



EUCOCRETE 5000

**DUAL SHRINKAGE COMPENSATED, HIGH PERFORMANCE
MICRO CONCRETE FOR FORMWORK REPAIRS**

EUCLID CHEMICAL

HORIZONTAL REPAIR

DESCRIPTION

EUCOCRETE 5000 is a versatile, single component, dual shrinkage compensated micro concrete that contains special blend of low heat cement with proprietary additives and graded aggregates. Requiring only the addition of water, **EUCOCRETE 5000** 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 concrete structure from 25mm to full depth.

PRIMARY APPLICATIONS

- Concrete repairs
- Beam and column enlargements
- Concrete anchors
- Column bases
- Bridge bearings
- Form & pour jobs
- Jetty jobs
- Concrete piling

FEATURES/BENEFITS

- Pre-bagged/consistent quality
- Easy to mix and apply
- Good flow characteristics
- Suitable for large repair
- High ultimate strength
- Chloride free

TECHNICAL INFORMATION

CHARACTERISTICS	UNIT	VALUE	COMMENTS
Size of Aggregates	mm	< 6	
Fresh Mortar Density	Kg/L	2.2 – 2.3	
Compressive Strength (BS 1881:Part 116)	N/mm ²	>45 >75	7 days 28 days
Flexural Strength	N/mm ²	>7	28 days
Water Absorption (BS 1881:Part 122)	%	<2	28 days
Initial Surface Absorption (BS 1881:Part 208)	ml/m ² /sec	<0.015	28 days
Rapid Chloride Permeability (ASTM C1202)	Coulombs	<1000	28 days
Expansion / Shrinkage (ASTM C1090)	%	+0.20	28 days
Slump Flow (Abrams Cone)	mm	>750	Fresh, Class
Viscosity (T ₅₀₀)	sec	>2	
Slump Flow (J-Ring)	mm	>680 >640	Fresh 1 hour
Segregation Resistance (Sieve)	%	<5	
Passing Ability (L-Box)		>0.95	
Open Time	Minutes	40 – 50	At 30°C

The above tests were conducted under laboratory conditions.

EUCOCRETE 5000

PACKAGING

EUCOCRETE 5000 is packaged in 25 kg bags. 25 kg yields 12.0 L of flowable mortar when mixed with 3.3 L of water.

SHELF LIFE

12 months from the date of production if stored properly undamaged, unopened, original sealed packaging, in dry conditions at temperature between + 5°C and + 40°C. Protect from direct sunlight.

DIRECTIONS FOR USE

Surface Preparation: Concrete surface must be structurally sound, free of loose or deteriorated concrete and free of dust, dirt, paint, efflorescence, oil and all other contaminants. A few hours prior to repair work, the substrate must be properly saturated by filling the formwork with clean water. Drain away the water prior to starting work.

Formwork Preparation: As **EUCOCRETE 5000** is a high flow material, all formwork must be tightly sealed and leak-proof to prevent loss of cement grout during placement of materials. However provisions must be made for outlets to drain away water used for pre-wetting the substrate.

Mixing: Pour approximately 80% of the recommended dosage of water into a clean container and gradually add **EUCOCRETE 5000** while mixing with a slow speed drill (400-500rpm). Add the remaining amount of water only as required until correct consistency is achieved. Mix materials for 3-5 minutes until mixture becomes homogeneous.

For best results, let material stand for 1-2 minutes before stirring lightly with a paddle to release entrapped air.

Placement: Free falling of material shall be reduced to less than 1m and placement shall be uni-directional to optimise compaction. **EUCOCRETE 5000** shall be casted to de-aerate through an external channel or throughout the length of cast section. For formwork placement, pump the material in through the lowest point. Avoid air entrapment to ensure full contact with the substrate. For large section placements, plan material preparation to maintain continuous flow throughout.

Curing: If formwork type repair is used, leave the formwork in place for at least 3 days. Upon removal of the formwork, cure the exposed surfaces immediately with curing compound or other approved curing method.

CLEAN UP

Clean all the tools and application equipment with water immediately after use. Hardened and/or cured material can only be mechanically removed.

PRECAUTIONS / LIMITATIONS

- Do not use material at temperature below 7°C.
- No heavy traffic until the product has fully cured.
- In all cases, consult Safety Data Sheet before use.

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