

Miracote MPC Park Deck

Product Technical Data Sheet

MPC Park Deck Coating is a two-component, polymer modified, cementitious coating for the waterproofing and protection of concrete parking deck surfaces. It consists of a unique rubber-like polymer liquid which is mixed with a proprietary cement and aggregate blend. MPC Park Deck Coating is typically applied by notched squeegee and back-rolled, but can also be easily applied by hand trowels, magic trowels, brush or spray.

Designed for either exterior or interior use, MPC Park Deck Coating restores and protects concrete surfaces from the consequences of exposure to water intrusion, chlorides, freeze thaw damage, carbonation and the impact and abrasion of vehicular traffic. MPC Park Deck Coating is an extremely durable, cost-effective "breathable" traffic deck coating that allows for the transmission of inherent moisture vapor within concrete without blistering or delamination. This unique benefit helps reduce internal moisture content which can contribute to significant reductions in corrosion rates of steel reinforcement.

MPC Park Deck Coating is available in two aggregate blends depending on the volume and severity of traffic conditions. Miracote MPC Regular Powder is ideal for normal conditions in parking stalls, drive lanes and turn lanes. MPC Hard Powder with aluminum oxide aggregate provides enhanced abrasion resistance where more extreme duty is required, such as in turn lanes, entrance and exit ramps or other high traffic volume areas.

For detailing and treatment of existing cracks, MiraFlex Membrane A is an elastomeric rubber emulsion that is required to use for crack isolation. For enhanced cleanability and stain resistance, consult with Crossfield Products for appropriate clear acrylic, polyurethane or siloxane-based surface sealers.

ADVANTAGES

- Moisture vapor permeable reduces potential for corrosion
- Protects against ingress of water, chlorides and carbonation
- Ideal for exterior/interior, pedestrian and vehicular traffic
- Excellent adhesion to damp concrete substrates
- Lower labor and material costs
- Reduce life cycle cost extend service life of parking decks
- One product for all three coats
- No broadcasting or recovery excess sand
- Less sensitivity in adverse weather conditions
- No odor VOC and LEED compliant

COVERAGE RATES

Theoretical coverage per unit:

Two Coat Application
Three Coat Application
Approximate Yield/Unit

250 sq. ft. @ 1/16" (62.50 mils)
166 sq. ft. @ 3/32" (93.75 mils)
1.25 cu. ft. (tech dept to verify)

Actual consumption rates are dependent on many factors including, but not limited to, substrate texture and porosity, variations in applied thickness and normal allowance for waste.

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 Hard Regular Powder, Natural Gray or White (55 lb bag)

MIX RATIO

5 Gal Liquid Catalyst: 2 Bags of MPC 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.

WHERE TO USE

- Parking Deck Waterproofing & Protection
- Restoration and protection for stadiums and sports arenas
- Waterproofing protection for plaza decks
- Ideal for concrete slabs on metal pans (unvented)

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

Recoat Time1-4 hours or when dry
Open to Traffic
Adhesion ASTM C882, Type 1515 psi
Tensile Strength ASTM C190450 psi
Compressive Strength ASTM C109 2,440 psi
Water Vapor Permeability ASTM E961.96 perms/in
Water Absorption Weight gain of 4" coated concrete cube after 21 day water immersion
Canadian Mortgage/Housing Corp8.79% ME 8211-09230 (2" CUBE, IMMERSION @ 48 hrs)
Freeze-Thaw Resistance – 50 Cyclesno scaling/peeling/flaking (Concrete cylinders immersed for 8 hrs in coated salt water solution followed by 16 hrs. of freezing).
Weathering ASTM G23No 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.
Resistance to Hydrocarbon Substances
Impact Resistance MIL-D-3134, Para.4.7.3
2 lb steel ball dropped from 8' height onto coated steel plate
Flammable Properties ASTM E84Flame spread – 4 Smoke Density – 0
Fire Resistance UL790 Complies as Class A Potable Water CompatibilityNSF/ANSI Compliant

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), material safety data sheets (MSDS), and installation guidelines (IG) are being utilized for project submittals and application reference.



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FOR BEST RESULTS (Continued)

- Protect materials at all times from excessive heat and cold.
- Regularly check wet film thickness with mil gauge and monitor product consumption to ensure correct application thicknesses are obtained.
- 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 temperatures are 40 F (4.5 C) and rising during placement and cure time.
- As with concrete and other cementitious or masonry products, surface staining and tire marking may occur. Apply a clear filmforming 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. For better color consistency, apply a topcoat of MiraGard Colorbond or other Miracote pigmented topcoats.

OVERVIEW OF INSTALLATION STEPS

• Surface Preparation

All surfaces to be coated 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 coating requirements. Concrete and other porous or absorptive substrates should be **(SSD) saturated surface dry** with no standing water at the time of the MPC application to the substrate.

Mixing

MPC must be mixed mechanically using a low-speed drill with a "Jiffy-type" or similar Miracote-approved mixing paddle in a clean mixing container. Pre-mix Liquid Catalyst first to redisperse any polymer solids that may have settled on the bottom of the pail.

When mixing MPC 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.

OVERVIEW OF INSTALLATION STEPS (Continued)

Application

Miracote MPC can be applied using a roller, brush, broom, trowel, magic trowel, squeegee or spray equipment. Apply MPC only on properly prepared substrates, and be sure that all voids and bug holes are properly filled by working material into the substrate.

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.



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