



EUCLID CHEMICAL

SPEED CRETE 2028

RAPID SETTING HORIZONTAL REPAIR MORTAR WITH CORROSION INHIBITOR

HORIZONTAL REPAIR

DESCRIPTION

SPEED CRETE 2028 is a cement-based, ready to use, repair mortar that sets quickly, and achieves rapid strength gain. SPEED CRETE 2028 is a proprietary formulation of blended cements, selected aggregates and it contains an integral corrosion inhibitor.

PRIMARY APPLICATIONS

- Highways
- Loading docks
- Bridge decks
- Pavement joint repairs
- Parking decks
- Industrial floors

FEATURES/BENEFITS

- Fast-setting, with rapid strength gain
- Very low permeability
- Contains an integral corrosion inhibitor
- Develops a tenacious bond
- Excellent resistance to freeze-thaw conditions and deicing chemicals
- Repair can be coated with an epoxy or urethane after a 24 hour cure

TECHNICAL INFORMATION

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

Initial Set Time, min ASTM C266...approx. 20 min.

Final Set Time, min ASTM C266...approx. 50 min.

Compressive Strength, psi (MPa) ASTM C109

3 hours3,000 (20.7)

24 hours5,000 (34.5)

7 days.....6,000 (41.4)

28 days.....7,000 (48.3)

Compressive Strength, ASTM C39

Extended 50% with 3/8" (9.5 mm) pea gravel, psi (MPa)

3 hour2,500 (17.2)

24 hours4,000 (27.6)

Flexural Strength, psi (MPa) ASTM C348

7 days.....1,050 (7.2)

28 days.....1,200 (8.3)

Bond Strength, psi (MPa) ASTM C882 (mod)

1 day.....1,800 (12.4)

28 days.....2,400 (16.5)

Scaling Resistance, ASTM C672

100 cyclesNo scaling

Freeze-Thaw, Durability Factor ASTM C666

300 cycles96%

Chloride Permeability ASTM C1202

400 coulombsvery low

Volumetric Resistivity

28 days..... 65,000 ohm-cm

SPEED CRETE 2028

MASTER FORMAT #: 03 01 30.71

PACKAGING

SPEED CRETE 2028 is packaged in 50 lb (22.7 kg) poly-lined bags

SHELF LIFE

18 months in original, unopened package

SPECIFICATIONS/COMPLIANCES

Complies with ASTM C 928, Standard Specification for Packaged, Dry, Rapid-Hardening Cementitious Materials for Concrete Repairs

COVERAGE/YIELD

One 50 lb (22.7 kg) bag yields approximately 0.42 ft³ (0.012 m³). Extending with 40 lb (18.1 kg) of 3/8" (9.5 mm) pea gravel increases the yield to approximately 0.70 ft³ (0.02 m³).

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 & 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 2028 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.

Mixing: SPEED CRETE 2028 requires 2.25 to 2.5 qt (2.13 to 2.37 L) of water per 50 lb (22.7 kg) bag. Use a drill with a "jiffy" type mixer for optimal mixing of single bags. For larger applications use a paddle type, horizontal shaft mortar mixer. The material is stiff initially but relaxes after 4 to 5 minutes of mixing. Do not add any additional water to loosen up the mix. For repair areas over 1½" (38 mm) deep, extend by adding up to 40 lb (18.1 kg) of 3/8" (9.5 mm) clean, well-graded, damp pea gravel per 50 lb (22.7 kg) of SPEED CRETE 2028. Proper mixing sequence involves; first, adding the measured quantity of water to the mortar mixer, second, adding the SPEED CRETE 2028 and mixing for 4 minutes to thoroughly wet it out, and third, adding pea gravel, if required.

Application: SPEED CRETE 2028 should be mixed, placed and finished within 15 minutes. Place the mixed material into the prepared area to be repaired. Work the material firmly into the bottom and sides of the repair area to ensure good adhesion. Screed and trowel the material so as to level with the existing concrete, and finish the surface as desired. Thickness of SPEED CRETE 2028 repair must be a minimum of 1/2" (12 mm) and a maximum of 1½" (38 mm) per lift. When applying multiple lifts, allow the repair to reach final set, score the surface and then place the subsequent lift. Repair areas over 1½" (38 mm) deep should either be extended or applied in multiple lifts. Do not over-trowel or featheredge. Follow ACI guidelines for proper curing. On windy or hot days or when under direct sunlight, wet curing is recommended.

Cold Weather Application: Application at temperatures below 45°F (7°C) extends the set time. Heating the repair area until warm, using warm water for mixing and tenting or insulating the repair area after application will assist in reaching higher strength development. Do not use direct heat on the repair after its installation.

CLEAN-UP

To prevent product build-up, clean application tools and mixer with water immediately after use.

PRECAUTIONS/LIMITATIONS

- Do not featheredge, overwork, retemper or over-trowel the repair material.
- Minimum depth of patching is 1/2" (12 mm).
- When necessary, follow the recommendations in ACI 305R "Guide to Hot Weather Concreting" or ACI 306R "Guide to Cold Weather Concreting".
- Do not add any admixtures or bonding agents to SPEED CRETE 2028.
- The repair area should be frost free prior to application.
- In all cases, consult the Safety Data Sheet before use.

Rev. 07.20

WARRANTY: The Euclid Chemical Company ("Euclid") solely and expressly warrants that its products shall be free from defects in materials and workmanship for one (1) year from the date of purchase. Unless authorized in writing by an officer of Euclid, no other representations or statements made by Euclid or its representatives, in writing or orally, shall alter this warranty. EUCLID MAKES NO WARRANTIES, IMPLIED OR OTHERWISE, AS TO THE MERCHANTABILITY OR FITNESS FOR ORDINARY OR PARTICULAR PURPOSES OF ITS PRODUCTS AND EXCLUDES THE SAME. If any Euclid product fails to conform with this warranty, Euclid will replace the product at no cost to Buyer. Replacement of any product shall be the sole and exclusive remedy available and buyer shall have no claim for incidental or consequential damages. Any warranty claim must be made within one (1) year from the date of the claimed breach. Euclid does not authorize anyone on its behalf to make any written or oral statements which in any way alter Euclid's installation information or instructions in its product literature or on its packaging labels. Any installation of Euclid products which fails to conform with such installation information or instructions shall void this warranty. Product demonstrations, if any, are done for illustrative purposes only and do not constitute a warranty or warranty alteration of any kind. Buyer shall be solely responsible for determining the suitability of Euclid's products for the Buyer's intended purposes.