

Permeable Membranes

Product Guide



SISALATION
The Original and The Best

Weather control on a roll

Fletcher
Insulation



Sisalation® Permeable Membrane

The breathable structure of the Sisalation® Permeable Membrane range allows moisture vapour to pass through it, to facilitate drying in wall and roof systems which thereby assists in preventing the growth of mould & mildew.

Best For

Sisalation® Vapawrap™ Wall and Sisalation® Vapawrap™ Metal Roof are designed for use in Australia's colder regions where a vapour permeable membrane may be required. They are not recommended for Walls or Roof applications in NCC Climate Zone 1.

Sisalation® Vapawrap™ Wall is suitable for use behind lightweight cladding such as fibre cement sheets, weatherboards and timber; and may also be used in brick veneer constructions. It is important that the cladding manufacturer's requirements are referred to when determining the suitability of Sisalation® Vapawrap™ Wall for a given system.

Sisalation® Vapawrap™ Wall is designed to comply with the requirements of AS/NZS:4200.1. It features a waterproof, vapour permeable membrane which is laminated and reinforced to a spun-bonded polymer fabric.

Sisalation® Vapawrap™ Metal Roof is intended for use as a Performance Solution to conventional roof sarking, which are fixed over timber or steel framed roofs in order to limit the entry of wind into the roof cavity, and to assist in the moisture management of the roof cladding system.

Benefits

Sisalation® Vapawrap™ Wall is used as a wall wrap building membrane for residential timber and steel framed walls and gables. Sisalation® Vapawrap™ Wall assists in minimising draughts which enables bulk insulation to perform more effectively.

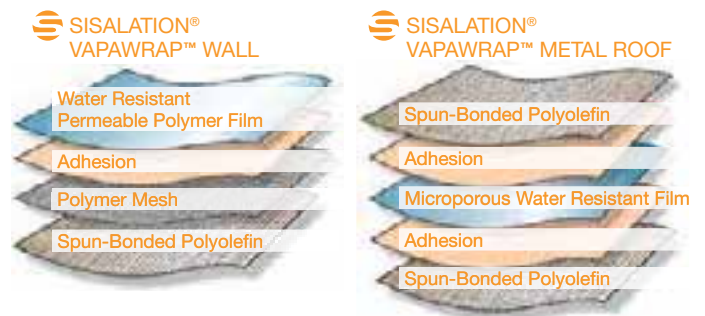
When overlapped and sealed with Tyvek® Contractor Tape, Sisalation® Vapawrap™ Wall provides a secondary skin against liquid water, wind and dust penetration. The effective barrier

also protects the building frame by minimising the accumulation of interstitial condensation.

With a Flammability Index of ≤ 5 in accordance with AS 1530.2:1993, Sisalation® Vapawrap™ Wall is suitable for use in Bushfire Areas with a Bushfire Attack Level (BAL) of 0 - FZ in accordance with AS 3959-2009.

Sisalation® Vapawrap™ Metal Roof has been appraised by BRANZ for use as a self-supporting roof underlay as an alternative solution to in terms of compliance to BCA Volume 1 (class 2 to 9 buildings) Part F1 and BCA Volume 2 (class 1 and 10 buildings) Part 2.2. Sisalation® Vapawrap™ Metal Roof is suitable for use under roof claddings on buildings as a roof underlay or sarking as called up in BCA Volume 1 Part F1.6 and BCA Volume 2 Part 3.5.1.

Product Composition



Sisalation® Permeable Membranes comply with the requirements of AS/NZS:4200.1

Sisalation® Permeable Membranes Range

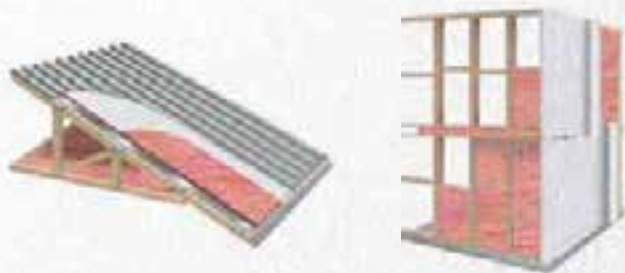
Sisalation® Vapawrap™ Wall

Is a lightweight, high water barrier and highly vapour permeable membrane which is laminated and reinforced to a spun-bonded polymer fabric. The reinforcing mesh provides extra strength providing superior tear resistance.

Sisalation® Vapawrap™ Metal Roof

Features a micro-porous water resistant film sandwiched between two layers of mould and shrink resistant, spun-bonded polyolefin. It provides greater heat shrink resistance compared to traditional polymer-weave based membranes, and is therefore less likely to shrink in a metal roof application. It also helps to mitigate the risk of condensation.

Installation Guidance



Sisalation® Vapawrap™ Wall

Sisalation® Vapawrap™ Wall must be installed in accordance with AS/NZS:4200.2 Pliable Building Membranes and Underlays Part 2 - Installation.

It must be installed horizontally across wall frame with the rougher spun bonded polymer facing outwards.

Starting at a corner location, line up the bottom of the wall wrap with the base of the timber bottom plate, cut at a height so that the wall wrap slightly overlaps the window by approximately 50mm.

Initially fasten the wall wrap at one point, roll the Sisalation® Vapawrap™ Wall along ensuring it is level before fastening.

Roll the wall wrap out to the far end of the subsequent window and affix using mechanical fasteners at a density of not less than 4.5 fixings/m².

If using staples, fix the wall wrap at not less than 11 fixings/m², including the top plate.

If an overlap of 150mm cannot be achieved, provide a minimal overlap of 50mm. This must be taped and sealed using Tyvek® Contractor Tape.

Install the next run of wall wrap leaving a 150mm overlap on the layer of wall wrap below. If the wall wrap is being installed onto

a steel frame, use double sided tape and button head screws to fix the wall wrap to the steel studs. Affix Tek screw fasteners with oversized washers when longer term exposure to weather is expected. This will provide added fixing strength.

Sisalation® Vapawrap™ Metal Roof

Sisalation® Vapawrap™ Metal Roof is suitable for use at pitches less than 10° (minimum 3°). When used at pitches less than 10°, Sisalation® Vapawrap™ Metal Roof must be installed horizontally (parallel to the fascia). At pitches greater than 10°, Sisalation® Vapawrap™ Metal Roof can be installed vertically (from ridge to eave) or horizontally and must span no greater than 1200mm in one direction.

Suitability / Cold Climates

TYPE:	R-VALUE BATTS			
	1.5	2.0	2.5	2.7
Brick Veneer				
Sisalation® 497 Breather	✓	✓	✗	✗
Sisalation® Vapawrap™ Wall	✓	✓	✓	✓
Tyvek® HomeWrap®	✓	✓	✓	✓

TYPE:	R-VALUE BATTS			
	1.5	2.0	2.5	2.7
Lightweight Direct Fix				
Sisalation® 497 Breather	✗	✗	✗	✗
Sisalation® Vapawrap™ Wall	✓	✓	✓	✓
Tyvek® HomeWrap®	✓	✓	✓	✓

TYPE:	R-VALUE BATTS			
	1.5	2.0	2.5	2.7
Lightweight Battened Out				
Sisalation® 497 Breather	✓	✓	✗	✗
Sisalation® Vapawrap™ Wall	✓	✓	✓	✓
Tyvek® HomeWrap®	✓	✓	✓	✓

Technical Specifications

Sisalation® Vapawrap™ Wall

Width mm	Length m	Coverage m ²	Weight per Roll kg	Product Code
1350	30	40.50	4.80	395356

Sisalation® Vapawrap™ Metal Roof

Width mm	Length m	Coverage m ²	Weight per Roll kg	Product Code
1250	40	50.00	11.10	395357

Install using Tyvek® Contractor Tape - 50m length (Product Code: 318053)



Design Specification Considerations

The building specification should specify:

- (a) Where the membrane should be installed within the building system
- (b) Required material properties of the membrane based on building design and function

Permeable Membranes Comparison

Criteria	Reference	Tuff Wrap™ Standard	Tuff Wrap™ Breather	Vapawrap™ Metal Roof	Vapawrap™ Wall
		RESULT	RESULT	RESULT	RESULT
Duty Classification	Table 1 AS/NZS:4200.1	Medium	Medium	BRANZ Appraisal	Light
Vapour Permeability µg/N.s	ASTM E96	0.01	0.3	4.7	5.5
Vapour Resistance MN.s/g	ASTM E96	92	4	0.21	0.18
Vapour Barrier Classification	AS/NZS:4200.1	Medium	Low	Low	Low
Emittance	AS/NZS:4201.5	0.03 (Silver Side)	0.03 (Silver Side)	0.9 (Non Reflective)	0.9 (Non Reflective)
Water Barrier	AS/NZS:4201.4	High	Unclassified	High	High
Absorbency	AS/NZS:4201.6	Unclassified	Unclassified	>100g/m ²	>100g/m ²
Resistance to Dry De-Lamination	AS/NZS:4201.1	Pass	Pass	Pass	Pass
Resistance to Wet De-Lamination	AS/NZS:4201.2	Pass	Pass	Pass	Pass
Shrinkage	AS/NZS:4201.3	<0.5%	<0.5%	<0.5%	<0.5%
Flammability Index	AS/NZS 1530.2	≤ 5	≤ 5	≤ 5	≤ 5
Allowable UV exposure prior to completion of cladding		4 weeks	4 weeks	7 days	8 weeks
Roll Size		1350mm x 30m 1350mm x 60m 1500mm x 30m	1350mm x 30m 1350mm x 60m 1500mm x 30m	1250mm x 40m	1350mm x 30m

Authorised Distributor

Fletcher
Insulation

For Sisalation® Information
Call 1300 654 444
www.insulation.com.au

