

CEMIMAX CEMlpatch ULW

Ultra light weight concrete repair mortar

Description:

CEMlpatch ULW is a light weight, 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.

Features and benefits:

- **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.

Technical Data:

Compressive Strength

After 28 Days Approx. 20mpa

Compressive strength in accordance with AS1478.2-2005

Pack-size: 10kg/bag

Colour: Grey Powder

Shelf life: 12 months

Application Temp: Min 5°C-Max 35°C

Water Add: 2L for 10kg

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 Cemimax PRIMER to prevent further oxidation and corrosion.

Mixing:

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

Water Ratio: Add 2.0 liters of clean water per 10kg bag of CEMlpatch ULW.

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.



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Yields:

The approximate yields are obtained if mixed in accordance with recommended procedures and accurately measured water content. A 10kg bag of CEMlpatch ULW with 3.0 litres of water will yield approximately 20 litres.

Packaging:

CEMlpatch ULW is supplied in a 10kg polylined bag.

Pot Life:

Setting begins after 45 minutes (at 25°C substrate and ambient temperature). CEMlpatch ULW should not be used after 45 minutes from time of mixing. The addition of water to the mortar after it has started to stiffen is not recommended, and the product should be discarded.

Clean-up:

CEMlpatch ULW should be removed from tools and equipment with clean water immediately after use.

Storage:

CEMlpatch ULW has a shelf life of approximately 12 months, if kept in a dry environment completely away from moisture.

