

TECHNICAL DATA SHEET

PUMPING MORTAR

Thixotropic cementitious Mortar

DESCRIPTION

Rockbond Pumping Mortar (RB 5.04) powder is a pre-mixed, ready to use mortar powder. The powder contains a blend of fine cement powders, graded quality sand and a union of admixtures. The material, when mixed with water, produces a thixotropic, mortar which is specially formulated for the pumping, filling and sealing of voids in applications where a pumping grout of standard mortar isn't an option. RB5.04 is ideally suited to ground anchoring applications where the ground is very weak or particularly dilated. The powder is packaged in 25kg durable bags, and has a shelf life of 2 years.



SPECIAL PROPERTIES

- Tested and quality assured to give a consistent product every time.
- Portland cement based, polymer modified, and microsilica enhanced.
- Quickly and easily mixed, worked and placed.
- Free flowing under pressure, but will gel and stiffen once in place.
- Thixotropic, high build and non-slumping.
- Very low permeability.
- Contains crystal growth technology: movement cracks will self-seal.
- Compatible with cementitious surfaces, bricks and blocks.
- Can be designed to give strengths of between 5 and 75 MPa.
- Strong impermeable bond to brick, masonry, steel and concrete.
- Contains no chlorides, ferrous metal or other deleterious substances.
- Economical, user friendly, non-toxic and safe to use.

USES

- Void filling operations where a thixotropic, non shrink, pumping mortar is required.
- As a thixotropic mortar in ground stabilisation projects in weak ground.
- Pressure pointing and hand pointing of bricks and blocks.
- Filling and sealing cavities, joints and gaps.
- For use with a hand held injection gun.
- Waterproofing applications.
- Cosmetic repairs to concrete and brickwork.
- In the application of soffit substrates or in high build situations.
- To render brick or cementitious surfaces to produce a uniform finish.
- To produce an attractive finish to concrete.

MIXING INSTRUCTIONS

Rockbond Pumping Mortar (RB 5.04) powder is mixed with water using a suitable container, a pneumatic or electric drill (1 kW), and a Rockbond Stirrer. Larger amounts of material may be mixed using a forced action paddle mixer.

- Add 3.75 litres of water to the container or mixer.
- Pour 25kg of the powder onto the water while mixing.
- After all the powder has been added, mix for 30 seconds.
- The Pumping Mortar is now ready for use.

Alternatively, small amounts of the material can be prepared by slowly adding the powder to a quantity of water and mixing to required consistency.

HEALTH AND SAFETY

Rockbond Special Concrete Products are 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 missing and applying the material.

APPLICATION PROCEDURE

To point up bricks and blocks, rake out all crumbly or weak mortar. Ensure that all surfaces with which the mortar comes into contact are clean and dust free. Use a water spray to wash-out and remove debris.

Mix the mortar, and pressure inject the material at the back of the cavity or fissure. Withdraw the nozzle while still injecting to minimise the formation of voids. Bring the level of mortar up to the profile of the brickwork. Finish off with a trowel.

To render brick or cementitious surfaces, remove all friable or weak material. Continually soak the substrate before applying the mortar. All standing water must be removed prior to applications. Alternatively, and especially on weak or porous substrates, use Primer Latex (RB 7.13). Brush the latex completely and evenly over the concrete. Work the latex well into the substrate where necessary. Let the latex dry out, usually 15-30 minutes depending on conditions.

If the concrete substrate requires a primer, apply a second coat of latex to the first coat. Normally, 1 litre of Primer Latex (RB 7.13) will treat 5 m² of substrate surface with 2 coats of latex.

To maximise the contact of the mortar to concrete, and to reduce voids at the bondline, form a contact coat, use a gloved hand to rub, work and compact the mortar will into the substrate. Ensure complete and intimate contact of the material with the concrete. On top of the contact coat, use a trowel or steel float to build up the mortar to the required level.

In the application of the mortar to soffit substrates, form a contact coat. Only just cover the substrate with mortar. The material is successfully applied at a stiff consistency using a gloved hand. Push and hold 25mm or more thick portions of the material onto the contact coat. Allow the mortar to gel and stiffen before finishing with a steel float..

TECHNICAL DATA

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

CONSISTENCY: Wet Mortar

CONSISTENCY LIFE: 20 minutes

DENSITY: 2180kg/m³

MINIMUM COMPRESSIVE STRENGTH:

Days: 1 7 28

MPa: 15 35 55

YIELD: 25kg of powder yields 13.00 litres of Pumping Grout
1m³ of Pumping Grout requires 1.925 tonnes of powder

TECHNICAL INFORMATION

Should you have any queries, or require further information, please contact our **Technical Sales Team: +64 4 568 5401**