



MASONS MORTAR

preserving the past, present & future of our built heritage

Explore our range of Lime Insulating Plaster & Render

Here's just a few reasons why using Lime Insulating plaster and render on your building makes sense:

- Significantly reduce heat loss from your home
- Lowers your heating bills, saving you money year after year
- Controls humidity & condensation in your living areas
- Healthier for you, better for the environment
- Long term reduction in your energy consumption
- Reduces the carbon footprint of your home

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Our products - CORNERSTONE

Render, insulation and dehumidifier all in one.

This lightweight render offers low strength, high flexibility, high vapour permeability and advanced thermal performance, for use on solid walled masonry.

Insulating Render has been specifically designed to reduce heat loss in solid walls and older buildings.

Working as a lightweight base coat for rendering and plastering applications, **Insulating Render** offers significantly improved insulation and moisture management, as well as much faster application times compared to conventional lime renders.



Most available lightweight / insulating materials use aggregates that have a two-dimensional structure. When these are subject to pressure during application the aggregate can break down, 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 break down under application and improves both the durability and insulating properties of the render.

Key benefits of Cornerstone:

- **Work quicker, apply thicker** – **Insulating Render** can be applied up to 30mm thick in a single pass, which is significantly better than standard mortars, reducing labour time and cost. This can be built up to 50mm, 'Green on Green'.
- **Let your walls breathe** – behaves the same as a standard NHL2 render, offering a highly vapour permeable and highly flexible coating, helping reduce issues such as damp and decay.
- **Highly insulating** – with a measured K Value of 0.12, a 25mm coat will improve the U Value of a solid wall by around 40%, whereas a 50mm coat will improve the U Value by around 60%.
- **A dehumidifier for your walls** – by incorporating non-porous aggregate **Insulating Render** helps to regulate moisture movement through the wall and reduce cold spots. Independent testing verifies how **Insulating Render** can absorb, store and buffer excess moisture, releasing it when suitable and never trapping it within the wall, improving the air quality and comfort of internal spaces.
- **Superior performance** – **Insulating Render** is at least 50% more insulating than the closest performing market alternative and is priced to meet or cost less than market alternatives.
- **Space is at a premium** – **Insulating Render** can be applied directly to the wall. It does not require framing or boards which can reduce space. If you are looking to maximise insulation it can also be incorporated within a boarded system.
- **Natural mineral ingredients** – made using only NHL2, recycled aggregates and additives enabling it to be used on virtually any background, and contains no organic content so no fear of the coating rotting or breaking down.

For internal applications, **Cornerstone** can be applied as a backing coat, or it can also be left as a rough finish. Alternatively, it can be finished with our pre-mix plaster finish coat, called MM PRF, which is supplied in a 25Kg bag and should be applied between 3-5mm thick, once the backing coat has suitably cured.*

For external applications, apply **Cornerstone** as a backing coat, with MM PRF as an external finishing coat. **Cornerstone Insulating Render** must be protected with a suitable finish externally.

*Application thicknesses of **Cornerstone** will vary, depending on circumstances. This will increase or decrease curing times. Please seek advice from our colleagues, based on your project.

Our products - ST. ASTIER NOVASKIN

NOVASKIN THERMO PLUS is an insulating **base coat** plaster, formulated for internal or external use. It is created from hydraulic lime and recycled glass beads, and is fully compatible with traditional substrates, offering a healthy, breathable & sustainable insulation solution.

NOVASKIN COATING is an ultra-fine, vapour permeable finishing coat. Ideally suited to substrates prepared with NOVASKIN THERMO PLUS. It can be used internally and externally, and is available in **405** standard colours.

*If you are using NOVASKIN THERMO PLUS externally, it **must** be finished with NOVASKIN COATING.

Key benefits of NOVASKIN THERMO PLUS:

- Compatible with traditional supports and listed buildings
- 15 times better insulation than traditional renders & plasters
- A1 fire classification, non-combustible
- Excellent vapour permeability
- Great workability and easy to apply
- Improves the thermal performance of your building

NOVASKIN[®] System

NOVASKIN[®] THERMO PLUS
THICKNESS 20-100mm

NOVASKIN[®] COATING
THICKNESS 2-5mm

NOVASKIN[®] THERMO PLUS + **NOVASKIN[®] COATING**

12 KG **405 COLOURS** **25 KG**

THERMAL CONDUCTIVITY
K=0.0793 W/m·K

COFRAC RE0923FB-014

An ideal worksite application

- Substrate preparation identical to traditional mortar
- Easy to apply (same as traditional mortar)
- Excellent workability
- Lightweight mortar
- Quick setting time (1 week for 100mm)
- No specific training required to apply NOVASKIN
- Compatible with all old substrates (half-timbered, rubble stone, brick etc.)

Optimised consumption:

For traditional mortar: 18kg approx. for 10mm thickness/m²

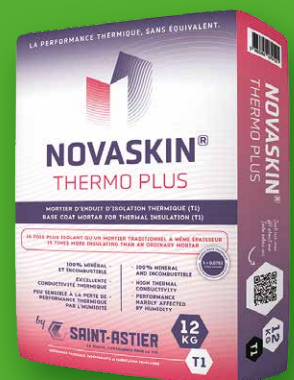
For NOVASKIN THERMO PLUS: 3.5kg approx. for 10mm thickness/m²



Consumption and performance

NOVASKIN THERMO PLUS CONSUMPTION / THICKNESS

THICKNESS (MM)	CONSUMPTION (KG/M2)	BAG PER M2	R (M ² .K)/W
20mm	6 to 7	0.5 to 0.6	0.25
40mm	12 to 14	1 to 1.2	0.5
60mm	18 to 21	1.5 to 1.8	0.76
80mm	24 to 28	2 to 2.3	1.01
100mm	30 to 35	2.5 to 2.9	1.26



PRODUCT PERFORMANCE

CLASS T1 MORTAR - BS EN 998-1 2016	
Fire reaction	A1
Compressive strength	CS I
Adhesion	≥ 0.3 N/mm ² - FP: A B C
Capillarity	W1
Water vapour permeability	μ ≤ 15
Thermal conductivity	λ* = 0.0793 W/m•K

Our products – CALCEA® LIME INSULATING PLASTER & RENDER

Two exceptional products for indoor and outdoor use.

Otterbein Natural Hydraulic Lime for the environment: - CALCEA® Lime Insulation Plaster & Render. Everything in the bag ready to use. Just add water, **Mix and Go.**

CALCEA® Lime Insulation Plaster and Render are natural products made from hydraulic lime, lime, and other mineral ingredients. Designed to be eco-friendly and climate-regulating insulation plaster and render, perfect for both modern and historic buildings. They can be applied by hand or with a machine, and they both provide excellent insulation properties.

Great for your home

Moisture Control & Mould Prevention Plaster and Render helps keep your indoor environment comfortable by regulating moisture levels and naturally preventing mould growth.

Healthy & safe

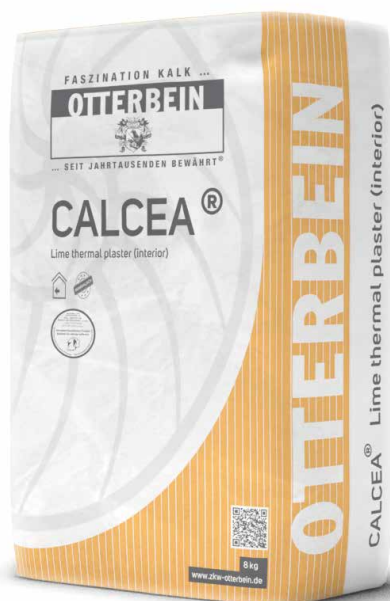
CALCEA® Lime Insulation Plaster and Render have been certified by the Institute for Environment and Health (IUG) in Germany as 'allergy-friendly,' making them a great choice for people with allergies or those looking for a healthier home environment.

Eco-friendly

It's perfect for eco-conscious homeowners who want to create a natural, healthy indoor climate for their family, significantly reduce the carbon footprint of their home, reduce heating bills and help to mitigate climate change. Homes without insulation have much greater energy consumption. Every millimetre of insulation is a long-term reduction in energy consumption - once in place, it goes on and on.

Internal application – Once the base coat plaster is applied, you have two options for the finishing coat; either the Calcea Lime skimming plaster or our MM Plaster Render Finish (PRF).

External application – Once the base coat render is applied, use our MM Plaster Render Finish (PRF) as the finish coat.



*Certain backgrounds may require a priming coat. *Please consult us regarding your specific circumstances.

CALCEA® Lime thermal plaster (interior)



Mortar group:	CS I acc. to EN 998-1
Fire class:	A1
Aggregate size:	0 – 2.0 mm
Dry bulk density:	approx. 0.34kg/dm ³
Compressive strength 28 days:	approx. ≥0.4 N/mm ²
Thermal conductivity:	approx. 0.08 W/(m·K)
E-Module:	approx. 400 N/mm ²
Water vapour diffusion Resistance factor μ:	approx. 3.6
Water absorption:	W0



Art.-No.	Delivery	Application	Consumption
A4054002	30 l-bag	mineral insulation for interior walls in ecological construction and historic building preservation and restoration, based on Natural Hydraulic Lime acc. to EN 459-1, slaked lime acc. to EN 459-1 and high-temperature insulating mineral light-weight additives	With a plaster application of 40mm: · approx. 0.65m ² from each 8kg bag · approx. 26 litres of wet mortar per 8kg bag

CALCEA® Lime thermal render (exterior)



Mortar group:	CS I acc. to EN 998-1
Fire class:	A1
Aggregate size:	0 – 3.0 mm
Dry bulk density:	approx. 0.31kg/dm ³
Compressive strength 28 days:	approx. ≥0.4 N/mm ²
Thermal conductivity:	approx.0.08 W/(m·K)
E-Module:	approx. 290 N/mm ²
Water vapour diffusion resistance factor μ:	approx. 6.2
Water absorption:	W1



Art.-No.	Delivery	Application	Consumption
A4054102	30 l-bag	mineral insulation for facades in ecological construction and historic building preservation and restoration, based on Natural Hydraulic Lime acc. to EN 459-1, slaked lime acc. to EN 459-1 and high-temperature insulating mineral light-weight additives	With a render application of 40mm: · approx. 0.65m ² from each 8kg bag · approx. 26 litres of wet mortar per 8kg bag

CALCEA® Lime skimming plaster



Mortar group:	CS I acc. to EN 998-1
Fire class:	A1
Aggregate size:	0 – 0.5 mm
Dry bulk density:	approx. 1.0kg/dm ³
Compressive strength 28 days:	approx. 1.0 N/mm ²
Thermal conductivity:	approx. ≤0.89 W/(m·K)
E-Module:	n.a.
Water vapour diffusion resistance factor μ:	≤10
Water absorption:	W0



Art.-No.	Delivery	Application	Consumption
A6052017	25 kg-bag	as finish plaster on all interior lime- or cement-bound surfaces, as final finish before subsequent top coating or as a surface ready for wallpapering and as smoothing finish for applying spatula and sweeping techniques	With a plaster application of 1-2mm: · approx. 12m ² from each 25kg bag · Water demand is approx. 11 litres per 25kg bag

Lime Plaster and Render Insulation - Terminology

U-value

U-value is a measure of how much heat can pass through a material or structure. It tells you how well something insulates. The lower the U value, the better the material keeps heat from escaping. U value measures the thermal transmittance of materials as the rate of transfer of heat through matter.

In simple terms, **the lower the U-value, the better the insulation.** The U-value is expressed in watts per square metre per degree Celsius (W/m^2K). U value depends on the thickness and type of the materials used, and how they are arranged in a structure. It considers the combined effect of layers of materials like walls, insulation and air gaps, as well as the temperature difference between the environments on either side of the material. U value is also known as thermal transmittance or overall heat transfer coefficient.

R-value

R-value is a measure of how well a material resists the flow of heat. **The higher the R-value, the better the insulation.** R-value is expressed in square metres per degree Celsius per watt (m^2K/W). R-value measures the thermal resistance of insulation against the conductive flow of heat. R-value is also known as thermal resistance.

For example, a material with an R-value of $2 m^2K/W$ means that for every square metre of material, a 2-degree Celsius difference in temperature will be maintained for every watt of heat passing through it.

R-value is mainly determined by the type & thickness of the insulation material. R-value can be added up for different layers of materials to get the total R-value of a structure. However, the R-value does not account for air gaps or weak points (Called thermal bridges) that may reduce overall insulation performance.

K-value

K-value represents the thermal conductivity of a material, and it measures its ability to conduct heat. It is a measure of how easily heat passes through a material. **The lower the K value, the better the insulation is.** It is expressed in units of watts per meter per degree Celsius ($W/m^{\circ}C$).

Unlike U-value & R-value, K-value depends only on the material itself, not on its thickness or temperature difference. A low K-value means the material naturally resists heat flow well. K value is also known as thermal conductivity or **lambda value.**