

## DESCRIPTION

TREMcrete HB Ultra is a high build thixotropic synthetic fibre reinforced cement based rheoplastic and non-segregating mortar. A modified version of our TREMcrete HBM, the TREMcrete HB Ultra is designed to be used for the re-profiling of concrete and masonry surfaces before the application of TREMcrete NWP.

## USAGE/PURPOSE

TREMcrete HB Ultra can be applied to any concrete and masonry surfaces which require re-profiling of depths ranging between 5mm - 50mm. TREMcrete HB Ultra is used for the structural re-profiling of concrete and masonry surfaces including:

- ☐ Swimming pools
- ☐ Water storage tanks
- ☐ Water treatment and sewage facilities
- ☐ Marine structures
- ☐ Bridges
- ☐ Tunnels, pipes, outfalls and all below ground structures especially in harsh ground conditions

## FEATURES & BENEFITS

- ☐ Can be applied 5mm-50mm 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
- ☐ Sulphate resistance
- ☐ Shrinkage compensated
- ☐ High early and ultimate strengths
- ☐ Waterproof, highly impermeable
- ☐ No added chlorides
- ☐ Excellent abrasion resistance and durability
- ☐ High freeze/thaw, carbonation and sulphate resistance



## PACKAGING

20kg Pail

## COLOUR

Grey powder

## TYPICAL PHYSICAL PROPERTIES

PROPERTY	TYPICAL VALUES
Grain Size	Max 1.2mm
Layer Thickness	5mm-50mm
Fresh Wet Density	Approx 2200 kg/m <sup>3</sup>
Mixing Water per 20kg Pail	3.0-3.4 litres
Working Time	30 minutes
Temperature for Application	5 to 35°C
Waterproof	DIN 1048
Compressive Strength (MPa)	1 day: 29.5 28 days: 55.4
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.
- ❑ All concrete surfaces are to be prepared by high pressure water blasting, wire brushing or grit blasting to create a rough surface and to open the pore structure of the concrete.
- ❑ Totally remove any dust, debris and loose material which may contribute to adhesion issues before priming of the concrete substrate.
- ❑ If steel reinforcement is exposed, 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. Please refer to the TREMcrete Zinc Rich Primer product data sheet regarding treatment of exposed steel.

## **SUBSTRATE PRIMING**

- ❑ Soak the repair area with clean water and remove any excess surface water. The substrate should be saturated, however free from any standing surface water.
- ❑ Priming is not normally required on good sound concrete, however, if the concrete is very porous the area can be primed with a slurry brush coat of TREMcrete HB Ultra at a 2:1 ratio (2 parts powder to 1 part water).

## **MIXING INSTRUCTIONS**

- ❑ Normal clean water requirement is 3.0 - 4.0 litres per 20 kg pail of TREMcrete HB Ultra.
- ❑ Place the minimum required amount of water in a clean mixing bucket
- ❑ While stirring slowly, gradually add TREMcrete HB Ultra
- ❑ If necessary, add additional water until a mix of the desired workability is obtained
- ❑ Mix for a further 2 – 4 minutes. Mixed product must be used within 30 minutes
- ❑ Low sheer mechanical mixer is suitable
- ❑ It is highly recommended to mix the full 20kg pail of TREMcrete HB Ultra for all applications.

## **APPLICATION**

- ❑ Apply TREMcrete HB Ultra by trowel, brush or spray method
- ❑ When applying by trowel, firmly press TREMcrete HB Ultra onto the concrete surface to push the product into the open pores and to ensure maximum adhesion onto the concrete surface
- ❑ When applying by spray, ensure to firmly brush or trowel immediately after spraying to remove possible trapped air within the product and to ensure maximum adhesion onto the concrete surface

## **WATER SEEPAGE**

Before the application of TREMcrete HB Ultra, all water seepage must be stopped by using TREMcrete Plug – please refer to the TREMcrete Plug product data sheet for application. Water seepage, no matter the flow, may not allow TREMcrete HB Ultra to cure and perform to its required capabilities.

## **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.
- ❑ Curing times may vary depending on weather and environmental conditions.

## **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.