

# ROCKBOND SCP LTD

# FORMULATORS, MANUFACTURERS AND CONSULTANTS OF SPECIAL CONCRETE PRODUCTS

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#### ROCKBOND FLOOR SCREED STEEL REINFORCED

#### **DESCRIPTION:**

ROCKBOND FLOOR SCREED STEEL REINFORCED (RB FSSR) powder is a premixed, ready to use, cementitious floor powder. The compound contains fine cement powders, acrylic co-polymer resins, graded wear resistant aggregates, stainless steel fibres and a combination of admixtures. The powder, when mixed with water, produces a grey, semi flow, trowelable, floor screed which is applied to new or existing concrete. The hardened screed produces a tough, hard, steel reinforced, wear resistant, durable floor. ROCKBOND FLOOR SCREED STEEL REINFORCED ACCELERATED (RB FSSRA) is used at low temperatures, or when a rapid gain in early strength is required at 20°C. The powders are packaged in 25kg durable, moisture proof 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 modified, shrinkage compensated and stainless steel fibre reinforced.
- Selected, quality graded, crushed rock aggregates with excellent wear resistant properties.
- \* Quickly and easily mixed, worked, placed and finished, and no need to install steel reinforcing.
- \* 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, shock and abrasion.
- \* High yielding, economical, non flammable, non toxic, odour free, user friendly and safe to use.

#### **USES**:

- + To cover concrete and cementitious floors, ramps, paths and roadways which are exposed to a high degree of mechanical attack, wear and tear.
- + High impact and abrasion resistant repairs to concrete floors.
- + In heavy engineering and railway workshops, shipyards and assembly plants.
- + On roads and areas where the traffic is steel wheeled or on caterpillars.
- + To repair and protect concrete against heavy equipment, loading buckets, shovels and grabs.
- + As an alternative material to concrete floors reinforced by the installation of steel reinforcing.
- + In chemically hostile areas: food factories, farms, abattoirs, dairies and breweries.

#### MIXING INSTRUCTIONS:

ROCKBOND FLOOR SCREED STEEL REINFORCED powders are mixed with water using a ROCKBOND CONCRETE STIRRER (RB CS), a pneumatic or 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 Steel Reinforced is now ready for use.

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

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## ROCKBOND FLOOR SCREED STEEL REINFORCED (RB FSSR) 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 substrate and 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 STEEL REINFORCED powders 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 12.0mm.

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.

Once the material is in place and has gained sufficient strength, apply ROCKBOND CURE (RB C) at the rate of 10m<sup>2</sup>/litre. During adverse curing conditions, repeat the procedure.

Use ROCKBOND FLOOR SCREED STEEL REINFORCED 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 STEEL REINFORCED 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 STEEL REINFORCED (RB FSSR) CONTINUED...

# **TECHNICAL DATA:**

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

**CONSISTENCY:** Good screed CONSISTENCY LIFE: 30 minutes **DENSITY**: 2300kg/m<sup>3</sup>

#### MINIMUM COMPRESSIVE STRENGTH:

28 Days 55 20 70 MPa

YIELD: 25kg of powder yields 12.00 litres of the Floor Screed Steel Reinforced 25kg of powder treats 1m<sup>2</sup> of concrete at 12mm cover. 1m³ of Floor Screed Steel Reinforced requires 2.100 tonnes of powder.

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

**CONSISTENCY:** Good screed CONSISTENCY LIFE: 15 minutes **DENSITY:** 2300kg/m3

## MINIMUM COMPRESSIVE STRENGTH:

7 1 hour 2 hours 1 28 Days 55 70 MPa 10 30 5

YIELD: 25kg of powder yields 12.00 litres of the Floor Screed Steel Reinforced Accelerated 25kg of powder treats 1m<sup>2</sup> of concrete at 12mm cover. 1m³ of Floor Screed Steel Reinforced Accelerated requires 2.100 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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