

## EmO MC xtra

**High Strength, shrinkage controlled, polymer modified, low alkali micro concrete**

### USES

EmO MC xtra is suitable for mass infill to structural repairs in all types of load bearing situation. Typical applications would include, but not be limited to, the following:

- Repairs to columns suffering from major loss of section
- Repairs to restricted access areas, where use of hand applied mortars would prove impractical
- Soffit repairs where heavy load bearing is required
- Repairs requiring high fluidity e.g. heavily congested steel or repairs in to re-entrant angles/concealed voids
- Any repairs requiring significant levels of loadbearing

### Advantages

- The dimensions of the repair remains stable; and thus eliminating failure, due to shrinkage cracking
- Cost effective
- Enhanced durability
- Compatibility
- User friendly

### Description

EmO MC xtra is supplied as a ready to use blend of dry powders and selected aggregates, which requires only the addition of clean water to produce a highly consistent fluid micro concrete suitable for all load bearing situations.

### Properties

The following typical results were obtained at a water : powder ratio of 0.132

Test Method	Typical result
Compressive Strength: (BS 1881 Pt.116)	> 40N/mm <sup>2</sup> at 1 day : > 60 N/mm <sup>2</sup> at 7 days : > 70 N/mm <sup>2</sup> at 28 days
Flexural Strength (BS 6319 Pt.3)	: >9N/mm <sup>2</sup> at 28 days
Water Absorption	: <2%
Drying shrinkage to ASTM C 157-93	
7 days	: < 300 micro strain
28 days	: < 500 micro strain

### Design criteria

- EmO MC xtra is designed for large volume repairs, typically in excess of 30 mm deep. The product can be applied in sections generally between 30 and 200 mm thick, greater thickness may be achievable.
- In situations where a substrate/repair barrier is required, or enhanced bond strength/working time is required, or where the substrate is likely to be damp, Ebond EP epoxy bonding agent should be used
- **Water addition – 3.3 litres/ 25 kg bag** under no circumstances should part bags be used or additional water be

employed. Either of those two actions will adversely affect material performance.

### Estimating

### Supply

EmO MC xtra : 25 kg bags

Yield : 12.5 litres/ 25 kg bag

### Technical support

ELMRR offers a comprehensive range of high performance, high quality construction products. In addition, ELMRR offers a technical support service to specifiers, end-users and contractors, as well as on-site technical assistance.

### Cleaning

EmO MC xtra should be removed from tools, equipment and mixers with clean water immediately after use. Cured material can only be removed mechanically.

### Limitations

EmO MC xtra should not be used when the temperature is below 5°C and falling. The product should not be part mixed, nor part bags used. Exposure to rainfall prior to the final set may result in water uptake and severe reduction in the performance of the hardened product. The product should not be exposed to moving water during or after application.

### Storage

### Shelf life

All products have a shelf life of 12 months if kept in a dry store in the original, unopened bags or packs.

### Storage conditions

Store in dry conditions in the original, unopened bags or packs. If stored at high temperatures and/or high humidity conditions, the shelf life may be reduced to 4 to 6 months.

### Precautions

### Health and safety

EmO MC xtra contains cement powders which, when mixed or become damp, release alkalis which can be harmful to the skin. During use, avoid inhalation of dust and contact with skin and eyes. Wear suitable protective clothing, gloves, eye protection and respiratory protective equipment. The use of barrier creams provides additional skin protection. In case of contact with skin, rinse with plenty of clean water, then cleanse with soap and water. In case of contact with eyes, rinse immediately with plenty of clean water and seek medical advice. If swallowed, seek medical attention immediately — do not induce vomiting.

### Fire

EmO MC xtra is non-flammable. For further information, refer to the Product Safety Data Sheet.

### **Additional information**

ELMRR manufactures a wide range of products specifically designed for the repair and refurbishment of damaged reinforced concrete. This includes hand-placed and spray grade repair mortars, fluid micro-concretes, chemical resistant epoxy mortars and a comprehensive package of protective coatings. In addition, a wide range of complementary products is available. This includes joint sealants, waterproofing membranes, High quality precision grouts, anchoring and specialised flooring materials.

### **Product Manufactured By:**

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