

## SilverWrap™ Micro-perforated HD

Product Code: HD-B

**Vapour Permeable  
reflective wall insulation**

**Micro-perforated  
Class 3 Vapour Permeable**



SilverWrap™ Micro-perforated is a Heavy Duty, Vapour Permeable wall wrap, designed for use in brick veneer and drained cavity wall systems to reduce the risk of interstitial condensation.

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.

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

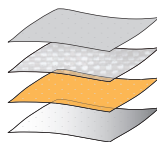
### Application

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
- > 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<sub>t</sub> 1.29**

Summer **R<sub>t</sub> 1.21**

#### Brick Veneer Wall

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

Winter **R<sub>t</sub> 2.93**

Summer **R<sub>t</sub> 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.

## Material Properties and Classifications

SilverWrap™ Micro-perforated 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 $\leq 5$                               | High ( $> 5$ ) / Low ( $\leq 5$ ) |
| Nominal Thickness                     |                    | 0.12 mm                                    | Value                             |
| Duty                                  | AS/NZS 4200.1:2017 | Heavy                                      | Classification                    |
| Tensile Strength Machine Direction    | AS 1301.448s-91    | 13.7 kN/m                                  | Min 12.5 kN/m                     |
| Tensile Strength Lateral Direction    | AS 1301.448s-91    | 8.3 kN/m                                   | Min 7.5 kN/m                      |
| Edge Tear Machine Direction           | TAPPI T 470 om-89  | 565 N                                      | Min 80 N                          |
| Edge Tear Lateral Direction           | TAPPI T 470 om-89  | 380 N                                      | Min 80 N                          |
| Vapour Control                        | ASTM E96           | Class 3 Vapour Permeable                   | Class 1 to 4                      |
| Vapour Permeance                      | ASTM E96           | 0.3341 $\mu\text{g}/\text{N}\cdot\text{s}$ | 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%                                       | $< 0.5\%$                         |
| Electrically Conductive               | 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: 0.3341  $\mu\text{g}/\text{N}\cdot\text{s}$

Vapour Resistance: 2.9931 MN·s/g

WVTR: 40.53 g/m<sup>2</sup>·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 ( $\leq 5$ )

Tested in accordance with AS 1530.2-1993 - *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<sup>2</sup>)

1500 mm x 60 m (90 m<sup>2</sup>)      1500 mm x 30 m (45 m<sup>2</sup>)

Nominal thickness: 0.12 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 single-sided vapour permeable reflective wall wrap and shall be installed in accordance with AS 4200.2:2017 *Pliable Building Membranes and Underlays, Part 2: Installation*.

Emittance Value: 0.90, 0.03

Emittance Category: IR Non-reflective, IR Reflective

Vapour Control Classification: Vapour Permeable, 0.3341  $\mu\text{g}/\text{N}\cdot\text{s}$

Water Control Classification: Non-water Barrier

Duty: Heavy in accordance with AS/NZS 4200.1:2017

Complete details available on our website:

<https://www.ametalin.com/tools/how-to-specify/>

## 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

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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. 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](mailto:info@ametalin.com)

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