



## TECHNICAL DATA SHEET (TDS)

A highly insulating lightweight plaster for solid walls, to achieve reduced heat loss.

REVISED **01 11 2022**

**9kg bags**

**COVERAGE:**  
**2m<sup>2</sup> at 10mm**  
**THICKNESS**

### Why use Breathaplasta Thermal? .

- Quick and easy way to improve your U-value.
- Highly insulating thermal base layer well suited to all solid masonry walls. Measured K-value of 0.127 W/mK.
- A simple Internal Wall Insulation (IWI) system that breathes with you in your building.

### Product overview

Breathaplasta THERMAL is a quick setting, low density plaster designed for rapid build-up on the internal face of solid walls. Maximum thickness per coat is 40mm and multiple coats can be applied in a single day with approximately two hours setting time per coat. Typical application is 80mm total thickness in two or more passes of the trowel (base coat 40mm and top coat 40mm).

Base Coat	Top Coat	Substrate	Important Notes
Up to 40mm	Up to 40mm	Solid masonry construction (brick, block, and stone).	Apply max. 40mm per pass, 80mm per day.

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, including Declaration of Performance for relevant certifications, 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 = 110 bags = 990kg

### Coverage per 9kg bag (approx.)

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).
- Porous backgrounds should be misted with clean water before plastering to help control suction (see surface preparation).



**breathAplasta**  
thermal | universal | smooth

**Adaptavate**  
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# TECHNICAL DATA SHEET (TDS)

## Surface Preparation

- Consolidate loose material and brush away dust.
- If needed, use Breathaplasta Thermal to dub out any large holes and to level the wall prior to main plastering.
- Spray water onto porous substrates such as brick, block and stone prior to the application of plaster – this helps to control suction. Typically, a light mist is done 2-3 times in the 10-20 mins before plastering.
- Primer may be required when plastering onto multiple background types to help unify suction rates.

## How to Mix

- Mix Breathaplasta Thermal to approx 5.5 litres of clean water per 9kg bag of dry powder used.
- Mix for 3 minutes using a paddle mixer on a medium speed and ensure all dry powder is thoroughly mixed in. There should be no visible lumps.
- Final mix should have a thick, sticky, and lightweight consistency. Mix can be applied to the wall straight away.

## How to Apply

See substrate specific installation guides.

## Working time of mixed plaster

After mixing to consistency, Breathaplasta Thermal has an open time of approximately 2 hours, depending on conditions.

Plaster mix may thicken within first 1.5 hours of mixing. Use paddle mixer to loosen, as needed, prior to application. Do not remix with water any plaster that has started to stiffen after approx. 1.5 hours.

Do not use when ambient temperature is below 5°C or above 25°C.

## Storage

Store in original packaging (unopened). Keep warm, dry and raised off the ground. Storage time: 6 months in original packaging.

## 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

