

VapourTech® Wall

Product Code: VTW

Vapour Permeable wall insulation

For use behind all types of cladding and in all wall systems in Climate Zones 2-8



VapourTech® Wall is classified as Air Barrier, Water Barrier and Class 4 Vapour Permeable. Very high levels of water vapour are allowed to absorb and diffuse through the core non-woven structure, ensuring that condensation risk is controlled, while outside liquid water cannot penetrate inwards. VapourTech® Wall is chemically non-reactive in conjunction with treated timber and salt conditions close to coastlines.

- > Class 4 Vapour Permeable
- > Advanced water, air and vapour control membrane
- > 90 days UV exposure
- > Triple layer construction for durability
- > Low Flammability, suitable for all BALs in bushfire-prone areas
- > High strength and puncture resistant

Application

VapourTech® Wall is used as a wall wrap behind fibre cement and timber cladding in most Australian climates.

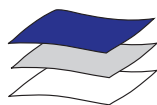
NOTE: For ABCB Climate Zone 1 and north of The Tropic of Capricorn in Climate Zone 2, substitute VapourTech® Wall with a Class 1 or Class 2 Vapour Barrier such as SilverSark® HVB or SilverSark® xR.

VapourTech® Wall can be used as wall wrap in brick veneer systems. Where reflective cavities are desired, SilverWrap™ xRS Micro-perforated is the preferred membrane for brick veneer systems outside of the humid tropics.

If installed behind non-absorbent claddings such as steel, provision should be given for adequate drainage of any trapped moisture.

Construction

VapourTech® Wall is a high permeance building membrane made with three-layer construction: two tough outer layers of spun-bonded fabric protecting an inner core of homogenous high permeance film.



- > Non-woven polymer fabric
- > High permeance membrane
- > Non-woven polymer fabric

Total System R-Values

Light Weight Cladding

fixed to battens with
VapourTech® Wall
+ R2.7 fibrous batt

Winter **R_t 2.92**

Summer **R_t 2.77**

Brick Veneer

with VapourTech® Wall
+ R2.7 fibrous batt

Winter **R_t 2.93**

Summer **R_t 2.78**

R-values apply to typical conditions for mainland Australian capital cities and have been calculated by an independent consulting engineer, in accordance with AS/NZS 4859.2:2018. For detailed design of building systems readers are advised to seek advice from a qualified engineer, based on actual site conditions.

The contributions of this product to the total system R-value depends on installation and environmental conditions. The R-value will be reduced in the event of the accumulation of dust on upward facing surfaces and in those cavities that are ventilated.

Material Properties and Classifications

VapourTech® Wall classifications in accordance with AS/NZS 4200.1:2017

Criteria	Reference	Result	Requirement
Flammability Index	AS 1530.2-1993	Low ≤ 5	High (> 5) / Low (≤ 5)
Nominal Thickness		0.45 mm	≤ 1 mm
Duty	AS/NZS 4200.1:2017	Light Wall	Classification
Ball Burst	AS 2001.2.19-1988	215 N	≥ 200 N
Edge Tear Machine Direction	TAPPI T 470 om-89	189 N	Min 45 N
Edge Tear Lateral Direction	TAPPI T 470 om-89	110 N	Min 45 N
Vapour Control	ASTM E96	Class 4 Vapour Permeable	Class 1 to 4
Vapour Permeance	ASTM E96	3.7640 $\mu\text{g}/\text{N}\cdot\text{s}$	Value
Water Control	AS/NZS 4201.4:1994	Water Barrier	Classification
Air Control	AS/NZS 4200.1:2017	Air Barrier	Classification
Resistance to Dry Delamination	AS/NZS 4201.1:1994	Pass	Pass
Resistance to Wet Delamination	AS/NZS 4201.2:1994	Pass	Pass
Shrinkage (Repeated wetting & drying)	AS/NZS 4201.3:1994	0.0%	$< 0.5\%$
Electrical Conductivity	AS/NZS 4200.1:2017	Non-conductive	Classification
Emittance Value	AS/NZS 4201.5:1994	Printed side: 0.58, White side: 0.56	Value
Emittance Classification	AS/NZS 4200.1:2017	IR Non-reflective, IR Non-reflective	Classification
Emittance Category	AS/NZS 4200.1:2017	NN	Category

NCC Compliant

VapourTech® Wall complies with AS/NZS 4200.1:2017 and therefore meets all of the requirements of the *National Construction Code* of Australia for pliable building membranes, insulation and sarking-type materials.

Vapour Permeance

Vapour Permeance: 3.7640 $\mu\text{g}/\text{N}\cdot\text{s}$

Vapour Resistance: 0.300 MN·s/g

WVTR: 440.190 g/m²·24hr

Tested in accordance with AS/NZS 4200.1:2017.

A detailed hygrothermal analysis is recommended for moisture control in building design.

Fire Performance

Flammability Index

Low (≤ 5)

Tested in accordance with AS1530.2-1993 - *Methods for fire tests on building materials, components and structures Part 2: Test for flammability of materials*.

Bushfire Attack Levels

Complies with AS 3959-2018 *Construction of buildings in bushfire-prone areas* for use in all BALs.

Seek independent advice regarding the selection of sarking prior to installation in the BAL design.

Dimensions

1500 mm x 30 m (45 m²)

Nominal Thickness: 0.45 mm

Specification Notes

When specifying, state the following:

Product Name: Ametalin VapourTech® Wall

The pliable building membrane to be installed shall be Ametalin VapourTech® Wall, very high permeance wall wrap and shall be installed in accordance with AS 4200.2: 2017 *Pliable Building Membranes and Underlays, Part 2: Installation*.

Emittance Value: 0.58, 0.56

Emittance Classification: IR Non-Reflective, IR Non-Reflective

Vapour Permeance: 3.7640 $\mu\text{g}/\text{N}\cdot\text{s}$

Vapour Control Classification: Class 4 Vapour Permeable

Water Control Classification: Water Barrier

Air Control Classification: Air Barrier

Flammability Classification: Low (≤ 5)

Duty Classification: Light Wall in accordance with AS/NZS 4200.1:2017

Complete details available on our website:

<https://www.ametalin.com>

Handling and Storage

Store this product undercover in a clean, dry place in the pack provided out of contact with alkaline products, cement and mortar.

Performance insulation for a greener world

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Ametalin

Durability may be affected by environmental factors, including chemical and airborne pollutants, if used in industrial or farm buildings.

Australian designed for Australian conditions. Ametalin 9-11 Playford Crescent, Salisbury North SA 5108 T: +61 8 8285 6955 F: +61 8 8285 5911 E: info@ametalin.com

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