

Insulating render/plaster

High performance, breathable, insulating, mineral render and plaster by *ProofShield*



ProofTherm insulating render and plaster provides multiple benefits in a single product. It can be used as a stand-alone insulation upgrade on external and internal walls, or as part of an insulation system on new build projects. It is particularly useful as an effective insulation measure on older properties due to its high vapour permeability which allows the building to breathe, maintaining a healthy environment free from damp and mould.

- ✓ Highly effective insulation
- ✓ Breathable: For a healthier living space
- ✓ Recognised energy saving measure
- ✓ 100% natural mineral render. No VOC's
- ✓ Fireproof
- ✓ Acoustic insulating
- ✓ Hand or machine application
- ✓ Thermal comfort: Increased thermal mass of walls means the home holds its heat in winter and remains cooler in summer.

A single 20mm coat of *ProofTherm* external wall render applied to a bare masonry wall will increase its thermal resistance by 250%

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Description:

ProofTherm is a breathable, insulating, mineral render whose primary components are cement, hydraulic lime, insulating aggregates, proprietary binders and polymers. It is available in different formulas as an external wall render, internal wall plaster and self-levelling floor screed.

Key attributes:

- Thermal insulating
- Acoustic insulating
- Vapour permeable
- Natural mineral
- Fireproof
- Lightweight
- Hand or machine applicable
- Easily worked

Mixing Method:

One 15kg bag of *ProofTherm* exterior wall render should be mixed with 15 litres of water. Put 80-90% of the water into a suitable sized bucket and then add the *ProofTherm* and mix with an electric mixer at 100-150 rpm for 2 minutes. Add the remaining water to achieve a creamy consistency. Allow mixture to rest for 2 minutes before mixing for a final minute. Avoid over mixing which will crush the insulating aggregates in *ProofTherm*.

Application Method:

- 1: Prepare the surface by fixing any loose or damaged sections and making sure the surface is free from dust, grease and loose material. ProofBase Universal primer provides the ideal adhesive key for all substrates.
- 2: ProofTherm can be applied by hand or pumped. Uniform layers of 15-20mm should be built up to the required overall depth. Typical depth is 20mm but ProofTherm can be built up to a depth of 100cm depending on the level of insulation required. Each layer should be allowed to cure for 5 hours and then slightly dampened before the next layer is applied to it.
- 4: Depth gauges can be used if required and should be removed after 3 hours and back filled.

Finishing:

ProofTherm is primarily an insulating render and needs to be finished with ProofDeco thin coat mineral render or a similar finish. Allow 24 hours before applying finishing coat. Care should be taken to use vapour permeable decorative coatings to maintain breathability.

Storage:

- Store in a dry place
- Do not stack above 8 rows
- If stored in these conditions, shelf life is 18 months

Safety:

- Contains natural hydraulic lime
- Skin irritant: Wash with plenty of water
- Eye irritant: Remove contact lenses if present and flush carefully with water for several minutes
- May cause respiratory irritation. Avoid inhaling dust
- Keep out of reach of children
- Wear protective gloves, clothing and eye protection
- Call a poison center or doctor if you feel unwell
- Dispose of contents / container in accordance with local regulations and at an approved facility.



Performance:

Essential Characteristics	Performance	Method of Test
Thermal conductivity λ_{10dry} (W/m.K)	T1 (0.072 W/m ² K)	EN 1745:2012 EN 12664:2009
Reaction to fire	A1	EN ISO 1182, ISO 1716
Adhesion (N/mm ² and fracture pattern (FP) A,B or C	FP:B (0.1 N/mm ²)	EN 1015 - 12:2000
Compressive strength	CSI (0.4 N/mm ²)	EN 1015 - 11:2000/A1:2007
Capillary water absorption	W1 (0.3 kg/m ² .min ^{0.5})	EN 1015 - 18:2014
Water vapour permeability (μ)	6.27 μ	EN 1015 - 19:2000/A1:2006
Dry bulk density (kg/m ³)	280 kg/m ³ \pm 10%	EN 1015 - 10:2001/A1:2007
Sound insulation db	23db/22 db/(3cm/500hz)	EN ISO 10140-2

Colour / appearance	White granule (3mm max)
Yield	2.2m ² /15kg @ 20mm
Drying time	5 hours (at 23°C, 50% relative humidity)
Full drying time	36 hours (at 23°C, 50% relative humidity)
Drying time for testing	28 days at (23°C, 50% relative humidity)
Application temperature	To be applied at +5 /+35°C
Application duration (pot life)	4 hours (at 23°C, 50% relative humidity)
Applicable depth	Minimum 10mm, maximum 100mm