

## Eucocrete FLO

**Flowable Repair Mortar** 

#### **PRODUCT DESCRIPTION**

Eucocrete FLO is a high strength, free-flowing micro-concrete reinstatement mortar for form and pour applications up to 200mm thick. Eucocrete FLO meets the requirements of EN1504-3 Class R4.

## **USAGE/PURPOSE**

Eucocrete FLO is ideal for the reinstatement of large, structural sections of concrete as well as for many smaller locations where difficulties of access make hand or trowel applied mortars impractical. The highly fluid nature of Eucocrete FLO eliminates the need for compaction and vibration even where access to the repair zone is restricted or where reinforcement is congested.

### **FEATURES & BENEFITS**

- ☐ Meets the requirements of EN1504-3 Class R4
- ☐ Excellent bond to concrete substrates without independent primer
- ☐ Suitable for use with Euclid Sentinel Anodes
- ☐ Exceptional flow allows pumping or pouring into restricted locations
- ☐ Compatible with concrete strength in the range of 30 to 60 MPa

### **PACKAGING**

20kg Bag

### **APPEARANCE**

Grey powder

### **SHELF LIFE**

12 months when stored as recommended in original unopened packaging.

### **STORAGE**

Store in original, undamaged packaging in clean, dry, protected area.

### **COVERAGE / YIELD**

Approximately 10 litres / 20 kg bag

## **SURFACE PREPARATION**

The unrestrained surface area of the repair must be kept to a minimum. The formwork should be rigid and tight to prevent loss of material and have properly sealed faces to ensure that no water is absorbed from the repair material.



- The formwork should include drainage outlets for pre soaking and, if beneath a soffit, provision for air-venting. Provision must also be made for suitable access points to pour or pump the mixed microconcrete into place. Saw cut or cut back the extremities of the repair locations to a depth of at least 25mm to avoid feather-edging and to provide a square edge.
- Break out the complete repair area to a minimum depth of 50mm up to the sawn edge. Clean the surface and remove any dust, unsound or contaminated material, plaster, oil, paint, grease, corrosion deposits or algae.
- □ Where breaking out is not required, roughen the surface and remove any laitance by light scabbling or grit blasting. Oil and grease deposits should be removed by steam cleaning, detergent scrubbing or the use of a proprietary degreaser.
- ☐ The effectiveness of decontamination should then be assessed by a pull-off test. Expose fully any corroded steel in the repair area and remove all loose scale and corrosion deposits.
- □ Steel should be cleaned to a bright condition paying particular attention to the back of exposed steel bars. Abrasive blasting is recommended for this process.
- Where corrosion has occurred due to the presence of chlorides, the steel should be high-pressure washed with clean water immediately after grit-blasting to remove corrosion products from pits and imperfections within its surface.

TYPICAL PHYSICAL PROPERTIES		
PROPERTY	TEST METHOD	TYPICAL VALUES
Determination of compressive strength	UNE-EN 12190:1999	45.0 N/mm <sup>2</sup>
Bond strength by pull-off (Without primer (28 days))	UNE-EN 1542:1999	2.5 MPa (Cohesive Failure in Mortar)
Bond strength by pull-off (With primer (28 days))	UNE-EN 1542:1999	2.5 MPa (Cohesive Failure in Mortar)
Shrinkage	UNE-EN 12617-4:2002. Controlled movements method	2.5 MPa
Expansion	UNE-EN 12617-4:2002. Controlled movements method	2.4 MPa
Carbonation Resistance	UNE-EN 13295:2005	Dk≤ reference concrete MC (0.45)
Elastic Modulus	UNE-EN 13412:2008	20.8 GPa
Chloride ion content	UNE-EN 1015-17:2000	<0.01%
Capillary absorption	UNE-EN 13057:2002	0.3 kg/(m <sup>2</sup> x h0.5)
Coefficient of thermal expansion	UNE-EN 1770:1990	16.2 µm/m ℃



## Construction Products Group

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### Reinforcing steel priming

Apply one full coat of Eucocrete Zincrich and allow to dry before continuing. If any doubt exists about having achieved an unbroken coating, a second application should be made and, again, allowed to dry before continuing.

## **Pre-soaking - Substrate priming**

- Pre-soaking the formed repair area with clean water helps to ensure good adhesion of the Eucocrete FLO at the interface of the concrete and improves the flow of the product during the installation. The area should be filled with clean water for a minimum 2 hours before the application takes place.
- Immediately before application takes place, any free water should be removed by draining or vacuum.

## **MIXING INSTRUCTIONS**

- Place the minimum required amount of clean water into a clean mixing bucket.
- While mixing slowly, gradually add Eucocrete FLO. If necessary, add additional clean water until a mix of the desired workability is obtained.
- Once the desired consistency is obtained, mix product for a further 2 4 minutes.
- □ Normal clean water required is 1.9 to 2.2 litres per 20kg bag of Eucocrete FLO.
- Low sheer mechanical mixer is suitable.
- It is highly recommended to mix the full 20kg bag of Eucocrete FLO for all applications.

## **APPLICATION**

- The mixed material should be placed within 30 minutes of mixing in order to gain the full benefit of fluidity and of the expansion process.
- ☐ If placing by pump, standard concrete pumping practice should be followed. The pump and pipeline must be 'primed' with a rich cement slurry or mortar, discharging the primer mix as waste.
- Pumping should be commenced immediately after 'priming' in this way.

### **CURING**

- Correct curing is essential to ensure optimum performance of Eucocrete FLO.
- The formwork should be left in place until the compressive strength of the Eucocrete FLO is 10MPa or as otherwise specified by the Supervising Officer. It is recommend that the formwork be left in place for as long as practically possible to provide the best curing conditions.
- □ Eucocrete FLO must be cured immediately after the formwork is stripped in accordance with good concrete practice. Immediately after striking the formwork, all exposed faces of the repair should be thoroughly soaked with clean water and then sprayed with a liquid curing membrane such as Eucocrete Activator.
- Any delay in starting the curing process after the formwork is stripped will adversely affect the performance of the product. In fast drying conditions, supplementary curing with polythene sheeting taped down at the edges must be used. In cold conditions, the finished repair must be protected from freezing.

### **HEALTH & SAFETY PRECAUTIONS**

The Safety Data Sheet (SDS) must be read and understood prior to use.

### **TECHNICAL SERVICE**

Tremco CPG Australia Pty Ltd has a team of Representatives who provide assistance in the selection and specification of products. For more detailed information or service and advice, call Customer Service on (02) 9638 2755 or fax (02) 9638 2955.

### **GUARANTEE/WARRANTY**

Tremco CPG Australia Pty Ltd products are manufactured to rigid standards of quality. Any product which has been applied (a) in accordance with Tremco CPG Australia written instructions and (b) in any application recommended by Tremco CPG Australia, but which is proved to be defective, will be replaced free of charge.

Any information provided by Tremco CPG Australia in this document in relation to Tremco CPG Australia's goods or their use is given in good faith and is believed by Tremco CPG Australia to be appropriate and reliable. However, the information is provided as a guide only, as the actual use and application will vary with application conditions which are beyond our control. Tremco CPG Australia makes no representation, guarantee or warranty relating to the accuracy or reliability of the information and assumes no obligation or liability in connection with the information. To the extent permitted by law, all warranties, expressed or implied are excluded.

### **CONTACT OUR TEAM**

Tremco CPG Australia Pty Ltd ABN: 25 000 024 064 Unit 12, 4 Southridge Street Eastern Creek, NSW 2766

P: (02) 9638 2755 F: (02) 9638 2955

E: tremco@tremco.com.au