

Scantle Mix

Product Data Sheet

A dry ready mixed Natural Hydraulic Lime mortar for slate roofing.



Product Description

Factory blended render using graded kiln dried sand and St. 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 available on request.

Binder

St Astier NHL3.5, gauged with Prompt Natural Cement for an accelerated set. Other binder blends available on request.

Aggregate

0.5mm down silica sand.

Usage

Scantle Mix is singularly designed for laying slates as part of traditional scantle roofing to prevent them from lifting during periods of strong wind.

Do not use this product below 5°C, do not use this product if freezing conditions are predicted within the following few weeks (including wind chill). Do not use this product in temperatures above 30°C.

Coverage

After mixing, a 25kg bag will produce approximately 14 litres of mortar.

We cannot give an accurate indication square meterage as the fine bed depth and the width of the slates can significantly vary how far this product will go. Shifting from a 1.5mm bed to a 2mm bed increases mortar requirements by 1/3rd. As such we advise starting the project and based on observed consumption ordering the quantities needed. We tend to find that a bag will cover 3-4m² but this should not be taken as given.

Advantages

- Quality controlled production and product consistency.
- Improved workability of mortar, reduced risk of lime bleed, increased bond strength and reduced risk of shrinkage.
- Faster set for washout-protection.
- Increased water retention for improved cure.
- Pre-fibred mortar for improved flexibility, good stress distribution and where cracking does occur there is still some support maintained.

Colour and Texture

This product is entirely natural in colour. No pigments or colourants are added.

Scantle Mix is made with a 0.5mm down cream silica sand which gives a tan to light cream mortar joint when finished.

Whilst the light colour is most historically appropriate, we appreciate that some customers do not want the mortar to stand out on their roof, we can also offer this mix with a black pigment 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, we strongly advise that each elevation is completed using mortar from the same batch.

Preparation

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.

Whilst this product includes additions to help mitigate shrinkage issues, best practice still needs to be followed.

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

Mixing

A 25kg bag of mortar will require 5 to 7 litres of clean potable water. 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 80 to 90% water of the total water into the mixer, followed by the dry 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 in a Belle Mixer: Mix for a minimum of 3 minutes, but for no longer than 8 minutes.

Mixing Time with a Whisk: Mix for a minimum of 2

Manufactured by Cornerstone Mortars

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

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minutes but no longer than 5 minutes.

Once water has been added, this mortar has an open time which is variable based on temperature. For summer/warmer conditions the set time is approximately 40-50 minutes, for winter/colder conditions the set time can be as high as 1 hour 45 mins.

Usage and Finishing

Areas Of Use: This product is singularly designed for laying of slates to prevent them from lifting during periods of strong wind. We do not recommend this product is used in any other fashion.

Application: Always wet a substrate (including previous render layers) to control suction before use, however you don't want to be laying into water sitting on the surface of the wall as this will act as a slip-layer and prevent the mortar from bonding.

The mortar should be laid as a "smile" on top the two lower slates a little under the width of the slate to be bedded into it. The fillet should be around 38-50mm across when the slate has been pressed down onto it. Typically, this fillet is spread right up to the slates edge, it can be left recessed by 5mm or so but this does not typically improve the performance by any meaningful way.

This mortar should not be used to bed the whole slate, this would allow water to be pulled in through the mortar up into the roof space by capillary action. It would also not allow the roof to expand and contract sufficiently whilst heating and cooling and will likely pop the slate from the mortar bed, or potentially crack the slate if reclaim slate is used.

After application the mortar should be kept damp to promote a cure and protected from high temperatures and drying winds for a minimum of two weeks; longer in colder weather. This can be achieved by use of damp hung hessian or even just unprotected regular dampening in sheltered areas.

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 to 8 weeks of the 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 lime mortars for renders and plasters are manufactured to the requirements of BS EN 998-1: 2016.

These will contain no Portland Cement whatsoever unless requested as a custom mortar or part of the Newbuild product range.

Document Control

Datasheet version 1.5, issued January 2023. Any more modern versions will supersede this datasheet, with no exclusions.

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