Ametalin

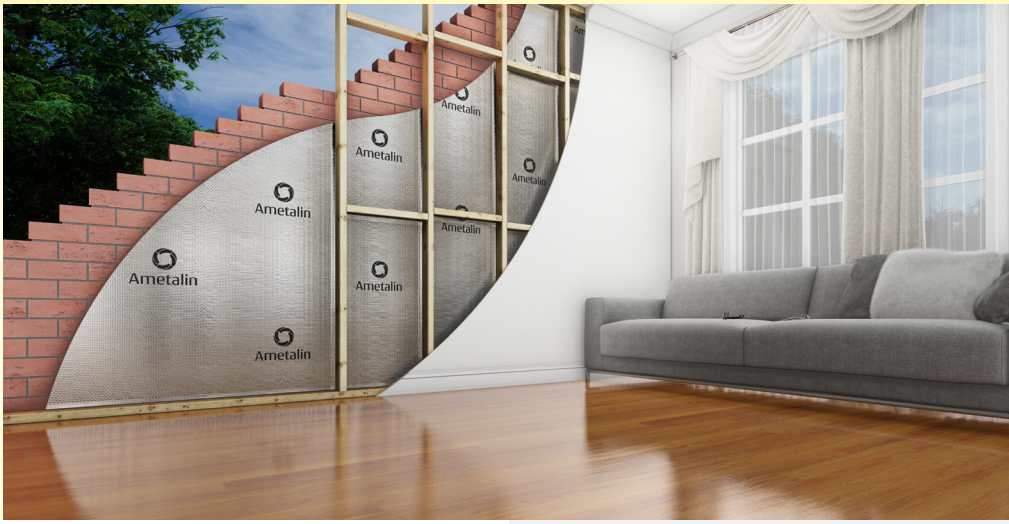
Performance insulation for a greener world

SilverWrap® MD Micro-perforated

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

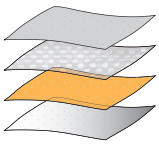
Application

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

(Based on NCC 2019)

Brick Veneer Wall

with SilverWrap® Micro-perforated

Winter R_T **1.29**

Summer R_T **1.21**

Brick Veneer Wall

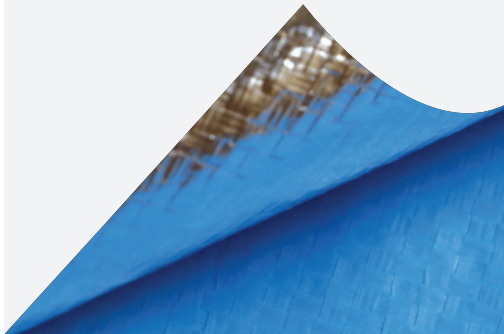
with SilverWrap® Micro-perforated + R2.7 fibrous batt.

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*. These values have been calculated specifically for use under NCC 2019 requirements and may not be valid for compliance with other editions. 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.



SilverWrap® MD Micro-perforated

Product Code: MD-B

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
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%
Nominal Thickness		0.10 mm	Value
Electrical Conductivity	*AS/NZS 4200.1:2017*	Conductive	Classification
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
Air Control	*AS/NZS 4200.1:2017*	Air Barrier	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
Vapour Control	*ASTM E96*	Class 4 Vapour Permeable	Class 1 to 4
Vapour Permeance	*ASTM E96*	1.717 µg/N·s	Value
Water Control	*AS/NZS 4201.4:1994*	Non-Water Barrier	Classification
Flammability Index	*AS 1530.2-1993*	Low ≤ 5	High (> 5) / Low (≤ 5)

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 µg/N·s
Vapour Resistance: 0.6 MN•s/g
WVTR: 200.685 g/m^2•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

1350 mm x 60 m (81 m^2)
1500 mm x 30 m (45 m^2)
1350 mm x 30 m (40.5 m^2)
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 µg/N·s
Water Barrier Classification: Non-water Barrier
Duty: Medium in accordance with *AS/NZS 4200.1:2017*

Complete details available on our website: 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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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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