

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

Newton's Farm Estate, Wissington, Nayland, Suffolk.CO6 4LX, England
Telephone: 01206 265116 Facsimile: 01206 265117

Email: info@rockbond.co.uk Website: www.rockbond.co.uk

ROCKBOND FASTROCK CEMENT AND MORTAR**DESCRIPTION:**

ROCKBOND FASTROCK CEMENT (RB FRCm) is a blend of special cement powders which, when mixed with water, produces a fast setting, quick strength cementitious binder. The cement is ideal for use on site with sand, or with sand and aggregates, to produce semi flow, quick strength, high strength, mortars and concretes for concrete repairs, floor screeds, and bedding in applications when a quick early return to service is required. ROCKBOND FASTROCK MORTAR (RB FRM) is ROCKBOND FASTROCK CEMENT dry mixed with graded sands and is ready for use. The powders are packaged in 25kg moisture proof, durable bags and have a shelf life of 5 years.

SPECIAL PROPERTIES:

- * Simple and easy to use: just add the cement, sand and aggregate to water, and mix.
- * Produces fast setting and early strength development mortars and concretes.
- * Strong cementitious binder: produces strong bonding and high strength materials.
- * Fastrock cement mortars and concretes are impermeable and durable.
- * The cement mixed with site batched sand and aggregates produce low cost materials.
- * Contains no chlorides, ferrous metal or other deleterious substances.
- * High yielding, economical, non flammable, non toxic, odour free, user friendly and safe to use.

USES:

- + Quick fixings and connections into concrete, masonry, rock, brick and block.
- + Applications that require a quick strength cement, mortar or concrete.
- + For quick non flow repairs to concrete floors, ramps, roads, car parks, cementitious surfaces, render, mortar, masonry, stone, bricks and blocks.
- + For fast and thin section repairs to defective concrete and masonry.
- + Quick patch and edge repairs to precast concrete, roadways, pathways, floors and steps.
- + The quick bedding in of precast concrete units, manhole rings and covers, posts, kerbs, stones, slabs, bricks and frames.

MIXING INSTRUCTIONS:

ROCKBOND FASTROCK CEMENT powder is mixed with sand, or with sand and aggregate, and water using a ROCKBOND CONCRETE STIRRER (RB CS), an electric power tool (1kW) and a ROCKBOND 25 LITRE MIXING CONTAINER (RB 25LMC). Mix small quantities of cement, sand and aggregate with water as and when required.

- Pour a quantity of water into the container or mixer.
- Add the FASTROCK CEMENT and sand to produce a mortar.
- Add the FASTROCK CEMENT, sand and aggregate to produce a concrete.
- Add further small quantities of water until the required consistency is obtained.
- After all the ingredients have been added, mix for 30 seconds.
- The Fastrock Mortar or the Fastrock Concrete is now ready for use.

ROCKBOND FASTROCK CEMENT (RB FRCm) AND MORTAR (RB FRM).

MIXING INSTRUCTIONS CONTINUED...

For a quick strength mortar: use 1 part cement to 3 parts of sand by weight. For a quick strength semi flow concrete: use 1 part cement, 1 part sand and 2 parts of a 3mm to 6mm aggregate by weight. Use sand and aggregates that are clean and dust free. For a quick early strength development, increase the cement content and reduce the water. Normally mix to a slightly wet mortar consistency, or slightly wet concrete consistency.

ROCKBOND FASTROCK MORTAR powder which contains Rockbond Fastrock Cement and graded sands is pre mixed and ready to use. Mix the powder with water at 16% water content: equivalent to 4.0 litres of water per 25kg bag of powder.

APPLICATION PROCEDURE:

For concrete repairs: thoroughly and completely abrade the surface where necessary to produce a sound substrate with a good mechanical key. All traces of contamination must be removed. Brush or blow away all dust and debris.

On weak, friable or porous 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 repair area. Brush out any puddles, and let the latex dry out, usually 15 to 30 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.

Only mix as much mortar or concrete that can be comfortably placed in 10 minutes. Once in place avoid heavy traffic for 2 hours.

For winter weather work, low temperature applications below 5°C approximately, or when a rapid early strength gain is required at 20°C, use ROCKBOND FASTROCK ACCELERATED CEMENT (RB FRACm) or ROCKBOND FASTROCK ACCELERATED MORTAR (RB FRAM).

TECHNICAL DATA:

ROCKBOND FASTROCK CEMENT (RB FRCm)

TYPICAL DATA at 32% water/powder ratio at 20°C

CONSISTENCY: Good Mortar Consistency
CONSISTENCY LIFE: 15 minutes

DENSITY: 2020kg/m³

MINIMUM COMPRESSIVE STRENGTH:

| | | | | | |
|--------|---------|----|----|----|------|
| 1 hour | 2 hours | 1 | 7 | 28 | Days |
| 5 | 10 | 25 | 35 | 50 | MPa |

YIELD: 25kg of cement powder yields 15.00 litres of Fastrock Cement.
1m³ of Fastrock Cement requires 1.675 tonnes of powder.

ROCKBOND FASTROCK CEMENT (RB FRCm) AND MORTAR (RB FRM).

TECHNICAL DATA CONTINUED...

ROCKBOND FASTROCK MORTAR (RB FRM)

TYPICAL DATA at 16% water/powder ratio at 20°C

CONSISTENCY: Good Mortar Consistency
CONSISTENCY LIFE: 30 minutes

DENSITY: 2100kg/m³

MINIMUM COMPRESSIVE STRENGTH:

| 1 hour | 2 hours | 1 | 7 | 28 | Days |
|--------|---------|----|----|----|------|
| 5 | 10 | 20 | 30 | 55 | MPa |

YIELD: 25kg of mortar powder yields 12.50 litres of Fastrock Mortar
25kg of mortar powder covers 1m² of concrete at a depth of 12.5mm.
1m³ of Fastrock Mortar requires 2.000 tonnes of mortar powder.

HEALTH, SAFETY AND STORAGE:

ROCKBOND FASTROCK CEMENT AND MORTAR powders 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 mixing and applying the material. Consult the relevant MSDS for further details. Store in a cool, dry, dark place.

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:

Gilbert Cox BSc,
Technical Director,
Rockbond SCP Ltd.,
Newton's Farm Estate,
Wissington, Nayland,
Suffolk, CO6 4LX, England.

Telephone: 01206 265116
Facsimile: 01206 265117

Email: info@rockbond.co.uk
Website: www.rockbond.co.uk

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.

OCTOBER 2021