

## CEMROK/HB

### DESCRIPTION

**Cemrok/HB** is a cementitious low density, high build, shrinkage compensated patch repair mortar incorporating 3mm fibres.

### USES

**Cemrok/HB** is designed for the rapid reinstatement of both vertical and overhead repairs to concrete.

### SPECIAL PROPERTIES

- Single component – easy to use, requires only addition of water.
- Low density – low slump enables rapid reinstatement.
- Shrinkage compensated – and fibres incorporated, crack resistant, no loss of integrity.
- Polymer modified – resistant to the ingress of water, chlorides, carbon dioxide etc.
- Early cure time – can be quickly overcoated with minimum delay.
- Reduces need for formwork.
- Excellent bond to concrete substrate.
- Can be placed by trowel, float or hand. For fast, extremely high-builds repairs with enhanced strength. **Cemrok/HB** can be applied by the wet spray process.

### TYPICAL PERFORMANCE

Compressive Strength N/mm <sup>2</sup>		
Days:	1	28
	5.0	20
Flexural Strength N/mm <sup>2</sup>		
	28 days	2.0

Fresh Wet Density: 1360 kg/m<sup>3</sup>

Yield: 1 bag (16kg) of **Cemrok/HB** will yield approximately 14.5 litre of mortar. For estimating purposes allow 1.1kg of **Cemrok/HB** per m<sup>2</sup>/mm thickness, i.e. 1 bag, (16 kg), will approximately cover 1.37 m<sup>2</sup> at 10 mm thickness.

Initial Set: 2 hours  
Final Set: 3 hours

### PREPARATION & PRIMING

All weak and friable concrete should be mechanically removed back to a sound substrate. When breaking out around steel rebar the full circumference should be exposed to at least 15mm behind the bar (sufficient for the fingers of a gloved hand to get through for placing) and 50mm along the bar beyond the corroded length.

When cutting back, feather edging must not be permitted. Saw cut edges to a minimum depth of 10mm should be used to outline the repair area.

All areas to be repaired must be free from unsound material, dust, grease and any contaminants which may affect the bond of the substrate to the repair mortar. Any saw cut edges should be roughened and reinforcement cleaned to bright steel using approved methods and treated with **Cemrok Steel Primer** prior to application of **Cemrok/HB**. The prepared substrate should be thoroughly soaked with clean water until uniformly saturated without any standing water.

A single coat of Cemrok Concrete Primer A diluted to one part primer : three parts water (by volume) should be scrubbed into the pre-dampened substrate at a coverage rate of 0.15 litres/m<sup>2</sup>.

The repair material should be applied "wet on wet" for maximum bond.

## Cementitious Systems

### **MIXING & PLACING**

Application should not progress if air/substrate temperature is below 5°C.

**Cemrok/HB** should be mixed using water which complies with BS EN 1008 (as for concrete).

**Cemrok/HB** should be mixed in a suitable container using either an electric (1Kw) or pneumatic power tool. Larger amounts **MUST** be mixed in a FORCED ACTION paddle mixer.

16kg of Mortar HB should be added to 2.9 litres of water, progressively mixing until a good to wet mortar consistency is achieved.

DO NOT OVER MIX THE MATERIAL. Mixing of part bags should not be attempted.

When placed by trowel, float or hand the rapid thixotropic nature of **Cemrok/HB** allows single application build up thicknesses of:-

60mm or more on soffit surfaces  
80mm or more on vertical surfaces.

Dependent on the extent of the mechanical key, it may be necessary to provide shutter support when working on reveals to improve compaction.

Priming of the substrate is essential to provide an adequate key. Very porous surfaces should be primed 24 hours before applying mortar. The substrate shall receive a scrub coat of CMS Pozament Cemrok Concrete Primer A. See separate data sheet before applying Cemrok/HB. Scrub the mortar into the primer coat to form a bonding key and build up from this layer. Subsequent layers should be re-primed before building up.

Application thicknesses depend on the substrate and great care must be taken to work the initial layer well into the prepared surface before attempting to build up thicker layers.

Finishing can be done with wood or steel float but wooden floats give a better surface for coating to adhere to.

### **CURING**

Any mortar exposed to wind or drying conditions should be suitably protected, preferably by coating with a wax-free Curing Agent.

Any mortar that is likely to be subject to low temperature immediately after placing or during its early strength development should be protected by covering with hessian or other insulative material. For working in cold weather reference should be made to BS8110 Pt. 1 Section 6.

**Cemrok/HB** should be cured in accordance with good concreting practice.

### **HEALTH & SAFETY**

For health and safety data, see sheet reference 40/A.

### **QUALITY CONTROL**

Factory blended, tested and packaged in the UK for Adomast Ltd to quality control procedure in accordance with BS EN ISO 9001 Series.

### **PACKAGING AND STORAGE**

**Cemrok/HB** is available in nominally 16kg sacks, palletised and shrink wrapped. **Cemrok/HB** may also be available in Intermediate Bulk Containers or in Bulk Powder Tankers.

Palletised **Cemrok/HB** should be stored in cool dry areas clear of the ground sheeted or under cover and stacked not more than two pallets high.

The product should be used on a first in – first out basis.

Shelf life is minimum 3 months but could be in excess of 6 months subject to temperature and humidity.