

Product Guide

GLOBAL

A GUIDE TO A. PROCTOR PRODUCTS & SERVICES



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.

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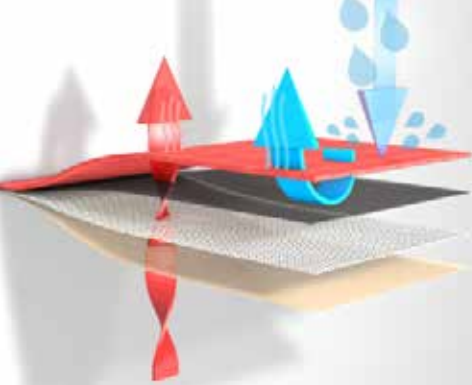
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Thermal Insulation Solution

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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, driven by increasingly rigorous Part L Regulations and the overall energy-efficiency agenda, is putting the creation of air tight buildings at the top of the agenda, in refurb as well as new build.

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



WRAPTITE-SA

Wraptite-SA combines important properties of vapour 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.

- 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 six weeks during construction.
- No VOC's.

Wraptite-SA 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 vapour permeability. With a rating of Sd 0.039, it provides 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 or mill finish)
- Most rigid insulation
- Cast-in-place concrete
- Pre-painted steel
- Galvanized metal
- OSB
- Rigid vinyl
- Precast concrete
- Steel
- Concrete block
- Plywood



SUNSHINE MOSQUE

Proctor Wraptite-SA airtight membrane was used as part of the refurbishment of the Sunshine Mosque's dome in Melbourne, Australia.

The Sunshine Mosque is an Ottoman/Turkish-style mosque in Sunshine, a suburb of Melbourne. This complex structure comprises of seventeen domes, a minaret, and a courtyard.

The complex existing concrete domes were leaking and needed to be re-roofed in Zinc. As part of this refurbishment, a watertight underlay and separation layer was required to be placed underneath the VM Zinc Plus.

Our local Proctor membrane distributor, Dynamic Composite Technologies, recommended the use of Wraptite-SA. Wraptite-SA was identified as the ideal solution to the water ingress problems, and as a result of the installation, the domes have been restored to their former glory with minimum disruption.





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 vapour permeability for internal and external applications.

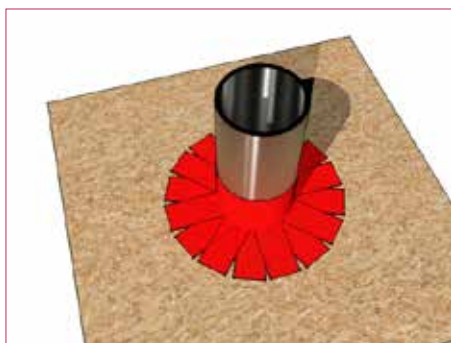
It fully bonds to all standard substrates, suppressing air leakage around joints, openings and penetrations. It is also suitable for permanent airtight sealing of membrane overlaps.

KEY FEATURES

- Resilient composition, which resists punctures and tears during construction
- Flexibility, facilitating ease of application and detailing
- Wide operating temperature range (-40°C to +60°C)
- Can be left exposed for up to six weeks during construction
- No primer required
- No VOC's



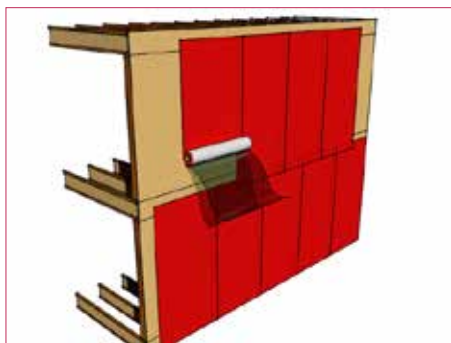
Seal joints of rigid insulation / sheet material



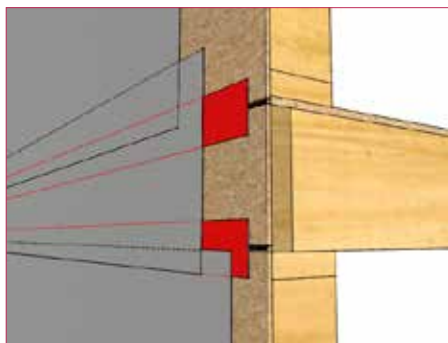
Pipe Seal



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 vapour 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 vapour 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 vapour resistance and is air permeable and eliminates the incidence of interstitial condensation in pitched roofs.

The combination of low vapour resistance and air permeability eliminates the need for low and high level ventilation. It also negates the need for a vapour 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 vapour resistance.

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

The A. Proctor Group has been supplying Roofshield for over 15 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 vapour 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 vapour resistance.
- Vapour & Air permeable.
- Water Resistant
- No VCL required
- No ridge ventilation required
- Roll size 1 m x 50m, weight 8.75kg.
- 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.





REFLECTATHERM PLUS

Reflectatherm Plus is a reflective, high resistance vapour barrier for internal walls, ceilings and floors, specifically designed to enhance the thermal performance when placed on the warm side of the insulation.

- High vapour resistance.
- Improved airtightness.
- Creates service void.
- Improved thermal resistance.
- Helps to meet the requirements of Part L in England and Wales, Section 6 in Scotland.
- Roll size: 1.5m x 50m & 3m x 100m. Weight: 142g/m²
- Colour reflective & black



PROCHECK STANDARD 300

A lightweight reinforced polyethylene vapour control layer for use within roof and wall constructions to prevent warm, moist air escaping from inside the building and condensing within the insulation. The woven polypropylene multifilament scrim reinforcement provides good resistance to tears and punctures.

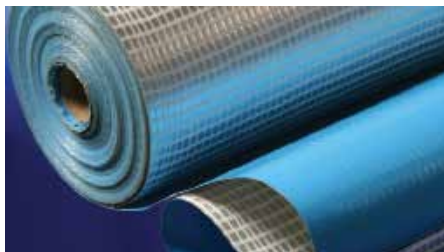
- Low Risk Applications eg. Heated warehouses
- Vapour Resistance – 336 MNs/g
- Reinforced
- Roll size; 2m x 50m. Weight 15kg/roll.



PROCHECK PREMIER 500

A strong reinforced polyethylene vapour control layer with good vapour resistance. The woven extruded polypropylene multifilament scrim reinforcing provides improved nail tear resistance.

- Vapour Resistance 533 MNs/g.
- UV stabilised.
- Low/Medium Risk eg offices, school, houses.
- Roll size; 2m x 50m. Weight 24kg/roll.



PROFOIL 861

A heavyweight reinforced vapour control layer with aluminium foil core to give a high water vapour resistance. The aluminium foil is protected on both faces by polyethylene for corrosive situations, such as chlorine in swimming pools.

- Vapour Resistance > 7,000 MNs/g.
- Unaffected by chlorine.
- Aluminium Foil.
- High Risk-eg Swimming Pools, Textile Factories
- Roll size 2m x 50m. Weight 31kg/roll.
- Colour; Blue (top) Reflective silver (bottom).





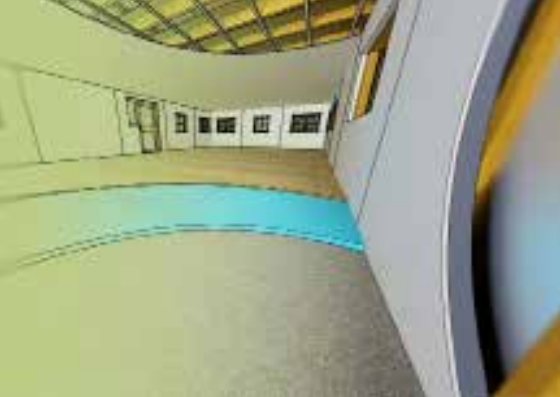
DUBAI TRAM PROJECT

The A. Proctor Group have supplied their Profoil 861 to Arabian Profiles for the Dubai Tram project for all 11 stations as well as all the Depot Buildings.

Profoil 861 is a heavyweight reinforced vapour control layer with aluminium foil core to give a high water vapour resistance. The woven extruded polypropylene multifilament scrim reinforcement gives good resistance to tears and punctures. The aluminium foil is protected on both faces by polyethylene for corrosive situations, such as chlorine in swimming pools.

The Dubai Tram (previously the Al Sufouh Tram) system was designed to be an integral part of the Dubai transport network, linking the Dubai Metro and the Palm Monorail and running along Al Sufouh Road and Jumeirah Beach Road from Mall of the Emirates at one end to the Dubai Marina.





THERMAL SOLUTIONS

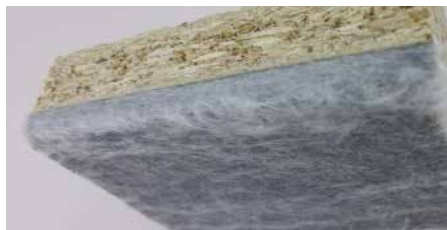
The A. Proctor Group have been involved in the development of thermal insulation solutions for nearly 50 years, during which time the twin issues of energy efficiency and heat loss reduction have become key considerations in the design of every new building.

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

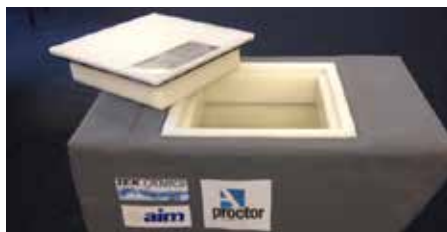
The A. Proctor Groups Spacetherm® Aerogel combines a silica aerogel with a fibre matrix to produce a flexible yet robust blanket solution. This superior material is suitable for a wide range of challenging applications where thermal performance is crucial.



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 Erich 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



IMPERIAL WAR MUSEUM, LONDON

Spacetherm Blanket was recently utilised within the Imperial War Museum, London.

The A. Proctor Group of Blairgowrie supplied 20mm of their thin, highly efficient thermal insulation for installation on a barrel vault ceiling within the Museum which opened at the Lambeth Road site in 1936. The Museum records the story of The Great War and has many valuable and irreplaceable artifacts.

Spacetherm is a composite of fibrous matting and aerogels, the newest and most thermally efficient of all insulants. It has a thermal conductivity of only 0.013W/mk which enables high thermal performance, whilst also producing an extremely thin, flexible blanket.

The Barrel Vault area of the museum had been previously insulated, achieving a u-value of 0.26W/m²K. However this was giving problems of overheating in the summer, whilst being very cold during the winter months. There was also an additional problem of cold bridging due to a horizontal steel plate.

Architects, CPMG, requested a product which would improve this u-value to below 0.2W/m²K whilst not reducing the floor to ceiling height.

After consulting with the A. Proctor Group, 20mm Spacetherm Blanket was specified and installed on the underside of the ceiling, by Gerram Faulkus Construction. The achieved u-value of 0.18W/m²K was an improvement over the minimum specification whilst barely reduced the floor to ceiling height.





GROUND GAS PROTECTION

The A. Proctor Group have been in the Gas Protection market for the past 15 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.

**WE'VE
GOT GROUND
GAS
COVERED**



PROTECH GM+

Prototech GM+ is a high performance proprietary reinforced gas barrier; that has been specifically designed to conform with the latest guidance documents. Due to its unique composition the membrane is extremely robust and flexible and therefore easy to install on site.

- Resistant to Methane, Carbon Dioxide, Radon and Damp
- Easy to install & flexible
- Can be welded or taped.
- 2m x 50m, Weight 29kg/roll
- Colour yellow
- Manufactured from high grade virgin polymer



PROTECH GM SUPER

Prototech 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 Vapours (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.





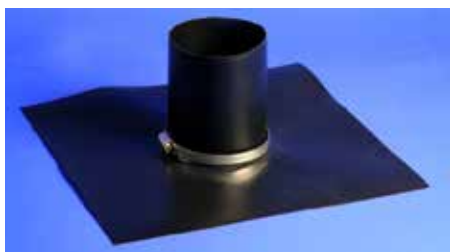
PROTECH GM TAPE

A 30mm x 30m double-sided, self-adhesive, cross linked butyl sealing and bonding strip.



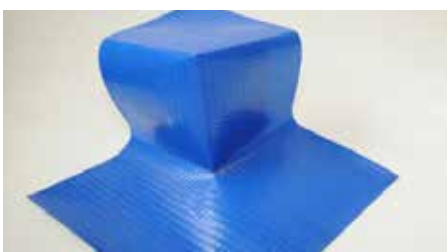
PROTECH GM FLASHING TAPE

Foil tape used for sealing around column penetrations and for repairs/patching of membranes damaged during installation. Roll Dimensions: 1.1 x 150mm x 10m or 1.1 x 300mm x 10m.



PROTECH GM HM TOP HAT

Preformed top-hat section for sealing around pipe penetrations in the gas membrane. Available in standard sizes of 110/130/160mm to suit popular pipe diameters. Other sizes available upon request.



PROTECH GM+/SUPER CORNER UNITS

Preformed internal and external corner sections allowing fast and accurate detailing of the membrane at perimeter corners. The corners come in one size and can be adjusted to suit larger or smaller corners on site with the use of Protech GM Flashing strip and a knife.



PROTECH SAGM (Self Adhesive Gas Membrane)

Self Adhesive Gas Membrane, comprising an aluminium/polyethylene laminate with a modified bitumen adhesive backing. Used to maintain gas membrane continuity on vertical surfaces and around complex penetrations and foundations. Roll Dimensions: 1m x 20m.

ADDITIONAL ACCESSORIES:

- Protech GM+ or Super Starter Band
- Protech GR-DPC
- Protech GM Primer



“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

