

# FORMULATORS, MANUFACTURERS AND CONSULTANTS OF SPECIAL CONCRETE PRODUCTS

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## ROCKBOND HYDRAULIC LIME MORTAR

# **DESCRIPTION:**

ROCKBOND HYDRAULIC LIME MORTAR (RB HLM) powder is a specially formulated, premixed, ready to use, natural hydraulic lime mortar powder. The compound contains a fine grade of natural hydraulic lime, quality graded limestone sands and a union of compatible admixtures. The powder, when mixed with water, produces a thixotropic, non flow, non slump, non shrink, white, low strength mortar which is specially designed for placement and pointing of bricks and blocks, and for the filling and sealing of gaps, joints and voids in masonry, brick and stone. The hardened mortar is microporous and compatible with lime substrates and mortars found in old buildings, churches and historic structures. The compound is packaged in 25kg moisture proof, durable sacks and has a shelf life of 5 years.

# **SPECIAL PROPERTIES:**

- \* Does not contain Portland cement.
- \* Available in white, and also in a range of attractive colours.
- \* Quickly and easily mixed, worked, placed and finished.
- \* High build material: thixotropic, cohesive, non flow, non-slumping and non shrink.
- \* Microporous: reduces condensation and allows masonry, brick and stone to breathe and dry out.
- \* Flexible: will move and give in sympathy with changes in temperature, humidity, stress and differential loading.
- \* Low strength and forgiving: a lime compatible joint fill and pointing material for bricks and blocks.
- \* Self-healing durable: micro-cracks and gaps are filled and repaired by continuous carbonation.
- \* High yielding, economical, non flammable, non toxic, odour free, user friendly and safe to use.

#### USES:

- + For the placement, pointing, bonding and bedding in of masonry, bricks, blocks and stone.
- + For the hand placing and filling of cracks, cavities, voids, gaps and joints in limestone, concrete and structures
- + As a compatible mortar to patch repair lime based materials, mortars, renders and stone.
- + To plaster, render and coat internal and external brick and limestone substrates to produce smooth or textured aesthetically pleasing finishes.
- + To restore, make good and protect historic buildings, listed buildings, churches, bridges, viaducts and limestone structures.
- + For the production of lime plaster mouldings, stucco, panels, limestone concrete and washes.

## MIXING INSTRUCTIONS:

ROCKBOND HYDRAULIC LIME 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). Use a ROCKBOND FORCED ACTION PAN MIXER (RB FAPM) to mix larger amounts of material.

Add 5.50 litres of water to the container or mixer. Pour 25kg of powder onto the water while mixing. After all the powder has been added, mix for 30 seconds. The mortar is now ready for use.

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## ROCKBOND HYDRAULIC LIME MORTAR (HLM),

#### MIXING INSTRUCTIONS 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:**

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.

To point bricks and blocks: rake out all crumbly or weak mortar. Ensure that all surfaces which the mortar comes into contact with are clean and dust free. Use a water spray to washout any debris and to wet the bricks and existing mortar to minimise suction.

To plaster or render brick or cementitious surfaces: remove all friable or weak material; apply one coat of the ROCKBOND PRIMER LATEX to the substrate and let dry. Apply a second coat of the latex and let dry. Or soak the substrate with water to reduce suction. Mix the mortar powder with water; place by trowel, steel float or wet spray.

For pressure pointing applications in brick and stone: use ROCKBOND HERITAGE T GROUT and a ROCKBOND INJECTION GUN 1 litre (RB GIG1000). Mix the powder with water to the appropriate consistency, charge the gun and inject the material at the back of the cavity or fissure. Withdraw the nozzle while still injecting to minimise the formation of voids. Bring the level of the mortar up to the profile of the surrounding brickwork and finish with a steel trowel.

For winter work: protect the mortar from wet weather and frost by covering the material with wet hessian and polyethylene sheet.

#### **TECHNICAL DATA:**

ROCKBOND HYDRAULIC LIME MORTAR (HLM)

TYPICAL DATA at 22% water/powder ratio at 20°C

CONSISTENCY: Wet mortar consistency

CONSISTENCY LIFE: 30 minutes

DENSITY: 1950kg/m<sup>3</sup>

COMPRESSIVE STRENGTH: 5MPa at 90 Days

YIELD: 25kg of powder yields 15.00 litres of Hydraulic Lime Mortar 1m³ of Hydraulic Lime Mortar requires 1.700 tonnes of powder.

## ROCKBOND HYDRAULIC LIME MORTAR (HLM), CONTINUED...

#### HEALTH, SAFETY AND STORAGE:

ROCKBOND HYDRAULIC LIME 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 materials. 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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https://rockbond.co.uk/products/rockbond-hydraulic-lime-mortar-rb-hlm-2/

# <u>IMPORTANT NOTE:</u>

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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