

Certification Body:



SAI Global Certification Services Pty Limited

(ACN 108 716 669) Operating as "Intertek & Intertek SAI Global".

JAS-ANZ Accreditation No. Z1440295AS

Address: 650 Lorimer Street Port, Melbourne, VIC, 3207

Australia

Website: www.saiglobal.com



Certificate Holder:

Kingspan Insulation Pty Ltd

25 O'herns Road, Somerton VIC 3062

Tel: 1300 247 235 Fax: 1300 247

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info@kingspaninsulation.com.au

THIS TO CERTIFY THAT AIR-CELL Permifloor®

Description of product:

Permifloor® is a reflective pliable building membrane acting as an insulation layer and a vapour-permeable membrane. It is an underfloor insulation fixed between or under floor joists and also suitable for suspended framed floors applications.

Type and/or use of product:

Permifloor® is a fibre-free, thermo reflective insulation, comprising a closed-cell foam structure sandwiched with an anti-glare foil facing on one side and a plain foil facing on the other side, which is vapour permeable.

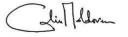
Certificate number: CM20029/3

COMPLIES WITH THE FOLLOWING BCA PROVISIONS AND STATE OR TERRITORY VARIATION(S)

BCA 2022

	Volume One		Volume Two & Housing Provisions	
Performance Requirement(s)	N/A	N/A	N/A	N/A
Deemed-to-Satisfy Provision(s):	C2D11 including S7C7	Fire resistance and Stability – Fire hazard properties Other materials	H3D2	Fire properties for materials and construction - Fire hazard properties
	J4D3	Building fabric - Thermal construction — general (must be used in conjunction with other building elements to achieve a total R value outlined in clause J4D7 'Floors') subject to state and territory variations.	13.2.2	Building fabric - Building fabric thermal insulation. (must be used in conjunction with other building elements to achieve a total R value outlined in 13.2.6 'Floors and subfloor walls') subject to state and territory variations
State or territory variation(s):	NSW C2D11 including NSW S7C7	Fire resistance and Stability – Fire hazard properties Other materials	NT Part 13.2	Building fabric – In the Northern Territory, Part 13.2 is replaced with NT Part 13.2.
			TAS Part 13.2	Building fabric – In the Tasmania, Section 13 is replaced
	NT Part J3	Energy Efficiency – For a Class 2 building and Class 4 part of a building, Section J is replaced with Section J of BCA 2009. For Class 3 and Class 5-9 buildings, Section J of NCC		with BCA 2019 Part 3.12.
			NSW Part 13.2.6	Building fabric – In NSW delete 13.2.6 and insert NSW Part 13.2.6 'Floors and subfloor walls'.

SAI Global Certification Services



Calin Moldovean President, Business Assurance SAI Global Assurance Harley larkes

Harley Parkes – Unrestricted Building Certifier

Date of issue: 26/10/2023

Date of expiry: 25/10/2026







2022 does not apply and from 1 October 2023 Section J of NCC 2019 applies.

TAS Part J3

Energy Efficiency - This Part is deleted from the BCA in Tasmania. In Tasmania, for a Class 2 building and Class 4 part of a building, Section J is replaced with Section J of BCA 2019 Amendment 1.

SUBJECT TO THE FOLLOWING LIMITATIONS AND CONDITIONS AND THE PRODUCT TECHNICAL DATA IN APPENDIX A AND EVALUATION STATEMENTS IN APPENDIX B

Limitations and conditions: Building classification/s:

- 1. The Product must be installed in accordance with the relevant Kingspan Insulated Panels Product Data Sheets, Installation Guides & Drawings as listed in section A5 of this certificate.
- 2. The product must be used for its intended purpose.

Volume 1 – Class 2 to Class 9 buildings

Volume 2 – Class 1 and Class 10a buildings

Scope of certification: The CodeMark Scheme is a building product certification scheme. The rules of the Scheme are available at the ABCB website www.abcb.gov.au. This Certificate of Conformity is to confirm that the relevant requirements of the Building Code of Australia (BCA) as claimed against have been met. The responsibility for the product performance and its fitness for the intended use remain with the certificate holder. The certification is not transferrable to a manufacturer not listed on Appendix A of this certificate.

Disclaimer: The Scheme Owner, Scheme Administrator and Scheme Accreditation Body do not make any representations, warranties or guarantees, and accept no legal liability whatsoever arising from or connected to, the accuracy, reliability, currency or completeness of any material contained within this certificate; and the Scheme Owner, Scheme Administrator and Scheme Accreditation Body disclaim to the extent permitted by law, all liability (including negligence) for claims of losses, expenses, damages and costs arising as a result of the use of the product(s) referred to in this certificate.



APPENDIX A – PRODUCT TECHNICAL DATA

A1 Type and intended use of product

Refer to Page 1 of this certificate.

A2 Description of product

Refer to Page 1 of this certificate

A3 Product specification

Product Name	Permifloor®	
Nominal Product Thickness	4.0mm	
Declared Material R-value	0.11m ² .K/W at 23°C	
Emittance	E0.03 – Reflective Face	
	E0.05 – Anti Glare Face	
Membrane Emittance Category	RR	
Flammability Index (AS 1530.2)	≤ 5 - Low	
Vapour Control (ASTM E96)	Vapour Permeable	
	Class 3	
Water Control (AS/NZS 4201.4)	Non-Water Barrier	
Electrical Conductivity (AS/NZS	Resistance < 10MΩ –	
200.1:2017)	Electrically Conductive	

A4 Manufacturer and manufacturing plant(s)

Manufacturer - Kingspan Insulation Pty Ltd, 25 O'herns Road, Somerton VIC 3062 Manufactured in Taren Point, NSW, Australia

A5 Installation requirements

Refer to Page 2 of this certificate and the following;

1. AIR-CELL Permifloor® Water-Permeable Underfloor Insulation – KIAU0052, Issue 14, September 2023

A6 Other relevant technical data

Certificate number: CM20029/3

- Australian Wool Testing Authority Ltd Test for Resistance to Water Penetration of Building Membranes and Underlays. Test No. 18-002084 (dated 24/04/2018). This report provides the results of testing to AS/NZS 4201.4-1994 (Permifloor®).
- Australian Wool Testing Authority Ltd Test for Water Vapour Transmission. Test No. 18-002079 (dated 08/05/2018). This report provides the results of testing to ASTM E96-2012 (Permifloor®).



APPENDIX B – EVALUATION STATEMENTS

B1 Evaluation methods

The product has been assessed as complying with the identified Performance Requirements of the NCC BCA 2019. This involved a review of product specifications, test reports, installation manuals, and associated documentation.

- 1. Fire Hazard Properties assessment:
 - a) A2G3(2)(a) / A5G3(1)(d) A report issued by an Accredited Testing Laboratory 'AWTA' Australian Wool Testing Authority (NATA accreditation No. 1356)
- 2. Energy Efficiency Assessment:
 - a) A2G3(2)(a) / A5G3(1)(d) A report issued by an Accredited Testing Laboratory 'AWTA' Australian Wool Testing Authority (NATA accreditation No. 1356) & OTM Solutions Pte. Ltd. (SAC accreditation no. LA-2016-0610-G) & R&D Services (IAS accreditation No. TL-566)
 - b) A2G3(2)(a) / A5G3(1)(e) A report from an appropriately qualified person Acronem Consulting Australia Pty Ltd
 - c) A2G3(2)(a) / A5G3(1)(f) Another form of documentary evidence, such as but not limited to a Product Technical Statement Kingspan Insulation Pty Ltd

B2 Reports

Evaluation methods	Related Reports	
Fire Hazard Properties assessment	1	
Energy Efficiency Assessment	2, 3, 4, 5	

- 1. **Australian Wool Testing Authority Ltd Test for Flammability of Materials. Test No. 18-007580 (dated 14/01/2019)**. This report provides the results of testing to AS 1530.2-1993 Part 2, and specifies the product obtained a Flammability Index of 1. (Permifloor®).
- 2. **Kingspan Thermal Value Summary Report (Thermal Value Summary Report Permifloor 4.0mm dated 02/08/2023)** (Permifloor®) *This report provides a Thermal value summary Report in conformance with AS/NZS 4859.1:2018 clause 2.3.3.9, based on the test reports provided by AWTA product testing* (NATA accreditation No. 1356) Test report No. 18-007627, 18-007628, 18-007629, 18-007632 and also R & D Services (IAS accreditation No. TL-566) Report No. RD221110. These reports provide results of testing to ASTM C518.
- 3. Australian Wool Testing Authority Ltd Test for Resistance to Surface Corrosion and Wet Delamination at Elevated Ambient Temperatures (Reflective Insulations). Test No. 20-004346 (dated 05/10/2020). This report provides the results of testing to AS/NZS 4859.1-2018 and indicates a "PASS" for Wet Delamination and a "PASS" for Surface Corrosion (Permifloor®).
- 4. **OTM Solutions Pte. Ltd. Material Surface Emittance Test Report. OTM2203038 'Antiglare Foil' (dated 16/03/2022)** This report provides the results of ASTM C1371-15 for determination of emittance of material (Permifloor).
- 5. **OTM Solutions Pte. Ltd. Material Surface Emittance Test Report. OTM2203040 'Silver Foil' (dated 16/03/2022)** This report provides the results of ASTM C1371-15 for determination of emittance of material (Permifloor).