

# Spacetherm<sup>®</sup> Multi for Walls

THERMAL INSULATION

## OVERVIEW

Spacetherm Multi is a high-performance laminate specifically designed to be laid directly onto existing floors & walls. Spacetherm Multi consists of Spacetherm Aerogel insulation blanket bonded to a 6mm Magnesium Oxide Board. Spacetherm Aerogel blanket is available in various thickness from 5mm to 40mm (in multiples of 5). For other thicknesses, or for U-value calculations for your project, please contact Proctor Technical services.

## 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.
- Unique fire resistance properties.
- Non-hazardous material.

## INSTALLATION

Spacetherm Multi can be fixed using SCS stainless steel wood screws 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 and external angles. Refer to Installation Guide for further details.

## PARTITION WALLS

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



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

PHYSICAL PROPERTIES	RESULT	
Spacetherm Multi panel sizes	Floors / WRB / Soffit Lining Walls	1200 x 600mm 2400 x 1200mm
Thickness Spacetherm Multi	Floors / WRB / Soffit Lining Walls	From 11mm From 11mm
K-Factor Magnesium Oxide	0.19W/mK	
K-Factor Aerogel	0.015W/mK	
Compressive Strength	80kPa	
Vapour Resistance	Sd 0.05m	
Fire Resistance: Aerogel MgO Board	Class C-s1, d0 (EN 13501-1) Class A1 (EN 13501-1)	



Spacetherm Multi skirting detail

# Spacetherm Multi for Walls

## 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 magnesium board 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 Multi is installed and reapplied using a proprietary adhesive such as Unibond No More Nails. Spacetherm Multi 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 Multi 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 Multi 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 Multi 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 Multi 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. Care should be taken when lifting the boards. Lift boards in the middle and do not bend.

## U-value – Performance Ready Reckoner

Base Wall Construction	Spacetherm Multi	U-value (W/m <sup>2</sup> K)
220mm Brick (no cavity) 13mm Plaster	10	0.77
	15	0.62
	20	0.52
	25	0.45
	30	0.40
	35	0.36
Base Wall Performance 2.09 W/m <sup>2</sup> K	40	0.32
	45	0.29
	50	0.27
Spacetherm Multi on 25mm battens	55	0.25
	60	0.23
	65	0.22
	70	0.21
	75	0.19



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