

### DESCRIPTION

CAPCEM-H.B IS a pre-mixed cement based mortar system consisting of polymers, aggregates, crack inhibiting fibers and chemical additives to provide a cohesive high build repair mortar giving a smooth finish with excellent adhesion. When mixed with specified amount of water, a trowel able mortar results that is ideally suited for interior and exterior application.

### COLOUR

Grey

### USES

- For making up small areas of concrete.
- For benching in sewers and manholes.
- Repair of vertical or horizontal surfaces.
- Re-profiling of concrete or masonry.
- Filling tie rod holes.
- To correct uneven structural irregularities.

### ADVANTAGES

- Perfect bonding and low shrinkage.
- Perfect protection to embedded steel.
- High resistance to freeze/thaw cycles.
- No segregation or sedimentation.
- Can be applied up to 10 mm in one pass on vertical surfaces without form work. Greater thickness can be achieved by the use of temporary form work. On horizontal surface up to 30 mm thickness can be applied. To built up thickness apply in successive pass.

### PROPERTIES

**Appearance:** Granular grey powder

**Compressive strength** as per ASTM C-109, w/p 0.150

7 days : 200 kg/cm<sup>2</sup>

28 days : 350 kg/cm<sup>2</sup>

**Wet density** as per BS 1881: Approx. 2050 kg/m<sup>3</sup>

**Yield** in 20 kg bag: Approx. 9.8 liter.

### APPLICATION INSTRUCTIONS

#### Surface Preparation:

Clean the area to be filled from all loosely adhered matter or surface contaminants (oil, grease, form release agents, dust etc.). Surfaces should be sound. In spilled areas, clear off any loose or weak concrete. Where ever possible, cut vertical shoulders at edges to accommodate repair mortar. Mechanically roughen smooth surfaces to receive repair mortar.

#### Priming:

If corrosion is observed on the surface, the possible cause may be the presence of chlorides or due to carbonation. In both cases epoxy based zinc rich primers are to be used for the treatment of steel and epoxy bonding agents for the concrete surface. Apply one full coat of zinc rich primer and allow drying before continuing.

#### Substrate:

For optimum adhesion, prime with **CAP SUPER BOND** diluted with 1 part water. Do not allow prime coat to dry and immediately fill /apply CAPCEM-H.B MIX.

#### Mixing:

CAPCEM-H.B IS mixed by adding the dry powder to a measured volume of water. Do not add more than 3.2 liters of water for each bag of CAP -CEM H.B. Mix thoroughly to a mortar like consistency with a suitable paddle mortar mixer or mix small quantity by hand and trowel. until lump free consistency is achieved. At a time mix only sufficient quantity of material that can be placed in 15 minutes. No tempering by the addition of additional liquid should be attempted. Clean the vessel frequently to avoid build up.

#### Application:

Begin application of CAPCEM-H.B immediately after mixing, and work thoroughly into the repair surface. Compact well to secure proper bonding. Application can be done by trowel or by a rubber gloved hand. If desired overfill, allow to firm and shave appropriately. Finish with steel trowel until the applied surface becomes smooth and level with surrounding surface. Do not over work and minimize trowelling. Minimum application thickness is 10 mm. Do not featheredge. Maximum lift recommended is 40 mm. For depth greater than 40 mm, successive lifts are mandatory. Score the lifted surface and allow adequate curing time before installing additional lifts.

# CAPCEM - H.B

HORIZONTAL /VERTICAL HIGH BUILD PATCHING /BENCHING MORTAR

To apply as a benching mortar inside manholes properly compact the mortar in base concrete and render or screed to a smooth finish to the required levels.

#### Curing:

CAPCEM-H.B should be cured in accordance with good concrete practice by application of a suitable curing membrane (recommended CURACOAT-R or CURACOAT-P) or by wet burlap. Protection against rapid drying from wind, sun or excessive heat is necessary.

#### Cleaning:

CAPCEM-H.B should be removed from tools, equipment and mixers with clean water immediately after use.

#### Note:

Do not apply CAPCEM-H.B below 4°C or above 32°C. Temperature will affect setting time and cure rate. . Extremely hot and cold substrates during and up to 48 hours following application, May cause poor material performance.

Optimum performance of CAPCEM-H.B will not be attained in cases like failure to dampen the substrate, failure to provide key in the patch to achieve proper bond, failure to bridge moving cracks or joints, presence of bond breaking agents in the substrate, premature loading, improper curing, failure to use the correct quantity of mixing liquid and other failures to follow good application practices.

#### COVERAGE

20 kg of CAPCEM-H.B will yield 9.8 lit of mortar

#### PACKAGING

CAPCEM-H.B IS supplied in 20 kg plastic bags.

#### STORAGE

CAPCEM-H.B should be stored over pallets in a cool dry place.

#### SHELF LIFE

12 months in unopened bags.

#### SAFETY PRECAUTIONS

CAPCEM-H.B into does not contain toxic materials. Care should be taken to avoid inhalation of dust and to prevent material entering eyes.

#### 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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