



TECHNICAL DATA SHEET (TDS)

A fast-setting, low-density, lime-based plaster for rapid build-up onto masonry walls to improve thermal insulation and reduce heat loss.

9kg bags

COVERAGE:
2m² at 10mm
THICKNESS

Why use Breathaplasta Thermal?

- A lime-based, insulating plaster to quickly and easily improve your U-value.
- Fast setting, pre-mixed lime plaster – faster completion times reduce labour costs.
- Internal wall insulation (IWI) for application to solid masonry walls. Measured K-value of 0.127 W/mK.
- Vapour permeable – allows water vapour to pass through.
- Reduces problems with condensation and mould.

Product overview

Breathaplasta THERMAL is a fast-setting, low-density lime-based plaster designed for rapid build-up on the internal face of solid masonry walls to improve thermal insulation and reduce heat loss. Typical application – see table below.

Substrate	Preparation	Day 1	Day 2	Day 3	Day 4
Solid masonry construction (brick, block, and stone).	Primer may be required if surface requires the addition of a key. Mist or brush substrate with clean water to control suction. Wetting may be needed several times for highly porous backgrounds.	Up to 30mm (max per day) By hand: 10-15mm per coat. ~2hrs setting time per coat. Spray machine: 20-30mm per coat.	Up to 30mm (max per day) By hand: 10-15mm per coat. ~2hrs setting time per coat. Spray machine: 20-30mm per coat.	Up to 30mm (max per day) By hand: 10-15mm per coat. ~2hrs setting time per coat. Spray machine: 20-30mm per coat.	Up to 30mm (max per day) By hand: 10-15mm per coat. ~2hrs setting time per coat. Spray machine: 20-30mm per coat.

Consult the relevant installation guide for the background you are applying Breathaplasta THERMAL onto. For more information and to view or download any of our resources, please visit adaptavate.com or scan the QR code.

- Declaration of Performance
- Safety Data Sheet
- Installation Videos
- Summary Sheet
- Installation Guides
- FAQs



Packaging

Available in 9kg sacks
1 full pallet = 112 bags

Coverage per 9kg bag

2m ²	10mm thickness
1m ²	20mm thickness
0.67m ²	30mm thickness
0.5m ²	40mm thickness

Substrates

- Breathaplasta Thermal is designed to be applied to solid masonry walls only.
- Suitable walls are constructed from one or more of the following materials: brick, block, and stone.
- Substrates must be uniformly flat. Dub out and consolidate uneven masonry (see surface preparation).
- Spray or brush water onto porous substrates such as masonry (brick, block, and stone) to control suction. Primer may be required if surface requires the addition of a key or to unify the suction rate across a wall of multiple background types



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Surface Preparation

- Consolidate loose material and brush away dust.
- Spray or brush water onto porous substrates such as masonry (brick, block, and stone) to control suction. Typically, a light mist is done 2-3 times in the 10-20 mins before plastering.
- Primer may be required if surface requires the addition of a key or to unify the suction rate across a wall of multiple background types e.g. brick, block, and stone.
- If needed, use Breathaplasta THERMAL to dub out large holes and to level the wall before main plastering.

Mix

- Mix Breathaplasta THERMAL (decant bag slowly) to approx. 5 litres of cool, clean water per 9kg bag of dry powder used.
- Mix with a paddle mixer at medium speed for 3 minutes until all dry powder is incorporated and no lumps remain.
- Final mix should have a thick, sticky, and lightweight consistency. The mix should be able to hold its shape well but remain easy to spread and apply. **Note:** If needed, adjust the powder-to-water ratio to achieve the required consistency to suit your substrate and working style.

Apply

- Apply a coat of plaster at the thickness specified for your application – see table in **Product overview** above.
- Ensure plaster has a good bond to the background and is not slumping on the wall. Reduce thickness of application for that coat if slumping occurs.
- Scratch each coat of plaster in a diamond pattern to create a mechanical key for follow-up coats.
- Ensure plaster is flat and level before allowing it to set.

Set

- Leave each coat to set and firm for approximately 2 hours.
- When returning to the plaster, the surface should be firm to the touch but not fully dry. For best results, apply follow-up coats within 1–2 days.

Repeat **MIX, APPLY** and **SET** steps above for follow-up coats of plaster.

Finish

- Breathaplasta THERMAL is an undercoat only. The plaster should be made flat and even, and left lightly scratched (devil floated) to provide a mechanical key for the finishing plaster. Apply Breathaplasta UNIVERSAL or SMOOTH as the finishing coat within 1–2 days following the application of THERMAL.

Conditions

Use in temperatures between 5°C and 25°C. Use cool, clean water for mixing. Setting times shorten in warmer conditions and lengthen in cooler ones. Do not 'force dry' plaster through heat or excessive ventilation.

Storage

Store in a cool, dry place, raised off the ground and away from moisture. For optimal performance and quality, use within 6 months of manufacture.

Important notes

- This document is not a specification.
- A small sample trial should always be conducted prior to plastering to ensure background material is compatible.
- Breathaplasta Thermal is not suitable for continuously damp backgrounds. Sources of continuous damp should be investigated and resolved prior to new plaster application.
- Forced drying, including commercial MVHR and other large ventilation systems, and/or the application of heat, can result in a less durable surface finish. In extreme cases, forced drying may lead to product failure.

Procedure	Results
Max Particle Size	2.8 mm
Fresh Mortar Density	850 g/L
Dried hardened mortar density	570 g/L
Water Absorption	1.3 Kg/(m ² .min ^{0.5})
Compressive Strength (mean)	3.4 N/mm ²
Flexural Strength (mean)	0.44 N/mm ²
Adhesion (concrete substrate)	0.1 N/mm ² - Fracture Pattern A
Vapour permeability	5 µ (tabulated)
Thermal Conductivity	0.127 W/mK (Measured)
Thermal Conductivity	0.18 W/mK (tabulated)
Reaction to Fire	Euroclass A1



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