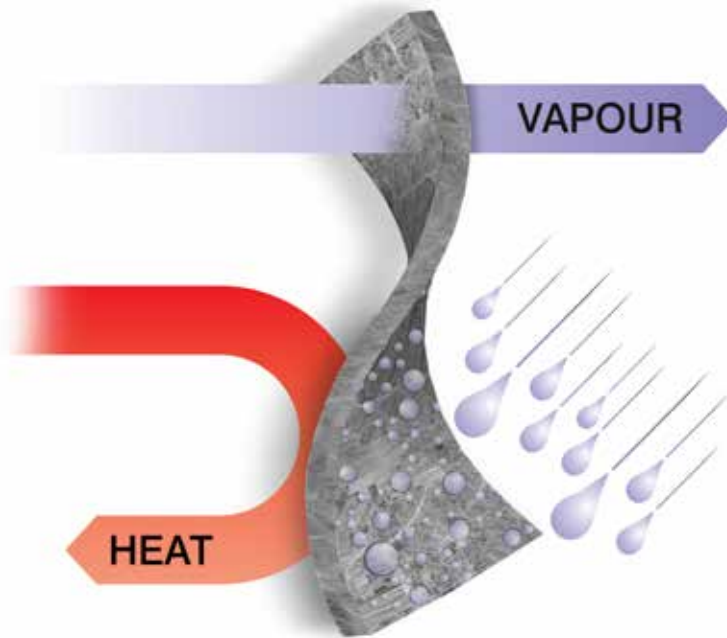


Spacetherm[®] WL

ULTRA-THIN ADVANCED AEROGEL INSULATION FOR SOLID WALLS





Spacetherm: Class leading thermal performance with breathability and water resistance

THE KNOWLEDGE TO PRODUCE SOLUTIONS

The A Proctor Group Ltd has been proudly pioneering thermal solutions for over half a century.

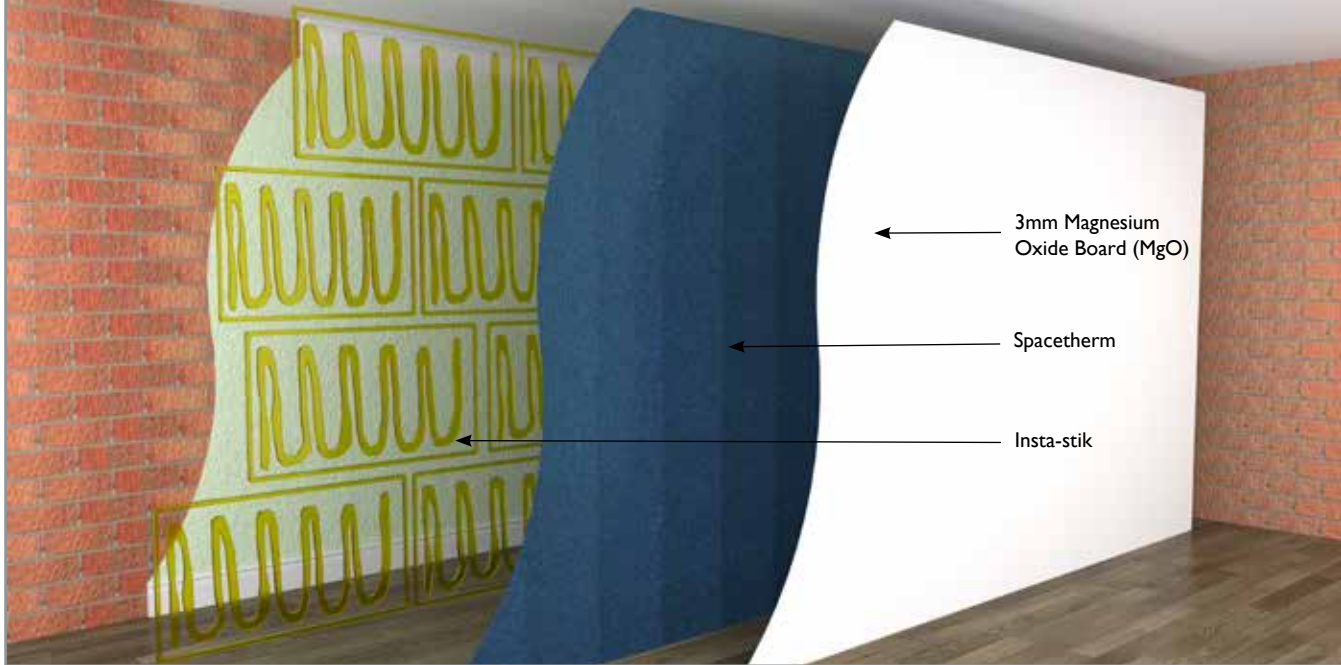
The A Proctor Group's Spacetherm® Aerogel offers specifiers a flexible yet robust insulation blanket solution. Combining a silica aerogel with a fibre matrix, it is a superior material which is suitable for a wide range of challenging applications where thermal performance is crucial.

With a thermal conductivity of 0.015 W/mK, Spacetherm Aerogel's performance credentials qualify it as one of the best insulation materials available worldwide. Engineered for unsurpassed thermal performance in space-critical applications, the product offers low thermal conductivity, and compression strength, plus breathability allied to hydrophobic characteristics. Its flexibility and ease of use has proven it as the insulation material of choice in many unique applications and for a wide variety of clients. It is also comforting for specifiers to know it retains its thermal properties for over 50 years.

The A. Proctor Group works closely with clients to establish requirements and deliver effective, tailored solutions.

KEY FEATURES

- Class-leading performance
- Minimum loss of space
- Repels moisture
- Hydrophobic
- 50+ year performance
- European Technical Approval & CE Mark
- Vapour permeable
- Breathable



SPACETHERM WL (WALL LINER)

Spacetherm WL (Wall Liner) is a high performance laminate specifically designed to be fixed to internal surfaces of existing solid walls without the need for mechanical fixings. Spacetherm WL consists of 10mm Spacetherm aerogel insulation blanket bonded to 3mm Magnesium Oxide Board (MgO), for use in applications where improved thermal performance is required with limited space. Spacetherm WL 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.

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+.
- Non-hazardous material.
- Easy refurbishment
- No specialist trades required
- Allows wall to breathe

INSTALLATION

The Spacetherm WL system is suitable for a variety of finishes such as paint, wallpaper and tiles. Spacetherm WL should be bonded to a clean, bare and structurally sound base using Insta-Stik adhesive. Full installation guide available on our website.



ACCESSORIES

PRIMER

MgO Primer has been specially designed to negate the high absorption and super smooth surface of MgO board. When using Spacetherm WL, Primer can be used, dependant on the requirements of the user, to remove the suction for the board, preparing it for paints, plasters, renders and adhesives. It is a technically advanced, high performance product which does not need mixing and can be applied in one coat. MgO Primer dries quickly dependant on climatic conditions, allowing the user fast progression to the next stage.

INSTA-STIK

Insta-Stik Adhesive is a moisture fast-curing one-component polyurethane aerosol adhesive. It contains an environmentally safe propellant, which complies with the latest EU regulations banning all CFC- and HCFC-propellants.

SPACETHERM WL READY RECKONER

Wall Liner U-Values (W/m ² k)		
Wall Construction	Base Wall	13mm Wall-Liner
225mm brick	2.06	0.81
300mm brick	1.72	0.75
600mm stone	2.18	0.83
Brick Cavity - unfilled	1.45	0.70
Brick Cavity - filled	0.58	0.40

All walls 13mm plaster on hard (with 2mm air gap)
 Brick cavity wall with insulation assumed at 0.038W/m²K

PHYSICAL PROPERTIES

Product Specification	
Dimensions	1200mm x 600mm
Thickness	13mm (10mm Aerogel + 3mm MgO)
Weight	2.775 kg per sheet
Fire Resistance	Aerogel (Class C-s1, d0) Magnesium Oxide board (Class A1)
Thermal Conductivity	Aerogel 0.015 W/mK Magnesium Oxide board 0.19 W/mK
Vapour Permeable	Aerogel Sd 0.050m Magnesium Oxide board Sd 0.062m

VAPOUR

HEAT

WATER
RESISTANT

SPACETHERM FAQs

How do I treat the joints?

The joints between the panels can be filled using traditional tape and filling mortar (eg. Jointing Cement or jointing stick). Depending on the surface irregularities and at windows/internal corners, a plasterboard jointing tape is recommended. This should be bedded in the jointing cement with the edges feathered and sanded to produce a smooth finish.

What finishes can be applied?

Spacetherm WL can take a variety of finishes depending on the clients requirements. The product is not designed to be the finished surface.

Is there a risk of condensation?

SpacethermWL 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 SpacethermWL once installed however this is minimal and not detrimental to the wall structure.

Can I keep my skirting boards and cornices in place?

As the product is only 13mm thick one of the major benefits is the fact that, dependant on profile, skirting boards and cornices can be kept in place in the majority of cases.

What thermal improvement will it give?

A solid wall will have a U value of around 2.1 W/m²K before the application of Spacetherm WL. This will be reduced to around 0.8 W/m²K after Spacetherm WL is installed. This is dependent on the wall structure and specific calculations can be carried out by the A Proctor Group Technical Department.

Is it available in various thicknesses?

No, Spacetherm WL is only available in 13mm.

Can I tile on it?

The bond between tile adhesive and MgO board was significantly strengthened when MgO Primer was applied.

What about subsequent fixings?

Fixings for shelves etc, can be carried out in the normal manner with screws and plugs. These fixings should be into the original substrate not just the Spacetherm WL.

How long will it last?

The base insulation has been tested using accelerated ageing techniques. These tests concluded that the product will not lose any of its thermal properties in a 50 year period. Assuming the Spacetherm WL is not disturbed we expect the product to perform in this lifetime.

What if the product gets damaged?

Spacetherm WL is a thin internal lining and as such the product is robust but can be damaged with sharp objects and force. Any areas damaged can be filled using proprietary fillers and re-decorated.

Has it got fire classification?

Spacetherm WL comprises of a 3mm MgO board with a Class A1 fire resistance and the 10mm Aerogel is class C-s1, d0.

Are there any maintenance requirements?

Apart from repairs to excessive knocks needing to be repaired as described earlier, there are no maintenance requirements and the product should continue to keep your house warm for the period it is installed on the wall.

Is there any dust?

Spacetherm WL comprises of a high performance fibrous insulation bonded to a Magnesium Oxide board. The Aerogel can create dust which has no known health hazard effects but we advise appropriate PPE is used, as would be used for any dust generating operation on site. There is more dust created with sanding off the filled joints than when installing Spacetherm WL.



“I believe the success of the A. Proctor Group is down to a solid foundation of innovation backed up by an excellent loyal and committed team, every one of them playing an important role in our continued success. Scotland provides us with a unique platform to launch our ideas, systems and products. I am fiercely proud of this heritage and our brand.”

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Issued June 2017

