

**FORMULATORS, MANUFACTURERS AND CONSULTANTS OF
SPECIAL CONCRETE PRODUCTS**

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Email: info@rockbond.co.uk Website: www.rockbond.co.ukROCKBOND REPAIR MORTARDESCRIPTION:

ROCKBOND REPAIR MORTAR (RB RM) is a premixed, ready to use, cementitious mortar powder. The compound contains a unique blend of cement powders, graded sands, an ultra-fine water dispersible acrylic resin co-polymer powder, compatible admixtures, corrosion inhibitors and the material is also fibre reinforced. The powder, when mixed with water, produces an anti-slump, non flow, acrylic modified, light grey cementitious mortar which quickly hardens to produce a high strength, strong bonding and impermeable material. The powder is packaged in 25kg moisture proof, durable bags has a shelf life of 5 years.

SPECIAL PROPERTIES:

- * Designed to the Department of Transport Highways and Traffic Standards.
- * Specially formulated for the repair and protection of reinforced concrete.
- * Portland cement based, acrylic resin modified, microsilica enhanced and fibre reinforced.
- * Quickly and easily mixed, worked and placed.
- * The mortar is thixotropic, cohesive, set accelerated and produces an attractive finish.
- * Formulated to produce an exceptionally dense, impermeable and durable material.
- * Contains low alkali cements: equivalent sodium oxide is below 3.0kg/m³.
- * Incorporates non reactive, graded sands inert to Alkali Silica Reaction (ASR).
- * High yielding, economical, non flammable, non toxic, odour free, user friendly and safe to use.

USES:

- + To repair and protect reinforced concrete to the Department of Transport Specifications.
- + For general non flow repairs to concrete floors, ramps, roads, car parks, cementitious surfaces, render, mortar, masonry, stone, bricks and blocks.
- + For structural applications, bedding in, thin sections and feather edge applications.
- + To fill, seal and waterproof voids, cavities, cracks, gaps and joints in mortar and concrete.
- + To coat concrete to retard or arrest carbonation, sulphation or ASR.
- + For the protection of reinforcing steel in concrete exposed to high levels of chloride.
- + For use on concrete in marine locations and chemically aggressive environments.
- + Applied as a render to concrete, masonry, brick and stone.
- + For the installation of horizontal, vertical and soffit fixings, bars and bolts into concrete, masonry, brick and stone.

MIXING INSTRUCTIONS:

ROCKBOND REPAIR MORTAR powder is mixed with water using a ROCKBOND CONCRETE STIRRER (RB CS), a pneumatic or electric power tool (1kW) and a ROCKBOND 25 LITRE MIXING CONTAINER (RB 25LMC). Only mix quantities of the Repair Mortar that can be successfully applied and finished in 20 minutes:

- Pour a quantity of water into the container or mixer.
- Slowly sprinkle the powder onto the water while mixing.
- Continue to add and mix the powder until the required consistency is obtained.
- After all the powder has been added, mix for 30 seconds.

ROCKBOND REPAIR MORTAR (RB RM) CONTINUED...

APPLICATION PROCEDURE:

All necessary preparatory work must be completed before the mortar is mixed. Ensure that all surfaces with which the mortar comes into contact are clean and dust free. A strong substrate free of all friable material will enhance a good bond.

For the repair of corroded reinforced concrete, correct and proper preparation of the concrete substrate and steel reinforcing is essential to execute an effective repair.

Break out all spalled, loose and contaminated concrete. Remove the concrete at least 20mm from behind the steel reinforcing, and extend the perimeter of the repair to at least 25mm beyond the point at which the corrosion is taking place.

Thoroughly and completely abrade the concrete to produce a sound substrate with a good mechanical key. Saw cut edges should be at least 10mm deep. Keep concrete surfaces free from contamination.

Remove all corrosion products from the surface of the steel. Severely corroded reinforcement should be cut back and replaced. In situations where there is a high degree of chemical attack, apply ROCKBOND STEEL PRIMER (RB SP).

On weak, friable or porous concrete substrates, use ROCKBOND PRIMER LATEX (RB PL) to penetrate, consolidate, strengthen and seal the surface. With a brush or a soft broom, brush the latex completely and evenly over the surface. Work the latex well into the substrate. Pay particular attention to the edges of the repair, and brush the liquid at least 25mm beyond the perimeter of the repair area. Let the latex dry out, usually 15 to 20 minutes depending on conditions.

To prime the substrate and to enhance the bond, apply a second coat of the latex to the first coat. Normally, 1 litre of the ROCKBOND PRIMER LATEX will treat 5m² of concrete surface with a two coat application.

To maximise the contact of the mortar to the concrete, use a gloved hand to form a CONTACT COAT: rub the mortar completely over and well into the substrate to be repaired. RUB IT IN! (100% contact is 100% bond). Add further quantities of the material and tamper or agitate the mortar to ensure complete compaction and to eliminate voids. Bring the level of the material up to the profile of the surrounding concrete.

Use ROCKBOND PRIMER LATEX (RB PL) to seal and protect the mortar by forming an acrylic resin barrier on the surface of the cement. When the material is in place, spray the latex onto the surface and use a steel float to produce a smooth, durable and attractive finish.

Once the mortar is in place and has gained sufficient strength, apply ROCKBOND CURE (RB C) at the rate of 10m²/litre. During adverse curing conditions, repeat the procedure.

For a repair mortar to colour match the surrounding mortar, render or concrete, use ROCKBOND REPAIR MORTAR PIGMENTED (RB RMP). ROCKBOND REPAIR MORTAR PIGMENTED (RB RMP) is supplied in a range of colours specially pigmented to colour match adjacent cementitious materials.

HEALTH, SAFETY AND STORAGE:

ROCKBOND REPAIR MORTAR powder is non toxic and safe to use. However, use the same precautions as with any cementitious product: wear goggles, protective clothing and a dust mask while mixing and applying the material. Consult the relevant MSDS for further details. Store in a cool, dry, dark place.

ROCKBOND REPAIR MORTAR (RB RM) CONTINUED...

TECHNICAL DATA:

TYPICAL DATA at 15% water/powder ratio at 20°C

CONSISTENCY: Good Mortar Consistency
CONSISTENCY LIFE: 20 minutes

DENSITY: 2120kg/m³

MINIMUM COMPRESSIVE STRENGTH:

1	7	28	Days
20	40	55	MPa

YIELD: 25kg of powder yields 12.50 litres of Repair Mortar
1m³ of Repair Mortar requires 2.000 tonnes of powder

FURTHER INFORMATION:

Should you require further information on this product, or details of other ROCKBOND SPECIAL CONCRETE PRODUCTS, then please do contact our Technical Department:

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IMPORTANT NOTE:

ROCKBOND SCP LTD provides the above information in good faith and without warranty. The data represents typical values which can be updated at any time, and this information supersedes previous issues. No liability can be accepted for any damage or loss arising from the use of ROCKBOND SCP LTD literature or its products, because the company has no continuous control on how the products are mixed, placed or cured.

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