

# Aftek Penapatch Structural HB50 Mortar 20kg Bag

## Product Images



## Short Description

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Penapatch HB50 is a high strength, high build, medium weight shrinkage compensated structural repair mortar. Penapatch HB50 is designed to be used for vertical or horizontal applications. Penapatch HB50 has high, ultimate compressive strength and high abrasion resistance. The specially selected cement and polymers contained in Penapatch HB50 provide a mortar with strong adhesion to concrete and masonry on vertical and horizontal substrates with extremely low shrinkage and relatively low density. Penapatch HB50 requires only the addition of water.

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### Features:

- High ultimate compressive strength
- High build repairs achievable in a single application
- Low permeability providing protection from chloride attack and carbonation
- High strength and high abrasion resistance
- Excellent workability
- Shrinkage compensated allowing for long term dimensional stability
- Eliminates the need for formwork
- Contains no chlorides
- Can be applied by dry or wet process, achieving high build with exceptional compaction and enhanced performance
- Exceptional bond strength to concrete substrates

### Ideal for:

- High build repairs for vertical, overhead and horizontal repairs
- Repairs requiring high compressive strength
- Repairing damaged concrete panels where structural strength is required
- High build repair applications 5mm to 80mm for vertical surfaces
- May be applied in verticals up to 120mm in small pockets or with the aid of formwork
- Repairs to spalled or deteriorated concrete caused by corrosion of steel reinforcement
- Repairs requiring low permeability and high resistance to chlorides and carbon dioxide
- Can be applied up to 120mm in vertical surfaces

## APPLICATION

### Surface Preparation:

All surfaces must be free of oil, grease, dust, plaster, paint and any other contamination that will inhibit the bond. Any cracked or weakened surface should be removed and repaired to provide a solid foundation. It is recommended that for large areas a minimum depth of 5mm be prepared to avoid excessive feather edging

or skim coating. Break out the repair area to a minimum of 5mm up to the saw cut edge. Scabbing or high-pressure water blasting should be used to remove laitance and provide a mechanical key. If any corroded steel is present remove all loose scale and corrosion/rust deposits. Grit blasting is effective in removing corrosion, and all steel including re-bars should be cleaned to a bright condition. Immediately after cleaning the steel, the steel should be treated with Aftek Zinc Rich Primer. This will stop further oxidation and corrosion.

Priming is necessary for concrete and masonry, exposed steel and rebar. Refer to the Technical Data Sheet for further information.

**Mixing:**

Penapatch HB50 is ready to use - simply add the powder to 2.7 – 3 litres of water and mix using a mechanical forced action mixer with a high shear spiral mixing paddle. Mixing normally takes 3-5 minutes.

**Placement:**

Thoroughly compact the mortar into the prepared and primed substrate and around the exposed steel reinforcement and re-bars. A smooth surface can be obtained using a steel trowel. Penapatch HB50 can also be applied using a wet application technique. The mortar is pre-mixed with the required dosage of water and then pumped through a delivery hose through a spray gun with a suitable nozzle. Curing should be conducted using a suitable curing compound, such as Curecon A, applied in accordance with the Technical Data Sheet.

**Clean Up:**

Wash all tools and equipment with fresh, clean water immediately after use. Penapatch HB50 can only be removed mechanically.

**Storage:**

HB50 has a shelf life of 9 months if stored in the original packaging in a cool dry place.

**Yield:**

One bag will yield 12.9 litres at 2.9 litres water per 20kg bag. 78 bags are required per cubic metre.

## Additional Information

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CODE	40-AFPHB50
U.O.M	Each
Colour	Grey
Suits Substrate	Concrete
Similar Products	Parchem Renderoc HB70 Sika Monotop 412NFG BASF Master Emaco S488CI
Pallet Quantity	64 bags
Brand	Aftek
Range / Model	Penapatch
Size	20 Kg
Appearance / Composition	Powder
Cure Time	Initial - 3 hours, Final - 5 hours
Compressive Strength at 7 days (MPa)	33
Compressive Strength at 28 days (MPa)	55
Yield	12.8 litres per bag
Modulus	26

