

# ROCKBOND SCP LTD

# FORMULATORS, MANUFACTURERS AND CONSULTANTS OF SPECIAL CONCRETE PRODUCTS

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#### ROCKBOND FLOOR SCREED

# **DESCRIPTION:**

ROCKBOND FLOOR SCREED (RB FS) powder is a premixed, ready to use, cementitious floor screed powder. The compound contains a blend of fine cement powders, acrylic co-polymer resins, graded crushed rock sands and aggregates, fibres and a combination of admixtures. The material, when mixed with water produces a grey semi flow, trowelable, floor screed which is applied to new or existing concrete. The hardened screed is strong, tough, hard and durable. ROCKBOND FLOOR SCREED ACCELERATED (RB FSA) is used at low temperatures, or when a rapid gain in early strength is required at 20°C. The powders are packaged in 25kg moisture proof, durable bags and have a shelf life of 5 years.

# **SPECIAL PROPERTIES:**

- \* All the ingredients in the bag and ready for use.
- \* Portland cement based, microsilica enhanced, acrylic polymer resin modified, shrinkage compensated and fibre reinforced.
- \* Selected and graded crushed rock aggregates with excellent mechanical properties.
- \* Quickly and easily mixed, worked, placed and can be finished ridged, brushed or smooth.
- \* Non shrink, anti slip, non crazing, non cracking, non curling and non dusting.
- \* High early and ultimate compressive, flexural and tensile strengths.
- \* Hard wearing, long lasting and resistant to impact and abrasion.
- \* High yielding, economical, non flammable, non toxic, odour free, user friendly and safe to use.

# **USES**:

- + Concrete repairs to concrete standing areas, floors, ramps, paths and roadways.
- + To cover concrete in car parks, forecourts, garages and petrol stations.
- + In loading bays, warehouses and factories.
- + In areas of high mechanical attack: engineering workshops and assembly plants.
- + For structural applications, bedding in applications, thin section concrete and screeds.
- + In chemically hostile areas: food factories, farms, abattoirs, dairies and breweries.
- + Repairs to cementitious surfaces, concrete roofs and flowing repairs to stone and brick walls.
- + To cover insulation, pipes and wires in underfloor heating systems in offices and houses.

#### MIXING INSTRUCTIONS:

ROCKBOND FLOOR SCREED powders are mixed with water using a ROCKBOND CONCRETE STIRRER (RB CS), an electric power tool (1kW) and a ROCKBOND 25 LITRE MIXING CONTAINER (RB 25LMC). Use a ROCKBOND FORCED ACTION PAN MIXER (RB FAPM) to mix larger amounts of material.

Add 2.50 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 floor screed is now ready for use.

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

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# ROCKBOND FLOOR SCREED (RB FS) CONTINUED...

# **APPLICATION PROCEDURE:**

Careful and proper preparation of the concrete substrate is essential if a successful floor is to be placed. The durability of the hardened screed is only as good as the integrity of the base concrete. If the substrate shows signs of oil, grease, diesel or other residues that may adversely affect the adhesion of the screed, treat the substrate with a propane burner to remove the contamination.

Thoroughly and completely abrade the concrete to produce a sound substrate with a good mechanical key. A well exposed aggregate surface is ideal. Saw cut edges should be at least 12.5mm deep. Feather edges are not recommended. Vacuum clean or blow away all debris, and keep concrete surfaces free from contamination.

In situations which involve reinforcing steel: remove all corrosion products form the surface of the steel. Severely corroded reinforcement should be cut back and replaced. In locations where there is a high degree of chemical attack, apply ROCKBOND STEEL PRIMER (RB SP).

On weak, friable or porous concrete 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 perimeter of the repair area. Let the latex dry out, usually 15 to 20 minutes depending on conditions.

To prime the substrate and to enhance the bond, apply a second coat of latex to the first coat. Normally, 1 litre of the ROCKBOND PRIMER LATEX will treat 5m<sup>2</sup> of concrete surface with a two coat application.

Mix the ROCKBOND FLOOR SCREED powders or with water at 2.50 litres to 2.75 litres of water/25kg bag of powder.

# 1 x 25kg bag covers 1m<sup>2</sup> of concrete surface at a depth of 12.5mm.

To maximise the contact of the screed to the concrete, use a gloved hand to form a **CONTACT COAT:** rub a small amount of the screed completely over and well into the concrete substrate to be repaired. **RUB IT IN!** 100% contact is 100% bond. Add further quantities of the material and tamper, agitate or vibrate the screed to ensure complete compaction and to eliminate voids. Bring the level of the material up to the profile of the surrounding concrete, smooth and finish.

Use ROCKBOND PRIMER LATEX to seal and protect the screed by forming an acrylic resin barrier on the surface of the cement. When the material is in place, spray the latex onto the surface and use a steel float to produce a smooth, durable and attractive finish. For a brushed finish, use a stiff brush or broom. For a slightly textured ridged finish, gently agitate the surface with a screed beam.

Once the material is in place and has gained sufficient strength, apply ROCKBOND CURE (RB C) at the rate of 10m²/litre. During adverse curing conditions, repeat the procedure.

Use ROCKBOND FLOOR SCREED ACCELERATED at temperatures below 5°C, or when a rapid gain in early strength is required at 20°C.

# **HEALTH, SAFETY AND STORAGE:**

ROCKBOND FLOOR SCREED 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.

# ROCKBOND FLOOR SCREED (RB FS) CONTINUED...

# **TECHNICAL DATA:**

# ROCKBOND FLOOR SCREED TYPICAL DATA at 10% water/powder ratio at 20°C

CONSISTENCY: Good screed CONSISTENCY LIFE: 45 minutes DENSITY: 2300kg/m³

#### MINIMUM COMPRESSIVE STRENGTH:

1 7 28 Days 25 45 60 N/mm<sup>2</sup>

YIELD: 25kg of powder yields 12.50 litres of Floor Screed 25kg of powder treats 1m<sup>2</sup> of concrete at 12.5mm cover 1m<sup>3</sup> of Floor Screed requires 2.000 tonnes of powder

ROCKBOND FLOOR SCREED ACCELERATED TYPICAL DATA at 10% water/powder ratio at 20°C

CONSISTENCY: Good screed CONSISTENCY LIFE: 15 minutes DENSITY: 2280kg/m³

# MINIMUM COMPRESSIVE STRENGTH:

1 hour 2 hours 1 7 28 Days 5 10 30 45 65 N/mm<sup>2</sup>

YIELD: 25kg of powder yields 12.50 litres of Floor Screed Accelerated 25kg of powder treats 1m² of concrete at 12.5mm cover 1m³ of Floor Screed Accelerated requires 2.000 tonnes of powder

# 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:**

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.

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