

Product Guide

GLOBAL

A GUIDE TO A. PROCTOR PRODUCTS



THE KNOWLEDGE TO PRODUCE SOLUTIONS



SOLUTIONS BUILT ON KNOWLEDGE

The A. Proctor Group has, for nearly 50 years, been serving the construction industry with an extensive portfolio of technically advanced thermal, acoustic and membrane products. The Group provides a wide range of high quality, innovative solutions which are designed to meet the continuously evolving requirements of the construction industry. Our commitment to keeping pace with this evolution has led to the group's expansion, today encompassing multiple product sectors.

International supply within the construction industry demands creative solutions, tailored to specific requirements. We take time to investigate local knowledge of construction technology, climatic considerations and legislative standards. This attention to detail is essential to our global vision and continued growth within the international construction market.

SPECIALIST SERVICES WUFI® CALCULATION

We are pleased to be able to offer WUFI® Calculations as part of our technical services. WUFI® calculations allows analysis of heat and moisture movement in multilayer building envelopes, such as walls, taking into account regional weather variations.

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AIRTIGHTNESS

In buildings, air leakage normally manifests itself as uncontrolled flow of air through gaps and cracks in the fabric. The result is significant reduction in the thermal performance and efficiency of structures.

The construction industry is now being driven by increased awareness of the overall energy efficiency of buildings. This global focus is putting airtight buildings at the top of the agenda for new build as well as refurbishment.

Available as either a full width roll, or as a conveniently sized tape, Wraptite has been developed to provide the airtightness solution for all air leakage problems.



WRAPTITE®

Wraptite combines important properties of vapor permeability and airtightness in one affordable self-adhering membrane. It fully bonds (needing no mechanical attachment) to virtually any substrate, with a key benefit being its ease of installation, negating requirement for sealants or tapes.

- Airtight yet vapor permeable
- No primer required
- Tough facer laminate resists punctures and tears during construction
- Lightweight and easy to install
- Manufactured rolled goods ensure consistent properties and performance
- Wide service temperature range
- Can be left exposed for up to 90 days (North America) or 120 days (UK) during construction*
- No VOC's

Wraptite airtight membrane makes a significant contribution to a building's thermal performance by preventing lateral air movement, but it also contributes to a healthy living environment and a healthy building, thanks to its vapor permeability. With a rating of S_d 0.039, it provides a high degree of permeability in a commercial quality, self-adhered, airtight breathable membrane.

Specifiers can have confidence that Wraptite-SA's performance is unsurpassed.

MULTIPLE SUBSTRATE COMPATIBILITY

- Exterior Gypsum Sheathing
- Aluminium (painted, powder coated or mill finish)
- Most rigid insulation
- Cast-in-place concrete
- Pre-painted steel
- Galvanized metal
- OSB
- Rigid vinyl
- Precast concrete
- Steel
- Concrete block
- Plywood





Photography John Gollings

SYDNEY SEED HOUSE

Increasingly architects and designers are turning to natural products such as timber in seeking to bridge the disconnect between our increasingly busy lives and our opportunity to connect with nature in the everyday. International studies have long sought to demonstrate the benefits associated with the use of natural materials in our homes and workplaces linked to improvements in physical and mental health. More recently a study by Australian research consultancy Pollinate has been able to demonstrate benefits links to lower blood pressure, reduced levels of stress and improved productivity.



One such project which endeavours to maintain these close links and benefits with nature is the home of leading Australian architect James Fitzpatrick on the Sydney North Shore, which incorporates Wrraprite, as an external air barrier system. A key environmental focus of the design was intended to ensure that the building would sit comfortably within the natural landscape and efficiently assist with the heating and cooling of the home.

Cross laminated timber (CLT) was used within the main design, with its excellent structural properties with some of the walls being up to 300mm thick.

The concept for the Seed House came from spending time in the natural landscape, collecting seed pods with the intent to use them as plant stock for the property. The proposed building pods close themselves off from the surrounding cacophony and leave themselves open to an ever-changing aspect. All pods can be closed down through doors or curtains from the main dwelling to create a sense of enclosure, separation or individual thermal control.

The correct management of moisture vapour within buildings is an important aspect of ensuring the longevity of not only the building fabric but also the health of the occupants. As today's structures become increasingly better insulated, more airtight, and more energy efficient, taking management of moisture into account in the design process becomes more critical, to ensure that it provides a durable, fit for purpose environment throughout the building's lifespan.



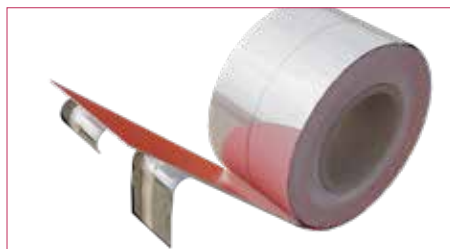
WRAPTITE® TAPE

A useful way of stopping unnecessary air leakage around openings and overlaps is to use Wraptite Tape, an airtight, tear resistant tape with high vapor permeability for internal and external applications.

It fully bonds to all standard substrates, suppressing air leakage around joints, openings and penetrations. It is also suitable for permanent airtight sealing of membrane overlaps.

KEY FEATURES

- Airtight yet vapor permeable
- Resilient composition, which resists punctures and tears during construction
- Flexibility, facilitating ease of application and detailing
- Wide operating temperature range (-40°C to +100°C)
- Can be left exposed for up to 90 days (North America) or 120 days (UK) during construction*
- No primer required
- No VOCs



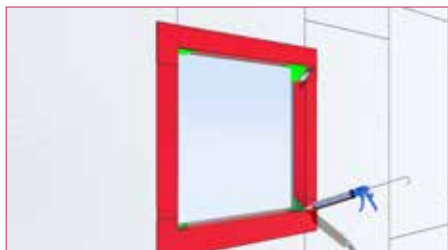
WRAPTITE® TAPE SPLIT LINER

Whilst Wraptite Tape is suitable for most applications there are some details, such as panel joints, cassette edges, complex detailing, where the benefit of a split liner is advantageous. The split liner allows one part of the Wraptite Tape to be adhered to the substrate, prior to the second portion, and can allow panels to be easily sealed on site. It can also be used for complex detailing where you need to protect part of the tape from bonding to areas until its needed.

- Easier removal of backing
- Location of split can be bespoke
- Aids accurate detailing
- Maintains adhered edge until installation phase
- Easier installation non-linear application ie pipe or window flashing



Pipe Seal



Window Flashing



Vertical over sheathing



Floor Junction on installation



ALPERTON GATEWAY, LONDON

Wraptite Tape was used for a project encompassing seven new tower blocks in Alperton, London by Simco External Framing Solutions Limited.

The development, 243 Ealing Road, comprises 441 high quality, mixed tenure apartments in seven 9-14 storey contemporary glass towers, plus 13,330 ft² of commercial space, with a gross development value of £110m. This is part of a wider £520m regeneration project in Alperton, which is located in the Borough of Brent.

Wraptite Tape was used to create a permanent airtight seal of the membrane overlaps. Easy to work with and known to have excellent proven joint-sealing performance, Wraptite Tape was the obvious choice for the contractors.

Uncontrolled flow of air through gaps and cracks in the fabric of a building is a common problem in the UK, resulting in a significant reduction in the thermal performance and efficiency of the structure, but Wraptite Tape and Wraptite-SA membrane have the answers.





CONDENSATION CONTROL

The A Proctor Group has been at the forefront of developing breather membrane technology for more than twenty five years.

The company has an excellent reputation for supplying both quality products and customer service.

Moisture in today's buildings can be a continual problem if not tackled professionally. Condensation will occur within a roof or wall construction if the heated internal air escapes through the lining or insulation, then comes into contact with the cold outer surfaces.

Condensation in a building is an unwanted phenomenon as it may cause dampness, mould related health issues, wood rot, corrosion and energy loss due to increased heat transfer.

The A. Proctor Group is unique in that they supply two different "families" of membranes to control water vapor within roof and wall constructions, each serving a different purpose.

A breather membrane allows moisture trapped within the construction to escape the building whilst offering temporary weather protection from driving rain or snow.

A vapor control layer (VCL) is a continuous membrane laid on the warm side of the insulation to inhibit the flow of moisture escaping into the roof or wall construction.



ROOFSHIELD®

Roofshield is a unique three layer nonwoven spunbonded polypropylene breather membrane with a patented melt blown core. It is intended for use as a pitched roof underlay and is fixed beneath tiles and slates.

Roofshield provides a secondary barrier to the ingress of rain, wind and snow. It has a low vapor resistance and is air permeable and eliminates the incidence of interstitial condensation in pitched roofs.

The combination of low vapor resistance and air permeability eliminates the need for low and high level ventilation. It also negates the need for a vapor control layer or air barrier fixed at ceiling level. This is a basic requirement with other inferior performing products which are air impermeable and have a significantly higher vapor resistance.

The product provides the most cost effective solution to controlling interstitial condensation in a pitched roof. The exclusion of ventilation and a vapor control layer eliminates the cost of buying the components and labour to install them.

The A. Proctor Group has been supplying Roofshield for over 25 years with millions of square metres installed in the United Kingdom during that time. The product is BBA approved for use without ventilation or a vapor control layer in both warm and cold pitched roof construction. It can also be used with square edged softwood timber sarking planks.

KEY FEATURES

- Low vapor resistance.
- Vapor & Air permeable.
- Water Resistant
- No VCL required
- No ridge ventilation required
- Roll size 1 m x 50m, weight 9.25kg.
- Colour green printed top layer and white underside.





MAWSON'S HUT

Roofshield has been successfully installed on Mawson's Hut in the Antarctic.

Sir Douglas Mawson, a geologist, who led the Australasian Antarctic Expedition of 1911, landed a party of 18 at Cape Denison on Commonwealth Bay in January, 1912, and remained there until December 1913.

Only a concerted public campaign would save and conserve this historic site for all Australians, and the Mawson's Huts Foundation was formed in 1996 for this purpose.

The Foundation has been involved with five conservation expeditions to Cape Denison, working in partnership with the Australian Government through the Minister for Environment and Heritage, the Australian Antarctic Division and the Australian Heritage Division.

Following several sporadic attempts in the 1970s and 1980s to stabilise the deteriorating fabric, over the past 10 years the Foundation has achieved some outstanding results, including most recently a re-roof of the main hut. The design team required a robust material that would withstand the rigours of the Antarctic Conditions whilst also providing vital air permeability to manage the high levels of moisture.

After an initial internet search the lead Architect short-listed a number of roofing materials including Roofshield. The PII report available at www.proctorgroup.com convinced the Architect of Roofshield's unique physical properties and thus ensured it's specification and eventual use on this project.





FIRESHIELD®

Fireshield is a vapour permeable walling underlay with an intumescent coated surface. Fireshield is suitable for all walling applications including those in multiple storey buildings. Its unique coating doesn't just resist fire, but eliminates fire spread.

- The unique intumescent coating helps protect the substrate
- Vapour permeable walling underlay for use either directly onto sheathing or insulation
- Class B, s1-d0 but performs differently to other similar class products
- Complies with BS5250, BS4016 & NHBC requirements for vapour permeable walling underlays
- Ideal for use in rainscreen / façade construction
- Suitable for applications over 18m high



PROCHECK® ADAPT

Procheck Adapt is a high performance variable-permeability vapour control layer with integrated lap tape for use in a variety of commercial and residential applications. It is designed to protect the building fabric from potential risks of condensation and it will also act as an airtight barrier.

- Variable permeability adapts to changes in humidity
- Wide Sd range guarantees performance in demanding climatic conditions
- Ensures effective drying out of building materials
- Suitable for variety of commercial and residential applications
- Provides airtightness to structure as well as vapour control
- Roll size 1.5m x 50m & 3m x 50m. Weight 110 gsm



PROCHECK® A2

Procheck A2 is a vapour and airtight membrane. Procheck A2, with its Class A2-s1,d0 fire classification to BS EN 13501-1, is considered non-combustible with no contribution to fire. Its composition comprises of the glass fibre backing, with a pure aluminium foil and clear lacquer coating.

- Reaction to Fire classification to A2,s1-d0
- Water vapour diffusion tight
- Reflective material, emissivity <0.05
- Easy to install
- Clear lacquered aluminium surface allows for low emissivity surface
- Robust and able to withstand tough site conditions



PROCHECK® 125

Procheck 125 is a lightweight reinforced polyethylene vapor barrier which can be utilised in a variety of commercial applications. Procheck 125 can be utilised where very high moisture vapor resistance is not a necessity but a strong, durable airtight membrane is.

- Improved airtightness
- Reinforced
- Translucent
- Colour reflective & black
- Low / Medium Risk Applications e.g. Infrastructure, Light Commercial Buildings



PROCHECK® FR200

Procheck FR200 is used as a vapour control layer in roof and wall structures in new build and renovation projects. Procheck FR200 has a Reaction to Fire classification of Bs1, d0 which provides assurance of fire performance for the structure. Procheck FR200 air and vapour tight membrane improves energy efficiency and reduces the condensation risk.

- Independent assurance of fire performance (EN 11925-2 Bs1, d0)
- Improved energy efficiency
- Reduced condensation risk
- Reinforced and robust



PROCHECK® STANDARD 300

Procheck 300 is a lightweight, reinforced, polyethylene, vapor barrier for use within roof and wall constructions to prevent warm, moist air entering the building fabric and condensing within the insulation. The woven, polypropylene, multifilament scrim reinforcement provides good resistance to tears and punctures.

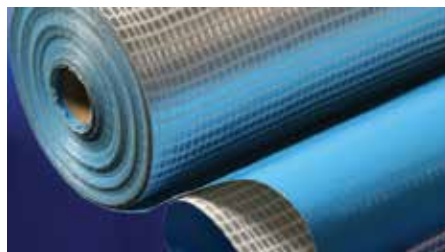
- Improved airtightness
- Reinforced
- Translucent
- Unaffected by Chlorine
- Low Risk Applications e.g. Warehouses, Infrastructure, Light/Medium Commercial Buildings



PROCHECK® PREMIER 500

Procheck Premier 500 is a strong reinforced polyethylene vapor barrier with good vapor resistance. The woven extruded polypropylene multifilament scrim reinforcing provides improved nail tear resistance. The sheet is translucent to ease the installation process and is the grade utilised by many leading system manufacturers.

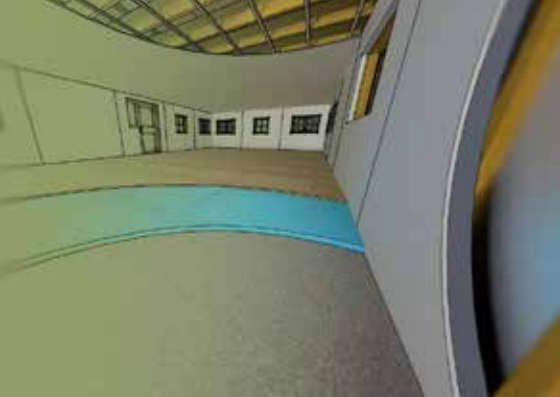
- Improved airtightness
- Reinforced
- Translucent
- UV stable
- Unaffected by chlorine
- Low/Medium Risk e.g. Offices, Schools, Infrastructure, Commercial Buildings



PROFOIL 861

Profoil 861 is a heavyweight, reinforced vapor barrier with an aluminium foil core to give a high water vapor resistance. The aluminium foil is protected on both faces by polyethylene for corrosive situations such as chlorine in swimming pools.

- Improved airtightness
- Reinforced
- UV stable
- Unaffected by chlorine
- Aluminium Foil
- High Risk: e.g. Swimming Pools, Textile Factories, Infrastructure, Commercial Buildings



THERMAL SOLUTIONS

The A. Proctor Group have been involved in the development of thermal insulation solutions for nearly fifty years, during which time the twin issues of energy efficiency and heat loss reduction have become key considerations in the design of every new building.

As thermal insulation requirements continue to grow, the industry is under increasing pressure to meet these requirements and the ever more stringent u-values demanded by them.

With a thermal conductivity of 0.015 W/mK, Spacetherm® Aerogel is one of the best insulation materials available worldwide. Engineered for unmatched thermal performance in space critical applications, The A. Proctor Groups works with clients to establish requirements and deliver sound engineered solutions.

SPACETHERM® SOLUTIONS

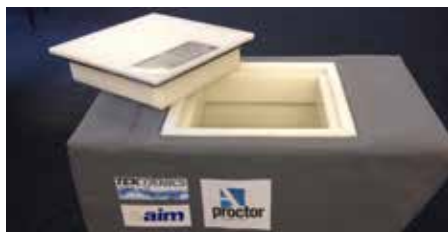
The A. Proctor Groups Spacetherm Aerogel combines a silica aerogel with a fibre matrix to produce a flexible yet robust blanket solution. This superior material is suitable for a wide range of challenging applications where thermal performance is crucial.



MARINE Innovations

The A. Proctor Group have also developed and supplied multiple thermal innovations to the Marine Industry such as developing a super-efficient galley fridge and supplying bespoke Spacetherm® Aerogel sheets to thermally refurbish river barges.

The client approached the A. Proctor Group to see if we could design and develop a super insulating fridge with increased capacity and within the restricted galley location. Working in conjunction with our partners Tek-Tanks and Aim Developments, we successfully created a unit that achieved a U-Value of 0.22 W/m²K, considerably better than most new homes built today!



Insulating galley fridge using Spacetherm®

CONSTRUCTION Innovations

Working in conjunction with Morrison Construction we have developed a process that allows for water pipes to be laid at shallower depths where ground depth is restricted such as the Ericht bridge project pictured below. The solution significantly decreased the potential for freezing within the pipes and was considered a cost effective simple solution to Morrison Construction.



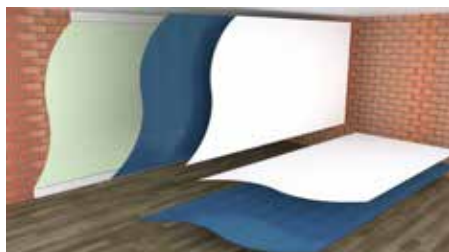
Shallow water piping process



SPACETHERM® SLENTEX® A2

Spacetherm SLENTEX® A2 is a flexible, high-performance, silica aerogel-based insulation material of limited combustibility used for exterior and interior applications. Supplied in a variety of finishes, the substantial layers of Spacetherm SLENTEX® A2 meet the requirements for A2 classification (insulation, MgO and plasterboard). The product is used to optimise the thermal performance and fire properties of façade systems in a number of ways. These include enhancing the thermal performance of the ventilated façade, and addressing thermal bridging in the façade. Spacetherm SLENTEX® A2 is also useful in minimising thermal bridges around windows in areas such as window reveals and roller shutter cases.

- Class leading A2 reaction to fire classification from an Aerogel insulation
- Superior thermal performance
- Limited combustibility
- Water vapour diffusion open
- Permeable
- Flexible
- Thinnest A2 aerogel insulation available
- Thickness: 10mm, 20mm, 30mm, 40mm*
- K factor of 0.019 W/m²K





GROUND GAS PROTECTION

The A. Proctor Group have been in the Gas Protection market for the past fifteen years promoting a range of gas membranes and venting components for use on contaminated land sites.

Adequate protection against the ingress of ground gas and vapours is crucial and the A. Proctor Group can provide safe, cost effective and value engineered solutions.

MEMBRANES AND ACCESSORIES TO PROTECT AGAINST METHANE, CARBON DIOXIDE, RADON, HYDROCARBONS AND VOCs.

DESIGN AND CAD DETAILING SERVICES AVAILABLE.

PROTECH GM ACCESSORIES



PROTECH GM TAPE

Protech GMTape is used to seal overlaps in gas membranes and accessories.



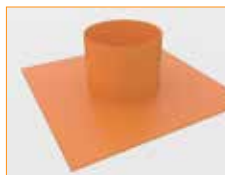
PROTECH GM CORNERS

Protech GM Internal & External Corners are recommended to achieve a gas tight seal and as technically a better solution. Corners available to suit all Protech gas membranes. Alternative sizes available on request.



PROTECHSAGM

Protech SAGM is a self adhesive gas and waterproofing membrane for use in detailing and vertical installation applications.



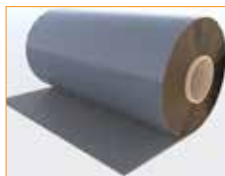
PROTECHGMTOPHATS

Protech GMTophats are used to detail around pipe penetrations. Tophats available to suit all Protech gas membranes. To be used in conjunction with Protech GM Flashing 150mm.



PROTECH GM FLASHING

Protech GM Flashing Strip is a waterproof and gas resistant tape protected by an aluminium film and reinforced with a polyester film. Used for detailing stanchions, corners, penetrations and repairs.



PROTECH GR-DPC

Protech GR-DPC is a gas resistant DPC used through junctions with cavities or masonry to protect against the ingress of gas and damp.

ADDITIONAL ACCESSORIES:

- Protech GM Super Starter Band
- Protech GM Protection Fleece
- Protech GM Primer



PROTECH VOC FLEX

Protech VOC Flex complies with CIRIA C748 and BS8485:2015. It is a high performance 6 layer flexible proprietary reinforced VOC gas barrier and is suitable for use on brownfield sites that require protection from dangerous contaminants such as hydrocarbons. The Protech VOC Flex has been developed to ease installation on site due to the flexibility of the membrane. It is also suitable as a high performance damp proof membrane.

- Complies with CIRIA C748
- Exceptional chemical resistance
- Additional damp proofing protection
- Flexible membrane to ease installation on site
- Robust & durable multi-layer membrane
- High resistance to puncturing
- Achieves 2 points for gas protection in accordance with BS 8485:2015 requirements



PROTECH GM SUPER

Protech GM Super is a high performance proprietary reinforced gas barrier that incorporates an aluminium foil layer, for maximum protection against ground-borne gases. This has been specifically designed to conform with the latest guidance documents.

- Resistant to Hydrocarbon Vapors (if not in direct contact with the ground), Methane, Carbon Dioxide, Radon and Damp.
- Easy to install & flexible.
- Can be welded or taped.
- 2m x 50m. Weight 37kg/roll.
- Colour green/silver.



PROVOID 25

Provoid 25 is a 25mm thick single-sided geocomposite that provides a void beneath floor slabs which, when connected to air inlets and outlets, allows sufficient air changes to dilute gases to safe concentrations when designed correctly.

- 25mm Geocomposite Void Former which results in less contaminated spoil compared to a 'pipe and gravel' venting layer
- Flexible and easy to lay
- Large rolls available for reduced installation times
- Full range of ancillary products

**WE'VE
GOT GROUND
GAS
COVERED**



"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."

Keira Proctor
Managing Director

