



MIRACOTE PROTECTIVE COATING

Product
Information
Sheet

1) PRODUCT DESCRIPTION

A) Composition

Miracote is a polymerized cementitious protective coating. It consists of a unique rubber-like polymer liquid mixed at the time of application with a cement aggregate blend. The material is applied in multiple coats by brush, roller, trowel or spray to a typical thickness of 3/32" (2.4mm). It can be applied over almost any clean sound surface-concrete, block, tile, metal, certain types of insulation, etc.

Important characteristics of Miracote are its extraordinary adhesion coupled with its ability to withstand prolonged pedestrian and vehicular traffic. In these respects the material is far superior to conventional cementitious coatings.

Miracote provides a tough water-retardant coating which substantially reduces or prevents water penetration, freeze-thaw scaling, and concrete carbonation. It is a "breathable" coating which releases normal entrapped vapor without loosening or blistering. Miracote is available in two basic colors - white and natural cement. A compatible acrylic topcoat, an optional application, is available in eighteen additional colors.

B) Typical Uses

- Concrete exterior restoration
- Parking structure protection
- Sidewalk resurfacing
- Wall refinishing and insulation coating
- Stadium renovation
- Swimming pool walkways
- Balcony deck surfacing

C) Advantages/Limitations

Advantages

1. Excellent adhesion and weathering resistance
2. Long-wearing under traffic
3. Retards water and salt penetration
4. Resists ultra-violet degradation from long-term exposure to sunlight
5. Environmentally safe - entirely water-based
6. Slip resistance underfoot
7. Moderate cost

Limitations

2) PHYSICAL CHARACTERISTICS AND TECHNICAL DATA

A) Adhesion

ASTM C-882,
Type 1 *515 p.s.i.*

B) Absorption

Weight gain by 4" coated concrete cube after 21 days water immersion <2%

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ME 8211-09230 (2" material cube, immersed 48 hrs.) *8.79%*

ASTM C-642 *1.61%*; volume of permeable voids *5.07%*

C) Freeze-Thaw

Coated concrete cylinders immersed 8 hrs. in salt water solution (8 hrs.) followed by 16 hrs. freezing, 50 cycles - *no scaling, peeling, flaking*

D) Weathering

ASTM G-23 (Weatherometer) Method 1 procedure, 60 cycles no visible degradation

E) Hydrocarbon Substances Resistance

ASTM D-1308 (Spot Open Test) 21 days repeated re-application of gasoline, motor oil SAE-10, jet fuel) *No softening or attack*

F) Resistance to Wind Driven Rain

Fed Spec. TT-C-565B. *At 5" water pressure and 60 gal/hr. flow, no water or dampness shows on back of concrete test panels*

G) Compressive Strength

ASTM C-579 Method A 2, *140 p.s.i.*

H) Tensile Strength

ASTM C-307 *465 p.s.i.*

I) Shore Hardness

ASTM D-2440 *Durometer "A" 82*

J) Impact Resistance

MIL-D-3134, Para. 4.7.3.
(2 lb. steel ball dropped from 8' height onto coated steel plate) *No cracking or detachment*

K) Water Vapor Permeability

ASTM E-96 *1.95 Perms/Inches*

L) Flammability

ASTM E-84
Flame Spread 4
Smoke Density 0

M) Potable Water Compatibility

U.S. Environmental Protection Agency
Criteria and Standards Division
Office of Drinking Water
Approved

3) INSTALLATION

A) Prepare surfaces by removal of dirt, foreign matter plus patching in accordance with manufacturer's recommendations.

B) Apply first coat of Miracote by brush or broom.

C) Apply following coats (one or two depending on service conditions/requirements) by broom, roller, brush or spray. Finish to specified texture.

D) Color Finish (optional) - apply acrylic color finish, when specified, in two coats by roller, brush or spray.

CAUTION: Do not install Miracote in cold weather (i.e. below 50°F/10°C) or when rainfall can be expected prior to material setting.

4) PRODUCT AVAILABILITY

Miracote is available at sites listed below.

5) MAINTENANCE

Miracote can be cleaned by hosing or power scrubbing. If mildew occurs this can be cleaned by sodium hypochlorite rinse. Worn spots can easily be recoated

6) SPECIFICATION ASSISTANCE

Consult Crossfield Products

1. May reflect working concrete cracks
2. Do not install in freezing weather
3. Minor shade variations may occur with natural cement color material
4. Not suitable for use in areas where acids are spilled

Corp. for specification assistance, detailing etc. This consultation is highly recommended prior to specification.