

# ROCKBOND SCP LTD

# FORMULATORS, MANUFACTURERS AND CONSULTANTS OF SPECIAL CONCRETE PRODUCTS

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# ROCKBOND LIGHTWEIGHT SCREEDS

# **DESCRIPTION:**

ROCKBOND LIGHTWEIGHT SCREED (RB LWS) powders are premixed, low density, ready to use, cementitious screed powders. The compounds consist of blends of cement powders, shrinkage compensating agents, graded lightweight sands and aggregates and a combination of compatible admixtures. The powders, when mixed with water, produce lightweight, free flowing concrete screeds, which are easily mixed, pumped and placed. The screeds are used as low density, low strength materials to fill large volume voids, for lightweight floors and for low density trench fill. ROCKBOND LIGHTWEIGHT (1100) SCREED (RB LW1100S) has a set density of 1100kg/m³, and the ROCKBOND LIGHTWEIGHT (1250) SCREED (RB LW1250S) has a set density of 1250kg/m³. The powders are packaged in 25kg moisture proof, durable bags and have a shelf life of 5 years.

# **SPECIAL PROPERTIES:**

- \* Quickly and easily mixed with water, pumped and placed.
- \* Portland cement based, shrinkage compensated, microsilica enhanced.
- \* Lightweight: can be designed and supplied with set densities from 750kg/m³ to 1800kg/m³.
- \* Free flowing, self compacting, self smoothing and will not readily segregate or bleed.
- \* Excellent insulator: a poor conductor of heat and sound.
- \* Resistant to fire: will protect steel against fire and heat, and will not burn or give off toxic gases.
- \* Contains no chlorides, alumina cement or deleterious substances.
- \* Very high yielding and economical to use.
- \* Non flammable, non toxic, odour free, user friendly and safe to use.

# **USES**:

- + Whenever a free flowing, low density, low strength material is required.
- + For the installation of lightweight floors and lightweight floor toppings.
- + To fill large volume voids with a lightweight material.
- + For use as a free flowing, low density, low strength trench fill.
- + For the casting and installation of lightweight concrete structures.
- + To fill areas that require a low heat material.
- + To protect steel and concrete structures from fire and heat.
- + To thermally insulate buildings and walls on the inside or outside.
- + For use as an insulating infill around pipes and ducts.
- + For lightweight mezzanine floors, cavity walls, roofs and spaces.
- + To minimise condensation on walls and ceilings.
- + To acoustically insulate rooms or areas to reduce noise and sound.

# MIXING INSTRUCTIONS:

ROCKBOND LIGHTWEIGHT SCREED powers 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 the material. The concrete powder should be slowly and gently mixed with water.

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# ROCKBOND LIGHTWEIGHT SCREEDS (RB LWS), MIXING INSTRUCTIONS CONTINUED...

Add 17.50 litres of water to the container or mixer.

Pour 25kg of the ROCKBOND LIGHTWEIGHT (1100) SCREED powder onto the water. After all the powder has been added, mix gently for 30 seconds.

The concrete screed is now ready for use.

For the ROCKBOND LIGHTWEIGHT (1250) SCREED, use 12.50 litres of water per 25kg bag.

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

# **APPLICATION PROCEDURE:**

All necessary preparatory work must be completed before the screed is mixed. Ensure that all surfaces with which the screed comes into contact are clean and dust free. A strong concrete substrate free of all friable material will enhance a good bond.

On weak, friable or porous 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 repair area. Brush out any puddles, and let the latex dry out, usually 15 to 30 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. Substrate surfaces without the use of the Primer Latex should be wet.

Shutters must be impermeable to the passage of water, and strong enough to contain and support the screed. Sufficient hydrostatic head must be given to the material to enable it to flow completely through the void to be filled. Make sure sufficient screed is mixed and available so that the operation can be performed in one continuous pour.

When the concreting has been completed, or when the shutters are removed, any exposed screed must be cured immediately with ROCKBOND CURE (RB C) at the rate of 10m²/litre. During adverse weather conditions, such as high temperatures or drying winds, apply a second coat after the first coat is dry.

# **TECHNICAL DATA:**

TYPICAL DATA at for LIGHTWEIGHT (1100) SCREED at 70% water/powder ratio at 20°C

CONSISTENCY: Good Grout CONSISTENCY LIFE: 30 minutes

SET DENSITY: 1100kg/m<sup>3</sup>

COMPRESSIVE STRENGTH:

1 7 28 Days 1 2 5 MPa

YIELD: 25kg of powder yields 35.5 litres of Lightweight (1100) Screed.

1m³ of Lightweight (1100) Screed requires 0.700 tonnes of screed powder.

# ROCKBOND LIGHTWEIGHT SCREED (LWS), TECHNICAL DATA CONTINUED...

TYPICAL DATA at for LIGHTWEIGHT (1250) SCREED at 50% water/powder ratio at 20°C

CONSISTENCY: Good Grout CONSISTENCY LIFE: 30 minutes

SET DENSITY: 1250kg/m<sup>3</sup>

COMPRESSIVE STRENGTH:

1 7 28 Days 2 5 10 MPa

YIELD: 25kg of powder yields 28.5 litres of Lightweight (1250) Screed.

1m³ of Lightweight (1250) Screed requires 0.875 tonnes of screed powder.

# **HEALTH, SAFETY AND STORAGE:**

ROCKBOND LIGHTWEIGHT 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.

# **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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