



Ametalin

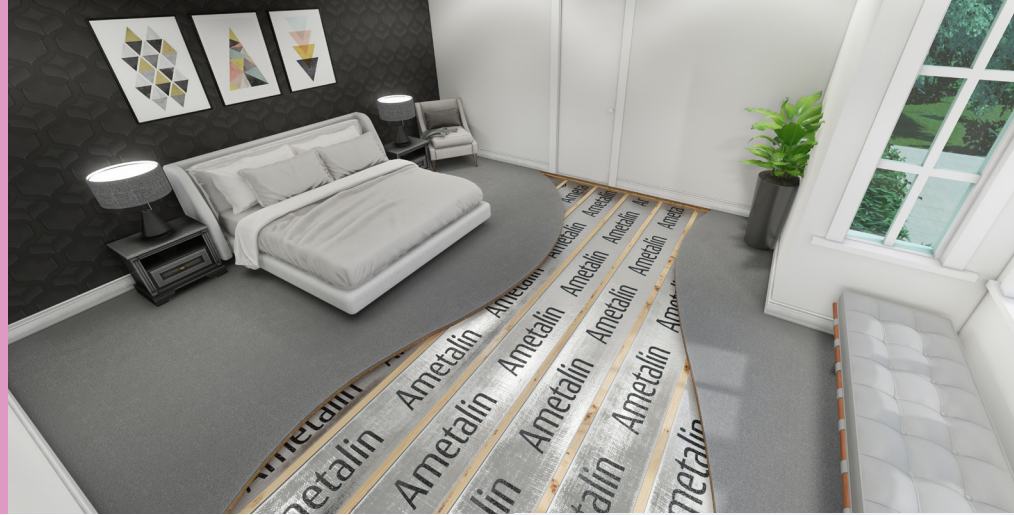
Performance insulation for a greener world

ThermalFloor™

Product Code: TF

Reflective underfloor insulation

For under floors that are adhered directly to floor joists

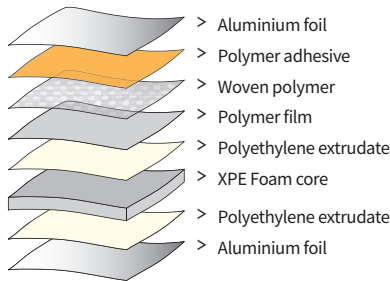


ThermalFloor™ is a 2 in 1 insulation and moisture management system, designed for use under floors with a sealed air space between flooring and enclosed sub-floor space. Double-sided reflective surfaces provide increased R-value to your floor system. Weep holes in the membrane structure allow water and 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_t 3.47**

Summer **R_t 1.63**

Enclosed Sub-floor Ventilated

with ThermalFloor™

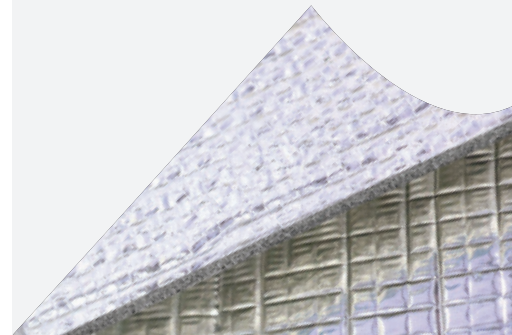
Winter **R_t 2.16**

Summer **R_t 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 ² .K/W (Rm 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 m²)
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

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



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

© 2021 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-21333-4