

# ProofTherm<sup>®</sup>

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.

**2m<sup>2</sup>**

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%

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## INSULATING RENDER/PLASTER

### 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 ( $\mu$ )	6.27 $\mu$	EN 1015 - 19
Dry bulk density (kg/m <sup>3</sup> )	350 kg/m <sup>3</sup> $\pm$ 10%	EN 1015 - 10
Sound insulation (db)	23db (3cm/500hz)	EN ISO 10140-2
Colour & appearance	White granule	
Yield	approx. 2.2m <sup>2</sup> /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.



## Disposal Considerations:

Regional legislation (waste): Disposal must be done according to official regulations. Waste Management Regulation published in the Official Journal numbered 29314 on April 2, 2015. Regulation on Incineration of Waste Materials published in the Official Journal numbered 27721 on October 6, 2010. Waste treatment methods: Dispose of contents/ container in accordance with licensed collector's sorting instructions. Do not remove as household garbage. Sewage disposal recommendations: Disposal must be done according to official regulations. Additional information: Empty containers should be taken for recycling, recovery or waste in accordance with local regulation.

bringing european innovation

# smet<sup>®</sup>

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