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.

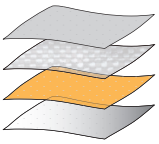
- Micro-perforated to Class 3 Vapour Permeable
- Superior strength, light weight
- Air Barrier
- Low Flammability, suitable for all BALs in bushfire-prone areas
- 97% reflective

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.

Declared Total System R-Values

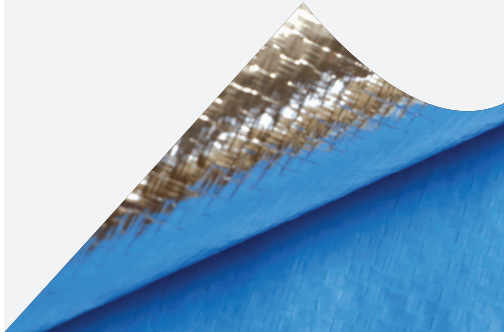
Brick Veneer Wall
With SilverWrap™ Micro-perforated

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 4859.1:2018*. 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.



SilverWrap™ Micro-perforated XHD

Product Code: XHD-B

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 µg/N.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 µg/N·s
Vapour Resistance: 1.746 MN·s/g
WVTR: 70.6 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 *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 m²)
1500 mm x 60 m (90 m²)
Nominal thickness: 0.17 mm

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

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 µg/N·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.

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. Manufactured by: Ametalin 9-11 Playford Crescent, Salisbury North S 5108 T: +61 8 8285 6955 F: +61 8 8285 5911 E: info@ametalin.com
© 2020 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-21021-6