



Unimix RM

Product Description

Unimix RM is a ready for use shrinkage free, polymer modified cementitious repair mortar which requires only the addition of clean water to yield a thixotropic mix with good application properties both on vertical, horizontal and overhead surfaces. It can be applied in thickness from 6 mm to 200 mm per layer.

Features and benefits

- High compressive strength.
- Resistant to sea water and to high-sulphate water.
- Suitable for internal and external applications.
- Resistant to oil and water.
- Prevents steel reinforcements from corrosion.
- Nesting treatment to thickness 5cm.
- Normal setting.
- Composition that ensures excellent adhesion to prepared steel and concrete.
- Enables overhead application in thicker layers possible.

Typical use

- Unimix RM is designed for horizontal, vertical and overhead repairs to concrete, profiling to precast concrete and medium duty repairs to concrete floors and pavements, overhead anchoring.
- Voids up to 10 mm deep.
- Repairs up to 75mm for vertical applications and 50mm for overhead.
- Larger scale repairs where formwork cannot be erected.

Product Data:

Packaging size:	25 Kg, 5 Kg
Form:	Cementitious Powder
Color:	Grey
Bulk Density:	1.60 – 1.80 g/ml
Mixed Fresh Density	1.90 – 2.20 g/ml
Mortar/putty Working time:	Approx. 35 min at 25°C
Compressive Strength: ASTM C 109-84, Air Cured, 28 days	> 30 N/mm ²
Flexural Strength: ASTM C348, Air Cured: 28 days	> 5 N/mm ²



Pull Off Strength to concrete ASTM D 4541, 28 days	≥ 2.0 MPa
TVOC UL 2818, 14 days	<10 µg/m ³ h – in compliance

Application data

The product can be applied by

Hand:	Recommended
Spray:	Recommended using suitable equipment

Cleaning of tools

Unimix RM should be removed from tools, equipment and mixers with clean water immediately after use. Cured material can be removed by water.

Film Thickness per coat

Dry film thickness	6 mm – 200 mm.
Yield	15 L.
Consumption	2.1 m²/pack – 0.06 m²/pack

Note: The consumption is theoretical and also do not include wastage and depend on the nature of substrate to be prepared.

Mix Ratio:

Liters of water added per 25 kg bag	6.5 L
Liters of water added per 5 kg bag	1.3 L

Water mixing ratios may vary depending on weathering conditions.

Application Method

Surface Preparation:

All surfaces should be clean and sound. Remove surfaces laitance by acid etching or mechanical grinding, grit blasting ensuring all dust and debris are removed. All surface should be thoroughly wetted before starting and be in a moist condition but not dripping during placing. Any free surface water must be removed before application. For better adhesion apply 1 coat of Admix SBR as a bonding agent before applying Unimix RM.

Crack Repair:

A “V” shape groove has to be cut along the crack with any suitable power tool, then you have to clean any dust or loose materials. The surfaces to be repaired have to be moistened but not dripping. apply Admix SBR by brush and when it becomes tacky, then start batching Unimix RM.



Mixing:

Care should be taken to ensure that Unimix RM is thoroughly mixed prior to use. Pour the powder component into a suitable vessel containing the measured quantity of water gradually, stir well with a slow speed paddle stirrer until the desired consistency is achieved. Alternatively, this operation may be carried out in pan mixer.

Small quantities up to 10 kg may mix manually in a bucket, not on a spot board. Ensure thoroughly mixing of the mortar which should be cohesive and free from lumps.

It is suggested that the temperature of the water should not exceed 25°C, so that the temperature of the final mixed material is not greater than 30°C.

In an elevated temperature conditions above 35 °C the water demand for Unimix RM possible to increase.

Product Application:

Unimix RM remains workable for approx. 35 min after mixing at ambient temperature. It should be pressed into place using gloved hands or a trowel to ensure intimate contact with the substrate.

Leveling and initial finishing should be carried out using a wooden, plastic or steel float.

Curing:

Good curing is essential on all exposed surface, particularly in dry, hot/windy conditions. Un-curing the exposed surfaces will reduce bond, strength and durability. Immediately after finishing; apply Uniguard Bond Plus curing compound to all exposed surfaces.

Otherwise; use water curing, sheet curing or wet covering curing for at least 3 days.

Storage:

- Store in a cool, dry place in original and non-open bags for 12 months
- Keep away from extreme cold, heat, or moisture conditions.
- Keep in dry place.
- Keep out of the reach of children

Health and safety

For further information see Unimix RM Safety Data Sheet.