



ProctorPassive Wraptite SA & UV-SA System Guide



January, 2024 - VI

About DriSpace

DriSpace, a division of TCL Hunt, a New Zealand-based company tracing its roots back to 1937, was established in response to the widespread internal moisture issues and air leakage plaguing buildings throughout NZ, resulting in damp and cold homes and buildings.

Driven by a strong determination to combat these challenges, the DriSpace team engaged in close collaboration with industry experts, including VENT NZ and Proctor Group Australia. The result is DriSpace systems delivering unique external airtight envelope solutions, providing an effective and innovative approach to address moisture issues and air leakage in buildings.

About Proctor Passive

Proctor Passive systems are developed by Proctor Group Australia, a recognised expert in membrane systems affiliated with Proctor Group UK. With 50 years of industry service, the A. Proctor Group provides a trusted portfolio.

Proctor Group Australia (PGA), established since 2005, is renowned in the Australian and New Zealand construction industry for its high-performance thermal and acoustic insulation. Specialising in geotextiles and vapour-permeable construction membranes, PGA leverages its 100% Australian ownership to solve challenges through global experience in research and product development. Solutions are tailored to local climates, regulations, and practices. Committed to expansion, PGA aims to enhance its product range in Australia and New Zealand by understanding local customer needs and introducing innovative products and systems from around the globe.



■ Bendigo GovHub, Bendigo



■ Cere's House, Victoria



■ Eyre Lane, Sheffield

External Airtight Membranes.....	page 3 & 4
ProctorPassive Wraptite SA	page 5
ProctorPassive Wraptite UV-SA	page 6 & 7
System Accessories	page 8
Tape Solutions for windows & openings	page 9
Liquid Flashing Solutions for windows & openings	page 10
Airtightness Simplified	page 11
Vapour Permeance Optimised	page 12
Technical Properties	page 13 - 15

External Airtight Membranes

Why are airtight membranes needed?

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 a significant reduction in the performance of even thermally insulated building envelopes.

The two main ways to achieve airtightness in the building envelope are internally or externally, or in other terms, 'inside of the services zone' or 'outside of the services zone'. The use of traditional internal air barriers can be more complex and costly to install, due to the need to accommodate building services such as electrical, lighting, heating and drainage systems. An internal air barrier is only as good as it's installation. If all the service penetrations are not adequately sealed, performance will be compromised.

By moving the air barrier to the external side of the structural frame, external air barrier systems such as Wraptite allow for an almost penetration-free airtight layer, which can be installed faster and more robustly. Far simpler than internal options an external air barrier system like Wraptite will maintain the envelope's integrity, with less building services and structural penetrations to be sealed, and less room for error.

ProctorPassive Wraptite

External Airtight Membranes

Wraptite is a unique external airtight solution, which is not only highly vapour permeable, yet airtight – but also self-adhered to ensure a consistent airtight external seal.

There are two grades of Wraptite self-adhesive airtight membranes:

- Wraptite SA: closed joint cladding applications
- Wraptite UV-SA: for high uv applications e.g. behind open-joint cladding

Moving the air barrier to the outside of the building, away from the 'services zone' means there are far fewer potential penetrations to the air barrier and that there is no requirement for expensive specialist components such as airtight junction boxes, light switches or downlighter hoods.

Our range of Wraptite external air barriers solve the problem of reliably achieving airtightness in buildings, with two robust solutions for windows and openings comprising of either DriFlash Tape or Liquid Flashing options. This new approach saves on both the labour and material costs associated with meeting the demands of modern energy efficiency requirements in both commercial and residential buildings.



Multiple Substrate Compatibility

- Exterior Grade Gypsum/Fibre Board
- Galvanized Metal
- In-Situ Concrete
- OSB & Plywood
- Precast concrete
- Pre-painted steel
- Rigid Vinyl
- Steel
- CLT
- Aluminium (painted or mill finish)
- Anodised aluminium
- Concrete Block

Wraptite SA

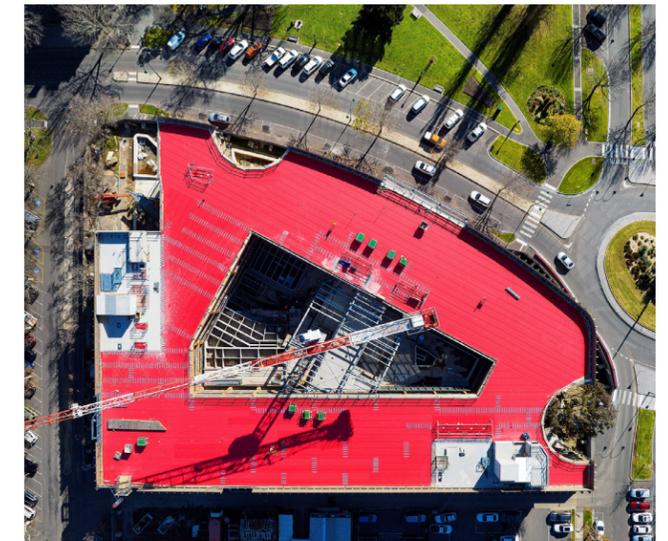
for closed joint cladding application

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 excellent choice for this application.

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



■ Repton Gardens, Wembley Park



■ Bendigo GovHub, Bendigo



WRAPTITE SA

- Self-adhering airtight and vapour permeable membrane for wall and roof applications
- CodeMark Certified
- Low initial tackiness for ease of installation
- Multiple substrate compatibility
- No primer required on most clean substrates down to -6°C
- Low Flammability Index (FR Index: 1)
- Tear, rip and puncture resistant, reducing install costs
- Zero VOCs, and free of any chemicals on the Red List
- Passive House Institute Certified Component pH A

PRODUCT SIZE

Roll Width	1500mm
Roll Length	50m
Coverage	75m ²

Wraptite UV-SA

for open joint cladding application

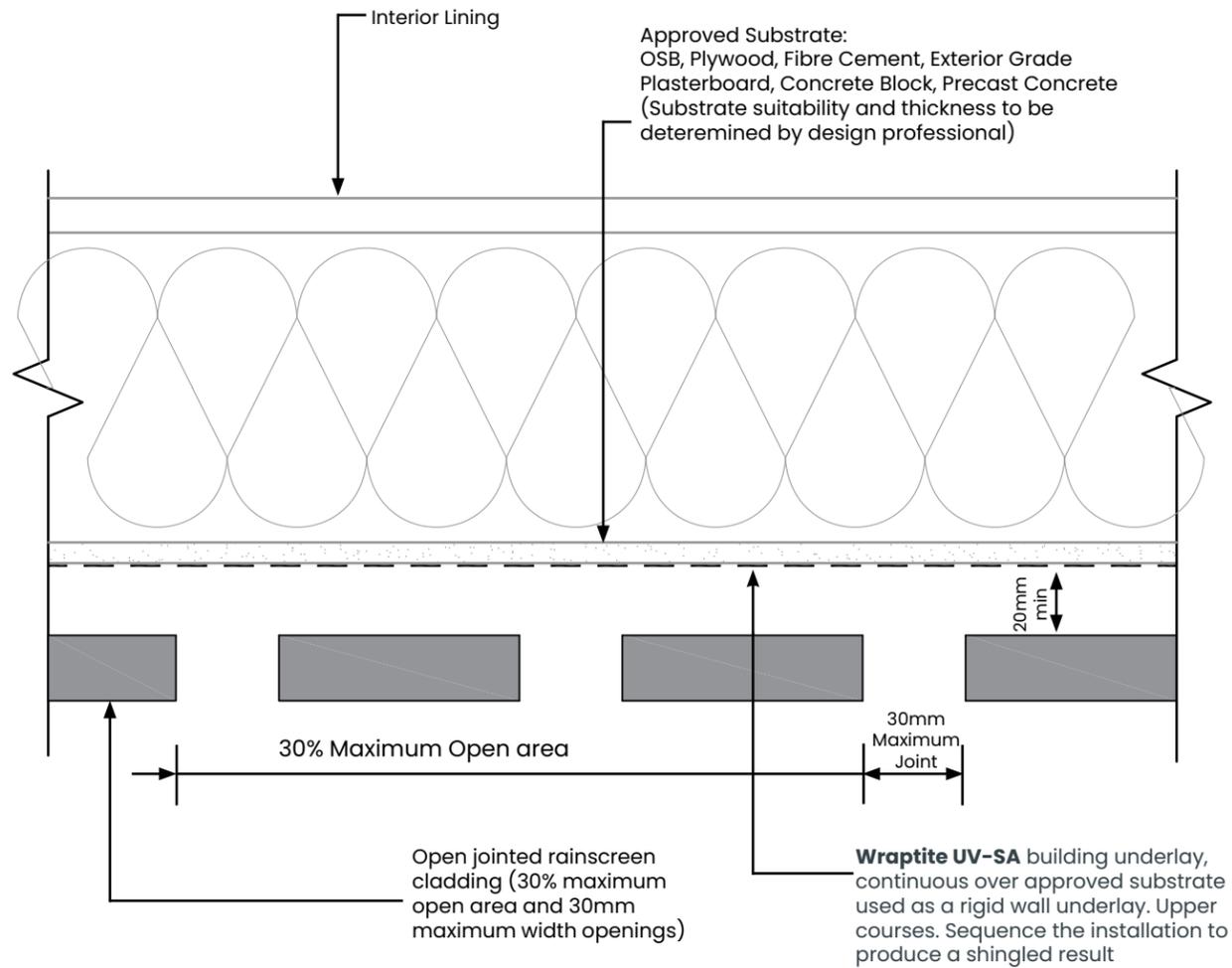
Introducing CodeMark Certified ProctorPassive Wraptite UV-SA – Setting a New Standard in External Airtight Solutions for Open Joint Cladding applications.

Wraptite UV-SA has exceptional water resistance and UV resistance to allow for a 'shadow' appearance within open rainscreen façades. Manufactured from polyester non-woven textile and a functional UV resistant vapour open 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 to depending on environmental conditions.

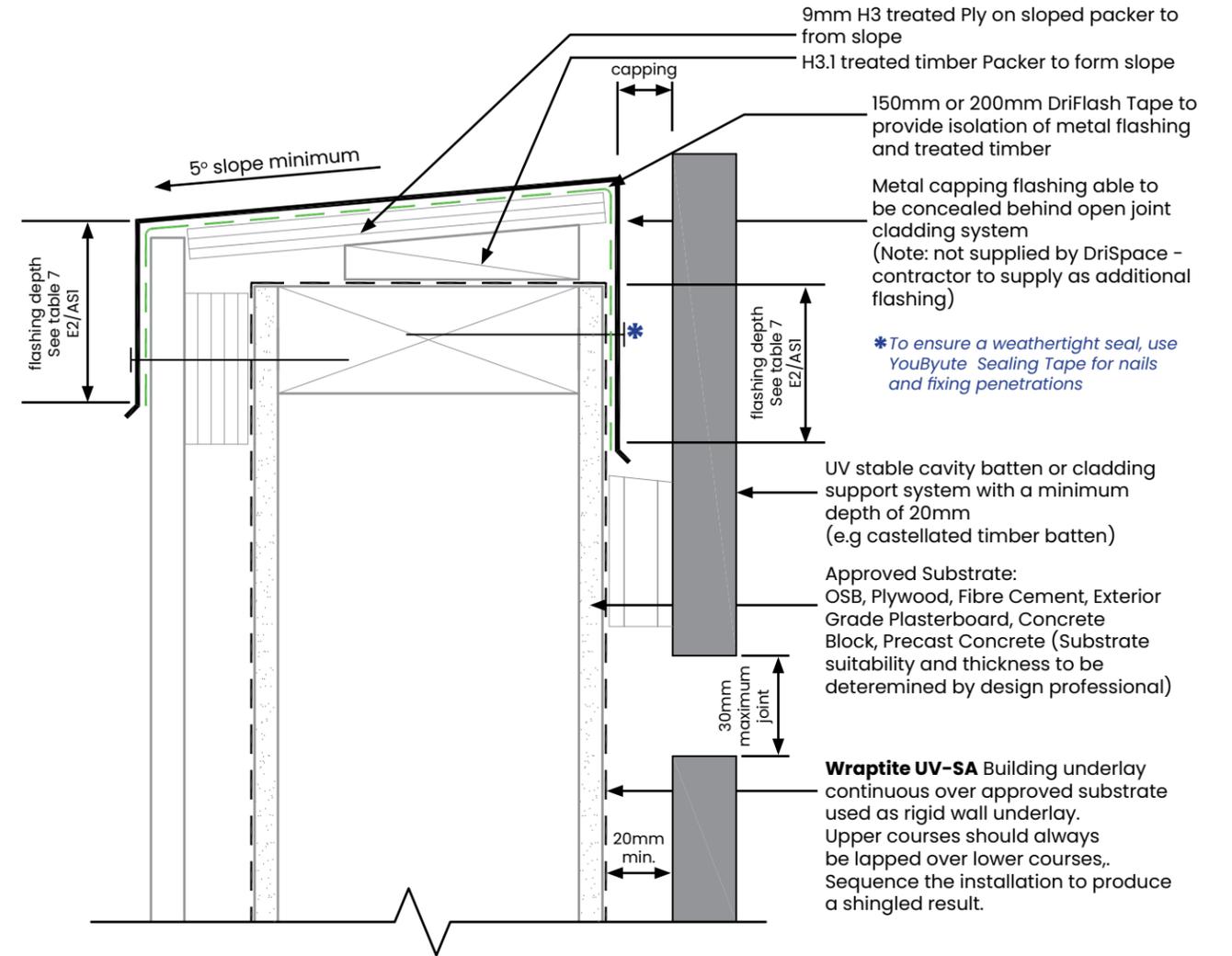
Wraptite UV-SA prevents lateral air movement enhancing the buildings thermal performance. With a vapour resistance of 0.67MNs/g vapour permeability in a commercial quality, self-adhered, airtight breathable membrane.

To protect the membrane from mechanical damage, the joint openings in the facade covering have to be less than 30 of the area and maximum 30mm wide.



Wraptite UV-SA

Revolutionary self-adhesive membrane that enables open joint cladding on a cavity, over a direct fixed substrate – approved by CodeMark



WRAPTITE UV-SA

- Self-adhering
- CodeMark Certified
- For prolonged UV exposure or open joint cladding application
- Vapour permeable adhesive layer
- High vapour permeance
- Tough material resists punctures and tears
- Multiple substrate compatibility
- Low VOC's
- Exceptional airtightness

PRODUCT SIZE	
Roll Width	1500mm
Roll Length	50m
Coverage	75m ²



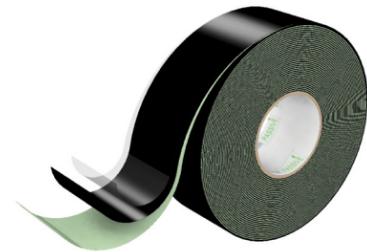
PROCTOR DRIFLASH TAPE

- Window flashing tape with high vapour permeance
- Suitable for High UV Exposure areas
- No primer required on most clean substrates
- Tough material; resists punctures and tears
- Multiple substrate compatibility
- Wide service temperature range
- Low VOC's
- Initial low tack for adjustability
- Exceptional for airtightness

AVAILABLE SIZES

150mm x 25m

200mm x 25m



PROCTOR YOUBYUTE FLEXI TAPE

- Suitable for corner mould applications
- Highly stretchable
- High tack
- Long term water resistance
- High ageing resistance
- Air and water tight
- Low emission of VOC

AVAILABLE SIZES

80mm x 10m



APPROVED WRAPTITE LIQUID FLASHING GORILLA FIXALL FLEXI SEALANT ADHESIVE (supplied elsewhere)

- Multi use
- Bonding and sealing applications
- Highly flexible
- Primerless adhesion
- Mould resistant
- Does not contain solvents, isocyanates, acids, halogens and toxic components, completely neutral
- Good weather and UV resistance
- ALL materials, ALL surfaces (except on PE, PP, PTFE and Bitumen)
- Non staining
- Virtually odourless
- Can be painted with water-based systems
- Interior and exterior applications

DRIFLASH TAPE

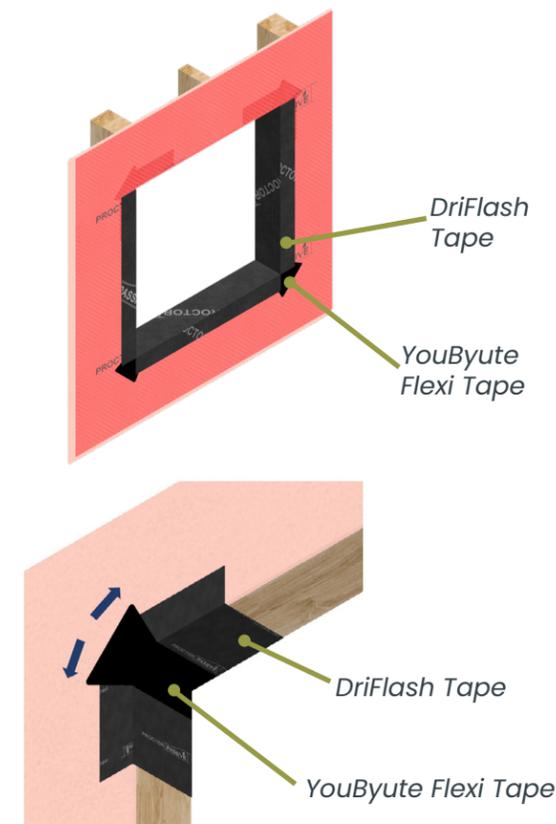
An ultimate airtight solution for airtight sealing around the windows. DriFlash Tape stands out as a UV-resistant, highly vapour-permeable tape designed with a unique vapour-open acrylic pressure-sensitive adhesive with superior ageing resistance. With a vapour permeability of 0.67MNs/g, making it the most vapour-permeable sill tape available in NZ. DriFlash Tape is a smart solution for preventing air leakage around openings while allowing trapped water vapour to escape.

YOUBYUTE FLEXI TAPE

YouByute Flexi Tape features strong adhesion and is made from highly stretchable PE butyl rubber tape, ensuring lasting water and ageing resistance. Ideal for sealing overlaps in edges, corners, and locations requiring high weathertightness, airtightness, and flexibility in the tape. YouByute Flexi Tape is to be applied at window corners in conjunction with DriFlash tape for optimal performance.

DETAIL FOR BITUMINOUS MEMBRANE

Apply Soudal's Gorilla BlackJack bituminous sealants between Wraptite SA and/or Wraptite UV-SA and the bitumen waterproofing membrane. Ensure that Wraptite SA adheres securely to the waterproofing membranes.



Opening prior to DriFlash & YouByute Flexi Tape

Option Two: Liquid Flashing Solutions

LIQUID FLASHING SOLUTION

APPROVED LIQUID FLASHING FOR WRAPTITE SA AND UV-SA: [GORILLA FIX ALL FLEXI](#)

Gorilla Fix All Flexi is multi use, mould resistant sealant, adhesive and filler with high flexibility. It can be applied in all weather conditions.

Internal and external use:

Primerless adhesion on most construction materials, including wet and damp surfaces. Specially formulated to react to those possible rapid changes in movement (expansion & contraction) that many building elements undergo.

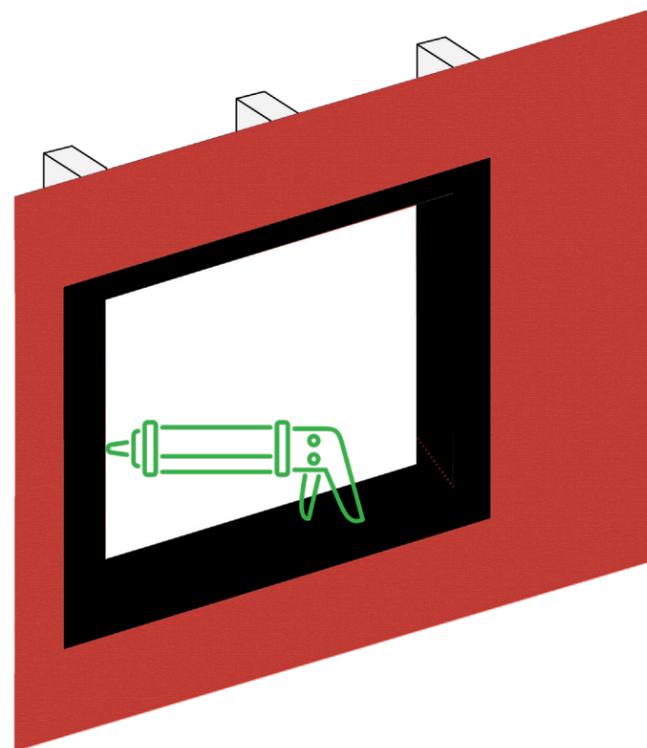
Gorilla Fix All Flexi is compatible with both Wraptite SA and Wraptite UV-SA providing an airtight solution for airtight sealing around the windows and openings. This liquid flashing is ideal for use in complex details and it can be used to protect the leading edge of the Wraptite membrane or tape from water penetration if the edge can not be protected by overlapping in a shingle fashion.

DETAILS FOR BITUMINOUS MEMBRANE

Apply Soudal's Gorilla Blackjacket bituminous sealants between Wraptite SA and/or Wraptite UV-SA and the bitumen waterproofing membrane. Ensure that Wraptite SA adheres securely to the waterproofing membranes.

SEALANTS COMPATIBLE WITH APPROVED LIQUID FLASHING:

- Gorilla Fix All Flexi
- Soudal Gorilla 940 FC
- Dowsil 791
- Dowsil 795
- Dow 688



Airtightness Simplified



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 function, but consideration of local climate and position in the building envelope will determine if these must be vapour open, vapour tight or vapour diffusion variable.

BENEFITS OF AIRTIGHT BUILDINGS:

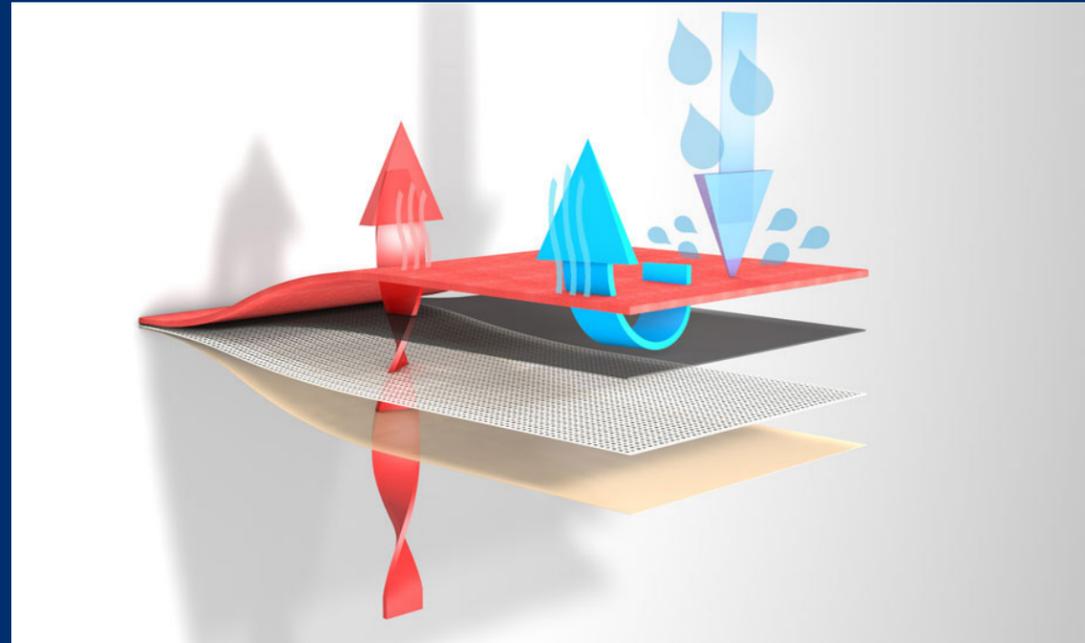
- More thermally efficient
- Reduce energy costs
- Lower CO₂ emissions
- Reduce interstitial condensation
- Improved performance of HVAC
- Improved health and comfort for occupants

Appendix

Wraptite SA & UV-SA Technical Properties

Vapour Permeance Optimised

Elevate performance with uncompromised vapour permeance



Wraptite SA: 0.243MNs/g

Wraptite UV-SA: 0.67MNs/g

With water vapour resistance of 0.243 MN s/g and 0.67 MN s/g for Wraptite SA and UV-SA respectively, Wraptite's high vapour permeability means any construction moisture can dry out rapidly, reducing the likelihood of mould and 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.

PROPERTIES	TEST METHOD	WRAPTITE SA RESULT	WRAPTITE UV-SA RESULT
Nominal Thickness	Calibrated deadweight micrometre	0.65mm	0.38mm
Weight (excludes release liner)	Electronic weight scale	240g/m ² (±10g/m ²)	340 g/m ² <i>without release liner</i>
Installation Temperature	-	-6°C to +60°C	-10°C to +60°C
Service Temperature	-	-40°C to 100°C	-40°C to 100°C
Water Resistance	AS/NZS 4201.4	Water Barrier: High	Water Barrier: High
Air Permeance	AS/NZS 4200.1, ISO 5636-5 EN 12114 ASTN 2178	Air Barrier (≥0.1 MNs/m ³) 0.01 m ³ /m ² .h @50Pa 0.000134 L/s/m ² @ 75Pa	Air Barrier (≥ 0.1 MNs/m ³) 0.01m ₂ /m ² .h @50Pa 0.0000134 L/s/m ² @75Pa
Water Vapour Permeance (Resistance)	ASTM E96- Method B: AS4200.1:2017	0.243 MN s/g (permeance of 4.1 µg/N.s)	1.5 µg/N.s 0.67 MN s/g
Vapour Barrier Classification	AS/NZS 4200.1:2017	Vapour Permeable: Class 4	Vapour Permeable: Class 4
Peel Adhesion	ASTM D3330	>0.26N/mm	
Dimensional Stability	EN 1107-2	MD: - 0.34% CD: + 0.02%	MD: - 0.32% CD: + 0.15%
Resistance to Dry/Wet Delamination	AS/NZS 4201.1, /4201.2	Pass/Pass	Pass/Pass
Flammability Index	AS1530.2*	Pass: 1 (low)*	Pass: 1 (low)*
Reaction to fire	EN 11925-2, BS EN 13501-1	Class B, s1, d0†	Class B, s2, d0†
Duty Classification	Table 1 AS/NZS 4200.1	Light	Light
Tensile Strength	AS 1301.448	MD: 7.9kN/m CD: 4.5kN/m	MD: 7.7 kN/m CD: 5.1kN/m
Edge Tear Resistance	AS/NZS 4200.1:2017	MD: 379N CD: 225N	MD: 409N CD: 275N
Material Type (Fire Performance)	ISO5660	(results pending)	(results pending)
UV Exposure	ASTM G154	200 days wall, 100 days roof	Up to 9 months

*Tested with release liner removed and adhered to 0.127 mm thick aluminium foil.

†Tested over 12mm Calcium Silicate Board as per BS EN 13238:2010

Appendix

System Tapes Technical Properties

YouByute Flexi Tape

YouByute Flexi tape is a strong adhesive highly stretchable PE butyl rubber tape with lasting water and ageing resistance. Used in roof and wall construction as a tape for permanent sealing of air barriers, roof underlays, building wraps and around doors, windows and pipes. The tape is suitable for sealing overlaps in edges and corners and locations that require a high degree of flexibility in the tape.

PROPERTIES	NOMINAL VALUE
Adhesive Carrier	0.02mm Transparent PE Film
Adhesive Type	Butyl Rubber Adhesive
Total Thickness	2.0mm (uncompressed)
Liner	Silicone Paper - Finger Lift
Peel Adhesion	≥ 10 N/25mm
Tensile Strength	15 N/25mm
Elongation at break	>300%
Temperature Range	-30°C to +80°C
Application Temp.	+5°C to +40°C
Shelf Life	1 year in original packing stored uncompressed protected from UV in a dry location at 5°C to 25°C
Roll Dimensions	80mm x 10m
Packaging	6 rolls per carton

DriFlash Tape

DriFlash Tape is a UV resistant single sided highly vapour permeable and air tight tape made with a unique vapour open acrylic pressure sensitive adhesive with superior ageing resistance, and a useful way of stopping unnecessary air leakage around openings and overlaps.

PROPERTIES	NOMINAL VALUE
Adhesive Carrier	Vapour permeable, airtight and water resistant polyacrylic, coated spun-bond polyester
Adhesive Type	Vapour open polyacrylate adhesive
Nominal Thickness	0.38mm
Peel Adhesion	≥ 0.26 N/mm
Air Permeance	≤ 0.01 m ³ /m ² .h@ 50Pa
Tensile Strength	15 N/25mm
Temperature Range	-40°C to +100°C
Application Temp.	-10°C to +60°C
UV Exposure	Up to 9 months
Vapour Permeance	1.5 µg/Ns (Resistance 0.67 MNs/g)
AS4200.1 Vapour Barrier Classification	Vapour Permeable: Class 4
Roll Dimensions	150mm x 25m 200mm x 25m

Appendix

UV Exposure

UV Exposure Values: Max # Days

Wall application

LOCATION	SA (Closed joint face sealed Façade)	UV-SA (Open joint façade with conditions**)	UV-SA (Closed joint face sealed façade)
Auckland	200 days	120 days	270 days
Wellington	200 days	120 days	270 days
Christchurch	200 days	120 days	270 days
Dunedin	240 days	120 days	270 days

Roof application

LOCATION	SA (Closed joint face sealed Façade)	UV-SA (Open joint façade with conditions**)	UV-SA (Closed joint face sealed façade)
Auckland	100 days	120 days	270 days
Wellington	100 days	120 days	270 days
Christchurch	100 days	120 days	270 days
Dunedin	100 days	120 days	270 days

Temporary Exposure Guidance: Best Practice

1. Cover as quickly as possible with the primary water shedding layer to keep maximum exposure to a minimum - ESPECIALLY WHEN USING FOR ROOF APPLICATION.
2. Exposure periods have been calculated based on UK conditions and testing, and converted to accurately reflect UV exposure periods in New Zealand and Australia
3. Vapour and air tightness is expected to remain unchanged during the stated exposure period.
4. Separate exposure periods for walls and roofs due to orientation and risk.
5. For longer UV exposure times, including open joint façade applications, consider using Wraptite UV-SA.



Email: technical@drispace.co.nz
Phone: 0800 374 7883
www.drispace.co.nz