



Miracote MPC-MT

Product Technical Data Sheet

Miracote MPC-MT is a two-component, polymer-modified, multi-purpose, cementitious concrete topping that can also be applied over a variety of other surfaces including masonry, wood, tile, formica and metal. It consists of a unique rubber-like polymer liquid which is mixed with a proprietary powder blend consisting of either natural gray or white cements and regular or smooth aggregates. The regular and smooth aggregate blends are

designed for application in combination and a specific sequence to transform and restore existing concrete surfaces with a limitless choice of decorative and faux finishes that exhibit superior durability and wear resistance. Miracote MPC-MT is typically applied in three or more micro layers by hand trowel, magic trowel, broom, brush, roller, spray or with a notched squeegee and back roll.

Miracote MPC-MT can be integrally pigmented with Miracote ColorPax LIP or stained with Miracote Mirastain, or both pigmented and stained. The Miracote MPC-MT application starts with base and intermediate coats that utilize the regular aggregate powder blend to provide the backbone for the concrete topping installation. For contribution to architectural and decorative elements, the smooth aggregate powder blend is utilized as a grout and to achieve uniquely distinctive textures. Miracote MPC-MT is an extremely durable, cost-effective protective flooring material exhibiting extraordinary adhesion. It is also “breathable” allowing for the transmission of moisture vapor in the concrete without compromise to adhesion.

For maintenance and protection of Miracote MPC-MT, it should be sealed with any one of several available clear, water-based Miracote sealers and topcoats such as MiraThane WB (aliphatic polyurethane), MiraGard HDWB Sealer (acrylic), or MiraFlor WB (epoxy). Depending on specific service and exposure conditions, other clear sealers and topcoats are available to protect the Miracote MPC-MT application. Most Miracote sealers and topcoats are available in Gloss, Satin and Matte finishes.

INTENDED USES

- Concrete resurfacing and flooring projects
- Restore and refurbish flawed or discolored concrete
- Decorative floor and wall finishes
- Faux tile and masonry finishes on balconies/breezeways
- Resurfacing of ceramic tile floors
- Create faux concrete countertops over wood and formica
- Decorative floor finishes and microtoppings

ADVANTAGES

- Ideal for exterior/interior – pedestrian and vehicular traffic
- Enhances appearance/curb appeal of building assets
- Excellent adhesion to most substrates
- Extensive choice of colors, textures and patterns
- Integrally pigmented, stained or both
- Excellent canvas for all stains
- Zero VOC - meets LEED point criteria

COVERAGE RATES

Theoretical coverage per unit:

Base Coat (Regular Powder):	500 sq. ft. @ 1/32” (31.25 mils)
Intermediate Coat (Regular Powder):	500 sq. ft. @ 1/32” (31.25 mils)
Grout Coat (Smooth Powder):	580 sq. ft. @ 1/64” (15.60 mils)

(Coverage rate may be less depending on surface profile)

Approximate Yield/Unit	Regular Powder = 1.33 cu. ft.
	Smooth Powder = 1.24 to .90 cu. ft.

PACKAGING and COLORS

MPC Liquid Catalyst Component (5 gallon pail)
MPC Regular Powder, Natural Gray or White* (55 lb bag)
*To match Standard Colors requires use of White Powder
MPC Regular Powder, Gray & White Blend (55 lb bag)
MPC Special Custom Blends Available (55 lb bag)
MPC Smooth Powder, Natural Gray or White (40 lb bag)
ColorPax LIP single pigment pack unit

MIX RATIO

Base Coat and Intermediate Coat:

5 Gal Liquid Catalyst with 2 bags of Regular Powder

Grout and Texture Coat:

5 Gal Liquid Catalyst with 1.5 to 2 bags of Smooth Powder

SHELF LIFE AND STORAGE

One year from the date of manufacture as long as containers remain unopened and material is stored in a protected environment free from moisture, excessive heat, freezing temperatures, and direct sunlight.

TYPICAL PHYSICAL PROPERTIES @ 75°F (24°C)

Working Life	15-60 minutes (temperature dependent)
Recoat Time	1-4 hours or when dry
Open to Traffic	12 – 24 hours
Adhesion ASTM C-882, Type 1	515 psi
Tensile Strength ASTM C190	450 psi
Compressive Strength ASTM C109	2,440 psi
Water Vapor Permeability ASTM E96	1.96 perms/in
Water Absorption Weight gain of 4” coated concrete cube after 21 days water immersion (CMCH)	<2%
Freeze-Thaw Resistance – 50 Cycles	no scaling/peeling/flaking (Concrete cylinders immersed for 8 hrs in coated salt water solution followed by 16 hrs. of freezing).
Weathering ASTM G23	No visible degradation (Method I Procedure, 60 cycles)
Resistance to Wind Driven Rain	
Fed. Spec. TT-C-558	(8hrs)
Fed. Spec. TT-C-0035	(24hrs)
At 5” water pressure and 60 gal/hr water flow, no water or dampness noted on back of test panels.	
Flammable Properties ASTM E84	Flame spread – 4 Smoke Density – 0
Fire Resistance UL790	Complies as Class A

OVERVIEW OF INSTALLATION STEPS **

(Obtain Miracote Installation Guideline for full instructions.)

- **Surface Preparation** - All surfaces to receive Miracote MPC-MT must be clean, sound and free from any bond inhibiting substances including, but not limited to, grease, oil and any other contaminants or loosely adhered materials. For concrete substrates, a minimum surface profile of a CSP-3 or higher is required depending on overall substrate conditions and resurfacing requirements. Concrete and other porous or absorptive substrates should be **(SSD) saturated surface dry** with no standing water at the time of the application to the substrate.
- **Mixing** – Miracote MPC-MT must be mixed mechanically with a low-speed drill and “Jiffy-type” or similar Miracote-approved mixing paddle in a clean mixing container. Pre-mix Liquid Catalyst first to re-disperse any polymer solids that may have settled on the bottom of the pail.

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OVERVIEW OF INSTALLATION STEPS ****Continued**

(Obtain Miracote Installation Guideline for full instructions.)

When mixing Miracote MPC-MT always pour the liquid catalyst component into the mixing pail first and slowly add the powder component. The mix ratio of powder to liquid may be slightly modified depending on whether a slurry or trowel-grade consistency is desired. Thoroughly mix the MPC until a uniform smooth consistency is achieved that is free of lumps and pockets of dry powder.

- **Application** – Miracote MPC-MT can be applied using conventional microtopping tools and equipment. Apply base and intermediate coats with regular powder only. For grouting and finished texture coats, the use of smooth powder is required for best results.

FOR BEST RESULTS

- Always install a minimum 4' by 4' test area or job site mock up for owner approval of acceptable color, texture, finish adhesion and any other critical requirements prior to proceeding with the installation.
- Verify that the most current versions of product technical data sheets (PTDS), color charts, material safety data sheets (MSDS), and installation guidelines (IG) are being utilized for project submittals and application reference.
- Protect materials at all times from excessive heat and cold.
- The proper application of this product is the sole responsibility of the end user. Job site visits by Miracote representatives are only for the purpose of making recommendations. Supervision and quality control are the sole responsibility of the user.
- Measure surface and ambient temperatures to ensure that material is only applied when surface temperatures range between 40°F (4.5°C) and 90°F (32.2°C) during mixing, placement and time of application.
- As with concrete and other cementitious or masonry products, surface staining and tire marking may occur. Apply a clear film-forming or penetrating sealer to enhance stain resistance, cleanability and minimize tire marking.
- Natural gray and pigmented cementitious coatings may exhibit color variegation due to fluctuating evaporation rates during cure.

LIMITATIONS

- May reflect moving cracks and control joints. Implement detail as per current published installation guidelines (IG's).
- Staining, streaking and efflorescence may occur when fresh coating is exposed to excessive ponding or running water.
- Prevent any contact with aluminum which can cause an adverse reaction due to MPC's cementitious content.

LIMITED WARRANTY

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CAUTION: ALWAYS KEEP OUT OF THE REACH OF CHILDREN.



**Miracote Product Line
Crossfield Products Corp**

www.miracote.com

East Coast Office
140 Valley Road
Roselle Park, NJ 07204
P: (908) 245-2808
F: (908) 245-0659

West Coast Office
3000 E. Harcourt Street
Rancho Dominguez, CA 90221
P: (310) 631-6594
F: (310) 886-9119



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