Ametalin

Performance insulation for a greener world

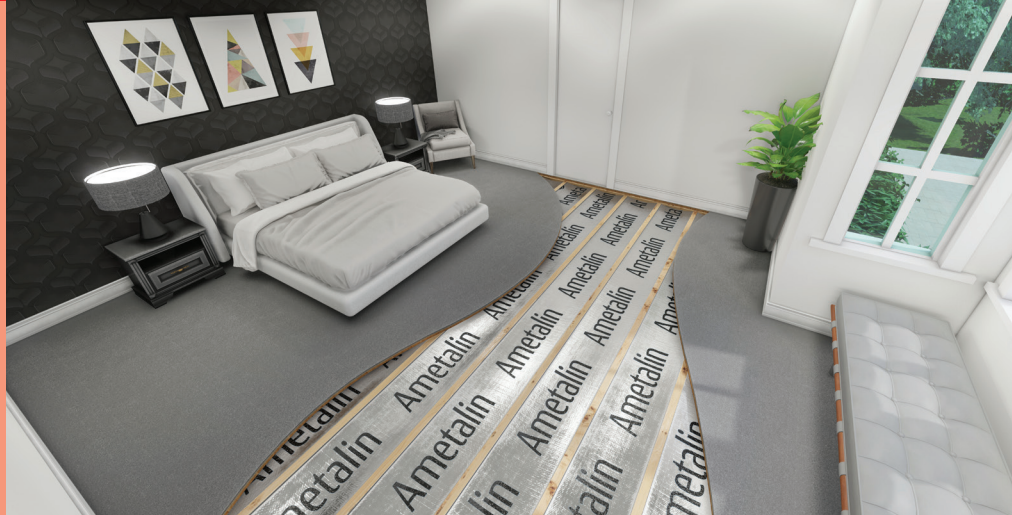## SilverFloor™

Underfloor insulation

For use under floors that are directly adhered to floor joists

SilverFloor™ is a Heavy Duty, vapour permeable floor insulation, designed for use under floors with a sealed air space between flooring and enclosed sub-floor space. Double-sided reflective surfaces provide increased R-value to your floor system. 5 mm weep holes at 400 mm intervals in the membrane structure allow water and water vapour to permeate through, preventing moisture build-up under flooring.
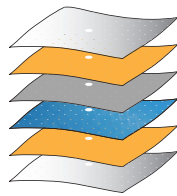
> Heavy Duty
> Double-sided foil radiant barrier
> High strength, light weight
> Low Flammability
> Weep holes allow water to drain

Application

SilverFloor™ is designed for use as an insulation under floors with a sealed air space between flooring and enclosed sub-floor space. Where the sub-floor space is exposed to wind, e.g. in pole construction, a lining should be installed under the floor joists.

Construction

SilverFloor™ is a flexible six-layer product with anti-oxidant UV-stabilised woven polypropylene and polymer flood coat layers, backed on either side with fire-resistant polymer adhesive and 97% reflective aluminium foil.

> 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.

Declared Total System R-Values

Suspended Framed Floors
enclosed sub-floor unventilated with SilverFloor™ installed between joists or over bearers

Winter R_T **3.36**
Summer R_T **1.52**

Suspended Framed Floors
unenclosed sub-floor, ventilated with SilverFloor™ installed between joists or over bearers

Winter R_T **2.05**
Summer R_T **0.77**

R-values apply to typical conditions for mainland Australian capital cities and have been calculated by an independent consulting engineer, in accordance with A*S/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.
To ensure optimum thermal insulation performance, ensure a ≥ 90 mm air gap adjacent to the upper foil side of the product.

Material Properties and Classifications

SilverFloor™ Heavy Duty classifications in accordance with *AS/NZS 4200.1:2017* and *AS/NZS 4859.1:2002, Amdt 1:2006*

Criteria	Reference	Result	Requirement
Flammability Index	*AS 1530.2-1993*	Low ≤ 5	High (> 5) / Low (≤ 5)
Nominal Thickness		0.17 mm	Value
Duty	*AS/NZS 4200.1:2017*	Heavy	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*	14.2 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*	452 N	Min 80 N
Vapour Control	*ASTM E96*	Class 3 Vapour Permeable	Class 1 to 4
Vapour Permeance	*ASTM E96*	0.3009 µg/N.s	Value
Water Control	*AS/NZS 4201.4:1994*	Non-Water Barrier	Classification
Air Control	*AS/NZS 4200.1:2017*	Non-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%
Electrically Conductive	*AS/NZS 4200.1:2017*	Conductive	Classification
Emittance Value	*AS/NZS 4201.5:1994*	Printed side: 0.03, 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

SilverFloor™ 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.

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*.

Dimensions

500 mm x 60 m   (30 m²)
1500 mm x 60 m (90 m²)

Nominal Thickness: 0.17 mm

Specification Notes

When specifying state the following:
Product Name: Ametalin SilverFloor™

The insulation to be installed shall be Ametalin SilverFloor™ Vapour Permeable reflective underfloor insulation and shall be installed in accordance with the instructions issued by them and in accordance with *AS 4200.2:2017.*

Emittance Value: 0.03, 0.03
Emittance Classification: IR Reflective, IR Reflective
Vapour Control Classification: Vapour Permeable, 0.3009 ug/N.s
Water Control Classification: Non-water Barrier
Duty: 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.

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