



## PRODUCT DESCRIPTION:

**PRIMEMIX RM** is based on an advanced co-polymer, graded sand and cement along with active ingredients, which when mixed with water produces a high strength waterproofing patching mortar, screed or render. Once applied the mortar has excellent resistance to wash out and cures rapidly to form dense impermeable matrix with high diffusing resistance to oxygen, acid gases and chloride ion.

## USES:

**PRIMEMIX RM** is a single component polymer modified ready-to-use repair mortar ideally suited for repair of RCC structures by hand application or spray and troweling.

**PRIMEMIX RM** can also be used to produce gunite with enhanced properties for application by wet or dry process allowing high build application with low rebound losses at too water- cement ratios.

The enhanced properties ensure high adhesion, low shrinkage, excellent resistance to freeze - thaw attack and high flexural and compressive strengths.

## ADVANTAGES:

**PRIMEMIX RM** when mixed with calculated water, gives the following properties.

- ❖ Excellent adhesion in dry, damp or permanently wet conditions to both concrete and steel.
- ❖ Higher compressive and tensile strength.
- ❖ High abrasion resistance.
- ❖ Low water permeability due to continued pozzolanic reactions hence has dense matrix.
- ❖ Enhanced resistance to freeze - thaw cycles, alkalis and dilute acids.
- ❖ Low shrinkage.
- ❖ Non-Corrosive to steel with high inherent alkalinity,



- ❖ Allows easy application to achieve high application thickness in both vertical and horizontal situations. Resulting spray applied mortar have low rebound losses.

### **Advantages Over Liquid Polymer Modified Repair Mortar**

1. As product needs only addition of calculated quantity of water, consistent quality is achieved.
2. No need to weigh separately sand and cement for making polymer repair mortar.
3. Site tampering with material is not possible, which may be possible with liquid polymer by adding water which is not desirous.
4. Exact graded sands are used to get compact repair mortar, which is not possible if different grades of sand are mixed at site.
5. Factory controlled quality, hence consistency is obtained for all repair patches, which may not be possible for site prepared polymer modified repair mortar.
6. Easy to carry by train, trucks, tempos or private vehicles, without risk of loss and other limitation.
7. No need of carrying weighing balance and, water is added on volume basis.
8. Small packing of 1kg and 5kg also available, hence no loss of material at site.

### **REPAIR MORTARS:**

Description	PrimeMix RM-100	PrimeMix RM-200	PrimeMix RM-300
Uses	High Performance	High Performance	Heavy Duty
Fibre	Nil	Yes	Yes
Water for 25 Kg	3.25 lit	3.25 lit	3.45 lit
Typical Yield, lit/25 kg	13 lit	13 lit	13 lit
Compressive Strength*, N/mm <sup>2</sup>	40	40	65

\*28 days

Coverage of 25 kg pack for filling Groove, of dimension, W width in mm and D depth, in mm:





Coverage in feet = 426250/ (W\*D)

## APPLICATION DATA:

### **Surface Preparation**

Mechanically remove all damaged concrete back to a sound core. Whenever possible, the full circumference of the steel reinforcement should be exposed to at least 25mm behind the bars and 50mm beyond the point at which corrosion is visible. On cutting back, feather edges must be avoided. The perimeter of the repair area should be stepped to a depth of 10 mm by means of saw or disc cutting or preferably using a power chisel. The areas to be repaired must be free from all unsound materials i.e. dust, oil, grease, corrosions by-products and organic growth. Smooth cut surfaces should be roughened, all loose materials and surface laitance removed and reinforcement cleaned to bright steel. Shot blasting or grit water jetting is recommended, but for some smaller areas needs gunning or bush hammering is effective. The strength of the concrete sub-base should be a minimum of 20 N/mm<sup>2</sup>.

The prepared substrate should be thoroughly soaked with clean water until uniformly saturated without any standing water.

### **Priming / Bonding**

Where necessary, two coats of MULTIBOND S (steel reinforcement protector) should be applied to the prepared steel, by brush, as described in the individual data sheet. Where the substrate exhibits high porosity or is absorbent, the pre dampened surface should be primed with a thin slurry consisting of one part of Multicrete CM, 1 part ordinary Portland cement mixed to give a thin emulsion consistency.(coverage 10-15m<sup>2</sup>/kg of Multicrete CM) For repair of concrete in Crystalline waterproofing system, use MIM (separate datasheet) instead of Primemix RM. In some of the cases Primemix RM may be used with MITA as primer.

Allow to become dull before continuing with application and remove any excess material lying in rough, broken or irregular surfaces. The subsequent rendering, screeds, etc. should be applied on wet basis.



**PRIMEMIX™ RM**

High Performance Ready-to-use Repair Mortar

Product Code: M-0305/6/7

### **Mixing**

**PRIMEMIX RM** should be mechanically mixed, using a forced action pan mixer in a clean drum, using a drill and paddle. A normal concrete mixture is not suitable. For normal application, use from 3.0-3.7 litres of clean water per 25 kg bag depending upon desired consistency. This equates to 5.0-6.0 volumes of powder to one volume of water. Exact quantity of water should be derived as per desired consistency of mixed product. Normal mixing time depends upon the type of mixer used 2-3 minutes is an average. Mix so as to entrain as little air as possible. Use without delay.

### **Placing**

Mortar or screed should be applied so as to remove entrapped air, in layer, not exceeding 25mm thickening (preferably 10mm) per application.

If necessary, support with shuttering to allow for compaction. For repairs, which require multi- layers application (10mm thickness per application to avoid cracking or for thicker application add 25% 6mm aggregates.), it is important to ensure that previous layers are well keyed and hardened but not fully cured prior to the application of subsequent layers. Final profiling should be carried out with wooden float or steel trowel.

### **CLEANING:**

All tools should be cleaned with water immediately after use.

### **CURING:**

Normal concreting procedures should be strictly adhered to. It is important that the surface of the coating is protected from strong sunlight and drying winds with Multichem CURING MEMBRANE, polythene sheeting, and damp hessian or similar. Alternatively, for flooring applications, a 300-600 micron silica sand can be cast liberally onto the surface (approximately 2kg/m<sup>2</sup>), taking care to ensure that the sand does not penetrate the full depth of the coating. This provides effective curing, whilst also providing a hard wearing, non-slip finish. Curing must commence within 10-15 minutes after coating is dried completely.

### **STORAGE:**



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PRIMEMIX RM/2014/R2-13-3-2016



Store in dry, frost-free conditions at moderate temperatures not greater than 25 °c.

## PACKING

Pack size: 1kg, 5kg, and 25 kg

## WARRANTY

Multichem warrants **Primemix RM** to be free from manufacturing defects as defined in this warranty. Manufacturing defects are considered to be those defects that occur due to the quality of the ingredients or from the manufacturing process itself. This warranty does not include labor costs and other costs or expenses associated with the removal or installation of **Primemix RM**.

Because the Multichem does not perform the actual installation, it cannot be held responsible for the results of the application. Multichem specifically disclaims problems that occur due to weather conditions, structural movement, structural design flaws and application techniques.

This warranty is in lieu of all other warranties expressed or implied including the warranty of merchantability and fitness of purpose and of all other obligations or liabilities on Multichem part. Multichem neither assumes nor authorizes any person to assume for Multichem any liability in connection with the sale and installation of **Primemix RM**.

Because of constant improvement of manufacturing techniques and formulations, Company reserves rights to change this datasheet and its contents without prior notice.

