

ProofTherm[®]

INSULATING RENDER/PLASTER

High-performance, breathable, insulating render/plaster



ProofTherm uses expanded Perlite as an insulating aggregate to create a highly breathable, lightweight, insulating render/plaster that can be used to provide significant gains in thermal and acoustic insulation on internal and external walls. The open cell, honeycomb structure of the expanded Perlite creates a thermally resistant barrier that reduces heat and sound transmission through the wall when applied as an external render or an internal plaster. Because it is highly vapour-permeable, *ProofTherm* allows the structure to breath, reducing the risk of moisture damage and mould.

2m²

1 BAG
@ 20mm



INTERNAL/
EXTERNAL



INSULATING



BREATHABLE



ECO
FRIENDLY

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

www.proofshield.co.uk

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ProofTherm Use:

ProofTherm can be used as part of an insulation/facade system on new builds or as a useful thermal upgrade measure for older properties, particularly where natural, breathable materials are beneficial. It is supplied in 15kg bags to be mixed with water on site and applied as a simple render or plaster base coat that will then be finished off with a decorative skim coat.

Mixing Method:

- 1: One 15Kg bag of *ProofTherm* should be mixed with 13-14 litres of water in a large container.
- 2: Pour 80-90% of the water and the 15Kg bag of *ProofTherm* into the container and mix at 100-150rpm mixer speed for approx. 3-4 minutes maximum. Do NOT over mix as this will crush the insulating aggregate.
- 3: Adjust the consistency by adding the remaining water. Rest the mixture for 2 minutes then mix again for another minute.

Application:

- 1: Ensure that the surface is clean, even and free from loose material and dust.
- 2: In hot weather conditions, dampen the surface with water 5 minutes before the application.
- 3: Lightweight blocks and high suction substrates should be primed with *ProofBase Universal Primer* at least 2 hours before application of *ProofTherm*.
- 4: Exposed concrete, previously painted surfaces and older, damaged surfaces should be stabilised with a *ProofBase RB1F* base coat to provide a suitably sound and strong anchor for the *ProofTherm*.
- 5: Depth gauges may be used to determine the required thickness of application and these should be fixed to the surface prior to application and removed before the *ProofTherm* sets, at which point gaps should then be infilled.
- 6: Minimum application depth is 10mm. Maximum application depth is 120mm.
- 7: Maximum application in one pass is 25mm.
- 8: Drying time: 8-10 hours at 23c, 50% relative humidity.
- 9: When used externally, *ProofTherm* should always be protected with a weatherproof final coat of *ProofDeco Silicone Mineral* render or *ProofDeco Monocouche* coloured render.
- 10: When used internally, *ProofTherm* should be finished with a thin coat of finishing plaster to provide a hard wearing, protective surface.
- 11: Machine application: Caution should be taken not to over mix the *ProofTherm* as this will crush the insulating aggregate, reducing the effectiveness and causing the mixture to slump.

Storage:

Should be stored in dry, well ventilated conditions. Shelf life in these conditions is 18 months. Maximum stacking is 14 rows.

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Essential Characteristics	Performance	Method of Test
Thermal conductivity	T1	EN 1745:2012
		EN 12664:2009
Reaction to fire	A1	EN 13501-1
Adhesion fracture pattern	B	EN 1015 - 12
Compressive strength	CS I	EN 1015 - 11
Capillary water absorption	W1	EN 1015 - 18
Water vapour permeability (μ)	6.27 μ	EN 1015 - 19
Dry bulk density (kg/m ³)	350 kg/m ³ ±10%	EN 1015 - 10
Sound insulation (db)	23db (3cm/500hz)	EN ISO 10140-2
Colour & appearance	White granule	
Yield	approx. 2.2m ² /15kg @ 20mm	
Drying time	8 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	5° – 35°C	
Application duration (pot life)	4 hours (at 23°C, 50% relative humidity)	
Applicable depth	Minimum 10mm, maximum 100mm	

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.



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