

Aftek Penapatch HB80 Structural Mortar 20 kg

Product Images



Short Description

Aftek Penapatch Structural HB80 is a cementitious high strength, high build shrinkage compensated structural repair mortar. Structural HB80 is designed to be used for vertical or horizontal applications. Structural HB80 has a high ultimate compressive strength and high abrasion resistance. The specially selected cements and polymers contained in Structural HB80 provide a mortar with strong adhesion to concrete and masonry on vertical and horizontal substrates with negligible shrinkage.

Description

The specially selected cements and polymers contained in Structural HB80 provide a mortar with strong adhesion to concrete and masonry on vertical and horizontal substrates with negligible shrinkage. Suitable for repairs requiring high compressive strength and damaged concrete panels where structural strength is required; high build repair applications 5mm to 80mm for vertical surfaces; vertical repairs up to 160mm in small pockets or with the aid of formwork; and repairs to spalled or deteriorated concrete caused by corrosion of steel reinforcement.

Penapatch is also suitable for repairs requiring low permeability and high resistance to chlorides and carbon dioxide. Can be applied up to 180mm in horizontal surfaces.

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
- Can be applied by dry or wet process, achieving high build with exceptional compaction and enhanced performance
- May be coated with Aftek range of protective coatings
- Exceptional bond strength to concrete substrates
- Internal or external applications
- Easy to use - simply add water and mix
- Australian made

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 160mm 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 180mm in horizontal 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 as 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 steel, the steel should be treated with Aftek Zinc Rich Primer.

For concrete, masonry, steel and rebar, priming is necessary. Refer to the Technical Data Sheet for more information.

Mixing:

Add the powder to 2.6 – 2.9 litres of water and mix using a mechanical forced action mixer with a high shear spiral mixing paddle. Do not use free fall mixers. Mixing normally takes 3-5 minutes. Any shorter mixing time will result in an inconsistent mix. Excess water will reduce the ultimate (final) strength and extend the drying time of the product. Additional or excess water will increase the sag and reduce the build-up of the mortar. Only mix the quantity of material that can be used within the set time of the material. Discard partially set or hardened material.

Placement:

Apply the mixed material to the prepared surface using a trowel or a gloved hand. 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.

Structural HB80 can be applied using 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 in accordance with good concrete practice. Refer to the Technical Data Sheet for more information.

Clean Up:

Wash all tools and equipment with fresh clean water immediately after use. Structural HB80 can only be removed mechanically.

Storage:

Up to 9 months if stored in the original sealed packing.

Yield:

1 bag will yield 10.5 litres at 2.9 litres water per 20kg bag.

Additional Information

CODE	40-AFPHB80
U.O.M	Each
Colour	Grey
Suits Substrate	Concrete
Similar Products	BASF Master Emaco S488CI Sika Monotop 412NFG/612N
Pallet Quantity	64 bags
Brand	Aftek
Range / Model	Penapatch
Size	20 Kg
Appearance / Composition	Powder
Application Thickness (mm)	10 mm to 180 mm Horizontal, 5 mm to 100 mm Vertical
Cure Time	Initial - 3 hours, Final - 5 hours
Compressive Strength at 7 days (MPa)	68
Compressive Strength at 28 days (MPa)	80
Yield	10.5 litres per bag
Modulus	26

