



# EUCOCRETE

## HIGH-PERFORMANCE CONCRETE WITH CORROSION INHIBITOR

### DESCRIPTION

EUCOCRETE is a versatile, single-component, microsilica-modified repair mortar that contains an integral corrosion inhibitor for concrete repair projects of all types. Requiring only the addition of water, EUCOCRETE is a high strength material with an extended working time for ease of placement. It is similar in appearance to concrete and is suitable for use as a topping or repair mortar concrete structures from 2.5 cm to full depth.

### PRIMARY APPLICATIONS

- Parking decks
- Joint repairs
- Balconies
- Equipment bases
- Floor toppings
- Pavements
- Beams
- Vertical/Overhead form & pour jobs

### FEATURES/BENEFITS

- Microsilica modified for high strength
- Pre-mixed with pea gravel, ready-to-use
- Low permeability with excellent freeze-thaw resistance
- Long working time
- Compatible with galvanic anodes
- Interior or exterior
- Contains an integral corrosion inhibitor
- ▲ Can contribute to LEED points

### TECHNICAL INFORMATION

#### Typical Engineering Data @ 21°C

**Compressive Strength** ASTM C 109, 50 mm cubes @ 2.1 L/25 kg bag.

Age	Strength
1 day.....	35 MPa
7 days.....	61 MPa
28 days.....	67 MPa
56 days.....	69 MPa

**Compressive Strength** ASTM C 39, 3"x6" cyl. @ 2.1 L/25 kg bag..

1 day.....	31 MPa
7 days.....	48 MPa
28 days.....	59 MPa
56 days.....	61 MPa

**Freeze/Thaw Resistance** ASTM C 666 Procedure A  
300 cycles ..... 99% relative dynamic modulus

**Sulfate Resistance** ASTM C 1012

28 days.....	+0.006%
6 months.....	+0.016%
12 months.....	+0.018%

**Volumetric Resistivity**.....15,400 ohm-cm

**Flexural Strength** ASTM C 348

7 days.....	6 MPa
28 days.....	7 MPa

**Rapid Chloride Permeability** ASTM C 1202

28 days.....	718 coulombs
--------------	--------------

**Length Change** ASTM C 157, 50% RH @ 23°C (specimens were removed from molds @ 24 hours)

28 days.....	-0.072%
--------------	---------

**Working Time** .....2 hrs 30 min

**Consistency:**

Initial slump.....	254 mm
30 minute slump.....	241 mm
1 hour slump.....	229 mm

**Set Time** ASTM C 403

Initial.....	approx. 3 hrs
Final.....	approx. 4 hrs

**Unit Weight**.....2345.49 kg/m<sup>3</sup>

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

### PACKAGING/YIELD

EUCOCRETE is packaged in 25 kg bags. **Yield:** 0.01m<sup>3</sup> per bag when mixed with 2.1 L of water. Bulk bags suitable for mixing in ready-mix trucks are also available.

## SPECIFICATIONS/COMPLIANCES

Canadian Food Inspection Agency

## SHELF LIFE

2 years in original, unopened package

## COVERAGE

One unit of EUCOCRETE will cover approximately 0.42 m<sup>2</sup> when placed at an average depth of 2.5 cm. EUCOCRETE may be extended with up to 6.8 kg of clean, SSD (saturated surface dry), 9.5 mm pea gravel for placements over 15 cm, which will yield 0.013 m<sup>3</sup>. This may alter certain engineering properties.

## 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 of at least CSP 5-7 in accordance with ICRI Guideline 310.2. Properly clean profiled area.

**Priming & Bonding (Saw Cut & Chipped Out Repairs, Form & Pour 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 a scrub coat of EUCOCRETE 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:** All materials should be in the proper temperature range of 5°C to 32°C. Single 25 kg bags may be mixed with a drill and “jiffy” mixer. Use a horizontal shaft, paddle type mortar mixer for mixing multiple bags simultaneously. Add the appropriate amount of water, 1.9 - 2.1L per bag, for the batch size and then add the dry product. Mix a minimum of 3 minutes. If additional pea gravel is to be added, mix an additional 2 to 3 minutes. **Mixing Bulk Bags:** Add the additional pea gravel, if desired, and approximately 80% of the appropriate water for the batch size to the ready-mix concrete truck. Fully open the top of the bulk bag. Position the bulk bag over the truck opening using a forklift or crane. While the drum is turning at slow speed, cut the bottom of the bulk bag to release contents into truck. Use the remaining mix water to wash down any dry, stuck material into the drum. Mix for a minimum of 5 minutes after last bulk bag is added. Reverse drum and check consistency. **Note:** It is recommended to keep 25 kg bags on hand to adjust consistency if needed. The mixed product should be transported to the repair area and placed immediately.

**Placement:** To make repairs, spread with a trowel, come-a-long, or square tipped shovel to a thickness that matches the surrounding concrete. **Note:** On large floor areas, use screed strips as guides in combination with vibratory screeding to level. Compact and finish by hand or machine trowel.

**Finishing:** This product is designed for finishing with a float or broom appearance. A steel trowel finish may be applied but timing of the final trowel is critical and the contractor may have difficulty achieving a smooth finish over a large area. Do not add water to the surface during the finishing operation; use EUCOBAR evaporation retarder.

**Curing and Sealing:** To prevent surface cracking, cure the repair with a high-solids curing compound from The Euclid Chemical Company. In hot, windy or direct sunlight situations, re-wet the surface after the curing compound has dried and cover with polyethylene for a minimum of three days. 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 use material at temperatures below 7°C.
- No heavy traffic until the product has fully cured.
- Keep repair from freezing until a minimum strength of 6.90 MPa is reached.
- EUCOCRETE requires a primer/bond coat and proper curing.
- In all cases, consult the Safety Data Sheet before use.

**WARRANTY:** Flowcrete India Private Limited 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 Flowcrete India Private Limited no other representations or statements made by Flowcrete India or its representatives, in writing or orally, shall alter this warranty. Flowcrete India 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 Flowcrete India product fails to conform with this warranty, Flowcrete India 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 installation of Flowcrete India 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 Flowcrete India's products for the Buyer's intended purposes.