ROCKBOND
STRENGTH IN CONCRETE

RB 3.01, 02, 03 & 04

ROCKBOND FASTROCK CEMENT & MORTAR

Accelerated materials of low temperatures

DESCRIPTION

ROCKBOND FASTROCK CEMENT (RB 3.01) powder, when mixed with water, produces a fast setting, quick strength cement. When a quick strength mortar is required, sand is mixed with the cement. If a quick strength concrete is required, sand and aggregate are mixed with the cement. The cement is ideal for use on site to produce non-flow mortars and concretes for concrete repairs, and bedding in applications when an early return to service is required. ROCKBOND FASTROCK MORTAR (RB 3.02) is FASTROCK CEMENT (RB 3.01) premixed with graded sands and is ready for use. ROCKBOND FASTROCK ACCELERATED CEMENT (RB 3.03) and ROCKBOND FASTROCK ACCELERATED MORTAR (RB 3.04) are used when an early gain in strength is required when ambient temperatures are low. ROCKBOND FASTROCK CEMENT & MORTARS are packaged in 4 kg plastic buckets and 25 kg durable bags, with a shelf life of 2 years.

SPECIAL PROPERTIES

- The powder contains a fine blend of non-shrink cements.
- Simple and easy to use, just add cement and fillers to water, and mix.
- Produces fast setting and rapid hardening mortars and concretes.
- Strong cementitious binder: produces materials of high strengths.
- Produces excellent bond strengths, impermeable and durable.
- Cement combined with site batched fillers produce low cost materials.
- Contains no chlorides, ferrous metal or other deleterious substances.
- Non-toxic, user friendly and safe to use.

USES

- Quick fixings and connections into concrete, rock, block, and brick
- Applications that require quick strength mortars and concretes.
- Quick and thin sections repairs to concrete and masonry.
- Patch repairs to roadways, pathways, floors and steps.
- Quick bedding-in of manhole rings and covers, posts, frames, kerbs, stones, slabs, bricks and frames.

MIXING INSTRUCTIONS

ROCKBOND FASTROCK CEMENT and MORTAR powders are mixed with water using a suitable container, a pneumatic or electric drill (1 kW), and a Rockbond stirrer. Mix small quantities of cement or mortar with water as and when required:-

Pour a quantity of water into the container.
Slowly sprinkle the powder onto the water while mixing.
Continue to add and mix to obtain the required consistency.
The cement or mortar is now ready to use.

For an accelerated mix: reduce the water/cement ratio to 25%. For a retarded mix: increase the water/cement ratio to 40%. Normally mix to a slightly wet mortar consistency.

For quick strength materials that require a sand, or a sand and aggregate, the maximum dosage of filler is 1 part cement to 3 parts fine sand, or sand and aggregate. Use sand and aggregates that are clean and dust free. For quick and high strength materials, increase the cement content and reduce the water.

APPLICATION PROCEDURE

For concrete repairs: substrates should be clean, free of laitance, dust and contaminants such as oil and grease. The perimeter of repair areas should be square cut. If required, use ROCKBOND PRIMER LATEX (RB 7.13) to consolidate, seal and prime concrete substrates.

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

For winter weather work, low temperature applications (below 10°C approximately), or when a rapid early strength gain is required, use ROCKBOND FASTROCK ACCELERATED CEMENT (RB 3.03) or ROCKBOND FASTROCK ACCELERATED MORTAR (RB 3.04).

ROCKBOND FASTROCK CEMENTS (RB 2.01 & 3.03) & MORTARS (RB 3.02 & 3.04) are cured using ROCKBOND CURE (RB 7.12). Spray or brush the curing agent at the rate of $10m^2$/Lt. During adverse weather conditions, such as high temperatures and drying winds, repeat the procedures after the first application is dry.

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 dusk mask while mixing and applying the material.

TECHNICAL DATA

TYPICAL DATA for FASTROCK CEMENTS (RB 3.01) at 32% water/powder ratio at 20°C.

CONSISTENCY: Good mortar consistency
CONSISTENCY LIFE: 20 minutes

DENSITY: 2020 kg/m^3

MINIMUM COMPRESSION STRENGTH:

1	7	28	Days
25	35	50	MPa

YIELD: 25 kg cement powder yields 15.0 Litres of wet cement 1 m^3 cement requires 1.675 tonnes of powder.

TYPICAL DATA for FASTROCK MORTAR (RB 3.02) at 16% water/powder ratio at 20°C.

CONSISTENCY: Good mortar consistency
CONSISTENCY LIFE: 10 minutes

DENSITY: 2200 kg/m^3

MINIMUM COMPRESSION STRENGTH:

1	7	28	Days
20	45	60	MPa

YIELD: 25 kg cement powder yields 12.5 Litres of wet mortar.
1 m^3 wet mortar requires 2.0 tonnes of powder

TYPICAL DATA for FASTROCK ACCELERATED CEMENT (RB 3.03) at 32% water/powder ratio at 20°C.

CONSISTENCY: Good mortar consistency
CONSISTENCY LIFE: 3 minutes

DENSITY: 2010 kg/m^3

MINIMUM COMPRESSON STRENGTH:

1 hour	2 hours	1	7	28	Days
5	10	15	30	50	MPa

YIELD: 25 kg cement powder yields 15.0 Litres of wet cement.
1 m^3 cement of requires 1.675 tonnes of powder.

TYPICAL DATA for FASTROCK ACCELERATED MORTAR (RB 3.04) at 16% water/powder ratio at 20°C.

CONSISTENCY: Good mortar consistency
CONSISTENCY LIFE: 3 minutes

DENSITY: 2080 kg/m^3

MINIMUM COMPRESSON STRENGTH:

1 hour	2 hours	1	7	28	Days
5	10	20	40	60	MPa

YIELD: 25 kg cement powder yields 12.5 Litres of wet cement.
1 m^3 cement of requires 2.0 tonnes of powder.

TECHNICAL INFORMATION

Should you have any queries, or require further information, please contact our Technical Sales Team:

CONTACT DETAILS

T +64 4 568 5401 | **F** +64 4 568 4580

Revised January 2018