Drymix Medium

Product Data Sheet

A dry ready mixed Natural Hydraulic Lime mortar for building & pointing.

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Product Description

Factory blended mortar using kiln dried sand and Saint-Astier Natural Hydraulic Lime, combined with carefully selected additives to improve the mortar's physical and mechanical properties, whilst maintaining all of the virtues of a pure Natural Hydraulic Lime mortar.

Mix Ratio

2:5 as standard, other mix ratios made to order.

Binder

Saint-Astier NHL2 or NHL3.5 as stocked, other binders and strengths available on request.

Aggregate

3mm down sharp, washed flint sand.

Usage

Cornerstone Drymix NHL Mortars are multi-purpose mortars suitable for bedding, general building and pointing.

Suitable for applications in construction where the binder strength is appropriate for the host background or surface. Suitable for external and internal use.

Do not use this product if the temperature is above 30°C, below 5°C or if the risk of frost or snow is present within the next few weeks (including wind chill); for cold weather working we have specific blends designed to develop strength faster than our standard mixes.

Benefits

- Better workability & reduced shrinkage risk
- Slower drying; better curing
- Quality controlled production
- Consistency of mix ratio and working additions

Coverage

After mixing, a 25kg bag will produce approximately 15 litres of mortar.

For Pointing applications; a single 25kg bag will do approximately 1.5m^2 however this is dependent on pointing depth and joint width so this yield should only be used as a rough guide. On site trials will always give the best indication of yield for your specific project.

Colour and Texture

All of our standard Drymix mortar range is entirely natural in colour. No pigments or colourants are added.

Drymix Medium is made with a 3mm down tan/buff flint sand which gives a milky tea coloured mortar after finishing.

Other colours are available on request.

Please note that as sands come from a natural source there can be some variation in colour. While variances are slight, for applications where colour is important such as unpainted pointing, we strongly advise that each elevation is completed using mortar from the same batch.

Preparation

In general, this will be determined by the purpose and application of the mortar.

Ensure surfaces are clean and free of dust and other debris.

Dense impervious backgrounds/materials are unlikely to be very absorbent and require little to no dampening, whereas more absorbent backgrounds/materials require adequate dampening in order to prevent rapid drying.

If very high suction bricks are used, please contact us in advance of your project as we offer a different formulation specifically designed for this application.

Mixing

A 25kg bag of mortar will require 4 to 4.6 litres of clean drinking water. Adjust water to suit for bedding applications running the mix wetter for higher suction units, for pointing keep the mix as stiff as reasonably feasible but still workable. Always avoid making the mortar too wet, as this can promote shrinkage issues.

For drum type mixers, it is essential not to overfill the mixer.

As a dry mixed material, it is possible that some settlement or separation may occur in the bag during transit; when mixing part bags, it is especially important that the dry contents are thoroughly blended prior to mixing with water.

Best Practice/Advised Mixing: First add 60 to 70% water of the total water into the mixer, followed by the Drymix mortar and turn the mixer on. Allow the mortar to mix until the water is thoroughly distributed, then add additional water to achieve desired consistency.

Mixing Time: Mix for a minimum of 5 minutes, but for no longer than 10 minutes.

Quenching: Like most lime mortars this blend will benefit from Quenching; allow the mortar to stand

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Cornerstone products are CE marked
and manufactured under an ISO9001:2015
accredited Factory Production Control System.

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for 10 to 20 minutes after mixing, before use. Whilst this is not mandatory you may find the mortar stiffens a bit if used straight out of the mixer, it may need a splash more water with remixing or just knocking back up again after 20 minutes as a result.

Other Mix Methods: We accept that it is generally site practice to add the water to the mortar. Providing the mortar is well mixed and not too wet, this method is acceptable.

Once water has been added, this mortar has an open time of at least 14 hours. Longer in colder weather.

Usage and Finishing

Areas of Use: Our Drymix Mortar range is suitable for use in pointing and building applications. NHL mortars prefer masonry with a degree of suction, so units like engineering bricks may be more difficult to work with as they will swim more than expected due to the slower set time of lime mortars.

Pointing: Removal of the previous mortar should be done in such a way as to give a good space and key for the fresh mortar to be applied. The depth should be no less than 10mm, and should be raked out to give angled corners in the back of the joint. Any dust and residual old mortar should be removed by way of a stiff bristled brush or by vacuum cleaner if a suitable industrial one with HEPA filters is available.

After cleaning out the joint it must be sufficiently dampened down to control suction, high suction backgrounds may need multiple passes to wet out sufficiently, and be prepared to keep wetting the wall as you work if particularly high suction or in hot/windy weather.

Push the mortar into the joint with an appropriately sized and shaped tool, the mortar should be pressed into the back of the joint as tightly as possible. After the mortar has started to stiffen from background suction it may shrink away from the edge of the masonry units a little bit; come back and re-press the mortar to close up those gaps.

After time has passed and the mortar stiffens even more a tool should be used to drag across the face of the mortar to remove the fat from the front of the joint, the mortar should fall cleanly away from any metal tool without sticking when it's ready. Finally, the mortar should be beaten into the joint with a churn brush, this will help to compact the mortar into the joint as well as expose the coarser aggregate in the mortar.

Building: There are multiple building styles and methods so covering them in a short document like this is not feasible. This mortar is suitable for laying blocks, bricks or stonework. If the masonry is particularly high suction and/or the weather is quite hot then it may be advisable to dip it in water before laying so that the mortar doesn't dry back too quickly and allows enough time for placement and adjustment.

At the end of the day, it is recommended to cover over the fresh work with damp hessian sheeting to keep the fresh mortar damp and aid in its early strength development. The hessian should be setup with an overhang in such a way that it doesn't allow it to 'slap' against the wall which can ruin any finish that has been applied and smear lime onto the masonry.

This can be achieved by fixing the hessian to a scaffold or by having an overhanging board placed on top of the wall with something weighing the bottom of the hessian on the floor below.

Packaging

This product is supplied in 25kg polythene lined paper bags, palletised for shipping and handling. The packaging is a mixed material and should be recycled accordingly.

Also available as tonne bags for 3 Tonne or higher order quantities.

Storage

This product should be stored in dry conditions, in unopened bags and clear from the ground. Always protect bags from water and damp. Reseal part bags after opening if unused product is present.

Use within 6 months of manufacturing date (provided on each bag).

Health and Safety

RISK PHRASES: R36 / R37 / R38 / R43

- Avoid contact with skin and eyes.
- Contact with wet mortar may cause irritation, dermatitis and/or burns.
- Contact between lime powder and body fluid (sweat, eye fluid etc.) may cause skin burns and respiratory irritation, dermatitis or burns.

SAFETY PHRASES: S2 / S24/25 / S26 / S37

- Avoid eye and skin contact by wearing suitable eye protection, protective clothing and gloves.
- Avoid breathing dust.
- Keep out of reach of children.
- On contact with skin and/or eyes, rinse immediately with clean water and seek medical attention.

Declaration

Cornerstone masonry mortars are manufactured and tested to the requirements of BS EN 998-2: 2016.

This product will contain no Portland Cement whatsoever.

Document Control

Datasheet version 1.5, issued September 2024. More modern versions of this document will supersede this datasheet, with no exclusions.

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