

PRODUCT INFORMATION BULLETIN

DESCRIPTION

Ad-Tek HB-Quick is a balanced blend of sand, cement and active chemical components mixed together to create a rapid-hardening high build mortar to repair damaged horizontal concrete surfaces. Ad-Tek HB-Quick is designed to accept traffic two hours after placement, minimizing any traffic interruption.

USES

Repair of damaged concrete structures such as bridges, roads, pipes, factory floors and walls where a depth of fill of between 10mm and 100mm is required.

BENEFITS

- Rapid setting for quick repair in less than one hour.
- Contains no added chlorides and gypsum.
- High early and ultimate strength.
- Excellent bond to the concrete substrate.
- Corrosion protection to reinforcement.
- Excellent abrasion resistance and durability.
- Can be painted over — most coatings adhere well to the cured product.
- Economical and labour-saving material.
- Open to foot traffic in 2 hours, to vehicle traffic in 3 hours.
- Can be top treated with Ad-Tek PW for dramatically increased waterproofing.
- Product, when correctly applied, has a life greater than 10 years.

PROPERTIES

Appearance	Grey powder
Grain size	Max 1.2mm
Layer thickness	10mm-100mm
Fresh wet density	Approx 2.3 kg/m ³
Mixing water per 20 kg pail	2.0-2.4 litres
Working time	25 minutes
Temperature for application	From 5 to 40°C

Initial and final	40 and 50 min
Compressive strength (AS 1012.8.1 – 2000)	- 2 hours: 11 MPa - 3 hours: 18 MPa - 1 day: 41 MPa - 28 days: 92 MPa
Flexural strength (AS 1012.8.2 – 2000)	28 days: 8.1 MPa
Bond strength	28 days: 4.9 MPa
Crack resistant	Ring method
Shrinkage	Less than 600 microstrain at 28 days
Time to pedestrian and vehicular traffic	2-3 hours at 23°C

INSTALLATION (Refer to the MSDS before applying)

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-Quick** (2 parts powder to 1 part water).

Mixing equipment:

Low shear mechanical mixer

Mixing Instructions (20kgs Ad-Tek HB-Quick):

Place the required amount of water in a clean mixing bucket and, while stirring slowly, gradually add the **Ad-Tek HB-Quick** until a mix of the desired workability is obtained. Mix for a further 2 – 3 minutes and use within approximately 25 minutes.

Note: The normal water requirement is 2.0 - 2.4 litres of water to 20 kg of **Ad-Tek HB-Quick**.

For depths of fill above 100mm up to 250 mm, the product can be bulked out by adding up to 40% of 5-10mm aggregate.

APPLICATION

Apply the **Ad-Tek HB-Quick** by trowel onto the repair surface. Fill all pores and voids and screed of excess. Allow mortar to set to desired stiffness, then finish. The total time of mixing, placing and finishing should not exceed 30 minutes.

CURING

All exposed areas should be moist cured. This should be done, as soon as the surface is firm (approx. in 1 hour after addition of water to **Ad-Tek HB-Quick** dry mix) with continuous application of water or wet hessian.

PACKAGING, SHELF LIFE and STORAGE

Ad-Tek HB-Quick is available in 20 kg moisture-resistant plastic pails.

Ad-Tek HB-Quick has a shelf life of 12 months if kept in a dry store in sealed plastic 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.