

PRODUCT DESCRIPTION

TREMcrete HBM is a high build thixotropic synthetic fibre reinforced cement based rheoplastic and non-segregating mortar. TREMcrete HBM is a chemical resistant compound of high strength designed to protect embedded steel reinforcement and repair damaged or spalling vertical, overhead and horizontal concrete surfaces.

USAGE/PURPOSE

TREMcrete HBM is used for the structural repair of concrete including:

- Water treatment and sewage facilities
- Marine structures
- Bridges
- Tunnels, pipes, outfalls and all below grade structures especially in harsh ground conditions
- Walls, cooling towers chimneys and other concrete repair applications

FEATURES & BENEFITS

- Can be applied 10mm-90mm in a single layer thickness, even in an overhead application
- Overhead, vertical and horizontal applicable in enclosed or open environments, wet or dry conditions
- Excellent workability
- Shrinkage compensated
- High early and ultimate strength
- Waterproof, highly impermeable
- No added chlorides
- Excellent abrasion resistance and durability
- High freeze/thaw, carbonation and sulphate resistance
- Life span greater than 10 years if applied correctly



PACKAGING

20kg Bag

COLOUR

Grey powder

TYPICAL PHYSICAL PROPERTIES

PROPERTY	TYPICAL VALUES
Grain Size	Max 1.2mm
Layer Thickness	10mm-90mm
Fresh Wet Density	Approx 2200 kg/m ³
Mixing Water per 20kg Pail	2.5-3.2 litres
Working Time	30 minutes
Temperature for Application	5 to 35°C
Waterproof	DIN 1048
Compressive Strength (MPa)	1 day: 29.5 28 days: 59.4
Flexural Strength (MPa)	28 days: 6.6
Bond Strength (MPa)	28 days: 6.9
Crack resistant	Ring Method
Restrained expansion (Microstrain)	28 days: 255
Acidic medium resistance at pH 3-4	Approx 3 times higher than conventional Portland cement mortar
Yield	Approximately 10.5 litres

SHELF LIFE

12 months when stored as recommended in original unopened packaging.

STORAGE

Store in original, undamaged packaging in a clean, dry, protected location.

SUBSTRATE PREPARATION

- ❑ Totally remove any weak, spalling, or unconsolidated concrete and clean surface. Any existing coating or material which may contribute to bonding or corrosion issues shall be totally removed.
- ❑ Corroded steel must be fully exposed and cleaned. A minimum of 20mm breakout around the exposed steel must be achieved. Rust, loose material and other contaminants which may contribute to bonding or corrosion issues shall be totally removed.
- ❑ To provide maximum bond and to avoid feather edging, a minimum saw cut edge depth of 10mm is to be achieved on all edges of the repair area.
- ❑ Soak the repair area with clean water and thoroughly remove any excess water. The area shall be puddle free and without a glistening appearance.

SUBSTRATE PRIMING

- ❑ Dependent on substrate condition, the clean damp substrate can be primed with a generous coat of TREMcrete Activator, to provide a damp but puddle free and non-glistening appearance prior to application of TREMcrete HBM. More than one coat of TREMcrete Activator may be required.
- ❑ The clean damp substrate must be primed with a slurry brush coat of TREMcrete HBM at a 2:1 ratio (2 parts powder to 1 part water).

STEEL REINFORCEMENT PRIMING

Apply an unbroken coat of TREMcrete Zincrich Primer onto and totally encapsulating the steel, and allow to dry. If any uncertainty exists with the first unbroken coat, a second coat may be applied. Again, the second coat must be allowed to dry.

MIXING INSTRUCTIONS

- ❑ Place the minimum required amount of clean water into a clean mixing bucket.
- ❑ While mixing slowly, gradually add TREMcrete HBM. If necessary, add additional clean water until a mix of the desired workability is obtained.
- ❑ Once the desired consistency is obtained, mix product for a further 2 – 4 minutes. The working time for TREMcrete HBM is 30 minutes.
- ❑ Normal clean water required is 2.5 – 3.2 litres per 20kg bag of TREMcrete HBM.
- ❑ Low sheer mechanical mixer is suitable.
- ❑ It is highly recommended to mix the full 20kg bag of TREMcrete HBM for all applications.

APPLICATION

Once the substrate has been prepared, apply the mixed TREMcrete HBM by hand or trowel. The mortar must be pressed and compacted firmly on to the substrate to ensure all voids are filled, paying close attention to compacting behind all prepared steel reinforcement.

FINISHING

When TREMcrete HBM has stiffened, the product can be finished off. Steel trowels, plastic or wooden floats can be used during the finishing process, depending on the desired effect required.

CURING

To achieve the optimum result, cover the surface with a polythene sheet taping down the edges. In higher than normal ambient conditions, an approved curing compound such as TREMcrete Activator is to be applied immediately after finishing.

HEALTH & SAFETY PRECAUTIONS

The Safety Data Sheet (SDS) must be read and understood prior to use.

TECHNICAL SERVICE

TREMCO has a team of Representatives who provide assistance in the selection and specification of products. For more detailed information or service and advice, call Customer Service on (02) 9638 2755 or fax (02) 9638 2955.

GUARANTEE/WARRANTY

TREMCO products are manufactured to rigid standards of quality. Any product which has been applied (a) in accordance with TREMCO written instructions and (b) in any application recommended by TREMCO, but which is proved to be defective, will be replaced free of charge.

Any information provided by TREMCO in this document in relation to TREMCO's goods or their use is given in good faith and is believed by TREMCO to be appropriate and reliable. However, the information is provided as a guide only, as the actual use and application will vary with application conditions which are beyond our control. TREMCO makes no representation, guarantee or warranty relating to the accuracy or reliability of the information and assumes no obligation or liability in connection with the information. To the extent permitted by law, all warranties, expressed or implied are excluded.