



Ametalin

Performance insulation for a greener world

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.

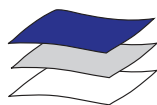
NOTE: For ABCB Climate Zone 1 and north of The Tropic of Capricorn in Climate Zone 2, substitute VapourTech® Wall with a Class 1 or Class 2 Vapour Barrier such as SilverSark® HVB or SilverSark® xR.

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

Declared 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 4859.1:2018. 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	3.7982 µg/N.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: 3.7982 µg/N.s

Vapour Resistance: 0.2632 MN.s/g

WVTR: 468.25 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: 3.7982 ug/N.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

9-11 Playford Crescent Salisbury North SA 5108

T: +61 8 8285 6955 F: +61 8 8285 5911

E: info@ametalin.com W: ametalin.com



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

© 2023 Ametalin All Rights Reserved. Ametalin is a division of Amalgamated Metal Industries Pty. Ltd. Product information in this publication and otherwise supplied to users is based on our general experience and is given in good faith, but due to factors outside our knowledge and control which may affect the use of products, no warranty is given or implied with respect to this information or the product itself regarding the suitability of the product for any particular purpose. The usage of this and other building membranes will affect moisture migration in the building element. The purchaser should independently determine the suitability of the product for the intended purpose. For large projects with complex air-conditioning and condensation issues, designers may wish to contact our technical department. Product colour may vary from batch to batch. Amalgamated Metal Industries Pty. Ltd. reserves the right to amend product specifications without prior notice. Information provided is considered to be true and correct at the time of publication. Complete details including installation instructions are available on our website: www.ametalin.com APM-23132-1