VERTICAL/OVERHEAD REPAIR

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# SPEED CRETE PM

## SINGLE-COMPONENT, VERTICAL/OVERHEAD MORTAR WITH CORROSION INHIBITOR

EUCLID CHEMICAL

### PACKAGING

50 lb (22.7 kg) bag
Code: TR5100650PM

### APPROXIMATE YIELD

**50 lb (22.7 kg) unit:** 0.5 ft³ (0.014 m³) per unit when mixed with 1 gal (3.8 L) of potable water.

### MINIMUM/MAXIMUM APPLICATION THICKNESS

Featheredge to 3 inches (7.6 cm)

### CLEAN UP

Clean tools and equipment with water before the material hardens.

### SHELF LIFE

1 year in original, unopened package

## DESCRIPTION

SPEED CRETE PM is a single-component, polymer-modified, ready-to-use, cement based concrete and masonry repair mortar that requires only potable water for mixing. SPEED CRETE PM is a proprietary formulation of portland cement, finely graded aggregates and special polymer modifiers used to increase adhesion, strength, and aid in curing.

## PRODUCT CHARACTERISTICS

### FEATURES/BENEFITS

- Compatible with galvanic anodes
- Repairs from featheredge to 3" (7.6 cm)
- Excellent workability
- Develops high strength and tenacious bond
- Contains an integral corrosion inhibitor
- Excellent resistance to freeze-thaw conditions
- After initial set, may be shaved to conform to contours of the surrounding surface

### PRIMARY APPLICATIONS

- Repair of numerous interior/exterior, above/below grade, vertical/overhead structural surfaces without forming

## TECHNICAL INFORMATION

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

| Test Method | Test Property | Values |
|---|---|---|
| ASTM C266<br>Gilmore | Set Times | Initial Set . . . . . 15 minutes<br>Final Set . . . . . 40 minutes |
| | Working Time | 10 to 15 minutes |
| ASTM C109 | Compressive Strength | 1 day. . . . . 2,500 psi (17.2 MPa)<br>7 day. . . . . 6,500 psi (44.8 MPa)<br>28 days . . . . . 7,000 psi (48.3 MPa) |
| ASTM C78 | Flexural Strength | 7 days . . . . . 650 psi (4.5 MPa)<br>28 days . . . . . 1,300 psi (9.0 MPa) |
| ASTM C882 | Shear Bond Strength | 28 days . . . . . 2,650 psi (18.3 MPa) |
| ASTM C496 | Split Tensile Strength | 7 days . . . . . 450 psi (3.1 MPa)<br>28 days . . . . . 550 psi (3.8 MPa) |
| ASTM C666 | Freeze/Thaw Resistance | 320 cycles . . . . . 99.0% RDF |
| | Volumetric Resistivity | 7,980 ohm-cm |

## 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 SPEED CRETE PM 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/Toppings):** Apply EUCOWELD 2.0 to a dry substrate or a scrub coat of SPEED CRETE PM 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:** SPEED CRETE PM will require approximately 4.0 to 4.25 qt (3.8 to 4.0L) of potable water per 50 lb bag (22.7 kg) to achieve the proper mix consistency. Pour the measured amount of water into a clean mixing container, slowly add the SPEED CRETE PM, and thoroughly mix for 2 to 3 minutes to a stiff, no slump, putty-like consistency. Use a rotary mixer with rubber tip blades for mixing quantities up to 100 lb (45.4 kg).

**Application:** Apply a scrub coat of neat mortar to the prepared SSD substrate. Before the scrub coat dries, apply SPEED CRETE PM. To ensure complete bond with the entire surface, force the SPEED CRETE PM firmly into the repair area by hand or with a trowel. Place the SPEED CRETE PM so that the material conforms to the contours of the surrounding surface. Always finish the SPEED CRETE PM toward the common bonding edge between the repair material and the existing surface. For repairs deeper than 3" (7.6 cm) apply in multiple lifts. Score surface between lifts. Cure material using standard curing practices.

**Curing:** Follow standard ACI guidelines for curing. In case of high temperature, high wind, or low humidity causing rapid surface drying, use wet burlap/plastic or a water-based curing compound.

## PRECAUTIONS/LIMITATIONS

- Use only potable water with SPEED CRETE PM.
- Do not re-temper or add sand to SPEED CRETE PM.
- Do not over-work or over-trowel the repair material.
- Do not apply at temperatures below 45 °F (7 °C).
- When necessary, follow the recommendations in ACI 305R "Guide to Hot Weather Concreting" or ACI 306R "Guide to Cold Weather Concreting".
- In all cases, consult the Safety Data Sheet before use.