

SILVERBRANE™ HP

MEDIUM DUTY

REFLECTIVE INSULATION HIGH PERMEANCE WALL WRAP



REFLECTIVE PERMEABLE MEMBRANE

Product Code: HP-81 | I/N: 0811009

SILVERBRANE™ HP is a High Permeance (HP), Medium Duty double-sided reflective building membrane, designed to reduce the risk of interstitial condensation in building systems. Classified as Low Vapour Barrier, a dense pattern of micro-perforations allows water vapour to escape from the wall structure while restricting the ingress of liquid water.

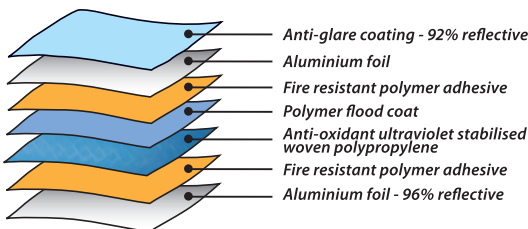
When installed facing an air space, the low emittance reflective membrane offers extra R-value of R0.4, providing increased thermal resistance in your building structure.

SILVERBRANE™ HP is the preferred product for brick veneer systems.

- ✓ High vapour permeance
- ✓ High strength and durability
- ✓ Low flammability
- ✓ Fibre-free, non-allergenic, non-irritant

Construction

SILVERBRANE™ HP is a seven-layer construction with an extremely tough woven polymer fabric core. A dense pattern of micro-perforations enables SILVERBRANE™ HP to achieve a Water Vapour Transmission (WVT) rate of 140 grams per square metre per 24 hours under standard test conditions. The very small holes do not allow water to pass through under low pressure.



Ametalin utilises Advanced Laminating Technology; the polymer adhesive remains tacky for an indefinite period and provides superior resistance to heat, fire and delamination.

NOTE: SILVERBRANE™ HP is not classified as a High Water Barrier under AS/NZS 4200.1:1994 Pliable building membranes and underlays, Part 1: Materials, which requires testing under a 100 mm water column.

Application

SILVERBRANE™ HP High Permeance wall wrap is designed to minimise condensation risk in residential, commercial and office buildings in all regions of Australia. It is used primarily as a wall wrap in brick veneer and double brick wall constructions in temperate climate zones. Where the vapour drive moves from in to out, especially cold climates, the use of a vapour barrier behind the internal wall lining is a benefit.

Durability may be affected by environmental factors, including airborne pollutants, if used in industrial or farm buildings.

NOTE: High Permeance, Low Vapour Barrier wall wraps are suitable for temperate climate zones. To minimise condensation risk, use in conjunction with a vapour retardant barrier behind internal wall lining. NOT suitable for use behind a rain screen.

Tear Resistance

SILVERBRANE™ HP is guaranteed to meet or exceed the minimum performance levels for Medium Duty rating required under AS/NZS 4200.1:1994.

	Minimum Value*	Actual Test Value
Machine direction edge tear resistance	65 N	410 N / 25 mm
Lateral direction edge tear resistance	65 N	358 N / 25 mm

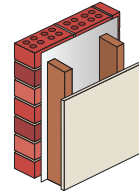
* Minimum value required to qualify as Medium Duty under AS/NZS 4200.1:1994

DECLARED TOTAL SYSTEM R-VALUES

The contribution of this product to the total R-value depends on installation and environmental conditions. The R-value will be reduced in the event of the accumulation of dust on upward facing surfaces and in those cavities that are ventilated.

BRICK VENEER

with one layer of SILVERBRANE™ HP

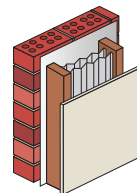


CALCULATION REF: 299w37

WINTER **R_T 1.8** SUMMER **R_T 1.6**

BRICK VENEER

with one layer of SILVERBRANE™ HP + two layers of PLEATED SILVERBATTS™

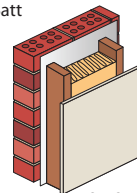


CALCULATION REF: 299w326

WINTER **R_T 4.0** SUMMER **R_T 3.5**

BRICK VENEER

with one layer of SILVERBRANE™ HP + R2.5 Fibrous Batt



CALCULATION REF: 299w3011

WINTER **R_T 3.7** SUMMER **R_T 3.4**

SILVERBRANE™ HP



HP-81



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Classification

SILVERBRANE™ HP classifications under AS/NZS 4200.1:1994

PRODUCT		SILVERBRANE™ HP	AS/NZS 4200.1:1994
FLAMMABILITY INDEX	AS 1530.2-1993	Low	Low ≤ 5
DUTY	AS/NZS 4200.1:1994	Medium	Classification
EMITTANCE	AS/NZS 4201.5:1994	Bright side: 0.04 Anti-glare side: 0.08	Value
REFLECTIVITY	AS/NZS 4200.1:1994	Bright side: 96% Anti-glare side: 92%	Value
RESISTANCE TO WATER PENETRATION	AS/NZS 4201.4:1994	Unclassified	Classification
VAPOUR BARRIER	ASTM E96	Low, PROCEDURE B, WET CUP TEST	Classification
MACHINE DIRECTION TENSILE STRENGTH	AS 1301.448s-91	13.4 kN/m	Min 9.5 kN/m
LATERAL DIRECTION TENSILE STRENGTH	AS 1301.448s-91	10.0 kN/m	Min 6.0 kN/m
MACHINE DIRECTION EDGE TEAR	TAPPI T 470 om-89	410 N	Min 65 N
LATERAL DIRECTION EDGE TEAR	TAPPI T 470 om-89	358 N	Min 65 N
RESISTANCE TO DRY DELAMINATION	AS/NZS 4201.1:1994	Pass	Pass
RESISTANCE TO WET DELAMINATION	AS/NZS 4201.2:1994	Pass	Pass
SHRINKAGE	AS/NZS 4201.3:1994	< 0.1%	< 0.5%

WATER VAPOUR TRANSMISSION RATE:

73.9 g/m²·24hr (23°C, 50% RH)

AMETALIN CLASSIFICATION:

HIGH PERMEANCE, LOW VAPOUR BARRIER

Vapour Barrier Properties

SILVERBRANE™ HP has a Water Vapour Transmission (WVT) rate of 73.9 grams per square metre per 24 hours tested at 23°C, 50% Relative Humidity (RH). Vapour Resistance 1.67 MN·s/g. Ametalin classification is High Permeance, Low Vapour Barrier.

NCC/BCA Compliant

SILVERBRANE™ HP complies with AS/NZS 4859.1:2002 Amdt 1:2006 and AS/NZS 4200.1:1994, and therefore meets all the requirements of the *National Construction Code* and *Building Code of Australia* for insulation and pliable building membranes.

BUSHFIRE ATTACK LEVELS

SILVERBRANE HP™ complies with AS 3959-2009 *Construction of buildings in bushfire-prone areas* for use in wall systems BAL – LOW to BAL – FZ.

Total System R-values

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 4859.1:2002/Amdt 1:2006. For detailed design of building systems, seek advice based on actual site conditions from a qualified licensed engineer.

Reflectivity

SILVERBRANE™ HP is made with aluminium foil laminates with reflectivity of 96% and emissivity of 0.04 to one side and 92%

reflectivity and emissivity of 0.08 to the other, in compliance with *ASTM Standard E 408-71 (Re-approved 2002)*.

Storage

This product should be stored under cover in a clean, dry place in the pack provided.

Dimensions

SILVERBRANE™ HP is sold in size:

1350 mm x 60 m (81 m²)

Specification Notes

When specifying, state the following:

Product Name: SILVERBRANE™ HP

The insulation to be installed shall be SILVERBRANE™ HP single-sided reflective laminate with anti-glare, emittance bright side 0.04, anti-glare side 0.08. Product is manufactured by Ametalin and shall be installed in accordance with *AS/NZS 4200.2: 1994 Pliable Building Membranes and Underlays, Part 2: Installation Requirements*.

Emittance Bright Side: 0.04, Anti-glare Side: 0.08

Water Vapour Transmission (WVT): 73.9 g/m²·24hr

Vapour Resistance: 1.67 MN·s/g

Vapour Barrier Classification: Low

Water Barrier Classification: Unclassified

Duty: Medium in accordance with AS/NZS 4200.1:1994

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Manufacturers of building membranes | insulation products | flexible packaging



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Health and Safety Information

Ametalin has assessed SILVERBRANE™ HP according to the criteria outlined in the *National Occupational Health and Safety Commission (NOHSC):1008 (1998)* and *NOHSC: 1005 (1999)*. As a result of the assessment, this product is classified as non-hazardous according to the NOHSC criteria. To reduce risk of UV damage when installing this product, wear protective clothing, safety glasses and sunscreen, and work in the shade wherever practical.

Installation

ELECTRICAL SAFETY PRECAUTIONS - BEFORE YOU START:

Ametalin stresses the importance of safe installation practices for foil-based insulation as critical to installer and consumer safety. Aluminium Foil Insulation Association Inc. (AFIA) has prepared Work Method Statements and Hazard Management forms to assist contractors and installers in safe installation of reflective insulation products. These documents are available under 2009 AFIA WMS & Hazard Management, at www.afia.com.au/news/health-and-safety/.

SILVERBRANE™ HP should be installed in accordance with *AS/NZS 4200.2: 1994 Pliable Building Membranes and Underlays, Part 2: Installation Requirements*.

GENERAL

SILVERBRANE™ HP is not designed to withstand prolonged direct exposure to the elements. Accordingly, the outer construction envelope should be installed without delay. Aluminium foil should not come into contact with wet concrete or mortar, as the aluminium is susceptible to alkali corrosion. If installed within 500 metres of the sea, or in non-residential buildings where foil surfaces may be exposed to a corrosive atmosphere (including agricultural sheds), foil surfaces should face an enclosed, un-vented air space. To ensure optimum thermal insulation performance, as well as satisfactory durability, a 25 mm air space adjacent to each side of the product is recommended.

TIMBER & STEEL FRAMED CONSTRUCTION:

- ▶ **BRICK VENEER**
- ▶ **REVERSE BRICK VENEER**

SILVERBRANE™ HP should be installed horizontally as a continuous membrane by fixing to all framing members with the printed anti-glare blue side facing out. SILVERBRANE™ HP should extend from the top plate to the bottom plate on concrete slabs or bearers in timber construction. Fixings are to be no more than 450 mm apart and should be galvanised clouts or staples for fastening to timber construction and tech screws for fastening to steel constructions. In high wind areas, it is recommended to install using flat punched multi-point fasteners or cap screws. Horizontal, vertical and end overlaps must be 150 mm if not taped or 50 mm taped with Ametalin Insulation/Ducting Tape, with all top layers overlapping the outside of lower layers to prevent water ingress. Stagger any vertical overlaps. Any damage made to SILVERBRANE™ HP during installation including holes and tears must be repaired with Ametalin Insulation/Ducting Tape or a large overlapped piece of SILVERBRANE™ HP.

DOUBLE BRICK AND MASONRY CAVITY WALLS

After the inner leaf of the double brick or masonry cavity wall is laid, place Ametalin Cavity Spacers™ onto the brick ties via the vertical slit provided, with the white adhesive side facing outwards. Install one cavity spacer per square metre to ensure the required air space. Remove adhesive tape backing. Install SILVERBRANE™ HP horizontally, cut slits through the pliable building membrane at all brick tie positions, place SILVERBRANE™ HP into position over the brick ties. Push the membrane and the cavity spacer into position against the inner back leaf.

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