



PROPERTIES



+25 °C

+5 °C

REPAMIX M45 is a fiber-reinforced repair mortar for structural repairs of concrete and masonry, applied vertically, horizontally, or overhead. Suitable for indoor and outdoor applications. REPAMIX M45 meets the requirements of EN 1504-3 class R4.

REPAMIX M45 consists of selected types of sand and cement, enriched with prime additives that provide the product with high-performance properties. It features excellent adhesion and high ultimate strength. Additionally, it offers accelerated hardening and extremely low shrinkage

Applications:

- Repairs of concrete and masonry, vertically, horizontally, and overhead
- Repairing static cracks
- Repairing bridge piers, beams, pillars, vaults, columns, slabs, etc.
- Repairing balconies and all kinds of concrete structures

Technical parameters			According to EN 1504-3 class R4
Compressive strength	EN 12190	After 7 days After 28 days	> 40 MPa > 50 MPa
Chloride ion content	EN 1015- 17		≤ 0.05%
Adhesive bond strength on concrete	EN 1542	After 28 days	≥ 2.0 MPa
Thermal compatibility Part 1: Freeze/thaw	EN 13687-1	After 50 cycles	≥ 2.0 MPa
Overhead application on type MC (0.45) concrete per EN 1766 (300 mm x 300 mm x 100 mm)	EN 13395-4	After 28 days	≥ 2.0 MPa
Carbonation resistance	EN 13295		dk ≤ reference concrete
Elastic modulus in compression	EN 13412		≥ 20 GPa
Skid resistance	EN 13036-4		Class III
Capillary absorption	EN 13057		≤ 0.5 kg·m ⁻² ·h ^{-0.5}
Reaction to fire			A1

Mixing ratio	Consumption	Packaging
±3,75 L water per 25 kg bag (±15% water)	±1,9 kg/mm/m ² dry powder	25 kg
Color	Working time	Application temperature
Grey	±30 min.	+5 °C tot +25 °C

REPAMIX M45

DIRECTIONS FOR USE

Always work on a clean, sound, dust-free, and oil-free substrate. Remove defective parts down to a stable, load-bearing, undamaged substrate. Enlarge cracks and openings so that a square or triangular cross-section is obtained with a minimum size of 10 mm, where the depth is equal to or greater than the width. For reinforcing rebar, completely remove rust (e.g., using a wire brush), remove loose particles, and treat with an anti-corrosion coating such as PRB PASSIVANT ACIER. Next, dampen the substrate without leaving standing water.

Mixing procedure:

Mix the dry mortar with water ($\pm 15\%$) using a slow-speed mixer until a smooth, homogeneous, lump-free consistency is achieved. After careful mixing, allow the mortar to rest for 5 minutes. Stir the mortar once more before use.

Apply the mortar in successive layers of 5–70 mm onto the damp substrate. Press firmly during application to achieve optimal adhesion. Compact and smooth out using a plastic float (taloche) or smooth with a wet trowel.

REMARKS

- The application temperature must be between $+5\text{ }^{\circ}\text{C}$ and $+25\text{ }^{\circ}\text{C}$.
- Protect the repair from drying out too quickly by re-dampening.
- Do not mix more material than can be applied within 15 minutes.
- Clean tools with water immediately after use.
- Do not use REPAMIX M45 on:
 - Substrates damaged by chemicals
 - Insufficiently load-bearing substrates
 - Heavy-duty industrial concrete floors equipped with a top coat unsuitable for mechanical loads

PACKAGING

REPAMIX M45 is available in grey, in 25 kg bags.

REPAMIX M45 is packed in a plastic bag. The shelf life is 12 months if stored dry in the original, unopened packaging.

