

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

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Email: info@rockbond.co.uk Website: www.rockbond.co.uk**ROCKBOND FASTROCK SUPER ACCELERATED CEMENT AND MORTAR****DESCRIPTION:**

ROCKBOND FASTROCK SUPER ACCELERATED CEMENT (RB FRSACm) is a mix of special cement powders and accelerators which, when mixed with water, produces a rapid setting, quick strength cementitious binder. The cement is ideal for use on site with sand, or with sand and aggregate, to produce semi flow, rapid strength, high strength mortars and concretes for concrete repairs, floor screeds, and bedding in applications. The materials are used during winter weather work when temperatures are below 0°C, or in factories and freezer stores where temperatures fall to -20°C. ROCKBOND FASTROCK SUPER ACCELERATED MORTAR (RB FRSAM) is ROCKBOND FASTROCK SUPER ACCELERATED CEMENT dry mixed with graded sands to produce a rapid strength mortar 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 Fastrock Cement, sand and aggregate to water, and mix.
- * Portland cement based, shrinkage compensated and microsilica enhanced.
- * Produces a rapid early strength development in mortars and concretes at 0°C and below. The compressive strength of the RB FRSAM is 4MPa at 1 hour, 10MPa at 3 hours at 0°C!
- * Excellent bond strength, and resistance to shock, abrasion and mechanical attack.
- * The cement mixed with site batched sand and aggregates produce low cost materials.
- * Contains no chlorides, high alumina cement or other deleterious substances.
- * High yielding, economical, non flammable, non toxic, odour free, user friendly and safe to use.

USES:

- + In situations that require a rapid development in early strength at 0°C and below.
- + Repairs to factory floors, car parks, forecourts, loading bays and ramps that require early trafficking at ambient temperatures below freezing.
- + Repairs to concrete in refrigeration plants and freezer stores at temperatures below -10°C.
- + Quick fixing and bedding in applications that require a rapid early strength, such as crash barriers, posts, signposts, manhole covers and rings, kerbs, drains and precast concrete.
- + Site batched applications that require a rapid strength, high strength mortar or concrete.

MIXING INSTRUCTIONS:

ROCKBOND FASTROCK SUPER ACCELERATED CEMENT powder is mixed with 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 SUPER ACCELERATED CEMENT and sand to produce a mortar.

Add the FASTROCK SUPER ACCELERATED CEMENT sand and aggregate for 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 Super Accelerated Mortar or Concrete is now ready for use.

ROCKBOND FASTROCK SUPER ACCELERATED CEMENT (RB FRSAcM) AND

MORTAR (RB FRsAM), MIXING INSTRUCTIONS CONTINUED...

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

ROCKBOND FASTROCK SUPER ACCELERATED MORTAR powder is pre mixed and ready to use. Mix the powder with water at 16% water content: 4.0 litres of water/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. Substrate surfaces without the use of the Primer Latex should be wet.

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

Use ROCKBOND FASTROCK ACCELERATED CEMENT (RB FRACm) or ROCKBOND FASTROCK MORTAR (RB FRAM) at ambient temperatures of 5°C and above.

TECHNICAL DATA:

ROCKBOND FASTROCK SUPER ACCELERATED CEMENT

TYPICAL DATA at 32% water/powder ratio at 0°C

CONSISTENCY: Good Mortar Consistency
CONSISTENCY LIFE: 10 minutes

DENSITY: 2010kg/m³

MINIMUM COMPRESSIVE STRENGTH:

1 hour	2 hours	3 hours	1	7	28 Days
5	10	12	25	45	60 MPa

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

ROCKBOND FASTROCK SUPER ACCELERATED CEMENT (RB FR SACm) AND
MORTAR (RB FR SAM), TECHNICAL DATA CONTINUED...

ROCKBOND FASTROCK SUPER ACCELERATED MORTAR

TYPICAL DATA at 16% water/powder ratio at 0°C

CONSISTENCY: Good Mortar Consistency
CONSISTENCY LIFE: 10 minutes

DENSITY: 2150kg/m³

MINIMUM COMPRESSIVE STRENGTH:

1 hour	2 hours	3 hours	1	7	28 Days
4	8	10	25	45	60 MPa

YIELD: 25kg of powder yields 12.00 litres of Fastrock Super Accelerated Mortar.
25kg of powder treats 1m² of concrete at 12mm cover.
1m³ of good mortar requires 2.100 tonnes of mortar powder.

HEALTH, SAFETY AND STORAGE:

ROCKBOND FASTROCK SUPER ACCELERATED 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:

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IMPORTANT NOTE:

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