



Ametalin

Performance insulation for a greener world

SilverWrap® Micro-perforated XHD

Product Code: XHD-B

Vapour Permeable reflective wall insulation

For use in brick veneer and drained cavity wall systems in residential, commercial and office buildings



SilverWrap® Micro-perforated is an Extra Heavy Duty, Vapour Permeable wall wrap designed for use in brick veneer and drained cavity wall systems to reduce the risk of interstitial condensation in building systems. 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 3 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, and is ideal for use in double brick and brick veneer wall systems.

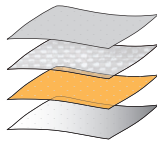
- > Micro-perforated to Class 3 Vapour Permeable
- > Superior strength, light weight
- > Air Barrier
- > Low Flammability, suitable for all BALs in bushfire-prone areas
- > 97% reflective

Application

Class 3 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_t 1.29**

Summer **R_t 1.21**

Brick Veneer Wall

with SilverWrap® Micro-perforated +2.7 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, seek advice based on actual site conditions from a qualified licensed engineer. The contribution of this product to the total system R-value depends on installation and environmental conditions.

Material Properties and Classifications

SilverWrap® Micro-perforated Extra Heavy 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		0.17 mm	Value
Duty	AS/NZS 4200.1:2017	Extra Heavy	Classification
Tensile Strength Machine Direction	AS 1301.448s-91	14.0 kN/m	Min 13.0 kN/m
Tensile Strength Lateral Direction	AS 1301.448s-91	11.0 kN/m	Min 10.5 kN/m
Edge Tear Machine Direction	TAPPI T 470 om-89	532 N	Min 90 N
Edge Tear Lateral Direction	TAPPI T 470 om-89	447 N	Min 90 N
Vapour Control	ASTM E96	Class 3 Vapour Permeable	Class 1 to 4
Vapour Permeance	ASTM E96	0.5727 $\mu\text{g}/\text{N}\cdot\text{s}$	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	Electrically Conductive	Classification
Emittance Value	AS/NZS 4201.5:1994	0.90, 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 not classified as a Water Barrier under

AS/NZS 4200.1:2017 Pliable building membranes and underlays, Part 1: Materials, which requires testing under a 100 mm water column.

Vapour Permeance

Vapour Permeance: 0.5727 $\mu\text{g}/\text{N}\cdot\text{s}$
 Vapour Resistance: 1.746 MN·s/g
 WVTR: 70.6 $\text{g}/\text{m}^2\cdot 24\text{hr}$

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 AS3959-2018 *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)
 Nominal thickness: 0.17 mm

Specification Notes

When specifying, state the following:

Product Name: Ametalin SilverWrap® Micro-perforated XHD

The insulation to be installed shall be Ametalin SilverWrap® Micro-perforated, micro-perforated single-sided reflective laminate and shall be installed in accordance with AS 4200.2:2017 *Pliable Building Membranes and Underlays, Part 2: Installation.*

Emittance Bright Side: 0.90, 0.03

Emittance Classification: IR Non-reflective, IR Reflective

Vapour Control Classification: Vapour Permeable, 0.5727 $\mu\text{g}/\text{N}\cdot\text{s}$

Water Control Classification: Non-water Barrier

Duty: Extra Heavy 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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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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