liquid is brought to the surface during this process, Ceramico is being overworked and/or oversaturated. Overworking or oversaturating the surface may have an adverse effect on the adhesion of subsequent coatings applied. Let Ceramico cure and remove surface deposit using concrete rub brick.

POT LIFE

1 hour at 77°F (24°C)

SURFACE TEMPERATURE

Minimum of 45°F (7°C), optimum 65°F to 80°F (18°C to 27°C), maximum of 90°F (32°C). Application should be performed out of direct sunlight and during times when the surface temperature of the concrete is stable or in a descending pattern. To minimize outgassing, concrete temperature should be stabilized or in a descending temperature mode.

MATERIAL TEMPERATURE

For optimum application, handling and performance, the material temperature during application should be between 70°F and 90°F (21°C and 32°C). Temperature will affect the workability. Cool temperatures increase viscosity and decrease workability. Warm temperatures will decrease viscosity and shorten pot life.

CLEANUP

Flush and clean all equipment immediately after use with warm water.