WOMERSLEYS INSULATING LIME RENDER/ PLASTER

PRODUCT

Dry ready mixed **Insulating Lime Render** designed for internal 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

Womersleys 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. A 50mm application, applied as two coats, will reduce heat loss in a solid wall by up to 60%.

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.

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

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.

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 15 to 16 litres of mortar. For render applications, a bag will cover approximately 1.55m2 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 30mm per coat.

Uses recycled aggregate and NHL2, making a low carbon render.

Significantly reduced risk of shrinkage.

Improved durability

Non-porous aggregate, reducing cold bridging and damp spots

Extended working and finishing time

Improved and even cure which offers an improved bond with the substrate

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

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

MIXING

A bag of Womersleys Insulating Render will require 4 to 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.

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 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, 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:

Womersleys Cornerstone lime mortars for renders and plasters are manufactured to the requirements of BS EN 998-1: 2010.

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

Manufactured by Cornerstone Mortars. Supplied via Cornish Lime. Brims Park, Old Callywith Road, Bodmin, Cornwall, PL31 2DZ