# Trade/Select

# Trade Select<sup>™</sup> Sarking xR HD

# Product Code: TSHD-XR

## **Extra R-value**

Reflective roof and wall insulation

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



Trade Select<sup>™</sup> Sarking xR HD is a 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 all roof and wall applications.

Roof spaces fitted with Trade Select<sup>™</sup> Sarking xR HD will benefit from controlled ventilation, which assists with excess heat in summer and moisture ingress in winter.

- > The best all-round weather barrier for your home
- > 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 Trade Select<sup>™</sup> Sarking xR HD facing an air space on either side for increased reflective R-value. Trade Select<sup>™</sup> Sarking xR HD 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.

#### Construction

Trade Select<sup>™</sup> Sarking xR HD 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 lowglare, 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.



- > Anti-glare coating> Aluminium foil
- > Polymer adhesive
- > 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.

In order to minimise shrinkage after installation, Trade Select<sup>™</sup> Sarking xR HD is pre-shrunk during the manufacturing process.

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

#### **Residential Roof**

22° pitch with Trade Select<sup>™</sup> Sarking xR HD, unventilated.

 Winter
 **R**<sub>T</sub> **1.14** 

 Summer
 **R**<sub>T</sub> **1.82**

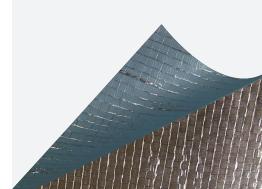
#### **Light Weight Cladding**

battened out with Trade Select<sup>™</sup> Sarking xR HD + R2.7 fibrous batts

Winter	$\mathbf{R}_{\mathrm{T}}$	3.00
Summer	R	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 contributions of this product to the total system R-value depends on installation and environmental conditions.



#### **Material Properties and Classifications**

Trade Select<sup>™</sup> Sarking xR HD 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)
Material Thickness		0.12 mm	Value
Duty	AS/NZS 4200.1:2017	Неаvy	Classification
Tensile Strength Machine Direction	AS 1301.448s-91	12.8 kN/m	Min 12.5 kN/m
Tensile Strength Lateral Direction	AS 1301.448s-91	8.4 kN/m	Min 7.5 kN/m
Edge Tear Machine Direction	TAPPI T 470 om-89	507 N	Min 80 N
Edge Tear Lateral Direction	TAPPI T 470 om-89	369 N	Min 80 N
Vapour Control	ASTM E96	Class 2 Vapour Barrier	Class 1 to 4
Vapour Permeance	ASTM E96	0.02141 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: 0.05, 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**

Trade Select<sup>™</sup> Sarking xR HD 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 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 bushfireprone areas for use in all BALs.

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

#### Dimensions

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Distributed

1350 mm x 60 m (81 m<sup>2</sup>) 1500 mm x 30 m (45 m<sup>2</sup>)

Nominal thickness: 0.17 mm

#### **Specification Notes**

When specifying, state the following: Product Name: Trade Select<sup>™</sup> Sarking xR HD

The insulation to be installed shall be in Trade Select<sup>™</sup> Sarking xR HD, 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, 0.02141 µg/N·s Water Control Classification: 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.

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

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