

## ThermalFloor™

Product Code: TF

### Reflective underfloor insulation

For under floors that are adhered directly to floor joists

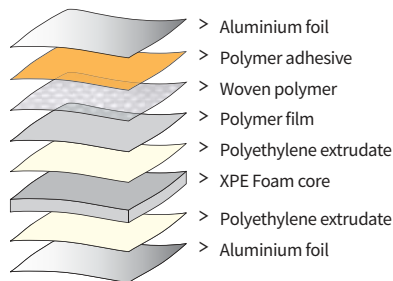


ThermalFloor™ is a 2 in 1 insulation and moisture management system, designed for use under floors with a sealed air space between flooring and enclosed sub-floor space. Double-sided reflective surfaces provide increased R-value to your floor system. Weep holes in the membrane structure allow water and water vapour to permeate through, assisting in preventing moisture build-up under flooring.

- > Scored for quick and easy installation
- > Double-sided foil radiant barrier
- > Low flammability
- > Weep holes allow water to drain
- > Extra Heavy duty

### Construction

ThermalFloor™ is made from aluminium foil laminates with reflectivity of 97% and emissivity of 0.03 to both sides. At its core is 4 mm of chemically cross-linked, closed-cell high-density XPE foam.



### Declared Total System R-Values

#### Enclosed Sub-floor Unventilated

with ThermalFloor™

Winter **R<sub>t</sub> 3.47**

Summer **R<sub>t</sub> 1.63**

#### Enclosed Sub-floor Ventilated

with ThermalFloor™

Winter **R<sub>t</sub> 2.16**

Summer **R<sub>t</sub> 0.90**

ThermalFloor™ has a material R-value of R0.1. When it is incorporated into typical construction systems, the following thermal performance can be achieved.

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 4859.1:2018. 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

ThermalFloor™ 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 Thermal Resistance	ASTM C518	0.1 m <sup>2</sup> ·K/W (R <sub>M</sub> 0.1)	Value
Tensile Strength Machine Direction	AS 1301.448s-91	15.6 kN/m	Min 13.0 kN/m
Tensile Strength Lateral Direction	AS 1301.448s-91	14.8 kN/m	Min 10.5 kN/m
Edge Tear Machine Direction	TAPPI T 470 om-89	853 N	Min 90 N
Edge Tear Lateral Direction	TAPPI T 470 om-89	804 N	Min 90 N
Vapour Control		Class 3 Vapour Permeable	Class 1 to 4
Vapour Permeance		> 0.1429 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%
Electrical Conductivity	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

ThermalFloor™ 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 m<sup>2</sup>)  
Nominal thickness: 4 mm

### Specification Notes

When specifying, state the following:  
Product Name: Ametalin ThermalFloor™

The insulation to be installed shall be Ametalin ThermalFloor™ underfloor reflective insulation. Product is manufactured by Ametalin and shall be installed in accordance with AS 4200.2:2017 *Pliable Building Membranes and Underlays, Part 2: Installation.*

Emittance Value: 0.03, 0.03  
Emittance Classification: IR Reflective, IR Reflective  
Material R-value: R0.1  
Water Control Classification: Non-Water Barrier  
Duty: Extra 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.

### Performance insulation for a greener world

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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 S 5108 T: +61 8 8285 6955 F: +61 8 8285 5911 E: [info@ametalin.com](mailto:info@ametalin.com)

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