



## SELF-CONSOLIDATING CONCRETE REPAIR MORTARS

# EUCOREPAIR SCC EUCOREPAIR SCC FAST



### TYPICAL APPLICATIONS

- Full depth repair of horizontal and formed vertical and overhead concrete
- Balconies, beams, and columns
- Floors, pavement
- Parking structures, industrial plants
- Bridges, dams, tunnels

### FEATURES AND BENEFITS

- Self-consolidating for ease of placement
- Micro-fiber reinforcement controls plastic shrinkage cracking
- Polymer modified for excellent bond strength
- Can be pumped or poured from 1 inch (2.5 cm) to full depth without extending
- Contains an integral corrosion inhibitor
- Excellent freeze-thaw durability
- Choice of long working time or fast set

**EucoRepair SCC** is a pourable and pumpable self-consolidating concrete repair mortar that can be placed from 1 inch (2.5 cm) up to full depth without extending with aggregate. **EucoRepair SCC Fast** is an accelerated version that allows for faster stripping of forms and earlier return to service. Both products are fortified with micro-fiber to increase tensile strength and help prevent plastic shrinkage cracking, and contain unique polymers that improve adhesion and durability. EucoRepair SCC and EucoRepair SCC Fast include an integral corrosion inhibitor and a blend of low permeability cements, so embedded reinforcing steel is protected within the repair. The high flowability of EucoRepair SCC and EucoRepair SCC Fast ensure excellent consolidation without vibrating.

### THE SCC ADVANTAGE

The advantages of using a concrete repair mortar that flows into place virtually effortlessly are obvious: reduced labor, no vibration or screeding, and faster construction. Often this flowability is achieved by overwatering the mortar, which decreases its strength and can lead to segregation. By incorporating unique water reducing and viscosity modifying additives in EucoRepair SCC and EucoRepair SCC Fast, high flow is achieved without excess water, assuring the strength and stability of the mortar. EucoRepair SCC and EucoRepair SCC Fast quickly spread into place, filling formwork and encapsulating reinforcement without mechanical consolidation.

### PROVEN PERFORMANCE

Self-consolidating concrete repair mortars must have the ability to flow and fill forms reliably, easily pass reinforcing bars or other obstacles, and not segregate during or after placement. Two test methods can be used for both laboratory and field measurement of these properties.

#### ASTM C1611 Slump Flow of Self-Consolidating Concrete

A sample of freshly mixed material is placed in a standard concrete slump cone in one lift without tamping or vibration. The mold is lifted upward and the mortar allowed to spread. After spreading ceases, two diameters of the mortar are measured. The slump flow, or "spread", is the average of the two diameters. A common range of slump flow for self-consolidating concrete is 18 to 30 inches (45 to 75 cm).

#### ASTM C1621 Passing Ability for Self-Consolidating Concrete by J-Ring

This test method provides a method to determine the passing ability of self-consolidating repair mortars by using a J-Ring in combination with the slump flow test. The J-Ring is placed outside the slump cone so that the concrete flows through the legs of the ring when the cone is lifted. The slump flow, or spread of the mortar, with and without the J-Ring in place is measured. A difference of less than 1 inch (2.5 cm) indicates good passing ability.



EUCLID CHEMICAL

EUCOREPAIR SCC AND EUCOREPAIR SCC FAST		TYPICAL ENGINEERING PROPERTIES
PROPERTY	EUCOREPAIR SCC	EUCOREPAIR SCC FAST
Compressive Strength	5,600 psi (39 MPa)	8,000 psi (55 MPa)
Slant Shear Bond Strength	2,500 psi (18 MPa)	3,500 psi (24 MPa)
Flexural Strength	> 900 psi (6 MPa)	1,000 psi (7 MPa)
Slump Flow	Initial: 24 to 33 in (61 to 66 cm) 30 minutes: 24 to 33 in (61 to 66 cm)	24 to 29 inches (61 to 74 cm)
J-Ring Slump Flow	25 inches (63.5 cm) Passing Ability: 0.75 inch (1.9 cm) with no visible blocking	26 inches (63.5 cm) Passing Ability: 1 inch (2.5 cm) with no visible blocking
Shrinkage	< 0.050%	< 0.020%
Initial Set Time	Approximately 8 hours	Approximately 30 minutes
Unit Weight	144 lb/ft <sup>3</sup> (2,313 kg/m <sup>3</sup> )	146 lb/ft <sup>3</sup> (2,338 kg/m <sup>3</sup> )
Minimum/Maximum Application Depth	Minimum: 1 inch (2.5 cm) Maximum: none	Minimum: 1 inch (2.5 cm) Maximum: none
Mix Ratio	0.5 gallon of water per 50 lb bag (1.9 L per 23 kg)	0.53 gallon of water per 50 lb bag (2 L per 23 kg)
Yield	0.375 ft <sup>3</sup> (0.011 m <sup>3</sup> ) per bag	0.37 ft <sup>3</sup> (0.010 m <sup>3</sup> ) per bag
Recommended Curing	High solids cure & seal or 3 day wet cure	High solids cure & seal or 3 day wet cure

For additional technical information, refer to the EucoRepair SCC and EucoRepair SCC Fast data sheets

## COMPLIMENTARY PRODUCTS

- For an exceptional bond to existing concrete and protection of reinforcing steel, use **DURALPREP A.C.** epoxy/cement bonding slurry. If additional protection of steel is not required, use **EucoWeld 2.0** latex bonding agent for cement-based repair mortars and concrete.
- EucoRepair SCC and EucoRepair SCC Fast can be cured with **SUPER DIAMOND CLEAR** or any Euclid Chemical high solids cure & seal.
- **EUCOBAR** is a liquid evaporation retarder used to aid finishing in hot, dry, or windy conditions.

## SERVICE AND SUPPORT

The Euclid Chemical Company is unique in our offering of superior products, unparalleled customer service and industry support. The Euclid Chemical team delivers a range of value-added resources and in-depth industry experience to architects, designers, engineers, building contractors and owners. Our experts are highly-trained professionals who are available in local offices across the Americas, and are active members on industry technical committees including American Concrete Institute (ACI), International Concrete Repair Institute (ICRI) and American Society for Testing and Materials (ASTM). Our experienced field team is available to support you and your projects using Euclid Chemical solutions and products manufactured under the stringent standards of our ISO 9000 certified quality system. The Euclid Chemical Company works hand-in-hand with customers:

- Supplying field evaluations, recommendations and application problem solving on a project-by-project basis.
- Assisting in product selection, specification, installation and related technology.
- Attending pre-design meetings, assisting in clarifying specifications, and recommending product selection.
- Supporting you by providing proper pre-installation instructions and methods for achieving quality results.

For more than 100 years, The Euclid Chemical Company has served as a leading supplier to the concrete and masonry industry, offering a full line of engineered concrete admixture and construction products marketed under the EUCO brand name. These products include concrete admixtures, block and masonry additives, curing and sealing compounds, epoxy adhesives, floor and wall coatings, structural grouts for columns, equipment and machinery, joint fillers and repair products. The Euclid Chemical Company strives to bring innovative technologies and products to the concrete market with industry-leading customer service.