

CEMIMAX CEMipatch HB100

High build, high strength, polymer modified, shrinkage compensated repair mortar

DESCRIPTION:

CEMipatch HB100 is a high-performance, shrinkage-resistant structural repair mortar engineered for both vertical and horizontal surfaces. Formulated with a carefully optimized combination of specialized cements and polymer additives, this high-volume mortar delivers exceptional compressive strength, outstanding abrasion resistance, and superior bonding strength to concrete and masonry substrates. Its shrinkage-compensating properties ensure long-term durability in structural repair applications.

PRODUCT PROPERTIES/BENEFITS:

- **Exceptional Compressive Strength:** Delivers high ultimate compressive strength for durable, long-lasting repairs.
- **Single-Application Efficiency:** Enables high-build repairs (up to 100mm) in one layer, saving time and labor.
- **Superior Durability:** Low permeability protects against chloride attack and carbonation, extending service life.
- **High Abrasion Resistance:** Withstands wear and tear in demanding environments.
- **Dimensional Stability:** Shrinkage-compensated formula ensures long-term structural integrity without cracking.
- **Excellent Workability:** Smooth and easy to apply, ensuring consistent results.
- **Formwork-Free Application:** Suitable for vertical, horizontal, and overhead surfaces without temporary supports.
- **Versatile Application Methods:** Can be applied via dry or wet processes for optimal compaction and performance.
- **Exceptional Adhesion:** Bonds tenaciously to concrete substrates, ensuring reliable repairs.
- **Universal Use:** Suitable for both internal and external applications.

Subfloor Preparation:

Clean Surface: Ensure all surfaces are free of oil, grease, dust, plaster, paint, and any other contaminants that could hinder adhesion.

Remove Weak Material: Eliminate any cracked, spalled, or weakened concrete to create a solid and stable substrate.

Minimum Depth: For large repair areas, prepare a minimum depth of 5mm to avoid excessive feather edging or thin skim coats.

Define Repair Area: Break out the repair area to a minimum of 5mm depth, extending to the edges of saw cuts.

Surface Profiling: Use scabbling or high-pressure water blasting to remove laitance and create a rough, mechanical key for optimal bonding.

Steel Reinforcement Preparation: Remove all loose scale, rust, and corrosion from exposed steel reinforcement. Grit-blast the steel to a clean, bright finish. Immediately after cleaning, apply RLA ZINC RICH PRIMER to prevent further oxidation and

Mixing:

Mixer Type: Use a mechanical forced-action mixer with a high-shear spiral paddle. Do not use free-fall mixers.

Water Ratio: Add 3.6 liters of clean water per 20kg bag of PENAPATCH HB80.

Mixing Process:

- Pour clean water into a clean mixing container.
- Gradually add the powder to the water while mixing at slow/medium speed.
- Mix for 3–5 minutes until a smooth, uniform mortar consistency is achieved.

Important Note: Insufficient mixing time may result in an inconsistent mix.

Application:

Application Method: Apply the mixed material using a trowel or gloved hand.

Compaction: Ensure thorough compaction into the prepared substrate and around exposed steel reinforcement or re-bars.

Finishing: Use a steel trowel to achieve a smooth surface finish.

Important Note: Avoid overworking the surface to maintain integrity and performance.

Technical Data:

Compressive Strength :

After 1 Day Approx. 25mpa
After 7 Days Approx. 51mpa
After 28 Days Approx. 70mpa

Tensile Bending Strength :

After 1 Day Approx. 6mpa
After 7 Days Approx. 8mpa
After 28 Days Approx. 9mpa

Compressive strength in accordance with AS1478.2-2005

Flexural strength in accordance with AS 1012-11-2000

Pack-size: 20kg/bag



Cemimax CEMIpatch HB100



Colour: Grey Powder
Shelf life: 12 months
Application Temp: Min 5°C - Max 35°C
Coverage (Kg/m²/mm): 2.2
Water Add: 3.6L for 20kg

Limitation:

Water Addition: Adding more water than the prescribed amount will lead to longer cure durations and poor strength build - up.

Substrate Movement: Should the substrate on which PENAPATCH HB80 is applied shift or crack, reflective cracking will occur in the PENAPATCH HB80.

Concrete Age: Concrete surfaces or substrates must be at least 21 days old before applying PENAPATCH HB80.

Thickness Constraints: Do not apply PENAPATCH HB80 in areas thinner than 5mm. Minor, localized areas with thicknesses less than 5mm are acceptable.

High - Wind and Exposed Areas: In high - wind and exposed application areas, apply the RLA CURECON A curing compound.

Sunlight and Heat Exposure: Protect from direct sunlight and heat.

Water Contact: Ensure that PENAPATCH HB80 does not contact water for at least 24 hours after application.

Temperature Range: Do not use PENAPATCH HB80 when temperatures are below 5°C or above 35°C.

Immersed Conditions: When using PENAPATCH HB80 in immersed conditions, use RLA EPILOX BINDER as a primer.

Health & Safety:

For information regarding the safe handling, first - aid procedures, storage, and disposal of chemical products, users must refer to the most recent Safety Data Sheets (SDSs), which contain physical, ecological, toxicological, and other safety - related data.

Warranty Statement:

RLA Polymers guarantees this product against manufacturing defects and guarantees it to be manufactured to our published specification. We certify that when fully cured, this product will perform as described in our technical data sheet or other published materials.

RLA Polymers will replace the product free of charge when purchased from a legally verifiable source, provided the product has been stored, handled, and installed according to the instructions on our packaging and within the stated shelf - life. The installation of all materials must comply with the relevant Australian Standard and the Floorcovering Manufacturer's instructions, and the floorcoverings must have been subject to normal traffic conditions.

The warranty does not apply if damage, loss, or failure to follow instructions, or other circumstances, are beyond our control.

Australian Consumer Law:

Our goods come with non - excludable guarantees under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure. The benefits under our warranty are in addition to other rights and remedies available to the consumer under the law in relation to the goods and services to which the warranty relates. - Sufficient time and access to investigate any complaint must be accorded to RLA Polymers. The consumer is responsible for any expenses incurred in making a claim.

Disclaimer:

All statements and technical information herein are based on tests we believe to be reliable, but the accuracy is not guaranteed. Users assume all risk and liability from using the product and must confirm its suitability through their own tests. The Conditions of Sale contain a limited warranty against manufacturing defects.

