CONCRETE-TOP SUPREME



SINGLE-COMPONENT, CEMENTITIOUS TOPPING & REPAIR MORTAR

DESCRIPTION

CONCRETE-TOP SUPREME is a latex and microsilica modified, cementitious mortar designed for use as a concrete repair mortar at thicknesses of 3/8" to 2" (10mm to 50mm). This product is a single-component formula which incorporates a powder latex technology, providing protection from corrosion and excellent durability under freeze-thaw cycles as well as reducing ingress by water and de-icing salts.

PRIMARY APPLICATIONS

- Parking decks
- Warehouse floors
- Shoulder repairs
- Walkways

- Pavements
- Light industrial floors
- Ramps

FEATURES/BENEFITS

- Provides a strong, wear resistant overlay
- Contains an integral corrosion inhibitor
- Excellent bond to properly prepared sound concrete
- · Compatible with galvanic anodes

- · Suitable for both interior and exterior use
- · Formulated for easy placement
- Can contribute to LEED points

TECHNICAL INFORMATION

Typical Engineering Data Obtained Under Laboratory Conditions 23°C (73°F) 50% RH

Compressive Strength ASTM C 109, 2" (50 mm) cubes

| Age | Strength |
|---------|----------------------|
| 1 day | 4,000 psi (27.6 MPa) |
| 7 days | 7,000 psi (48.3 MPa) |
| 28 days | 9,000 psi (62.1 MPa) |
| 56 days | 9,500 psi (65.5 MPa) |

Flexural Strength ASTM C 348

| 7 days1,200 | psi | (8.3 MPa) |) |
|--------------|-----|-----------|---|
| 28 days1,250 | psi | (8.6 MPa) |) |

Linear Shrinkage ASTM C 157 50% RH @ 23°C (73°F) (specimens were removed from molds @ 24 hours)

| 14 days | -0.10% |
|---------|--------|
| 56 days | -0.13% |

Chloride Permeability ASTM C 1202

28 days......1,200 coulombs

Freeze/Thaw Resistance ASTM C 666 Procedure A 300 Cycles...... 92% relative dynamic modulus

Working Time approx. 30 min

Initial Setapprox. 1 hour Final Set approx. 3 hours

Unit Weight.....approx. 140 lb/ft³ (2243 kg/m³)

Volumetric Resistivity......10,000 ohms/cm

CONCRETE-TOP SUPREME is a free-flowing powder as packaged. After mixing and placing, the color may initially appear darker than the surrounding concrete, but will lighten substantially as it cures.

PACKAGING/YIELD

CONCRETE-TOP SUPREME is packaged in 50 lb (22.7 kg) moisture resistant bags. Yield: is 0.40 ft³/bag (0.011 m³) when mixed with 2.5 qt (2.4 L) of water. Typical water requirement is 2.0 to 3.0 qt (1.9 to 2.8 L)/bag. A unit of material may be extended with 15 lb (6.8 kg) of 3/8" (9.5 mm) pea gravel. This will yield 0.47 ft³ (0.013 m³) and may be used for overlay placements that exceed 2" (50 mm) in depth.

SHELF LIFE

2 years in original, unopened package

SPECIFICATIONS/COMPLIANCES

Canadian Food Inspection Agency, MTQ, MTO

DIRECTIONS FOR USE

Surface Preparation: Concrete surfaces must be structurally sound, free of loose or deteriorated concrete and free of dust, dirt, paint, efflorescence, oil and all other contaminants. Mechanically abrade the surface to achieve a surface profile equal to CSP 5-7 in accordance with ICRI Guideline 310.2. Properly clean profiled area.

Priming: Clean and prime exposed steel with DURALPREP AC. Concrete should be primed with a spray or brush coat of DURALPREP AC. You must allow the DURALPREP AC to thoroughly dry prior to applying the repair material. Alternately, a Saturated Surface Dry (SSD) concrete surface can be primed with a scrub coat of CONCRETE TOP SUPREME. The repair or topping must be made before the scrub coat dries out.

Mixing: A single bag of CONCRETE-TOP SUPREME may be mixed with a drill and "jiffy" mixer. Use a paddle type mortar mixer for large jobs. All material should be in the proper temperature range of 45°F (7°C) to 90°F (32°C). Add the appropriate amount of water, 2 to 3 qt (1.9 to 2.8 L)/bag, then slowly add the dry product. Mix for 3 to 5 minutes.

Placement: For patching, spread with a trowel, come-a-long, or square tipped shovel to a thickness that matches the surrounding concrete. When used as an overlay, use screed strips along with vibratory screeding to level.

Finishing: Finish the repair material to the desired texture. This product is designed for finishing with a float or broom texture. A steel trowel finish may be applied but timing of the final trowel is critical. For a hard, flat troweled surface, delay finishing until the product is near final set to reduce the risk of blistering during troweling. Do not add additional water to the surface during the finishing operation. If additional liquid is required, use EUCOBAR evaporation retarder. **NOTE:** Always re-establish joints when using this product as an overlay.

Curing and Sealing: Proper curing procedures are important to ensure the durability and quality of the repair. To reduce surface cracking, cure the floor with a high solids curing compound, such as SUPER AQUA-CURE VOX or SUPER DIAMOND CLEAR VOX. Note: Do not use a solvent based curing compound on this product. If a curing compound is not desired, cover with quality plastic sheeting for a minimum of three days.

CLEAN-UP

Clean tools and equipment with water before the material hardens.

PRECAUTIONS/LIMITATIONS

- Do not allow repairs to freeze until the material has reached a minimum 1,000 psi (7 MPa) compressive strength.
- Use only potable water for mixing.
- Do not use material at temperatures below 45°F (7°C).
- · Always mix full units.
- Do not use a solvent based curing compound on this product.
- Store product in a dry place.
- Always use good concrete practices in hot & cold weather per ACI guidelines.
- In all cases, consult the Safety Data Sheet before use.