

# FORMULATORS, MANUFACTURERS AND CONSULTANTS OF SPECIAL CONCRETE PRODUCTS

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## ROCKBOND ABRASION RESISTANT SCREED STEEL REINFORCED

## **DESCRIPTION:**

ROCKBOND ABRASION RESISITANT SCREED STEEL REINFORCED (RB ARS SR) powder is a premixed, ready to use, polymer modified, cementitious floor screed powder. The compound contains a unique blend of cements, graded bauxite sands and aggregates, stainless steel fibres, and a union of admixtures. The powder, when mixed with water, produces a semi flowing, acrylic modified, stainless steel reinforced screed, which quickly hardens to produce a strong bonding, high strength, impermeable and wear resistant material. The screed is specially designed for use in mechanically aggressive environments to withstand heavy loading, impact and abrasion. The powder is packaged in 25kg moisture proof, durable bags and has a shelf life of 5 years.

## **SPECIAL PROPERTIES:**

- \* Portland cement based, acrylic polymer modified, steel reinforced and microsilica enhanced.
- \* Quickly and easily mixed, placed, worked and finished.
- \* The screed is thixotropic, cohesive, set accelerated, anti slump and has an attractive finish.
- \* Formulated to produce an exceptionally dense, strong, impermeable and durable material.
- \* Incorporates bauxite sands and aggregates which are resistant to mechanical wear and tear.
- \* Stainless steel reinforced: hard wearing, resistant to point loads, impact and abrasion.
- \* Tough, has a high tensile strength, and is durable to cyclic and vibrational stresses.
- \* Shockproof and shatterproof: stays in place after continual exposure to impact and collision.
- \* High yielding, economical, non flammable, non toxic, odour free, user friendly and safe to use.

## **USES**:

- + To repair and protect concrete structures and surfaces from mechanical attack.
- + To protect concrete surfaces in heavy engineering and railway workshops and shipyards.
- + For use in heavy and massive machine assembly plants, factories and warehouses.
- + In confined spaces where fork lift traffic and heavy vehicles collect and manoeuvre.
- + On roads and areas where the traffic is steel wheeled or runs on caterpillars.
- + To repair and protect concrete against loading buckets, shovels and grabs.
- + To protect concrete in running water situations from floating debris, scour, sand and stones.
- + To produce non slip, non skid surfaces to steps, ramps, paths and roadways.
- + Patch repairs to heavy duty floors.

## MIXING INSTRUCTIONS:

ROCKBOND ABRASION RESISTANT SCREED STEEL REINFORCED 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). Only mix quantities of the screed that can be successfully applied and finished in 30 minutes:

Add 2.50 litres of water to the container or mixer. Slowly pour 25kg of the powder onto the water while mixing. After all the powder has been added, mix for 30 seconds. The screed is now ready for use.

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## ROCKBOND ABRASION RESISTANT SCREED STEEL REINFORCED (RB ARS SR),

## MIXING INSTRCTIONS CONTINUED...

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 give the appropriate consistency, not too stiff not too wet.

Use the minimum amount of mix water, and mix to obtain the correct consistency/flow of the product for the job in hand. Do not over water the mix.

## APPLICATION PROCEDURE:

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. Vacuum clean or blow away all dust and debris.

For the repair and protection of reinforced concrete structures: remove all corrosion products form the surface of the steel. Severely corroded reinforcement should be replaced. In situations where there is a high degree of chemical attack, apply ROCKBOND STEEL PRIMER (RB SP) to the steel.

For heavy duty, wear resistant, patch repairs to concrete floors and roadways, square cut the concrete to a depth of not less than 25mm, and not less than 25mm beyond the area where the deterioration is taking place. Feather edges are not recommended.

On weak, friable or porous substrates, use the 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 area to be covered. 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 the 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 ABRASION RESISTANT SCREED STEEL REINFORCED powder with water to a good mortar consistency (equivalent to 2.50 litres of water/25kg bag of powder).

# 1 x 25kg bag of mixed screed covers 1m<sup>2</sup> of concrete surface at a depth of 10mm.

To maximise the contact of the screed to the concrete, use a gloved hand to form a CONTACT COAT: rub the screed completely over and well into the concrete substrate to be repaired.

RUB IT IN! Add further quantities of the material and tamper or agitate 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.

When the material is in place, use the ROCKBOND PRIMER LATEX to seal and protect the screed by forming an acrylic resin barrier on the surface of the screed. 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 10m²/litre. During adverse curing conditions, repeat the procedure.

## HEALTH, SAFETY AND STORAGE:

ROCKBOND ABRASION RESISTANT SCREED STEEL REINFORCED powder is 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 ABRASION RESISTANT FLOOR SCREED STEEL REINFORCED (RB ARS SR)

## **CONTINUED...**

## **TECHNICAL DATA:**

TYPICAL DATA at 10% water/powder ratio at 20°C

CONSISTENCY: Semi flowing screed

CONSISTENCY LIFE: 30 minutes

DENSITY: 2600kg/m<sup>3</sup>

## MINIMUM COMPRESSIVE STRENGTH:

1 7 28 Days 25 60 90 MPa

YIELD: 25kg of powder yields 10.00 litres of Abrasion Resistant Screed SR.

25kg of powder treats 1m<sup>2</sup> of concrete at 10mm cover.

1m³ of Abrasion Resistant Screed SR requires 2.500 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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