

# ROCKBOND SCP LTD

# FORMULATORS, MANUFACTURERS AND CONSULTANTS OF SPECIAL CONCRETE PRODUCTS

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#### ROCKBOND WATERSTOP MORTAR

# **DESCRIPTION:**

ROCKBOND WATERSTOP MORTAR (RB WSM) is a blend of special cement powders, finely graded sands and a unique combination of admixtures and accelerating agents. The powder, when mixed with water, produces a quick early strength, high strength mortar which is used to plug and stop the flow of water and grout thorough steel, cementitious surfaces, concrete, masonry, brick and stone. The powder is ready to use, is packaged in 5kg and 25kg waterproof, durable bags and has a shelf life of 5 years.

#### **SPECIAL PROPERTIES:**

- \* Portland cement based, microsilica enhanced and shrinkage compensated.
- \* Quickly and easily mixed and placed, and stops the flow of water instantly.
- \* The mortar gains a rapid high early strength, and develops a high ultimate strength.
- \* For use above and below water.
- \* High build material: vertical and soffit sections are built up as you go.
- \* Strong, fast and permanent bond to steel, stone, brick, masonry and concrete.
- \* Impermeable, waterproof, weatherproof, damp proof, durable and resistant to chemical attack.
- \* Contains no chloride, ferrous metal or other deleterious substances.
- \* High yielding, economical, non flammable, non toxic, odour free, user friendly and safe to use.

### **USES**:

- + To stop and plug the flow of running water, cementitious grouts, resins and liquids instantly.
- + For the quick filling and sealing of cracks, cavities, joints, gaps and seals.
- + In situations where a rapid early strength gain is required.
- + Caulking applications, and for sealing formwork and shutters.
- + For use in tidal and splash zones where time is limited.
- + Instant waterproofing and damp proofing applications.
- + Underwater, running water and wet weather applications.
- + Quick fixings to concrete, rock, masonry, bricks and blocks.
- + Designed for use during cold weather, low temperature applications and freezing conditions.

#### **MIXING INSTRUCTIONS:**

ROCKBOND WATERSTOP MORTAR 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 ROCKBOND WATERSTOP MORTAR that can be successfully applied within a minute after mixing:

Add a small amount of water to a container.

Pour the powder onto the water while mixing.

Continue to add the powder to give a stiff mortar consistency.

The Waterstop Mortar is now ready for use.

For an accelerated stiff mortar mix: reduce the water content. For a retarded wet mortar mix: increase the water content.

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### ROCKBOND WATERSTOP MORTAR (RB WSM) CONTINUED...

# **APPLICATION PROCEDURE:**

All necessary preparatory work must be completed before the mortar is mixed.

Break out all friable or loose concrete or brick and produce a substrate with a good, strong mechanical key. It may be advantageous to cut out and then fill a channel along the length of a crack to stop the flow of water. For best results insure that the cavity to be plugged is wider at the back than the front (use an inverted "V" shape). Ensure that all surfaces with which the compound comes into contact are clean and free of contamination.

Mix the powder with water in sufficient quantities to plug cracks or voids all in one go. A quick and efficient mixing action is recommended. To accelerate the set, use less water. To retard the set, use more water. Store the powder for 24 hours at 20°C prior to plugging leaks at low temperatures.

After mixing, especially during cold conditions, wait 1 to 2 minutes for the material to warm and stiffen. Apply at the right consistency: stiff but not yet set. With the use of a gloved hand, force the compound into the void to be plugged. If necessary, hold the material in place until the compound develops sufficient strength to stop the flow. Alternatively, while the mortar begins to set, use a Wellington boot or hammer to hit and compact the mortar into place.

On surrounding areas where leaks may occur, rub the compound well into any cracks or crevices which should be wet. In certain circumstances the dry powder can be applied to seal wet and weeping surfaces.

It may be possible to relieve the pressure of water by introducing the end of a steel pipe at the back of the crack or cavity, and then fixing the pipe into place with the waterstop mortar. Simply turn off a tap at the other end of the pipe when the waterstop mortar is sufficiently strong!

After filling and sealing leaking cracks and channels, build up the mortar to the profile of the surrounding concrete and form a bridge of the mortar over the crack. Use the mortar as a skim coat to produce a smooth and attractive finish.

During adverse curing conditions, apply ROCKBOND CURE (RB C) at the rate of 10m²/litre to minimise the loss of water and to maximise the strength of the mortar.

# **TECHNICAL DATA:**

TYPICAL DATA at 16% water/powder ratio at 20°C

CONSISTENCY: Good mortar consistency

CONSISTENCY LIFE: Seconds

DENSITY: 2100kg/m<sup>3</sup>

# MINIMUM COMPRESSIVE STRENGTH:

1hour 2 hours 1 7 28 Days 6 10 20 45 55 MPa

YIELD: 1 x 5kg pack of powder yields 2.20 litres of Waterstop Mortar

1 x 5kg pack of powder treats 0.5m<sup>2</sup> of concrete at 4.4mm cover.

1 x 25kg of powder yields 11.00 litres of Waterstop Mortar

1 x 25kg bag of powder treats 2m<sup>2</sup> of concrete at 5.5mm cover.

## ROCKBOND WATERSTOP MORTAR (RB WSM) CONTINUED...

# **HEALTH, SAFETY AND STORAGE:**

ROCKBOND WATERSTOP MORTAR 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. Store the Waterstop Mortar powder for 24 hours at 20°C prior to use in low temperature applications.

#### **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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