



Ametalin

Performance insulation for a greener world

SilverWrap® Micro-perforated MD

Product Code: MD-B

Vapour Permeable reflective wall insulation

For use in brick veneer and drained cavity wall systems in residential and commercial buildings in Climate Zones 2-8.



SilverWrap® Micro-perforated is a Medium Duty, Vapour Permeable wall wrap designed for use in brick veneer and drained cavity wall systems to reduce the risk of interstitial condensation. The reflective foil side provides extra R-value when installed facing an air cavity, and the multi-layer structure provides superior strength, flexibility and durability.

Classified as Class 4 Vapour Permeable, a dense pattern of micro-perforations allows water vapour to escape from the wall structure. SilverWrap® Micro-perforated also acts as a barrier to air, radiant heat and dust penetration.

- > Micro-perforated to Class 4 Vapour Permeable
- > Strong and light weight
- > Air Barrier
- > Low Flammability, suitable for use in all BALs in bushfire-prone areas
- > 97% reflective

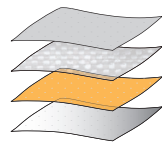
Application

Class 4 Vapour Permeable wall wraps are not recommended for wet tropical climate zones.

Construction

SilverWrap® Micro-perforated is a flexible four-layer product made with a combination of anti-oxidant UV-stabilised woven polypropylene, 97% reflective aluminium foil, and fire-resistant polymer adhesive, backed by a UV-stabilised polymer flood coat.

In order to minimise shrinkage after installation, our products are pre-shrunk during the manufacturing process.



- > Polymer film
- > Woven Polymer
- > Fire resistant polymer adhesive
- > Aluminium foil

Ametalin utilises Advanced Laminating Technology; the polymer adhesive remains tacky indefinitely and provides superior resistance to heat, fire and delamination.

Total System R-Values

Brick Veneer Wall

with SilverWrap® Micro-perforated

Winter **R, 1.29**

Summer **R, 1.21**

Brick Veneer Wall

with SilverWrap® Micro-perforated + R2.7 fibrous batt.

Winter **R, 2.93**

Summer **R, 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.

Material Properties and Classifications

SilverWrap® Micro-perforated Medium duty classifications in accordance with AS/NZS 4200.1:2017 and AS/NZS 4859.1:2018

Criteria	Reference	Result	Requirement
Flammability Index	AS 1530.2-1993	Low ≤ 5	High (> 5) / Low (≤ 5)
Nominal Thickness		0.10 mm	Value
Duty	AS/NZS 4200.1:2017	Medium	Classification
Tensile Strength Machine Direction	AS 1301.448s-91	11.5 kN/m	Min 9.5 kN/m
Tensile Strength Lateral Direction	AS 1301.448s-91	9.4 kN/m	Min 6.0 kN/m
Edge Tear Machine Direction	TAPPI T 470 om-89	444 N	Min 65 N
Edge Tear Lateral Direction	TAPPI T 470 om-89	358 N	Min 65 N
Vapour Control	ASTM E96	Class 4 Vapour Permeable	Class 1 to 4
Vapour Permeance	ASTM E96	1.717 $\mu\text{g}/\text{N}\cdot\text{s}$	Value
Water Control	AS/NZS 4201.4:1994	Non-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	Conductive	Classification
Emittance Value	AS/NZS 4201.5:1994	Anti-glare side: 0.90, Foil side: 0.03	Value
Emittance Classification	AS/NZS 4200.1:2017	IR Non-reflective, IR Reflective	Classification
Emittance Category	AS/NZS 4200.1:2017	RN	Category

NCC Compliant

SilverWrap® Micro-perforated complies with AS/NZS 4859.1:2018 and AS/NZS 4200.1:2017, and therefore meets all of the requirements of the National Construction Code of Australia for insulation and sarking-type materials.

SilverWrap® Micro-perforated is classified as a Non-Water Barrier under AS/NZS 4200.1:2017 *Pliable building membranes and underlays, Part 1: Material*, which requires testing under a 100 mm water column.

Vapour Permeance

Vapour Permeance: 1.717 $\mu\text{g}/\text{N}\cdot\text{s}$
 Vapour Resistance: 0.6 MN $\cdot\text{s}/\text{g}$
 WVTR: 200.685 $\text{g}/\text{m}^2\cdot 24\text{hr}$

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

1350 mm x 60 m (81 m²) 1350 mm x 30 m (40.5 m²)
 1500 mm x 30 m (45 m²)

Nominal thickness: 0.10 mm

Specification Notes

When specifying, state the following:

Product Name: Ametalin SilverWrap® Micro-perforated

The insulation to be installed shall be Ametalin SilverWrap® Micro-perforated, Vapour Permeable reflective wall wrap. Product is manufactured by Ametalin and shall be installed in accordance with AS 4200.2: 1994 *Pliable Building Membranes and Underlays, Part 2: Installation*.

Emittance Value: 0.90, 0.03

Emittance Classification: IR Non-reflective, IR Reflective

Vapour Control Classification: Class 4 Vapour Permeable, 1.717 $\mu\text{g}/\text{N}\cdot\text{s}$

Water Barrier Classification: Non-water Barrier

Duty: Medium 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.

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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



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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