Wraptite®

THE SELF-ADHERING AIRTIGHT AND VAPOUR PERMEABLE MEMBRANE



Wraptite®
Airtightness simplified

Proctor Group



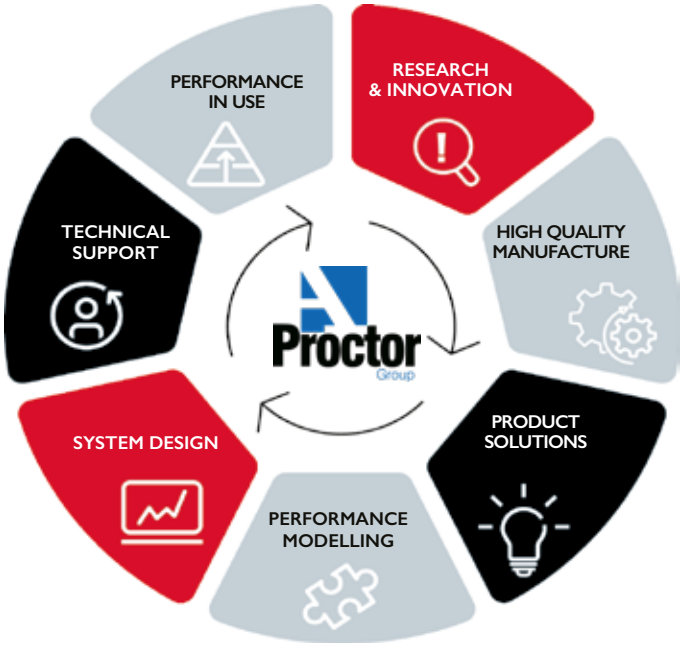
A. Proctor Group

Experts in membrane systems

The A. Proctor Group has, for 50 years, been serving the construction industry with an extensive portfolio of trusted solutions in thermal, acoustic and membrane products. Already a trusted brand with architects, developers and contractors, the A. Proctor Group product portfolio includes Proctor Air®, the high quality, air and vapour permeable pitched roof underlay, synonymous with the highest performing roofing solutions, and Wraptite, an external air barrier to solving the problem of reliably achieving airtightness in buildings.

Total Solution Capabilities

From concept to completion



Our products are backed up by a dedicated team of technical experts, able to assist at every project stage from pre-planning to on site. We offer CAD detail reviews, installation guidance, condensation risk analysis, WUFi calculations, U-Value calculations, ground gas system designs, telephone support & more. Our products also have a range of BIM Objects & Performance Specifications.

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Revised May 2026 Version 1.017 Next Review Due May 2027

Airtightness

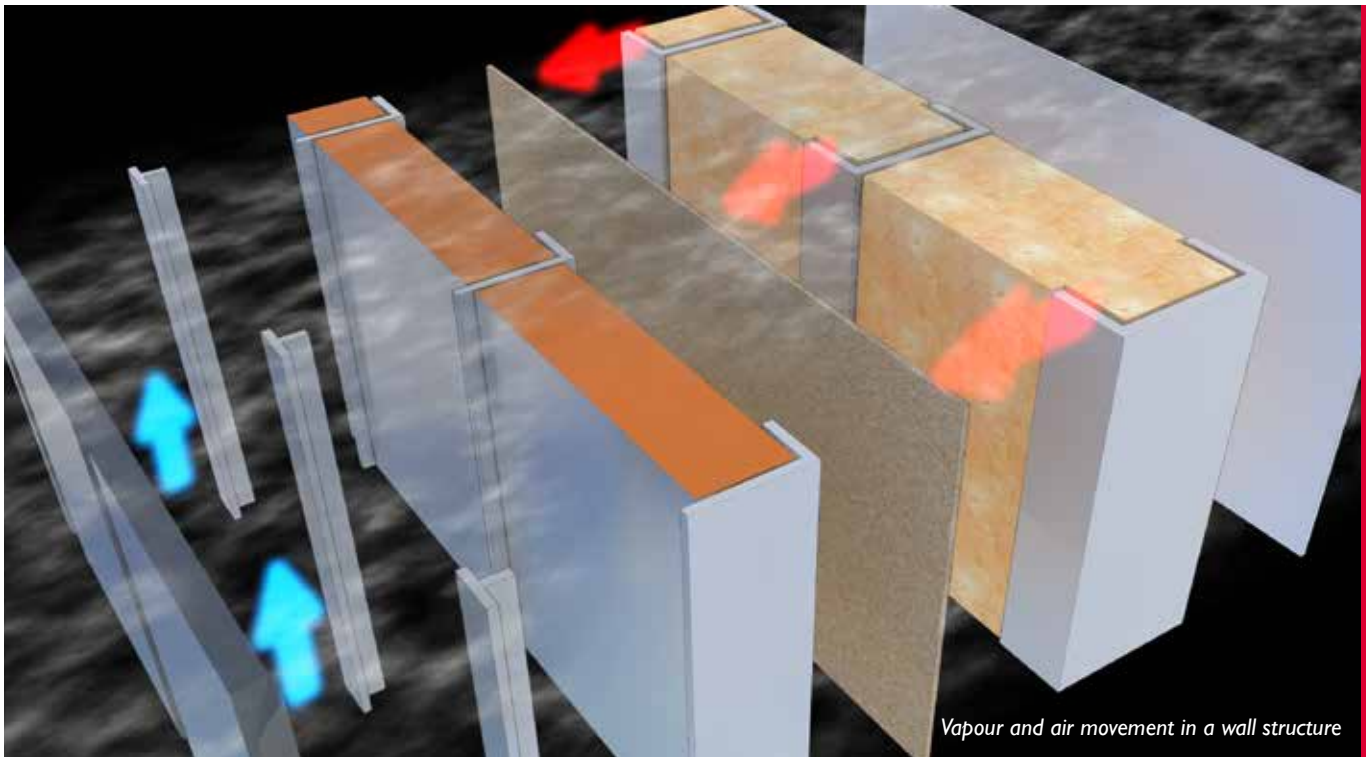


Air Permeability & Airtightness

Air movement is important in the building envelope, both infiltration and exfiltration. We need to control interior conditioned air escaping (whether heated or cooled) and exterior air infiltrating as it puts more pressure on heating or cooling mechanisms internally.

Airtight membranes are an obvious choice in this area whether vapour open/closed or variable.

Airtightness - Designing for airtightness in buildings



Vapour and air movement in a wall structure

Wraptite

Air permeability & airtightness

Air movement is important in the building envelope, both infiltration and exfiltration. We need to control interior conditioned air escaping (whether heated or cooled) and exterior air infiltrating as it puts more pressure on heating or cooling mechanisms internally. Airtight membranes are an obvious choice in this area whether vapour open/closed or variable.

Air Leakage Control Strategies

As Building Regulations have imposed more stringent energy performance criteria on the building envelope, improvements have often been driven through higher standards of insulation for roofs, walls, windows and floors. In the drive for higher standards, the significance of localised areas of reduced insulation or thermal bridging leading to air leakage has become even more crucial.

Air leakage through cracks, gaps, holes and improperly sealed elements, such as doors and windows, can cause an unneccessary reduction in the performance of even thermally insulated envelopes, in some cases reducing their effectiveness by up to 70%. As thermal insulation requirements increase, this reduction in performance is becoming a critical issue; a consensus has emerged in the industry that, discrepancies between 'as-built' and 'as designed' performance are largely attributable to uncontrolled air leakage. Architects and developers are increasingly turning to air barrier membranes as an essential part of the design process in achieving the most effective means of controlling and reducing air leaks.

Benefits of air-tight buildings

- More thermally efficient
- Reduce energy costs
- Lower CO_2 emissions
- Reduce interstitial condensation
- Efficient performance of HVAC
- Healthy environment for occupants

Designing for Airtightness in Buildings

Air Leakage Testing

A practical test of the extent of air leakage through a buildings fabric is an important part of ensuring "as built"performance come as close as possible to the design performance targets. Such testing also allows contractors to identify air leakage paths within the building, allowing them to take appropriate remedial action if the design targets are not met.

The methods governing such testing are laid out in EN13829, and are based around achieving a pressure differential between the inside of the building and the outside. The pressure differential is achieved by replacing the door with a large powered fan, and pumping air in (or out) to reach the test pressure of 50 Pascals. The volume of additional air that must be provided to maintain this pressure is then measured. The resulting figure, along with the buildings floor area is then used to arrive at the final air leakage result, which is expressed as cubic metres of air input required (m^3) per hour per square metre of floor area (m^2) to maintain a pressure differential of 50 Pascals, and is usually written as $m^3/(h.m^2)$ @ 50Pa.





Part L in England, Wales and the Republic of Ireland requires a value no greater than 5 $m^3/(h.m^2)$ @ 50Pa to demonstrate compliance.

In Scotland (Section 5) this is 7 $m^3/(h.m^2)$ @ 50Pa and in Northern Ireland (Part L) this is 8 $m^3/(h.m^2)$ @ 50Pa.

In practice, design values used are often lower than required by building regulation, making verification of compliance all the more important.

Wraptite® Warranty
Technology You Can Rely On From A Brand You Can Trust

See www.proctorgroup.com for Wraptite Warranty Application form.


BRIDGE STREET
WEST

Wraptite – vapour permeable air barrier

Wraptite – a proven solution for airtightness

By combining vapour permeability and airtightness in one, self-adhering membrane, Wraptite offers a fast and effective solution to unplanned air leakage and its detrimental effects on energy performance. With BBA certification for a wide range of wall and roof constructions and compatibility with multiple substrates, this high-performance air barrier solution can be employed on projects from domestic scale timber frame to large steel framed high rise and everything in between.








With an Sd-value of 0.039m, Wraptite's high vapour permeability means any construction moisture can dry out rapidly, reducing the likelihood of mould, mildew, and condensation related damage such as timber rot and distortion or metal corrosion. This ensures the building fabric remains as healthy as the indoor environment. Vapour permeability also allows flexibility in the placement of the air barrier, meaning it can be moved outwards in the construction without risking trapping moisture. This minimises the potential for damage from following trades, in turn allowing design air leakage rates to be reduced with increased confidence pressure test targets will be met.



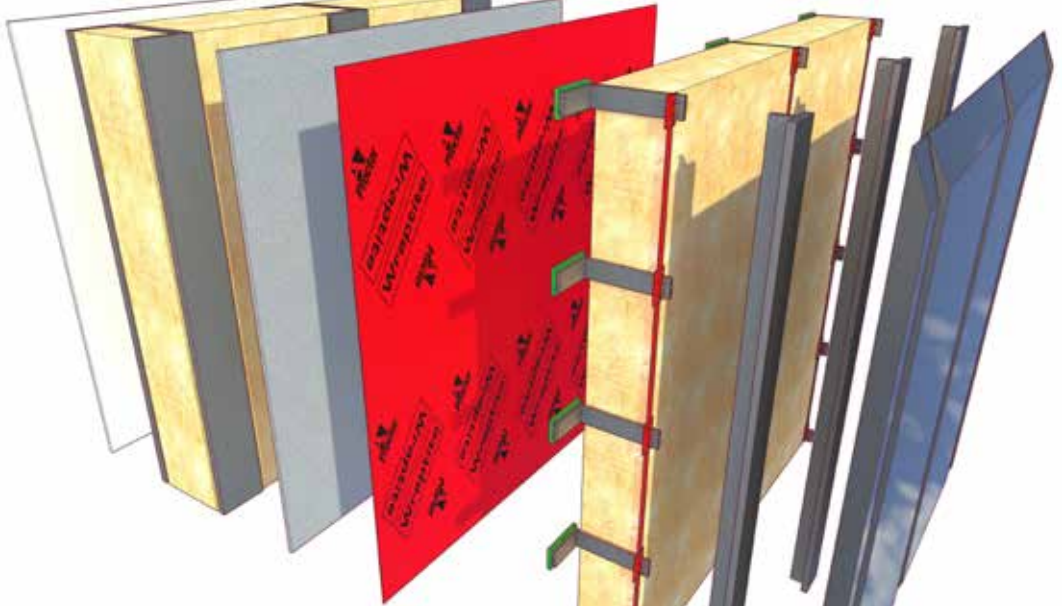
Wraptite – fire safety tests

Wraptite has completed the latest fire tests applicable to building products with a Class B certification.

Wraptite was extensively tested by an independent testing authority and achieved the highest classification for a polypropylene membrane of its type. The product was subjected to two separate tests: BS EN ISO 11925-2:2010 Ignitability of Building Products Subjected to Direct Impingement of Flame – Part 2 Single-flame source test, and to BS EN 13823:2010 Building Products Excluding Floorings Exposed to the Thermal Attack by a Single Burning Item. Following the test results the samples were classified according to BS EN 13501:2007+A1:2009. Fire classification of Construction Products and Building Elements: Part 1: Classification using Test Data from Reaction to Fire Tests.

BS EN 13823:2010 evaluates the performance of products in relation to heat & smoke production, lateral flame spread and the presence of flaming droplets or particles. Under these test conditions Wraptite achieves a Class B-s1-d0 rating, the highest possible for a polypropylene membrane. This classification gives specifiers absolute confidence in the membranes performance in the event of fire.





Applications

- SIPs panels
- Steel and timber framed constructions
- Façade systems
- Cassette Floor construction
- Unventilated warm roofs
- Exterior Gypsum Sheathing
- Aluminium (painted or mill finish)
- OSB
- Rigid insulation
- Cast-in-place concrete
- Rigid vinyl
- Pre-painted steel
- Galvanized metal
- Precast concrete
- Steel
- Concrete block
- Plywood

WRAPTITE® FOR WALLS

The self-adhered nature of Wraptite allows for a simple and efficient installation process, minimising the use of additional sealants and tapes, and requiring no specialist contractors to achieve the required results. This one-step solution provides both a strong air barrier layer and effective secondary weather protection in one installation process, achieving a wind and watertight envelope more quickly than using traditional methods.







Key Benefits

- Self adhered
- Airtight yet vapour permeable
- BBA Certificate No. 15/5274
- Passive House Institute - Certified component
- Tough 3-Layer Laminate resists punctures and tears
- Simple to install
- Wide service temperature range
- Can be left exposed for up to 90 days (North America) or 120 days (UK) during construction*
- Free from Volatile Organic Compounds

**Please contact the A. Proctor Group's technical department for advice on specific geographical locations.*

WRAPTITE® FOR ROOFS

Where a full wall and roof airtight envelope is required Wraptite can be used in both applications. The self-adhered backing not only ensures an airtight seal but resistance at laps against water penetration, dust, air infiltration and wind resistance making it an ideal choice for this application.

It fully bonds to all standard substrates, with no primer required, suppressing air leakage around joints, openings and penetrations. It is also suitable for permanent airtight sealing of membrane overlaps and for taping insulation joints. Wraptite Tape's high vapour permeability allows damp sheathing to dry quickly and moisture vapour to escape. This ensures a healthy indoor air quality and reduces the likelihood of mould, mildew, condensation, timber distortion and metal corrosion. Wraptite Tape contains no VOC's.





Key Benefits

- Self adhered
- Airtight yet vapour permeable
- No ventilation required
- For use in all wind zones
- No maintenance required
- Class B-s1,d0 in accordance with BS EN 13501 1:2007[1]
- BBA Certificate No. 15/5274
- Passive House Institute - Certified component
- Tough 3-Layer Laminate resists punctures and tears
- Simple to install
- Wide service temperature range
- Can be left exposed for up to 90 days (North America) or 120 days (UK) during construction[2]
- Free from Volatile Organic Compounds

[1]tested over 12mm calcium silicate board / fibre cement board as per BS EN 13238:2010.

[2]Please contact the A. Proctor Group's technical department for advice on specific geographical locations.



WRAPTITE® UV

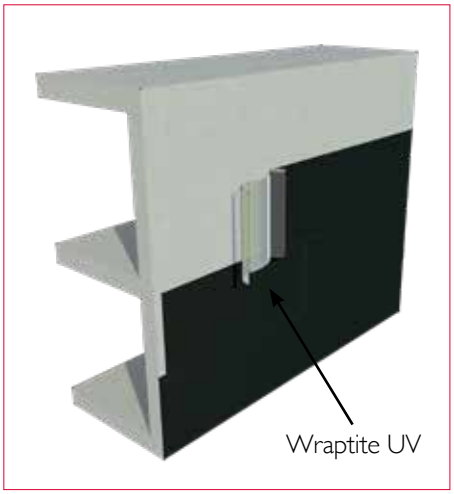
Wraptite UV is a Class B-s2,d0 membrane that combines the ideal properties of vapour permeability and air tightness in one self-adhering product, which is specifically designed for use behind open jointed cladding.

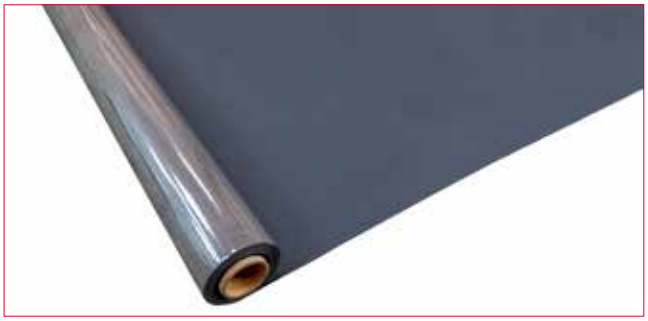
Wraptite UV has W1 water resistance and UV resistance to provide a "shadow" appearance within open rainscreen façades. Manufactured from polyester and a functional coating, with a proprietary acrylic moisture vapour permeable adhesive and silicone-coated PET release liner.

Wraptite UV bonds (no mechanical attachment) to multiple substrates for air tightness and ease of installation, negating the requirement for a primer, sealants or tapes. Adhesive curing time is approximately 6hrs depending on environmental conditions.

Wraptite UV prevents lateral air movement enhancing the buildings thermal performance. With a rating of Sd 0.06m it provides a high vapour permeability in a commercial quality, self-adhered, airtight breathable membrane.

To protect the membrane from mechanical damage, the joint openings in the façade covering have to be less than 40% of the area, and maximum 50mm wide.





Key Benefits

- Airtight yet vapour permeable
- No primer required
- Tough facer laminate resists punctures and tears during construction
- Simple to install
- Manufactured rolled goods ensure consistent properties and performance
- Wide service temperature range
- Can be left exposed for up to 12 months (UK climate)

WRAPTITE® LIQUID FLASHING

Wraptite Liquid Flashing is a high-quality, gunable, elastomeric, polyether, liquid applied flashing and detailing membrane. It bonds to most construction materials, such as aluminium, brick, concrete, wood, vinyl, and exterior sheathing boards. Wraptite Liquid Flashing is compatible with the entire line of A. Proctor Group's vapour permeable products for joint detailing in exterior sheathing panels.

Wraptite Liquid Flashing is for use with A. Proctor Group's range of vapour permeable membranes. This liquid applied flashing membrane is ideal for use in complex details. It can also be used to protect the leading edge of the Wraptite membrane or tape from water penetration if the edge cannot be protected by overlapping in a shingle fashion.



Applications

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





Key Benefits

- Continuous seal and system approach.
- Can be applied in damp conditions.
- Does not peel back when left exposed.
- Does not create build up in rough openings.
- Non-sag.
- 100% solvent free.
- Non-shrinking.
- Bonds to most construction materials.
- Simple to apply and spread.
- Does not harm foam insulation.



Applications

- Exterior Gypsum Sheathing
- Aluminium (painted or mill finish)
- OSB
- Rigid insulation
- Cast-in-place concrete
- Rigid vinyl
- Pre-painted steel
- Galvanized metal
- Precast concrete
- Steel
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WRAPTITE® DETAILING TAPE

Ideal for stopping unnecessary air leakage around openings and overlaps, Wraptite Tape is an airtight, tear resistant tape with high vapour permeability for internal and external applications.

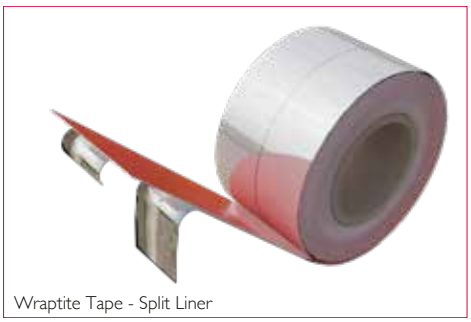
It fully bonds to all standard substrates, suppressing air leakage around joints, openings and penetrations. It is also suitable for permanent airtight sealing of membrane overlaps.

Composition
Wraptite Tape consists of a triple layer polypropylene micro-porous film laminate, with a proprietary acrylic moisture vapour permeable adhesive and silicone-coated PET release liner.

Drying Capacity
Wraptite Tape's high vapour permeability, with an Sd rating of 0.039m, allows damp sheathing to dry quickly and moisture vapour to escape. This ensures a healthy indoor environment and reduces the likelihood of mould, mildew, condensation, timber distortion and metal corrosion.

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 sealed on site in a simple process. It can also be used for complex detailing where you need to protect part of the tape from bonding to areas until its needed. The split can be accommodated at any position across the reverse of the tape allowing flexibility of taped lap.



Wraptite Tape - Split Liner

Please note: Colour may vary for Wraptite Tape and Wraptite Tape Split Liner

Key Benefits - Tape and Split Liner

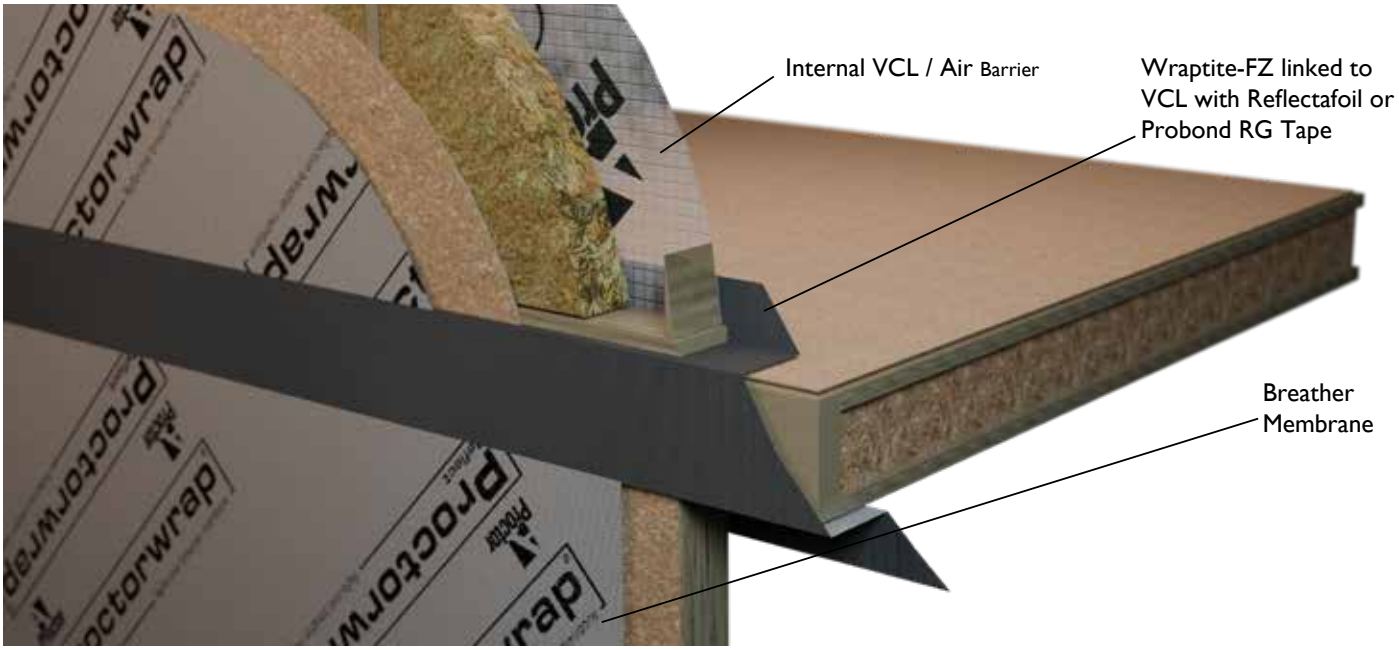
- Vapour permeable tape used to protect exposed joints in insulation
- Airtight
- Simple to use when detailing joints
- Ultimate airtightness accessory
- Can seal joints in mechanically fastened air barrier

Key Benefits - Wraptite Split Liner only

- 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

WRAPTITE® FLOOR ZONE

Wraptite-FZ is a vapour permeable air barrier membrane for use at floor junctions. It is flexible and lightweight, and offers temporary protection against wind driven rain, snow and dust and is supplied in 750mm roll widths for easy site handling. Wraptite-FZ conforms to the Construction Products Directive and is manufactured under control of an ISO9001 quality management system.

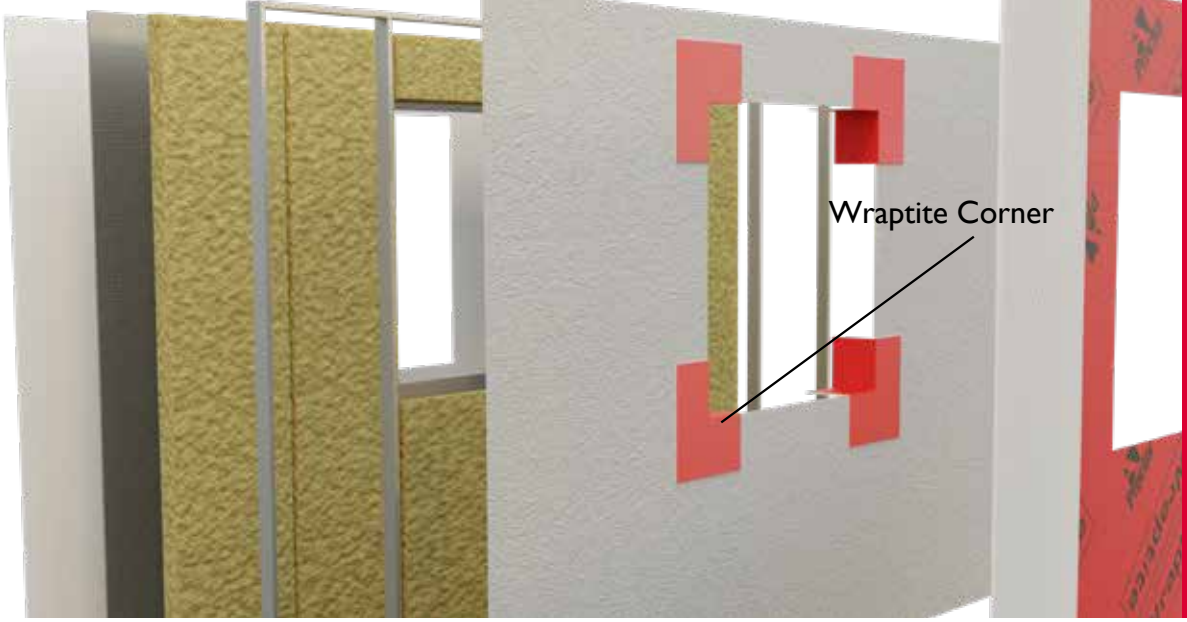






Key Benefits

- Provides continuity of internally applied air barriers around floor zone junctions in new build developments
- Allows temporary protection to the floor zone during construction
- Reduces risk of condensation within the floor cassette



Applications

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

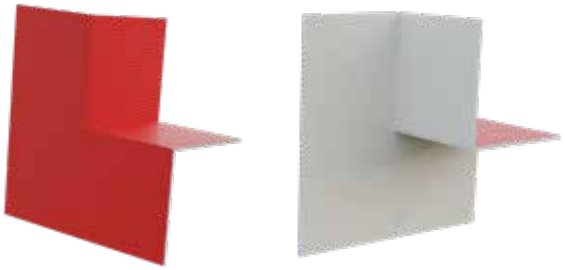
WRAPTITE® CORNERS

Wraptite Preformed Airtight Corners have been developed for the difficult areas around doors and windows where a well maintained barrier continuity is difficult and time consuming. Wraptite corners' simple design and installation process makes sealing openings against air leakage simple, just peel off the release liner, stick the corners in place, then install the Wraptite membrane as normal. This helps achieve the best possible results in the shortest possible time.

Once installed, the corner sections provide the same vapour permeable air barrier performance as the Wraptite membrane itself, ensuring air leakage and water ingress are minimised without trapping construction moisture or causing condensation.



Please note: Colour may vary



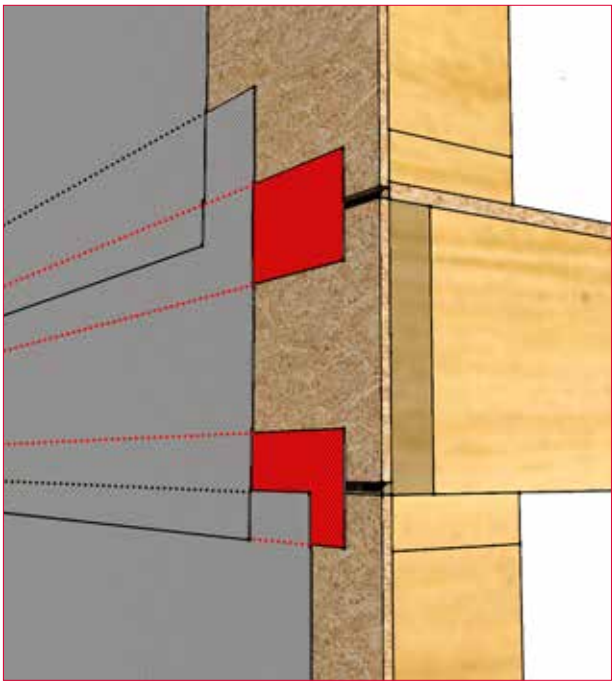
Key Benefits

- Airtight, yet vapour permeable
- Self-adhering
- Flexibility, facilitating ease of application and detailing
- Wide operating temperature range (-40°C to +100°C)

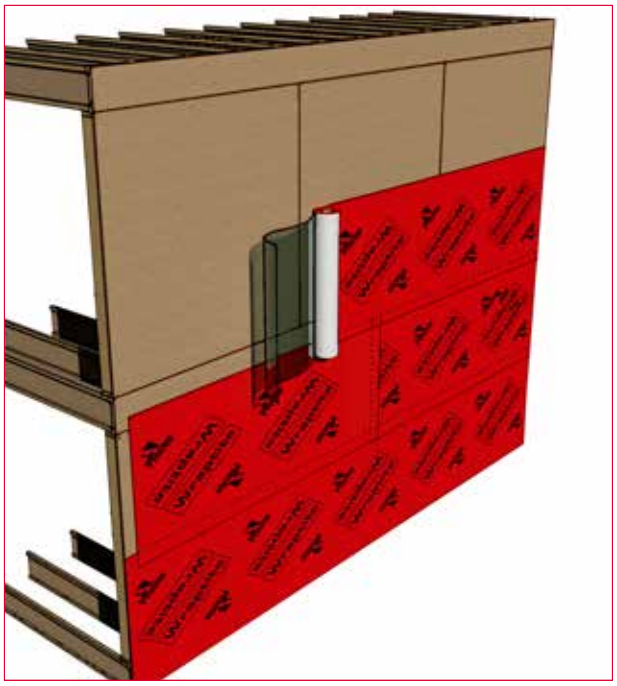
Wraptite accessories are available for both Wraptite and Wraptite UV applications.

PRODUCT APPLICATION DETAILS

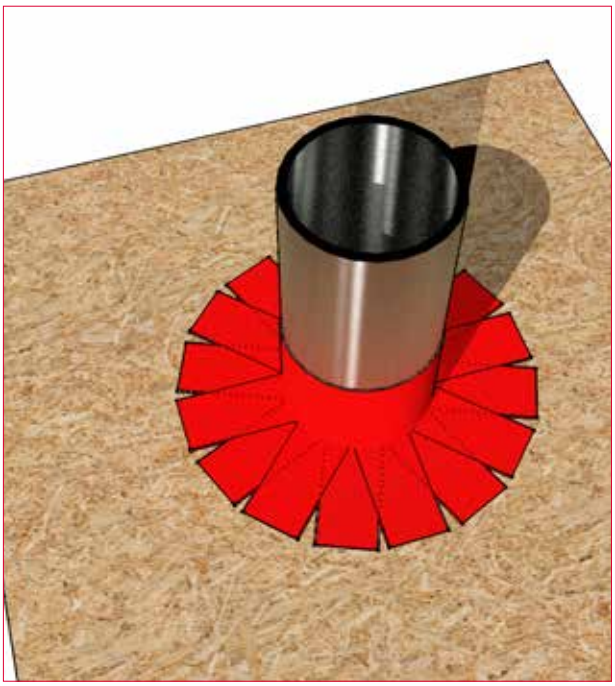
Penetrations in sheet material such as pipes, ducts and electrical work require to be sealed to stop air leakage from the structure.



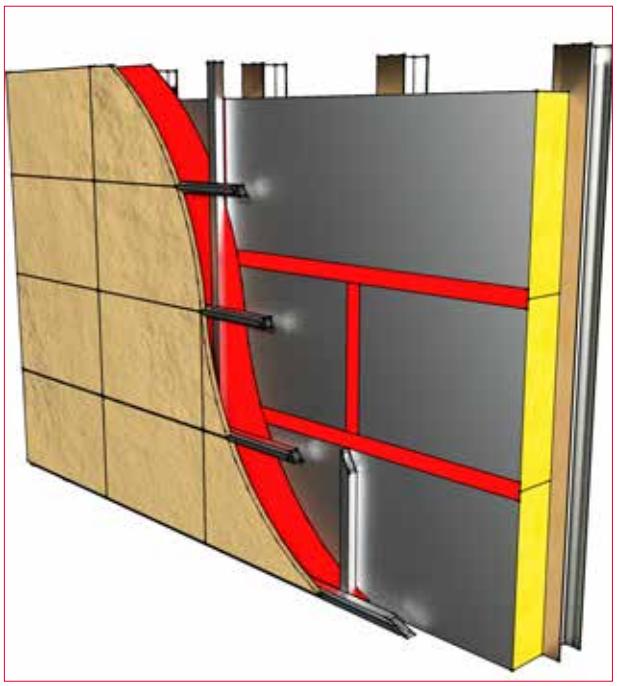
Floor junction on installation



Horizontal over sheathing



Pipe seal



Seal joins of rigid insulation with Wraptite tape / or use Wraptite

Customers must complete their own assessment of the product for its intended use. For any new applications other than those shown, please liase with our technical department as regards suitability on 01250 872261.

PRODUCT APPLICATION DETAILS

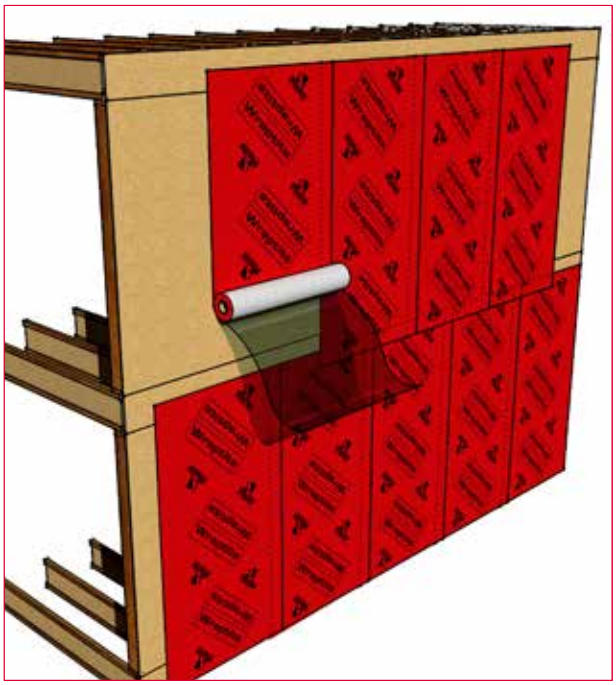
Detailing with Wraptite Tape is quick and simple, providing an ideal solution to what can be an expensive problem.



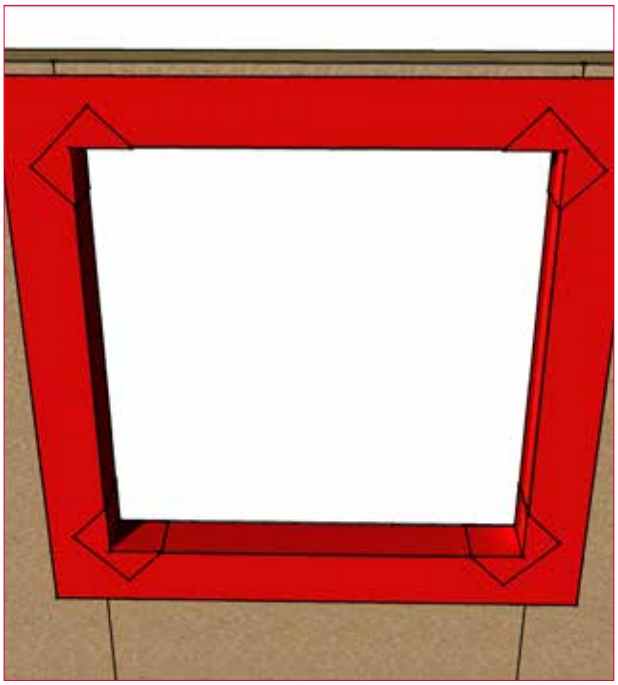
Expansion Joint



Draughtproofing



Vertical over sheathing



Window Flashing

Customers must complete their own assessment of the product for its intended use. For any new applications other than those shown, please liase with our technical department as regards suitability on 01250 872261.

PHYSICAL PROPERTIES

Wraptite

PROPERTY	TEST/STANDARD	RESULT
	BS EN 13859-1/2:2010	
Roll Length	-	50m
Full Roll Width Tape Widths	-	1.5m 75mm, 100mm, 150mm, 300mm (other sizes available on request)
Roll weight		24kg
Nominal Thickness	Calibrated Deadweight Micrometer	0.65mm
Basis Weight	Electronic Weigh Scale	292 g/m^2
Installation Temperature	-	-10°C to +60°C
Service Temperature	-	-40°C to +100°C
Water Penetration	EN 1928 : 2000 Method A	Class W1 (before ageing) Class W1 (after ageing)
Resistance to Penetration of Air	EN 12114	0.01 m^3/m^2.h.50 Pa
Water Vapour Permeability	EN ISO 12572 (C)	Sd 0.039m
Water Vapour Transmission	BS 3177:1959	893 g/m^2.24hr
Peel Adhesion	EN 1939	5.01 N/10mm
Tensile Strength	EN 12311-1	Mean MD 417N Mean XD 252N
Tear Resistance	EN 12310-1	Mean MD 412N Mean XD 286N
Dimensional Stability	EN 1107-2	MD +0.3% XD +0.1%
Reaction to Fire	EN 11925-2 BS EN 13501-1	Class B-s1,d0[1,2]
Flexibility at Low Temperature	EN 1109	No cracks at -40°C

[1]tested over 12mm calcium silicate board / fibre cement board as per BS EN 13238:2010.

[2]free hanging. It is unlikely that any breathable membrane in this application, including Wraptite would be free hanging due to either the self-adhered backing in Wraptite or the tapes used in installing non-self-adhered membranes. This test result is included to allow product specifiers to objectively compare Wraptite to other membranes tested using this method, and does not constitute a recommendation that Wraptite is installed free-hanging. Clients are urged to discuss their individual project with the Technical Department to ensure the suitability for any given project taking into account substrate, building height and boundary proximity.

All tests carried out to EN 13859-2:2010 standard.

Wraptite UV

PROPERTY		TEST/STANDARD	RESULT	
		BS EN 13859-2:2010		
Roll Length			50m	
Roll Width			1.5m	
Nominal thickness		Calibrated Deadweight Micrometer	0.38mm	
Basis Weight		Electronic Weigh Scale	392 g/m^2 (incl. liner)	
Installation temperature			-10° to +60°C	
Service temperature			-40° to +100°C	
Water penetration	Before ageing After ageing	EN 1928:2000 Method A	Class W1 (before ageing) Class W1 (after ageing)	
Water Vapour Permeability		EN ISO 12572 (C)	Sd 0.06m	
Tensile strength	Before ageing After ageing	EN 12311-1	MD 490N/50mm MD 480N/50mm	CD 330N/50mm CD 310N/50mm
Tear resistance		EN 12310-1	MD 327.38N CD 453.38N	
Dimensional stability		EN1107-2	MD -0.32% CD -0.15%	
Flexibility at low temperature		EN 1109	No cracks at -40°C	
Reaction to Fire		BS EN 13501-1	Class B-s2,d0*	

**tested over 12mm calcium silicate board as per BS EN 13238:2010.*

Wraptite FZ

PROPERTY	TEST / STANDARD		RESULT	
	BS EN 13859-2:2010			
Roll size	-		750mm x 50m 1m x 50m	
Mass per unit area	EN 1849-2		170 g/m^2	
Reaction to fire	EN13501-1		Class E*	
Water vapour resistance Sd	EN 12572		0.029 m	
Water penetration	EN 1928	Before ageing After ageing	Class W1 Class W1	
Tensile strength	EN 12311-1	Before ageing After ageing	MD 400N (-80N) MD ≥50%	CD 260N (-50N) CD ≥50%
Elongation	EN12311-1	Before ageing After ageing	MD 80% MD ≥50%	CD 100% CD ≥50%
Tear resistance	EN 12310-1		MD 190N (-50N)	CD 190N (-50N)
Flexibility at low temperature	EN1109		No cracking at minus 60°C	

*When tested to EN 11925-2

Wraptite LF

PROPERTY	TEST / STANDARD	RESULT
	BS EN 15651-1:2012	
Chemical base	1-component silicone	
Colour	CQP001-1	Black
Cure mechanism		Moisture-curing
Cure type		Neutral
Density	uncured	1.5 kg/l
Non-sag properties	CQP061-4 / ISO 7390	good
Application temperature	ambient	5 to 40 °C
Skin time	CQP019-1	25 minutes[A]
Tack free time	CQP019-3	120 minutes[A]
Shore A hardness	CQP023-1 / ISO 7619-1	30[B]
Tensile strength	CQP036-1 / ISO 527	1.0 MPa
100 % modulus	CQP036-1 / ISO 527	0.3 MPa
Elongation at break	CQP036-1 / ISO 527	800 %
Tear propagation resistance	CQP045-1 / ISO 34	4.0 N/mm
Service temperature		-40 to 150 °C
Shelf life	CQP016-1	600ml sausage - 12 months[C]

CQP = Corporate Quality Procedure

[A]23 °C / 50 % r. h.

[B]after 28 days

[C]storage below 25 °C

Technical Support

Our products are backed up by a dedicated team of technical experts, able to assist at every project stage from pre-planning to on site. We offer CAD detail reviews, installation guidance, condensation risk analysis, WUFi calculations, U-Value calculations, ground gas system designs, telephone support & more. Our products also have a range of BIM Objects & Performance Specifications.



Customer Focused

- Online Technical Advice
- Members Area / Onsite App
- WUFI & U-Value Calculations
- Condensation Risk Analysis
- CAD Design
- Site Advice
- CPD Presentations
- Accreditations
- System Design

Expertise and know-how to support your project

CONDENSATION RISK ANALYSIS

Condensation can significantly reduce the effectiveness of insulation, and result in damage to the building fabric.
A Condensation Risk Analysis evaluates the likelihood of interstitial condensation in your roof or wall construction. These calculations are regularly required by building control to demonstrate compliance with building regulation requirements. Calculations are performed free of charge when using our products.

BIM DATA

Available through NBS Chorus and NBS Source, specifiers can now access a full suite of digital products and technical specifications for many of our product solutions. The collaboration with NBS provides architects and designers with a comprehensive technical specification writing service. In addition, specifiers have easy access to the manufacturer's specification data, BIM objects, literature and third-party certifications.

PRODUCT DIVISIONS

We provide a wide range of high quality solutions which meet the continuously evolving requirements of the construction industry.

Product divisions include:

- Condensation Control
- Acoustics Floor Solutions
- External Airtight Barriers
- Ground Gas Protection
- Thermal Solutions

Get in touch for more information
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contact@proctorgroup.com

Case Study - State-of-the-art college to benefit from superior airtightness

The superior airtightness performance qualities of the Wraptite air barrier system will enhance a new state-of-the-art development at St Dunstan's College - a co-educational independent school in Catford, London.

Contractor Willmott Dixon will deliver the new Junior School, STEM building and Sixth Form Hub at St Dunstan's.

Designed by Bond Bryan Architects, the new development will be sited adjacent to the existing historic Headmaster's House and connected by a glass atrium. Phase one includes a new junior school with specialist facilities for art, music and performance, and phase two includes the construction of the STEM Centre and Sixth Form Hub.

A vital element of the design and construction is to maximise the energy efficiency of the new buildings: Wraptite airtightness membrane, the only self-



adhering vapour permeable air barrier certified by the BBA, will form a crucial part of the solution.

The inclusion of Wraptite within the facade will ensure "as-designed" performance, narrowing the gap between as-designed and actual energy performance and reducing the likelihood of potential failures to meet required airtightness levels.





" 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, A. Proctor Group Ltd

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