



EUCOREPAIR SCC FAST

FAST SETTING, SELF-CONSOLIDATING CONCRETE REPAIR MORTAR

EUCLID CHEMICAL

DESCRIPTION

EUCOREPAIR SCC FAST is a fast setting, one component, cementitious, self-consolidating repair mortar that is shrinkage compensated, pozzolan and microfiber modified, and contains an integral corrosion inhibitor. It is designed for horizontal and formed vertical and overhead structural repairs in applications from 1 inch (2.5 cm) to full depth where a faster return to service is required. This material is non-metallic and non-staining.

PRIMARY APPLICATIONS

- Parking decks
- Joint repairs
- Balconies
- Equipment bases
- Pavements
- Beams
- Vertical & overhead formed repairs

FEATURES/BENEFITS

- Shrinkage compensation and reduction to minimize cracking
- Pre-mixed with pea gravel, ready-to-use
- Low permeability with excellent freeze-thaw resistance
- Pozzolan and microfiber modified
- Contains an integral corrosion inhibitor
- Rapid-hardening allows user to strip forms same day
- Can be coated 5 hours after final set

TECHNICAL INFORMATION

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

Compressive Strength ASTM C39, 3 x 6 in cylinder
Age
 2 hour.....2,500 psi (17 MPa)
 1 day.....4,500 psi (31 MPa)
 7 days.....6,000 psi (41 MPa)
 28 days.....8,000 psi (55 MPa)

Freeze/Thaw Resistance ASTM C666 Procedure A
 300 cycles.....>95% relative dynamic modulus

Flexural Strength ASTM C78
 1 day.....500 psi (3 MPa)
 7 days.....900 psi (6 MPa)
 28 days.....1000 psi (7 MPa)

Rapid Chloride Permeability ASTM C1202
 28 days.....<300 coulombs

Length Change ASTM C157, 50% RH @ 23°C (73°F)
 (3" x 3" x 11" specimens were removed from molds @ 24 hours)
 28 day shrinkage.....<0.020%

Slump Flow ASTM C1611
 Initial.....24-29 inches (61-74 cm)

J-Ring Slump Flow ASTM C1621
 26.5 inches (67.3 cm)
 Passing Ability: 1 inch (2.5 cm) no visible blocking

Working Time
 approx. 20 - 30 minutes

Set Time ASTM C403
 Initial.....approx. 50 minutes

Fresh Wet Density ASTM C138
 146.0 lb/ft³ (2338 kg/m³)

Slant Shear Bond Strength ASTM C882
 (3" x 6" specimens per TXDOT)

1 day.....2,200 psi (15 MPa)
 7 days.....3,200 psi (22 MPa)
 28 days.....3,500 psi (24 MPa)

Crack Resistance ASTM C1581
 Net Time Until Cracking: >60 days
 Stress Rate: 9.1 psi/day
 Potential for Cracking: Low

PACKAGING/YIELD

EUCOREPAIR SCC FAST is packaged in 50 lb (22.7 kg) bags. **Yield:** Approximately 0.37 ft³ (0.010 m³) per bag when mixed with 4.25 pints (2.01L) of water.

HORIZONTAL REPAIR

EUCOREPAIR SCC FAST

MASTER FORMAT #:
03 01 30.71

SHELF LIFE

1 year stored properly in original, unopened package

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 (Concrete Surface Profile) 5 - 7 in accordance with ICRI Guideline 310.2. Properly clean the profiled area.

Saturate surface with clean water. Substrate should be saturated surface dry (SSD) with no standing water during application. The SSD concrete should be primed with EUCOWELD 2.0 or a scrub coat of EUCOREPAIR SCC FAST. The repair must be made before the EUCOREPAIR SCC FAST scrub coat dries out. On large placements or in steel-congested areas where a scrub coat is not possible, contact Euclid Chemical Technical Support for recommendations. For priming and protection of reinforcing steel use DURALPREP A.C.

Formwork: For building forms, refer to ACI 347R - Guide to Formwork for Concrete. Forms should be filled with water 24 hours prior to placement of EUCOREPAIR SCC FAST to ensure tightness and adequate saturation. Ensure forms are completely drained before pouring of product and any drainage outlets are sealed.

Mixing: Single bags may be mixed with a drill and #P2, #P5, or #P6 mixing paddle according to ICRI Guideline No. 320.5. Use a horizontal shaft mortar mixer for larger jobs. All materials should be in the proper temperature range of 60°F (15°C) to 85°F (29°C). Add the appropriate amount of water for the batch size and then add the EUCOREPAIR SCC FAST. **The amount of water to be mixed with the EUCOREPAIR SCC FAST is critical. Initially add 3.5 pints [56 fl.oz.] (1.6 L) of water per 50 lb (22.7 kg) bag and mix for 2 minutes. If after the initial 2 minutes of mixing the desired flow is not obtained, no more than 0.75 pints [12 fl.oz.] (355 mL) of additional water should be added to the mix in order to achieve more flow.** Mix an additional 2 minutes after adding extra water.

Placement: IMPORTANT: The application temperature range of EUCOREPAIR SCC FAST is from 45 to 95°F (7 to 35°C). Allow approximately 30 minutes to mix, place, and finish EUCOREPAIR SCC FAST repair mortar at 72°F (22°C). To make repairs, spread with a float, come-a-long, or square tipped shovel to a thickness that is level with the surrounding concrete. Do not use EUCOREPAIR SCC FAST for repairs less than 1 inch (2.5 cm) deep. Pump or pour product immediately after mixing. Vibration is typically not required, but form vibration can be used to ensure proper consolidation in situations which restrict flowability. If vibration is used, do not vibrate in excess as this can lead to segregation of the aggregate. When placing material, refer to ACI 304R - Guide for Measuring, Mixing, Transporting, and Placing Concrete.

Finishing: Finish the repair material to the desired texture. Do not add water to the surface during the finishing operation. When placing under hot and windy conditions, the use of EUCOBAR evaporation retarder is recommended to prevent the loss of surface moisture.

Curing & Sealing: If an epoxy coating will not be applied, wet cure the surface with water and polyethylene sheets at least one day, or use a curing compound. If applying an epoxy coating, it is important to wet cure with polyethylene sheets for at least 3 hours and then allow to air dry for 2 hours before coating. EUCOREPAIR SCC FAST can be coated with epoxy 5 hours after final set at 70°F (21°C).

CLEAN-UP

Clean tools and equipment with water before the material hardens.

PRECAUTIONS/LIMITATIONS

- The application temperature range of EUCOREPAIR SCC FAST is 45 to 95°F (7 to 35°C).
- If an epoxy coating will be applied, follow surface preparation procedures as directed by the coating manufacturer.
- Do not extend with aggregate.
- Do not use as a topping.
- 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.

Rev. 01.20

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