

ROCKBOND SPRAYED CONCRETE

Acrylic Modified Sprayed Microconcrete

DESCRIPTION

ROCKBOND SPRAYED CONCRETE (RB 1.02) powder is a pre-mixed, ready-to-use, polymer modified cementitious concrete powder. The material contains a unique blend of fine cement powders, graded sands and aggregates, and acrylic co-polymer powder and admixtures. The powder when mixed with water, produces a non-shrink, homogeneous sprayed concrete which is non-slumping, strong bonding and impermeable. The concrete is wet or dry sprayed with minimal rebound. The concrete powder is packaged in 25kg durable bags, and has a shelf-life of 2 years.

SPECIAL PROPERTIES

- Specially designed to British Specifications for Highway Works.
- Contains limestone, sand and 3mm aggregate certified safe from A.S.R.
- High build material will not flow or slump: 75mm or more in one pass.
- Quick and easily worked to produce a smooth and attractive finish.
- Contains shrinkage compensated, low alkali cements, equivalent Na_2O below 3.0kg/m^3 .
- Microsilica enhanced: strong bonding, impermeable and durable.
- Contains no chlorides, HAC, ferrous metal or other deleterious substance.
- Non flammable, non toxic, user friendly and safe to use.

USES

- Large scale concrete, masonry and brick repair.
- Quick and rapid repairs to concrete structures.
- For moving water situations, such as marine defences, tunnels and culverts etc
- Water tanks and reservoirs
- Protective coatings in chemically aggressive situations, such as, fertiliser and sewage tanks.
- To extend the concrete profile on existing structures.

MIXING INSTRUCTIONS

Normally, ROCKBOND SPRAYED CONCRETE (RB 1.02) powder is sprayed with water using the dry process. However, it can be mixed with water using a suitable container, a pneumatic or electronic power tool (1KW), and a ribbon mixer. Only mix quantities of concrete that can be applied in 15 minutes.

Add 2.5 – 3.25 litres of water to the container or mixer
(Water level can be varied to reach required consistency)
Pour 25kg of powder onto the water while mixing
For batches of 2 or more bags, repeat the procedure.
After all the powder has been added, mix for 1 minute.
The concrete is now ready for use.

APPLICATION PROCEDURE

Remove all contamination and weak material from the surface, and produce a sound, clean cement substance with a good mechanical key. Any steel reinforcing must be carefully prepared..

Remove any dust and debris from the surface to be sprayed. If possible thoroughly wash and soak the substrate before applying the material. Remove any standing water and keep the substrate free of contamination. In situations where there is a high degree of chemical attack, apply ROCKBOND PRIMER FOR STEEL (RB 1.00) to the steel reinforcing.

If required, apply ROCKBOND LATEX CONCENTRATE (RB 7.15) to consolidate and seal the concrete substrate. 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 ROCKBOND LATEX CONCENTRATE (RB 7.15) will treat 5m² of substrate surface with 2 coats of latex.

Mix and apply ROCKBOND SPRAYED CONCRETE (RB 1.02) completely through and around the steel reinforcing and evenly over the concrete substrate to be treated. The workability life of the concrete is 10 to 20 minutes depending on conditions.

ROCKBOND SPRAYED CONCRETE (RB 1.02) is cured using ROCKBOND LATEX CONCENTRATE (RB 7.15) diluted 1:1. As soon as the concrete surface has been finished, spray on the curing agent at the rate of 10m²/litre. During adverse weather conditions, such as high temperature and drying winds, repeat the procedure 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 protective clothing, goggles and a dust mask while mixing and applying the material.

TECHNICAL DATA

TYPICAL DATA at 8% water/powder ratio at 20°C

CONSISTENCY: Stiff Concrete Consistency
CONSISTENCY LIFE: 10 minutes
DENSITY: 2350Kg/m³

MINIMUM COMPRESSIVE STRENGTH:

1	7	28	Days
20	45	60	N/mm²

YIELD: 25kg powder yields 11.50 litres of sprayed concrete.
25kg powder treats 1m² of concrete at 11.5mm cover.
1m³ sprayed concrete requires 2.175 tonnes of powder.

CONTACT DETAILS

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



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 liabilities can be accepted for any damage or loss arising from the use of Rockbond SCP Ltd literature or its products, because Rockbond SCP Ltd has no continuous control on how the materials are mixed, placed or cured.

Revised January 2018