

## PRODUCT INFORMATION BULLETIN

### DESCRIPTION

**AD-TEK HB-T** is a high build thixotropic synthetic fibre reinforced cement-based rheoplastic and non-segregating mortar.

**AD-TEK HB-T** 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.

### USES

**AD-TEK HB-T** is used for the structural repair of concrete including:

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

### 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.
- Product, when correctly applied, has a life greater than 10 years.

## PROPERTIES

|   |  |
|---|--|
| <b>Appearance</b>                         | Grey powder  |
| <b>Grain Size</b>                         | Max 1.2mm  |
| <b>Layer Thickness</b>                    | 5mm-50mm   |
| <b>Fresh Wet Density</b>                  | Approx 2200 kg/m <sup>3</sup>  |
| <b>Mixing Water per 20 kg pail</b>        | 3-3.4 litres   |
| <b>Working Time</b>                       | 30 minutes   |
| <b>Temperature for application</b>        | From 5 to 35°C   |
| <b>Waterproof</b>                         | DIN 1048   |
| <b>Compressive strength (MPa)</b>         | 1 day: 29.5<br>28 days: 55.4   |
| <b>Flexural strength (MPa)</b>            | 28 days: 6.6   |
| <b>Bond strength (MPa)</b>                | 28 days: 6.9   |
| <b>Crack resistant</b>                    | Ring Method  |
| <b>Restrained expansion (Microstrain)</b> | 28 days: 255   |
| <b>Acidic medium resistance at pH 3-4</b> | Approximately 3 times higher than conventional Portland cement mortar. |

### Preventative:

Damaged or spalling concrete surfaces are usually a sign of corroding steel below the substrate surface.

We recommend, as a part of the installation process described below, the prior application of AD-TEK H on the concrete substrate in order to passivate the steel reinforcement embedded beneath the concrete and completely harden the concrete surface, creating an appropriate adhesion platform (Refer to Ad-Tek H Product Information Bulletin).

## INSTALLATION (Refer to the MSDS before use)

### Surface Preparation:

- Remove any weak, spalling or unconsolidated concrete and thoroughly clean surface.
- Remove any existing coating of the concrete surface.
- If steel reinforcement is exposed, remove any rusting on the steel surface.
- Acid etch, pressure wash then hose to fully impregnate with water and allow drying to a wet dull lustre and puddle free.

### Priming:

- The clean damp substrate must be primed with a slurry brush coat of **AD-TEK HB-T** (2 parts powder to 1 part water)

### Application:

Apply **AD-TEK HB-T** as you would use standard render techniques.

### Curing:

Cure at normal ambient conditions. To achieve the optimum result, cover the surface with a plastic sheet for 24 hours.

**Mixing Equipment:**

Low shear mechanical mixer

**Mixing instructions:**

- Place the minimum required amount of water in a clean mixing bucket.
- While stirring slowly, gradually add **AD-TEK HB-T**.
- If necessary, add additional water until a mix of the desired workability is obtained.
- Mix for a further 2 – 4 minutes. Use within 30 minutes.
- Normal water requirement is 3.0-4.0 litres per 20 kg pail of **AD-TEK HB-T**.

**PACKAGING, SHELF LIFE and STORAGE**

**AD-TEK HB-T** is available in 20 kg plastic pails. **AD-TEK HB-T** has a shelf life of 12 months if kept in an original unopened bag or container in a dry store in sealed pails.

Disclaimer: Any advice, recommendation, information, assistance or service provided by application is in good faith and is believed by AD-TEK PTY LTD to be appropriate and reliable. However, any advice, recommendation, information, assistance or service provided by AD-TEK PTY LTD is provided without liability.