

# CEMTEC EPOMORT 100 BM

## EPOXY BENCHING MORTAR

**CEMTEC EPOMORT 100 BM** is a three component system consisting of epoxy resin, hardener and quartz silica filler. The system exhibits excellent chemical and abrasion resistance for the protection of concrete and similar substrates. **CEMTEC EPOMORT 100 BM** Epoxy Mortar has been specifically designed for the rehabilitation of manholes.

### ADVANTAGES

- Chemical Resistance.
- Highly resistant to large range of industrial chemicals including acids and alkalis.
- High strength.
- One day strength approx. 8000 p.s.i. upon full curing the system is 2-3 times stronger than normal concrete.
- Ease of application.
- Specifically designed for easy installation.
- Water resistance.
- The cured system is impervious to water penetration.
- Bond strength.
- The system virtually bond to almost all substrates whether dry or damp.

### ENGINEERING DATA

Compressive Strength	-	11925 p.s.i. (82.2 MPa)
(ASTM C-579)	-	7 days strength
Flexural Strength ASTM C-580	-	4226 p.s.i. (29.1 mpa)
Tensile Strength ASTM C-307	-	2390 p.s.i. (16.5 mpa)
100 day acid test	-	Passes

### PROPERTIES

Surface Temperature	16°C.	24°C.	32°C.
Working Time	2 hours	1.15 hrs.	1/2 hour
Pot life with 0.5 liter mass	50 Mins.	30 Mins.	20 Mins.

### SURFACE PREPARATION

The surface must be strictly sound, clean and dry. Any loose or unsound brick or concrete or foreign items should be removed. Substrate should be totally free of all detergent, rust, grease, oil or any other contaminants. It is preferable that substrate should be mechanically scarified, light sandblasted or water jetted to remove all latents. This should be

followed by thorough washing to remove dust and remaining debris. If detergents have to be used to remove oil or grease, ensure that the area is rinsed by water. It is essential that if there is any active hydrostatic leaks these should be eliminated by initiating the use of AQUAPLUG hydraulic cement which has been specifically designed to stop water penetration.

### PRIMING

The area should be thoroughly primed with EPOMORT 1000 LV TWO COMPONENT EPOXY PRIMER. Apply in a thin even coat to ensure full area is still thoroughly wet. Allow the primer till tacky stage prior to applying the **CEMTEC EPOMORT 100 BM** Epoxy System.

### MIXING

In order to obtain fully homogeneous mortar, it is essential that the material should be mechanically mixed. The recommended machine is cretriangle pan mixer, alternatively a heavy duty slow speed drill running at 300 to 500 rpm utilising a special slotted paddle may be used. The entire contents of the hardener should be mixed into the base tin and both components should be mixed thoroughly. The mixed epoxy resin will be then emptied into suitable sized container or mixing drum and the supplied aggregate/quartz silica will be added slowly while the epoxy is being continuously mixed by the drill. The mixing should continue after all the components have been added for approx. 3 minutes to ensure that the product is completely blended.

### APPLICATION

The mixed epoxy mortar should be placed immediately. It is recommended that a steel trowel for application of the mortar. In addition, the mortar should be fully compressed on all surfaces to ensure good compaction and adhesion. On vertical and overhead surfaces, avoid applications over 12 mm per layer, as the material may exhibit some sagging. Where additional layers of epoxy mortar are required, avoid tightly closing the surface of the first layer. To close the surface and to achieve a smooth and impregnable finish, saturate the trowel with xylene.

### HEALTH AND SAFETY

The use of goggles and gloves are strongly

recommended and in addition, barrier creams such as debba-wet should be used. If skin contact occur with resin, remove immediately before hardening. This is best done by removing creams such as Kerocleanse 22 or Rozalex 42 followed by washing with soap and water.

Solvents used for Clean-up are flammable. Keep away from heat, sparks, open flame or lighted cigarettes.

**PACKING / YIELD**

27 kg unit - Yield 13.5 Litres

**QUALITY STATEMENT**

CMCI manufacture its products at their manufacturing facility in Saudi Arabia as per the Quality Procedures certified to conform with Quality Management System described in ISO 9000 series

CMCI provides a comprehensive technical support system for its full range of high performance construction products. CMCI also offers full technical field support to consultants, Architects, Contractors, applicators and End Users

The Technical Specification information and recommendation given are based on the current technical knowledge and the user or his representative is recommended to check the suitability of the product. CMCI reserves the right to amend the technical characteristic of the product as part of ongoing research and development. As the work execution is beyond the direct and continuous control of CMCI no guaranty and or responsibility is assumed on the performance of work completion executed with use of our products.