LINCOLNSHIRE LIME

Telephone: 01469 531227 Mobile: 077 433 62408
Email: sales@lincolnshirelime.co.uk
Alternative: lincolnshirelime@gmail.com
Northfield Farm Dam Lane Thornton Curtis
North Lincolnshire DN39 6XN

Insulating Render - Data Sheet

PRODUCT

Dry ready mixed **Insulating Lime Render** designed for both internal and external use to reduce thermal losses in solid walls.

Binder Strength – NHL2

Factory blended mortar made with a recycled ultra-lightweight hardened aggregate and NHL2, with the additions of fibres and selected additives to improve the mortars physical and mechanical properties.

USAGE

Cornerstone Insulating Render is designed to improve the thermal performance of solid walled masonry, whilst maintaining the high vapour permeability and low strength of an NHL2 render. Insulating Render offers a viable solution for Part L1B legislation in that it meets the requirements for improving the thermal performance of a wall, whilst maintaining a permeable fabric which absorbs and readily allows for the evaporation of moisture and will not prejudice the character of the host building or increase the risk of long-term deterioration of the building fabric or fittings. With a measured K Value of 0.12, Insulating Render significantly outperforms similar systems both in terms of performance and cost. A 50mm application will improve the U value of a solid wall by 50% or more, significantly reducing heat loss.

Most available lightweight/insulating materials use aggregates that have a two-dimensional structure, when these are subject to pressure during application the aggregate can breakdown, reducing both the thermal performance and durability of the mortar. Cornerstone Insulating Render uses a specialist recycled ultra-lightweight hardened aggregate with a three-dimensional structure, which does not breakdown under application and improves both the durability and insulating properties of the render. The void structure in the render can also accommodate salt deposits (to a degree).

Fibre additions improve the flexural strength of the render, distributing stresses across the render to help reduce point loading, and negate the need for any mesh to be applied to the wall or inserted within the render.

Insulating Render can also be used in sustainable construction projects as a basecoat onto natural building materials such as hemp, straw and rammed earth. The insulating properties help reduce the thermal expansion differentials between the background and any subsequent coatings.

For internal applications it can be applied as backing coat or through to finish coat, or finished with a lime plaster. For external applications, apply as a backing coat with Cornerstone NHL2 Drymix as a finish.

Suitable for application onto most host surfaces.

If working on weak/friable backgrounds such as cob, please contact us for further application information.

COVERAGE

After mixing, a bag will produce approximately 13.8 litres of mortar.

For render applications, a bag will cover approximately 1.38m2 at 10mm thickness.

ADVANTAGES

- Quality controlled production. Consistency of mix ratio and working additions.
- Significantly reduces heat loss in solid masonry.
- Meets the requirements of Building Regulation Part L1B.
- Lightweight material, can be applied up to 25mm per coat.
- Uses recycled aggregate and NHL2, making a low carbon render.
- Significantly reduced risk of shrinkage.
- Improved and even cure which offers an improved bond with the substrate.
- Improved durability.
- Non-porous aggregate, reducing cold bridging and damp spots.
- Extended working and finishing time.
- Helps reduce the thermal expansion differentials between the background and any subsequent coatings.
- Fibre additions improve the flexural strength, distributing stresses and reduces point loading.

COLOURS

Cornerstone Insulating Render is entirely natural in colour. No pigments or colourants are added.

However, please note that colour variation is still possible due to the use of natural sands

PREPARATION

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

We would expect appropriate preparation in accordance with best practice; where the surface is clean, free of dust and other debris.

Where necessary the background should be adequately dampened to promote adhesion/bond with the host surface.

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 Cornerstone Insulating Render includes additions to try and mitigate these issues, best practice still needs to be followed.

MIXING

A bag of Cornerstone Insulating Render will require 4.2 to 4.5 litres of clean potable water. The water addition will vary according to the application and desired consistency/workability of the mortar. Always avoid making the mortar too wet, as this can promote shrinkage issues, especially when used as a render.

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.

Cornerstone Insulating Render is best mixed using a paddle mixer or plasterers whisk.

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

Mix for a minimum of 5 minutes.

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 will be sufficient.

Quenching - Like most lime mortars Cornerstone Insulating Render will benefit from Quenching; allow the mortar to stand for 10 to 20 minutes after mixing, before use.

Should additional water be needed after quenching to maintain workability, this can be added and mixed thoroughly through the mortar.

Once water has been added, Cornerstone Insulating Render has an open time of at least 18 hours.

PACKAGING

This product is supplied in polythene lined paper bags.

Pallets contain 80 bags.

The paper used is of prime quality and suitable for recycling, the packaging is a mixed material and should be recycled accordingly.

STORAGE

This product should be stored in dry conditions, in unopened bags and clear from the ground. Always protect bags from water and damp.

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 lime mortars for renders and plasters are manufactured to the requirements of BS EN 998-1: 2010.
- Cornerstone lime mortars for masonry mortars are manufactured to the requirements of BS EN 998-2: 2010. These will contain no cement whatsoever unless stated.

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

LINCOLNSHIRE LIME

Telephone: 01469 531227 Mobile: 077 433 62408 Email: sales@lincolnshirelime.co.uk
Alternative: lincolnshirelime@gmail.com Northfield Farm
Dam Lane Thornton Curtis
North Lincolnshire DN39 6XN