# **Technical Data Sheet**



## **Unimix RM**

### **Product Description**

Unimix RM is a ready for use shrinkage free; polymer modified cementitious repair mortar that simply has to be mixed with water to yield a mix with good application properties both on vertical, horizontal and overhead surfaces. The mix consists of Portland cement blended and formulated with a chemical admixture and graded, high quality aggregates.

#### Features and benefits

- One pack product.
- High compressive strength.
- Resistant to oil and water.
- Composition that ensures excellent adhesion to prepared steel and concrete.
- The light density of the mortar enables overhead application in thicker layers possible.
- Waterproof repair mortar.
- Water repellent repair mortar.

## 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:**

Form: Cementitious Powder

Color: Grey

Packaging size: 25 Kg, 5 Kg

Bulk Density: 1.65 Kg/m<sup>3</sup>

Mortar/putty Working time: Approx 35 min at 25°C

Water Demand: 16%-20% of total weight

**Compressive Strength:** 

ASTM C 109-84, 28 N/mm<sup>2</sup>

Air Cured: 28days



## **Technical Data Sheet**

Flexural Strength: Approx. 6 N/mm<sup>2</sup>

Air Cured: 28 days

Consistency: Thixotropic

**Application Data** 

Tools: The product can be applied by Trowel, Hand.

**Surface Preparation and 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 during placing. Any free surface water must be removed before application. SBR can be used as a bonding agent before applying 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 stirring 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.

Do not use part-bags. 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.

**Application:** Unimix RM remains workable for approx. 35 min after mixing at ambient temperture. 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.

Alternative methods are suitable for at least 3 days like sheet curing or wet covering curing ...etc.

Date of issue:10.07.2023 Page: 2/3



## **Technical Data Sheet**

## **Cleaning of tools:**

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

## **Coverage & Yield:**

Unimix RM: Approx. 13 liters per 25kg/bag.

Uniguard Bond Plus: 3-5 m<sup>2</sup> / liter.

**Note :** The coverage figures are theoretical and also do not include wastage & depend on the nature of substrate to be prepared.

### Storage:

- 12 months in original unopened factory sealed bags. 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 Material Safety Data Sheet, or consult our technical department.

Date of issue:10.07.2023 Page: 3/3