

CEMTEC EPOMORT 100 B

EPOXY BEARING MORTAR SYSTEM



DESCRIPTION

CEMTEC Epomort 100 B is a solvent free three component system consisting of an epoxy resin, hardener and quartz silica filler. This system is tough and resilient when compared to concrete. It has excellent characteristics for levelling plinths of bridge bearing pads. CEMTEC EPOMORT100 B is a 100% solid system and may be applied at thickness of 5 mm or greater.

FEATURES & BENEFITS

- High early strength.
- Excellent bonding properties to substrate.
- High ultimate tensile and compressive strength.
- Solvent free and V.O.C. compliant.

BASIC USES

- Bridge bearing pads.
- Precast load bearing coloumns.
- Pile caps.
- Any load bearing surfaces.

SPECIFICATIONS / COMPLIANCES

The epoxy system for CEMTEC EPOMORT 100B complies with ASTM C-881-90, TYPE II&IV, GRADE 1, CLASS B & C.

TECHNICAL INFORMATION

Typical Engineering Data

The following information was developed under laboratory conditions.

Test Temp in ° C	Pot life in minutes	Working time in hours
16°C	50	2
24°C	30	1-1/4
32°C	20	1/2

Compressive Strength

ASTM C-579 @ 24°C

1 day	13,100 psi (90 MPa)
7 days	13,600 psi (94 MPa)
28 days	14,800 psi (102 MPa)

Split Tensile Strength ASTM C-496

:2,300 psi (16 MPa)

Flexural Strength ASTM C-580

:4,500 psi (31 MPa)

Coefficient of Thermal Expansion -

ASTM C-531

:2.0 X 10⁻⁵ in./in./°F (3.6 X 10⁻⁵ mm/mm/°C)

Modulus of Elasticity ASTM C580

1 day	1.2 X 10 ⁶ psi (8.5 X 10 ³ MPa)
28 day	1.5 X 10 ⁶ psi (10.5 X 10 ³ MPa)

CHEMICAL RESISTANCE

ASTM D-543, excellent resistance to most chemicals. Specific recommendations available up on request.

DIRECTIONS FOR USE

Surface Preparation

New concrete must be a minimum of 28 days old and possess an open surface texture with all curing compounds and sealer removed. Old concrete must be clean and rough. All oil, dirt, debris, paint and unsound concrete must be removed. The surface must be prepared mechanically using a scabbler, bushhammer, shotblast or scarifier which will give a surface profile of a minimum (3 mm) and expose the large aggregate of the concrete. The final step in cleaning should be the complete removal of all residue with a vacuum cleaner or pressure washing.

Mixing

In order to obtain fully homogeneous mortar, it is essential that the material should be mechanically mixed. The recommended machine is creteAngle pan mixer, alternatively a heavy duty slow speed drill running at 300 to 500 rpm with a special slotted paddle may be used. The epoxy must be well mixed to ensure proper chemical reaction. After mixing epoxy, add part C (aggregate). Pour the aggregate slowly while mixing for further 3-5 mins., or until aggregates are wetted completely by the epoxy. For large placements, mix the epoxy separately in a 20 ltr. pail then mix the epoxy and aggregate together in a mortar mixer. Place immediately.

Placement

The well mixed CEMTEC EPOMORT 100B is placed using steel trowel and finish by hand. In case of greater thickness (more than 60 mm), it is recommended to apply in layers. The time gap between layers shall not be less than 24 hours.

CLEAN-UP

Clean tools and equipment with solvent such as CEMTEC SOLVENT, xylene, toluene or MEK, Do not allow epoxy resin to harden on the equipment.

PRECAUTIONS / LIMITATIONS

- Interior use only.
- Not recommended in areas where the floor temperature exceeds (66°C) on a continuous basis.

YIELD	1 unit of 27 Kg will yield 13.5 ltrs.
PACKAGING	CEMTEC EPOMORT 100 B is available in 27 kg units.
COLOR	Contact CMCI Tech Dept.

Quality Statement

CMCI manufactures 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 recommendations 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.

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