

SilverWrap™ xRS Micro-perforated MD

Product Code: MD-XRS-B

Extra R-Value

Vapour Permeable reflective wall insulation

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



SilverWrap™ xRS Micro-perforated is a Medium Duty, Vapour Permeable reflective wall wrap designed specifically for use in masonry and brick veneer drained cavity wall systems to reduce the risk of interstitial condensation and enhance thermal performance.

The outward facing reflective anti-glare foil surface provides a reflective air cavity between the stud frame and the brick leaf, adding substantially to the system R-value of the wall. This is a simple way to enhance the home's energy efficiency without requiring a change in common construction practices.

With a precisely applied pattern of micro-perforations, SilverWrap™ xRS Micro-perforated delivers Class 3 Vapour Permeance for the effective management of indoor water vapour to reduce the risks of condensation within the masonry veneer wall.

Fully tested in accordance with AS/NZS 4200.1:2017, SilverWrap™ xRS Micro-perforated is IR Reflective, Low Flammability and classified as an Air Barrier.

- > Innovative low-glare, high IR reflection ink technology
- > Micro-perforated to Class 3 Vapour Permeable
- > Ideal for drained cavity systems in Climate Zones 6 - 8
- > Strong and light weight
- > Air Barrier
- > Low Flammability, suitable for all BALs in bushfire-prone areas

Application

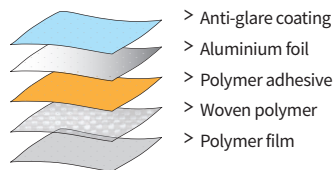
By delivering an optimised level of reflective insulation, SilverWrap™ xRS Micro-perforated will save on requirements for bulk insulation. Under standard calculation assumptions in accordance with AS/NZS 4859.1:2018, a non-reflective house wrap will require R2.5 insulation batts to satisfy minimum NCC requirements.

By choosing SilverWrap™ xRS Micro-perforated, R1.8 batts will be sufficient to achieve compliance with national energy efficiency provisions.

Class 3 Vapour Permeable wall wraps are not recommended for wet tropical climate zones.

Construction

SilverWrap™ xRS Micro-perforated is a flexible five-layer product made with a combination of low level anti-glare finish to 95% reflective, aluminium foil, fire-resistant polymer adhesive, anti-oxidant UV-stabilised woven polypropylene and backed by a grey UV-stabilised polymer flood coat.



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™ xRS
Micro-perforated
+ R2.0 fibrous batt
Winter **R, 2.90**
Summer **R, 2.74**

Brick Veneer Wall
with SilverWrap™ xRS
Micro-perforated
+ R2.7 fibrous batt
Winter **R, 3.40**
Summer **R, 3.26**

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™ xRS Micro-perforated 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	≤ 1 mm
Duty	AS/NZS 4200.1:2017	Medium	Classification
Tensile Strength Machine Direction	AS 1301.448s-91	12.2 kN/m	Min 9.5 kN/m
Tensile Strength Lateral Direction	AS 1301.448s-91	10.2 kN/m	Min 6.0 kN/m
Edge Tear Machine Direction	TAPPI T 470 om-89	452 N	Min 65 N
Edge Tear Lateral Direction	TAPPI T 470 om-89	417 N	Min 65 N
Vapour Control	ASTM E96	Class 3 Vapour Permeable	Classification
Vapour Permeance	ASTM E96	0.2028 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	Conductive	Classification
Emittance Value	AS/NZS 4201.5:1994	Anti-glare side: 0.05, Grey side: 0.62	Value
Emittance Classification	AS/NZS 4200.1:2017	IR Reflective, IR Non-reflective	Classification
Emittance Category	AS/NZS 4200.1:2017	RN	Category

NCC Compliant

SilverWrap™ xRS 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™ xRS Micro-perforated is classified as a Non-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: 0.2028 µg/N.s

Vapour Resistance: 4.9314 MN.s/g

WVTR: 25.0 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 AS 1530.2-1993 - *Methods for fire tests on building materials, components and structures Part 2: Test for flammability of materials* and is therefore suitable for use in non-combustible constructions.

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.

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.

Dimensions

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

Nominal thickness: 0.10 mm

Specification Notes

When specifying, state the following:

Product Name: Ametalin SilverWrap™ xRS Micro-perforated Medium Duty

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

Emittance Value: 0.05, 0.90

Emittance Classification: IR Reflective, IR Non-reflective,

Vapour Control Classification: Class 3 Vapour Permeable,

0.2028 µg/N.s

Water Control Classification: Non-water Barrier

Air Control Classification: Air Barrier

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

Complete details available on our website:

<http://www.ametalin.com>

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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 S 5108 T: +61 8 8285 6955 F: +61 8 8285 5911 E: info@ametalin.com

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