

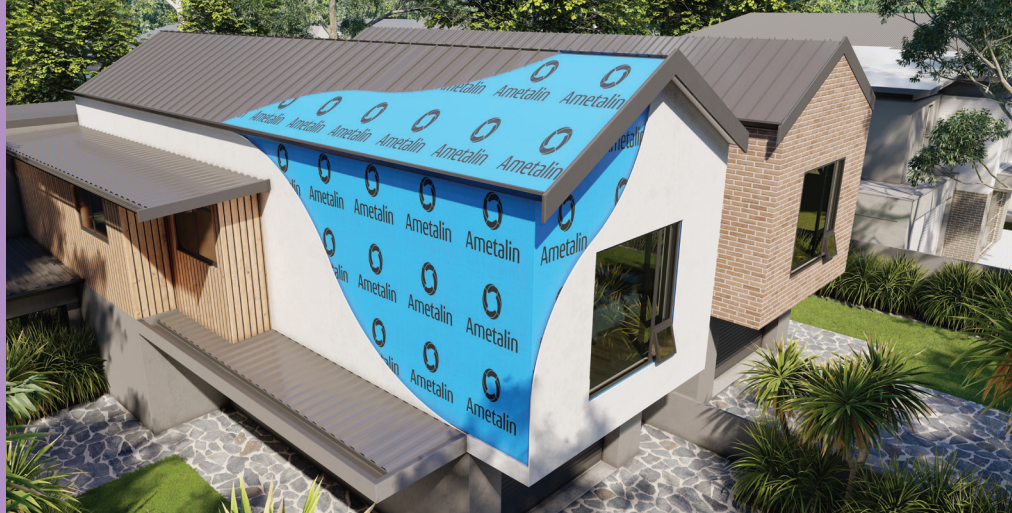
SilverSark® xR XHD

Product Code: XHD-XR

Extra R-value

Reflective roof and wall insulation

For use in walls and tile or metal roofs in residential and commercial buildings



SilverSark® xR is a Extra Heavy Duty double-sided radiant barrier, designed for use under metal deck roofs where temperatures can exceed 80°C, and with battened out cladding to create an extra reflective air space for enhanced R-Value. It is an Air and Water Barrier, Class 2 Vapour Barrier product, suitable for use in roof and wall applications.

Roof spaces fitted with SilverSark® xR will benefit from controlled ventilation, which assists with excess heat in summer and moisture ingress in winter.

- > The best all-round weather barrier
- > Superior strength, puncture resistant
- > Water and Air Barrier, Class 2 Vapour Barrier
- > Innovative low-glare, high IR reflection ink technology
- > Low Flammability, suitable for all BALs in bushfire-prone areas

Application

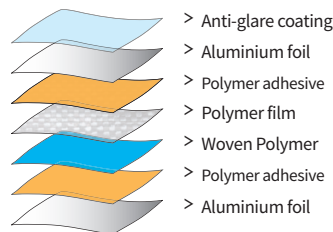
Install SilverSark® xR facing an air space on either side for increased reflective R-value. SilverSark® xR reduces the need for additional wall insulation, and increases overall thermal performance of the building system

Water Barrier, Class 2 Vapour Barrier wall wraps are recommended for wet tropical climate zones only.

Construction

SilverSark® xR is a flexible multi-layer product made with a combination of woven polymer substrate, aluminium foil, and fire-resistant polymer adhesive. It has reflective foil surfaces on both sides, one side with an innovative low-glare, high IR reflection ink technology for ease of installation. The internal membrane structure is highly flexible and resilient. This has two benefits:

- 1) Wind flap is minimised under tile roofs in high wind conditions.
- 2) Stress within the structure due to flapping, thermal expansion and shrinkage is significantly reduced, markedly improving the durability of the product.



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

In order to minimise shrinkage after installation, SilverSark® xR is pre-shrunk during the manufacturing process.

Total System R-Values

Residential Roof

22° pitch
with SilverSark® xR,
unventilated

Winter **R_t 1.14**

Summer **R_t 1.82**

Light Weight Cladding

battened out
with SilverSark® xR
+ R2.7 fibrous batt

Winter **R_t 3.00**

Summer **R_t 2.89**

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 readers are advised to seek advice from a qualified engineer, based on actual site conditions.

The contribution of this product to the total system R-value depends on installation and environmental conditions.

Material Properties and Classifications

SilverSark® xR Extra Heavy Duty classifications in accordance with AS/NZS 4200.1:2017

Criteria	Reference	Result	Requirement
Flammability Index	AS 1530.2-1993	Low ≤ 5	High (> 5) / Low (≤ 5)
Nominal Thickness		0.12 mm	Value
Duty	AS/NZS 4200.1:2017	Extra Heavy	Classification
Tensile Strength Machine Direction	AS 1301.448s-91	13.5 kN/m	Min 12.5 kN/m
Tensile Strength Lateral Direction	AS 1301.448s-91	12.1 kN/m	Min 7.5 kN/m
Edge Tear Machine Direction	TAPPI T 470 om-89	439 N	Min 80 N
Edge Tear Lateral Direction	TAPPI T 470 om-89	430 N	Min 80 N
Vapour Control	ASTM E96	Class 2 Vapour Barrier	Class 1 to 4
Vapour Permeance	ASTM E96	0.0147 $\mu\text{g}/\text{N}\cdot\text{s}$	Value
Water Control	AS/NZS 4201.4:1994	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, Foil side: 0.03	Value
Emittance Classification	AS/NZS 4200.1:2017	IR Reflective, IR Reflective	Classification
Emittance Category	AS/NZS 4200.1:2017	RR	Category

NCC Compliant

SilverSark® xR complies with AS/NZS 4200.1:2017, and therefore meets all of the requirements of the *National Construction Code* of Australia for pliable building membranes, insulation and sarking-type materials.

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*.

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 m²)

1500 mm x 30 m (45 m²)

Nominal thickness: 0.17 mm

Specification Notes

When specifying, state the following:

Product Name: Ametalin SilverSark® xR

The insulation to be installed shall be Ametalin SilverSark® xR, double-side reflective laminate with anti-glare and shall be installed in accordance with AS 4200.2:2017 *Pliable Building Membranes and Underlays, Part 2: Installation*.

Emittance Value: 0.05, 0.03,

Emittance Classification: IR Reflective, IR Reflective

Vapour Control Classification: Vapour Barrier, 0.0147 $\mu\text{g}/\text{N}\cdot\text{s}$

Water Control Classification: 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. Ametalin 9-11 Playford Crescent, Salisbury North SA 5108 T: +61 8 8285 6955 F: +61 8 8285 5911 E: info@ametalin.com

© 2024 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-45576-4