



## 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:**  
**2m<sup>2</sup> 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. | <b>Up to 30mm (max per day)</b><br>By hand: 10-15mm per coat.<br>~2hrs setting time per coat.<br>Spray machine:<br>20-30mm per coat. | <b>Up to 30mm (max per day)</b><br>By hand: 10-15mm per coat.<br>~2hrs setting time per coat.<br>Spray machine:<br>20-30mm per coat. | <b>Up to 30mm (max per day)</b><br>By hand: 10-15mm per coat.<br>~2hrs setting time per coat.<br>Spray machine:<br>20-30mm per coat. | <b>Up to 30mm (max per day)</b><br>By hand: 10-15mm per coat.<br>~2hrs setting time per coat.<br>Spray machine:<br>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](http://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 <sup>2</sup>    | 10mm thickness |
| 1m <sup>2</sup>    | 20mm thickness |
| 0.67m <sup>2</sup> | 30mm thickness |
| 0.5m <sup>2</sup>  | 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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thermal | universal | smooth

**ADAPTAVATE**

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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 <sup>2</sup> .min <sup>0.5</sup> ) |
| Compressive Strength (mean)   | 3.4 N/mm <sup>2</sup>                        |
| Flexural Strength (mean)      | 0.44 N/mm <sup>2</sup>                       |
| Adhesion (concrete substrate) | 0.1 N/mm <sup>2</sup> - 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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