



EUCLID CHEMICAL

VERTICOAT SUPREME

SINGLE COMPONENT, VERTICAL & OVERHEAD REPAIR MORTAR WITH CORROSION INHIBITOR

DESCRIPTION

VERTICOAT SUPREME is a single component, microsilica and latex modified, non-sag concrete repair mortar designed for trowel applied vertical and overhead repairs requiring structural strength and high performance.

PRIMARY APPLICATIONS

- Vertical and overhead repairs
- Marine structures, tunnels and dams
- Parking structures & bridges
- Parapet walls
- Above and below grade applications

FEATURES/BENEFITS

- One component for easy mixing and handling
- Excellent freeze-thaw resistance for difficult climates
- Microsilica and latex modified
- Contains an integral corrosion inhibitor
- Low permeability helps protect rebar from corrosion
- High bond strength provides excellent adhesion

TECHNICAL INFORMATION

The following are typical values obtained under laboratory conditions. Expect reasonable variation under field conditions.

Working Timeapprox. 30 minutes

Set Times 70°F (21°C) ASTM C266

Initial Setapprox. 1 hour

Final Setapprox. 3 hours

Unit Weightapprox. 115 lb/ft³ (1836 kg/m³)

Compressive Strength

ASTM C109 modified, 2" (50 mm) cubes

1 day.....2,000 psi (13.8 MPa)

7 days.....3,500 psi (24.1 MPa)

28 days.....5,500 psi (37.9 MPa)

Flexural Strength ASTM C348

7 days.....900 psi (6.2 MPa)

28 days.....1,000 psi (6.9 MPa)

Linear Shrinkage (3" x 3" x 11" beams)

ASTM C157 50% RH @ 73°F(23°C)

3 days.....-0.03%

7 days.....-0.06%

14 days.....-0.08%

28 days.....-0.10%

56 days.....-0.11%

Freeze/Thaw Resistance ASTM C666 Procedure A

300 cycles Relative Durability Modulus.....90%

Appearance: VERTICOAT SUPREME is a free-flowing powder designed to be mixed with water. After mixing and placing, the color may initially appear darker than the surrounding concrete. While this color will lighten up substantially as the VERTICOAT SUPREME cures and dries out, the repair may always appear somewhat darker than the surrounding concrete.

PACKAGING/YIELD

VERTICOAT SUPREME is packaged in 50 lb (22 kg) moisture resistant bags. **Yield:** 0.48 ft³ (0.014 m³) per bag when mixed with 2.75 qts (2.6L) of water.

SHELF LIFE

2 years in original, unopened package

SPECIFICATIONS/COMPLIANCES

Canadian Food Inspection Agency, MTQ and MTO

COVERAGE

One unit of VERTICOAT SUPREME will cover approximately 11.5 ft² (1.1 m²) when placed at an average depth of 1/2" (13 mm).

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 6 - 8 in accordance with ICRI Guideline 310.2. Properly clean profiled area. **Priming & Bonding (Saw Cut & Chipped Out Repairs):** Thoroughly clean any exposed reinforcing steel, and apply DURALPREP A.C. to the concrete and the reinforcing steel within the repair area. Refer to the DURALPREP A.C. technical data sheet for full instructions. Alternatively, application of EUCOWELD 2.0 to a dry substrate or a scrub coat of VERTICOAT SUPREME to the saturated surface dry (SSD) concrete surface may be used for bonding. The repair material must be placed on the scrub coat before the scrub coat dries out.

Priming & Bonding (Vertical & Overhead Skim Coats): Apply EUCOWELD 2.0 to a dry substrate or a scrub coat of VERTICOAT SUPREME to the saturated surface dry (SSD) concrete surface. The repair material must be placed on the scrub coat before the scrub coat dries out.

Mixing: Single bags may be mixed with a drill and "jiffy" type mixer. Use a paddle type mortar mixer for large jobs. All materials should be in the proper temperature range of 60°F (16°C) to 90°F (32°C). Add the appropriate amount of water for the batch size 2.5 to 3.0 qt (2.4 to 2.8 L)/bag, then add the dry product. Mix for 3 to 5 minutes. Do not mix more material than can be placed within 20 minutes.

Placement: Place in 1/4" to 2" (6 to 50 mm) lifts. Trowel into place and allow to stiffen before the next lift. If additional lifts are required after material has hardened, score the surface before proceeding to the next lift.

Finishing: Finish the repair material to the desired texture. Do not add additional water to the surface during the finishing operation. Use EUCOBAR evaporation retarder.

Curing and Sealing: Curing is required. Cure with a Euclid Chemical high solids, water-based curing compound. (NOTE: A SOLVENT BASED CURING COMPOUND SHOULD NOT BE USED ON THIS PRODUCT). Under hot, windy or direct sunlight situations, apply a second coat of curing compound after the first has dried. If a curing compound is not desired, wet cure 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 of 1000 psi (7 MPa) compressive strength.
- Use only potable water for mixing.
- Minimum application thickness 1/4" (6 mm).
- Minimum surface and ambient temperature 45°F (7°C) and rising at time of application.
- When necessary, follow the recommendations in ACI 305R "Guide to Hot Weather Concreting" or ACI 306R "Guide to Cold Weather Concreting".
- For optimum results, condition material to 65°F to 85°F (18°C to 29°C) at least 24 hours prior to use.
- Do not use a solvent based curing compound on this product.
- In all cases, consult the Safety Data Sheet before use.

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