

CAP-MICROCRETE

FLOWABLE SHRINKAGE COMPENSATED MICROCONCRETE

DESCRIPTION

CAP-MICROCRETE is a flowable micro concrete used in place of hand applied mortars for the restoration of large structural section. The material is poured into shuttering to reform concrete profiles. Its high flow properties enable placement where there is congested reinforcement.

COLOUR

Grey

USES

- Large volume concrete repairs where hand placing is impractical
- Repair of columns ring beams, walls soffits.
- Suitable for car parks, balconies and bridge repair.
- Repair of beams and support elements.
- Repair of concrete highway structures- such as piers, columns, abutments, sides and soffits of beams and crossheads

ADVANTAGES

- Can be poured or pumped
- Free flowing in shuttering and formwork to form profiles.
- Fluidity ensures coverage and compaction around reinforcing steel.
- Shrinkage compensated to ensure long-term stability.
- Early high strength development.
- Low permeability with excellent freeze/thaw resistance.
- Improved resistance to chloride ion diffusion.

APPLICABLE STANDARDS

/TEST METHODS

B.S 1881, ASTM C-827, BD 27/86

PROPERTIES

Density: approx 2400 kg/m³

Application temp: minimum 5°C to 35°C

Pour able life: 20-30 minutes

Expansion characteristics : < 1 %

Compressive strength Kg/cm² : 24 hrs > 350

@ 25 °C and 0.115 w/p ratio : 3 days > 500

B.S 1881:100 mm cubes : 7 days > 580

: 28 days: > 650

APPLICATION INSTRUCTIONS

CAP-MICROCRETE can be applied normally at temperatures from 5° c to 35° c.

Being cement based good surface preparation and concreting practice with regard to placing at low and high temperature should be observed when placing CAP-MICROCRETE.

Surface preparation:

All feathered edge area around the break out area to be repaired should be angle grinded and chiseled down to a minimum depth of 50 mm.

Fully expose any corroded reinforcement steel within the repair area. Remove all loose scale, rust, and corrosion products from the steel surface. Clean the steel to a bright metal finish, ensuring that all sides of the bars including the backs are thoroughly treated. Once cleaned, apply a suitable **zinc-rich primer** to the steel to provide corrosion protection before proceeding with further repair steps.

Form work preparation

The area to be repaired should be formed up with good quality watertight form work, adequate provision for air pressure relief should be made when constructing form work.

Flush out all formwork and thoroughly saturate the concrete substrate with fresh clean water prior to placement of CAP-MICROCRETE.

Mixing:

As a mixing tool forced action type mixer is recommended, mixing with a suitable drill with appropriate paddle is acceptable. Mixing of part bags should be avoided. Pour 2.3 liter (maximum of clean fresh cold water into the mixer and slowly add all the contents of the bag while mixing continuously. Thoroughly mix for minimum of 3 minutes until a smooth, lump free consistency is achieved, for less fluid consistency water can be reduced.

Placing:

The mixed material must be poured/pumped within 30 minutes of mixing

Application temp: minimum 5°C to 35°C

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Curing

All the surfaces must be immediately cured in accordance with good concrete practice.

Cleaning

Cap-microcrete should be removed from tools, equipment and mixers with clean water immediately after use.

PACKAGING

Cap-microcrete is packed in 20 kg bags.
Yield is 8.4 liter per bag.

STORAGE

Cap-microcrete should be stored over palette in a cool dry place.

SHELF LIFE

12 months in unopened bags.

SAFETY PRECAUTIONS

Cap-microcrete does not contain toxic materials. Care should be taken to avoid inhalation of powder and contact with skin or eyes during use.

TECHNICAL SERVICE:

Our Technical Service Department is available at any time to advise you in the correct use of this product or any other Ahlia products.

Note : The information presented herein is based on the best of our knowledge and expertise for which every effort is made to ensure its reliability. Although all the products are subjected to rigid quality tests and are guaranteed against defective materials and manufacture, no specific guarantee can be extended because results depend not only on quality but also on other factors beyond our control.

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