

Spacetherm[®] Wallboard

THERMAL INSULATION

OVERVIEW

Spacetherm Wallboard is a high performance laminate which is specifically designed to be fixed to timber straps. It consists of Spacetherm Aerogel insulation blanket bonded to plasterboard, and is ideal for use in applications where low U-values are required but space is at a premium. Spacetherm Wallboard is supplied with foil faced plasterboard as standard to reduce condensation. Plain plasterboard is available on request. Spacetherm Wallboard 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 (see installation guide for details).

KEY FEATURES

- Thin insulation system for hard to treat walls.
- Class leading performance.
- Minimum loss of room space.
- Constant long term thermal performance 50 years+.
- Includes an integrated vapour control layer.
- Non-hazardous material.

INSTALLATION

Spacetherm Wallboard should be fixed to timber straps with a DPC backing, also available from A. Proctor Group. Fixings should be at no more than 500mm centres. Although drilling is not recommended it may be required for wiring and services. When drilling, care should be taken to compress the panel as much as possible to reduce the risk of insulation fibres wrapping around the drill bit.

INTERNAL & EXTERNAL ANGLES

Spacetherm panels should be cut in such a way as to allow for the jointing of the plasterboard and an unbroken run of insulation to the existing wall in both internal & external angles. Refer to Installation Guide for further details.

PARTITION WALLS

Where an internal partition abuts an external wall with Spacetherm Wallboard lining, ideally Spacetherm Wallboard should be returned onto the partition or alternatively stopped at the junction.

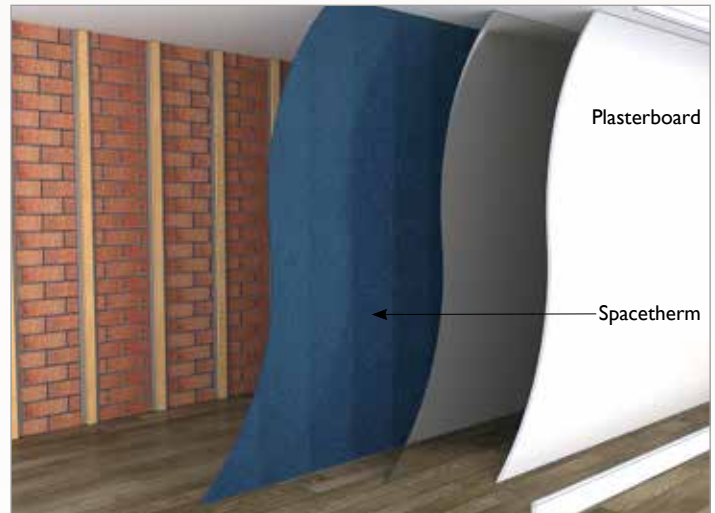


Image showing Spacetherm Wallboard applied internally to an existing external wall structure.

PHYSICAL PROPERTIES	RESULT
Spacetherm Wallboard panel sizes	2400 x 1200mm
Thickness: Plasterboard	9.5mm
Thickness: Aerogel	5, 10, 15, 20mm*
Vapour Control Layer	Sd 12m
K-Factor: Aerogel	0.015W/mK
K-Factor: Plasterboard	0.190W/mK
Fire Resistance: Plasterboard	Class I (BS476)
Fire Resistance: Aerogel	Class C-s1, d0 (EN 13501-1)

For other thicknesses, or for U-value calculations for your project, please contact Technical Services on 01250 872261 or technical@proctorgroup.com



Spacetherm Wallboard skirting detail

Spacetherm Wallboard

REVEALS

Spacetherm WRB (window reveal board) is a high performance laminate specifically designed to be fixed or glued to the existing solid wall. Spacetherm WRB consists of Spacetherm aerogel insulation blanket bonded to plasterboard or fermacell with or without plywood reinforcement. For use in applications where low U-values are required with limited space. Any reveals such as those which may occur at windows, doors etc, should be treated in the same manner as the internal and external angles mentioned above. Refer to Installation Guide for further details.

FLOOR & CEILING DETAILS

The skirting board should be removed before Spacetherm Wallboard is installed and reapplied using a proprietary adhesive such as Unibond No More Nails. Spacetherm Wallboard panels should be measured and cut as close as possible to the ceiling and the remaining space filled with either a PU Foam or traditional plaster filler. Refer to Installation Guide for further details.

TAPING & FILLING JOINTS

Prior to decoration Spacetherm Wallboard panels should be thoroughly wiped clean, and then taped and filled. A skim coat may be applied depending on the type of surface finish required.

CUTTING

Spacetherm Wallboard laminate may be cut using a jigsaw or circular saw. When using hand tools care should be taken that the fibrous insulation layers are not damaged. Cut-outs for sockets and switches in Spacetherm Wallboard can be cut using a knife. Where possible, cut-outs should be made prior to fixing the boards to the wall. Ideally sockets and switches should be surface mounted where possible.

HEALTH & SAFETY

Spacetherm Wallboard and in particular the dust produced when handling and cutting the material may cause drying of the skin and therefore gloves and dust masks should be worn. Ensure the working space is well ventilated and when necessary appropriate personal protection equipment is used.

U-value – Performance Ready Reckoner

Base Wall Construction	Spacetherm Wallboard	U-value (W/m ² K)
220mm Brick (no cavity) 13mm Plaster	19.5	0.76
	24.5	0.61
	29.5	0.51
	34.5	0.44
	39.5	0.39
	44.5	0.35
	49.5	0.31
	54.5	0.29
	59.5	0.26
	64.5	0.24
Base Wall Performance 2.12 W/m ² K	69.5	0.23
	74.5	0.21
	79.5	0.20
	84.5	0.19
	89.5	0.18
Spacetherm Wallboard on 25mm battens	19.5	0.76
	24.5	0.61
	29.5	0.51
	34.5	0.44
	39.5	0.39
	44.5	0.35
	49.5	0.31
	54.5	0.29
	59.5	0.26
	64.5	0.24



Image showing Spacetherm WRB applied internally to a reveal on an existing external wall structure.