

# Performance insulation for a greener world

# SilverWrap® xRS MD

# Product Code: MD-XRS

# **Extra R-value**

# **Reflective wall insulation**

For use in masonry veneer wall systems in residential and commercial buildings



SilverWrap® xRS is a Medium Duty, reflective wall wrap designed specifically for use in masonry and brick veneer wall systems to 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. SilverWrap® xRS is IR Reflective, Low Flammability and classified as an Air and Vapour Barrier.

- > Innovative low-glare, high IR reflection ink technology
- > Class 1 Vapour Barrier
- > Ideal for masonry drained cavity systems in tropical climate zones
- > Strong and light weight
- > Water and Air Barrier
- > Low flammability, suitable for all BALs in bushfire-prone areas
- > 96% reflective

## Application

By delivering an optimised level of reflective insulation, SilverWrap® xRS will save on requirements for bulk insulation. Under standard calculation assumptions in accordance with *AS/NZS 4859.1:2002/ Amdt 1:2006*, a non-reflective house wrap will require R2.5 insulation batts to satisfy minimum NCC requirements.

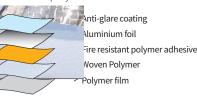
By choosing SilverWrap® xRS, R1.8 batts will be sufficient to achieve compliance with national energy efficiency provisions.

SilverWrap® xRS is designed for use where water barrier and Class 1 Vapour Barrier properties are required for use as a wall wrap in residential and commercial buildings in ABCB Climate Zone 1 and regions north of the Tropic of Capricorn in Climate Zone 2.

Class 1 Vapour Barrier wall wraps are not recommended for regions south of the Tropic of Capricorn in Climate Zone 2 and in Climate Zones 4 to 8.

#### Construction

SilverWrap<sup>®</sup> xRS 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.



#### **Total System R-Values**

Brick Veneer Wall with SilverWrap<sup>®</sup> xRS + R1.8 fibrous batt Winter  $\mathbf{R}_{\tau}$  **3.1** 

Summer **R**<sub>T</sub> **2.8** 

#### Brick Veneer Wall

with SilverWrap® xRS + R2.5 fibrous batt

Winter
**R**<sub>T</sub> **3.9** 

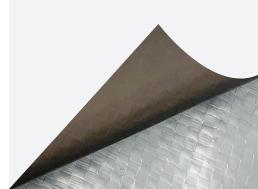
Summer
**R**<sub>T</sub> **3.5**

Brick Veneer Wall with SilverWrap® xRS + R2.7 fibrous batt

Winter **R**<sub>T</sub> **4.1** Summer **R**<sub>T</sub> **3.7** 

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 4859.2:2002/ Amdt 1:2006.* 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 Medium 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                     |                    | 0.10 mm                                | ≤1mm                   |
| 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 1 Vapour Barrier                 | Classification         |
| Vapour Permeance                      | ASTM E96           | 0.0117 μg/N.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 | Electrically Conductive                | Classification         |
| Emittance Value                       | AS/NZS 4201.5:1994 | Anti-glare side: 0.04, 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 complies with AS/NZS 4200.1:2017, and therefore meets all of the requirements of the National Construction Code of Australia for insulation, pliable building membranes 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 and is therefore suitable for use in non-combustible constructions.

#### **Bushfire Attack Levels**

Complies with AS 3959-2018 Construction of buildings in bushfireprone areas for use in all BALs.

Seek independent advice regarding the selection of sarking prior to installation in the BAL design.

| Electrically Conductive  | Classification         |
|--|------------------------|
| Anti-glare side: 0.04, Grey side: 0.6  | 52 Value               |
| IR Reflective, IR Non-reflective   | Classification         |
| RN   | Category               |
| <b>Dimensions</b><br>1350 mm x 60 m (81 m <sup>2</sup> )<br>Nominal thickness: 0.10 mm | 1500 mm x 30 m (45 m²) |

#### Specification Notes

When specifying, state the following: Product Name: Ametalin SilverWrap® xRS Medium Duty

The insulation to be installed shall be Ametalin SilverWrap® xRS Medium Duty, extra R-value, reflective wall wrap and shall be installed in accordance with AS 4200.2: 1994 Pliable Building Membranes and Underlays, Part 2: Installation.

Emittance Value: 0.04, 0.62

Emittance Classification: IR Reflective, IR Non-reflective, Vapour Control Classification: Class 2 Vapour Barrier, 0.0117 µg/N·s Water Control Classification: Water Barrier Air Control Classification: Air Barrier Duty: Medium 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

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

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