

CAP RAPID HARD

RAPID HARDENING REPAIR MORTAR

DESCRIPTION:

CAP RAPID HARD. Is a one component, cementitious, rapid hardening structural repair mortar designed for horizontal applications. **CAP RAPID HARD** is composed of blend of selected cements, silica sand chemical additives and fibers.

COLOR: Gray

USES:

CAP RAPID HARD is ideal for structural patching of concrete pavements, bridges, parking decks, airport runways and taxiways. **CAP RAPID HARD** is highly recommended for repair of industrial floors, sidewalk and general commercial applications.

ADVANTAGES

- Rapid strength gain can be opened to traffic in six hours
- Shrinkage compensated minimizes cracking and de- bonding.
- Chloride free
- Low permeability with excellent freeze thaw resistance
- Superior abrasion resistance.
- Can be extended with coarse aggregates.

PROPERTIES

Following physical properties recorded by using 3.8 liters of water for 25 kg of **CAP RAPID HARD**. At 25 °C.

Final Setting time: 2.45-3.15 hrs as per ASTM C-191

Working life: 15-20 min

Traffic time:

Pedestrian: 3-4 hrs

Vehicular: 5-6 hrs

Compressive strength Kg/cm²

130 @ 5 hrs

250 @ 6 hrs

500 @24 hrs

600 @7 days

650 @28 days

* While extending with 25-50 % aggregate up to 15 % reduction in compressive strength can be expected.

APPLICATION INSTRUCTIONS

Surface preparation:

Mechanically abrade existing substrate to remove all unsound concrete; substrate must be structurally sound and free of any contaminants that will adversely affect the bond. On existing substrate prepare a profile of 10 mm to ensure adequate mechanical lock. Perimeter of repair zone must be saw cut to the depth of 12 mm to avoid feather edging. Abrade reinforcing steel to a white metal finish. Remove all standing water and puddles.

Mixing:

Mix only complete bags, using a suitable size mortar type mixer. Add 95% of recommended water. Mix for 2 minutes until homogenous and lump free consistency achieved. To adjust the workability remaining 5 % water can be added. Do not mix more product that can be mixed, placed and finished in 15 minutes. Avoid over mixing.

For repair greater than 50 mm in depth, extend **CAP RAPID HARD** by 25-50 % of 10 mm aggregate always add the aggregate to the mixing water prior to addition of **CAP RAPID HARD** Proper stress relief must be given for large areas.

Placing

Apply mix mortar or concrete by trowel or screed. Compact **CAP RAPID HARD** well against the prepared substrate prior to bulk placement. Ensure complete encapsulation of reinforcing steel

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Finishing

Finish surface by screening CAP RAPID HARD to a level surface, for a rough Finish, a broom or burlap bag is suitable. Do not re-temper or overwork.

Curing

Start curing immediately with wet burlap for proper hydration and to avoid Dusting. Minimum 24 hrs curing is necessary.

Limitations

Do not add any admixture.
Recommended for concrete repairs only.
Do not bridge moving cracks.
Use of extender aggregate will alter physical Properties.

Cleaning

CAP RAPID HARD should be removed from tools equipment and mixers with clean water immediately after use.

Coverage

25 kg of CAP RAPID HARD yields approximately 12 liters of mortar, which will cover 0.0012 m³

Packaging

25 kg bag.

Storage

CAP RAPID HARD should be stored over pallets in cool dry place. Shelf life is 6 months in unopened bags.

SAFETY PRECAUTION

CAP RAPID HARD does not contain toxic materials. Care should be taken to avoid in handling of powder and contact with skin or eye during application.

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TECHNICAL SERVICE:

Our Technical Service Department is available at any time to advise you in the correct use of this product or any other Ahlia products.

Note : The information presented herein is based on the best of our knowledge and expertise for which every effort is made to ensure its reliability. Although all the products are subjected to rigid quality tests and are guaranteed against defective materials and manufacture, no specific guarantee can be extended because results depend not only on quality but also on other factors beyond our control.

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