

This certificate is valid for Building Regulations & associated technical guidance in force on the date of registration and for the regulations in the countries indicated

## Spacetherm Directfix Insulation

### Description of Product

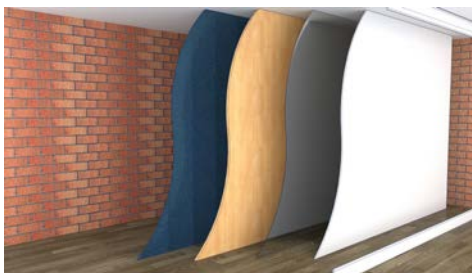
This is an assessment of Proctor Spacetherm Directfix wallboard, it is a high-performance laminate specifically designed to be installed directly onto existing solid walls.

Spacetherm Directfix is an aerogel insulation blanket bonded to a 6mm plywood board and 12.5mm plasterboard laminate. It is supplied in 2400mm x 1200mm sized boards and the boards can be supplied incorporating various thicknesses of insulation.

As the product can achieve similar thermal performance to other insulation systems, but at a fraction of the thickness with a K factor of 0.015W/mK, the solution is ideal for use in applications where low U-values are required and room space is at a premium.

A U-value calculation and condensation risk analysis service for projects is offered by Proctor technical services.

The manufacturer of the insulation has taken the responsibility to CE mark the insulation against ETA 11/0471.



### Key Factors Assessed

- ☐ Mechanical Resistance & Stability
- ☐ Safety in case of Fire
- ☐ Health Hygiene and Environmental
- ☐ Safety in Use
- ☐ Energy Economy and heat retention
- ☐ Durability serviceability and identification

### Validity

This certificate was first issued on 31<sup>st</sup> March 2018 and is valid until 31<sup>st</sup> March 2022

Issue Dated 21<sup>st</sup> March 2019

## Scope of Registration

Spacetherm Directfix is a high performance aerogel insulation blanket bonded to a 6mm plywood board and 12.5mm plasterboard laminate. This layered construction allows the direct fixing to the wall using shot fired nails, which reduces the risk of the material snagging on drill bits.

It is supplied in 2400mm x 1200mm sized boards and the boards can be supplied incorporating 28.5mm to 98.5mm thicknesses of insulation.

The product is ideal for use in applications where low U-values are required and room space is at a premium.

When installed the insulation product will be below a 12.5mm plaster board which has a fire rating of: A2,s1d0 the 6mm plywood has a rating of D-s2, d0. The aerogel insulation is fire rated as Class C-s1, d0 (EN 13501-1).

Spacetherm Directfix has a degree of vapour resistance; however the insulation is vapour permeable. There is a theoretical risk of condensation on the cold side of the Spacetherm once installed however this is minimal and not detrimental to the wall structure. Condensation risk analysis calculations can also be provided at request by the Proctor technical team.

### U-value – Performance Ready Reckoner

| Base Wall Construction  | Spacetherm Directfix<br>(overall thickness) | U-value (W/m <sup>2</sup> K) |
|---|---|------------------------------|
| <b>220mm Brick (no cavity)</b><br><b>13mm Plaster</b><br><br><b>Base Wall Performance</b><br><b>2.12 W/ m<sup>2</sup>K</b><br><br><b>Spacetherm Directfix</b> | 28.5  | 0.82                         |
|   | 33.5  | 0.65                         |
|   | 38.5  | 0.54                         |
|   | 43.5  | 0.46                         |
|   | 48.5  | 0.4                          |
|   | 53.5  | 0.36                         |
|   | 58.5  | 0.32                         |
|   | 63.5  | 0.30                         |
|   | 68.5  | 0.27                         |
|   | 73.5  | 0.25                         |
|   | 78.5  | 0.23                         |
|   | 83.5  | 0.22                         |
|   | 88.5  | 0.20                         |
|   | 93.5  | 0.19                         |
|   | 98.5  | 0.18                         |

For Scotland purposes:

Spacetherm Directfix is a high performance laminate which is specifically designed to be fixed directly to the wall. It consists of Spacetherm Aerogel insulation blanket bonded to plasterboard, with an additional pre-bonded plywood reinforcement to the plasterboard.

Ideal for use in applications where low U-values are required but space is at a premium.

Spacetherm Directfix is supplied with foil faced plasterboard as standard to reduce condensation. Plain plasterboard is available on request.

Spacetherm Directfix lining boards can achieve similar performance to traditional plasterboard laminates, but at a fraction of the thickness, allowing specifiers greater flexibility and higher performance for refurbishment projects.

Due to Spacetherm's unique hydrophobic qualities it is also possible to directly fix Spacetherm laminates to certain existing wall substrates (refer to installation guide for details).

The boards are supplied in panel sizes 2400mm x 1200mm, the plasterboard thickness is 12.5mm with plywood thickness of 6mm. The Aerogel insulation is available in a variety of thicknesses.

## Conditions of Certificate

The product must be installed and used in accordance with the manufacturer's instructions and ETA certificate 11/0471.



LABC and LABSS consider that, Spacetherm Directfix Insulation will meet the functional requirements of the Building Regulations (listed below) if the criteria detailed in this certificate are met;

## The Building Regulations 2010 (as amended) England & Wales

|              |   |
|--------------|---|
| Regulation 7 | Materials and workmanship                                   |
| Note:        | The product is acceptable.                                  |
| AD A         | Loading   |
| Note:        | The product is acceptable as per the Scope of Registration. |
| AD B         | Fire Safety   |
| Note:        | The product is acceptable as per the Scope of Registration. |
| AD C         | Resistance to Moisture                                      |
| Note:        | The product is acceptable as per the Scope of Registration. |
| AD F         | Ventilation   |
| Note:        | The product is acceptable.                                  |



## The Building Regulations 2010 (as amended) England

None presently.



## The Building Regulations 2010 (as amended) Wales

None presently.



## The Building (Scotland) Regulations 2004 (as amended)

Technical Handbooks - Domestic

|              |   |
|--------------|---|
| Regulation 8 | Durability, workmanship and fitness of materials  |
| 0.8.5:       | Ways of establishing the fitness of materials   |
| Note:        | The product is acceptable as referenced by ETA-11/0471 dated 06/06/2017                                     |
| Regulation 9 | Building Standards applicable to construction   |
| Note:        | Construction shall be carried out so that the work complies with the applicable requirements of schedule 5. |

Mandatory

Standard 3.10

Precipitation

Note:

The product is acceptable provided it is constructed in accordance with the manufacturer's details.

Mandatory

Standard 3.15

Condensation

Note:

The product is acceptable provided it is constructed in accordance with the manufacturer's details.

Mandatory

Standard 6.2

Building insulation envelope

Note:

The product will contribute to achieving the required U-value provided it is constructed in accordance with the manufacturer's details.

## Non-Regulatory Information



### LABC Warranty

The use of Spacetherm Directfix Insulation has not been assessed to meet the requirements of the LABC Warranty Technical Manual. If you would like to discuss a specific use please make an enquiry to [technical.services@labcwarranty.co.uk](mailto:technical.services@labcwarranty.co.uk)

## Supporting Documentation

Spacetherm Aerogel Insulation Brochure June 2017  
European Technical Approval Certificate ETA – 11/0471

For Scotland purposes:

Spaceloft European Technical Assessment ETA-11/0471

Spacetherm Data Sheet

Spacetherm WL Brochure

Spacetherm Aerogel Insulation Brochure (for building & construction)

## Contact Information

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