



Certificate of Conformity

Certificate number: CM20044

Certification Body:



SAI Global Certification Services Pty Limited
(ACN 108 716 669) Trading as "SAI Global"

JAS-ANZ Accreditation No. Z1440295AS

Address: 680 George St, Sydney, NSW 2000

Website: www.saiglobal.com

Certificate Holder:



Kingspan Insulation Pty Ltd
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THIS TO CERTIFY THAT

Kooltherm® K5 External Wall Board

Type and/or use of product:

A thermal insulation board with external render systems for use on the external side of masonry and timber or steel framed walls.

Description of product:

The Kooltherm K5 External Wall Board consisting of a CFC/HCFC-free fibre-free rigid thermoset, closed cell phenolic insulation core, sandwiched between two layers of tissue based facing autohesively bonded to the insulation core during manufacture, with a typical density of 40kg/m3.

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

BCA 2019

Performance Requirement(s) Deemed-to-Satisfy Provision(s):	Volume One	N/A	Volume Two	N/A
	N/A		N/A	
	Schedule 5 clause 2(b)	Fire Resistance of Building Elements	3.7.2.2	Fire Separation of External Walls – External walls of class 1 buildings
	Spec C1.1, clause 5	Fire-Resisting Construction – Type C Fire-Resisting Construction	3.7.2.4(b)(i)	Fire Separation of External Walls - Construction of External Walls
	J1.2	Building Fabric – Thermal construction – general (must be used in conjunction with other building elements to achieve a total R value outlined in clause J1.5 'Walls and Glazing') subject to state and territory variations.	3.12.1.1	Building fabric - Building fabric thermal insulation. (must be used in conjunction with other building elements to achieve a total R value outlined in clause 3.12.1.4 'External walls') subject to state and territory variations.

SAI Global Certification Services

Heather Mahon
Global Head of Technical Services
SAI Global Assurance

Quintin Kleyn – Unrestricted Building Certifier

Date of issue: 05/08/2020

Date of expiry: 05/08/2023



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State or territory variation(s):

SA C1.1

Fire Resistance

Type of Construction required

NSW Section J

Section J is replaced with NSW Section J which consists of two (2) subsections:

- J(A) Energy Efficiency – Class 2 buildings & Class 4 part (BASIX)
- J(B) Energy Efficiency – Class 3 & Class 5 to 9 buildings

NT Section J

For a Class2 building and a Class4 part of a building, Section J is replaced with Section J of BCA 2009. Section J does not apply to Class 3 and 5-9 buildings.

QLD Section J

In Queensland, for a Class 2 building, Section J is replaced with Section J of BCA 2009.

NSW-3.12

ENERGY EFFICIENCY

In New South Wales, Part 3.12 does not apply. Note: The New South Wales Additions contain energy efficiency measures that apply in New South Wales to support and complement BASIX.

NT-3.12

In the Northern Territory, Part 3.12 is replaced with BCA 2009 Part 3.12.

SA-3.12

In South Australia, for the purposes of this Part, a sunroom or the like is deemed to be a Class 10a building and must comply with 3.12.1.6.

QLD-3.12

In Queensland, building work for the energy efficiency of Class 1 buildings is also regulated by the Building Act 1975 and the Queensland Development Code MP 4.1— Sustainable buildings.

ACT-3.12

In the Australian Capital Territory, see the ACT Appendix for further information on application to building work on new buildings and additions to existing buildings in the ACT.

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

Limitations and conditions:

1. This Product is not certified against the STRUCTURAL provisions of the BCA.
2. This Product is not certified against the DAMP & WEATHERPROOFING provisions of the BCA.
3. This Product is certified for Class 1 & Class 10a buildings, for external wall constructions where an FRL is required (as per Vol.2 clause 3.7.2.2), in accordance with the Specimen prototype construction details in the relevant test reports as listed in items 4(c) to 4(e) below .
4. This product is certified to **Type C Construction** with a noted FRL. To achieve the noted FRL the wall construction and materials must be in accordance with the Specimen prototype construction details in the relevant test reports as listed below:
 - a) **FRL 30/30/30** – Warringtonfire Assessment Report Issue Number 31431900.2 dated 8 January 2019. Assessment report to be obtained from the manufacturer
 - b) **FRL -/60/60** – Exova Warringtonfire Report Issue Number 27043400.1 dated 8 August 2014. Test report to be obtained from the manufacturer
 - c) **FRL 60/60/60** – Warringtonfire Assessment Report Issue Number 31431900.2 dated 8 January 2019. Assessment report to be obtained from the manufacturer

Building classification/s:

Volume 1 - Class 2 to Class 9 buildings
Volume 2 – Class 1 & Class 10a buildings

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- d) **FRL 90/90/60** – Exova Warringtonfire Report Issue Number 19156200.3 dated 9 January 2015. Test report to be obtained from the manufacturer
- e) **FRL 90/90/90** – Warringtonfire Assessment Report Issue Number 31431900.2 dated 8 January 2019. Assessment report to be obtained from the manufacturer
- 5. The Kooltherm K5 External Wall Board General Installation Guide (AW2354 – Issue 3, Aug 2018). Can be used only when there is no requirement for an FRL.
- 6. The 'Kooltherm K5 External Wall Board Insulation for use Behind Traditional & Lightweight Polymer Modified Renders' Manual (K5, KIAU0014, Issue 14, Jan 2020). The installation methods outlined in this document can be used only when there is no requirement for an FRL as listed in Specification C1.1 Table 5 (BCA 2019).
- 7. A building element listed in Specification C1.1 table 5 (BCA 2019) and any beam or column incorporated in it, must have an FRL not less than that listed in the table for the particular Class of building concerned.

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	Kooltherm® K5 External Wall Board
Nominal Product Thickness	50mm & 80mm
Product Dimensions	2400mm x 1200mm (2.88m ²)
Declared Material R-value	50mm – R2.35m ² .K/W at 23°C 80mm – R3.80m ² .K/W at 23°C
Declared Thermal Conductivity (λ-value)	0.021 W/m.K at 23°C (insulant Thickness ≥45mm)

Specification provided in the 'Kooltherm K5 External Wall Board Insulation for use Behind Traditional & Lightweight Polymer Modified Renders' Manual (K5, KIAU0014, Issue 14, Jan 2020).



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A4 Manufacturer and manufacturing plant(s)

Kingspan Insulation Pty Ltd. – Manufactured in Somerton
25 Oherns Road, Somerton, VIC, 3062, Australia

A5 Installation requirements

Refer to Page 2 of this certificate and the following;

1. Kingspan Insulation Pty – Kooltherm K5 External Wall Board General Installation Guide (AW2354 – Issue 3, Aug 2018).
2. Kingspan Insulation Pty – Kooltherm K5 External Wall Board Insulation for use Behind Traditional & Lightweight Polymer Modified Renders Manual (K5, KIAU0014, Issue 14, Jan 2020).

A6 other relevant technical data

- None.

APPENDIX B – EVALUATION STATEMENTS

B1 Evaluation methods

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

1. Fire Hazard Properties assessment:
 - a) A2.3(2)(a) / A5.2(1)(d) - A report issued by an Accredited Testing Laboratory - 'Warringtonfire' (formally Exova Warringtonfire) (NATA accreditation No. 3277)
2. Energy Efficiency Assessment:
 - a) A2.3(2)(a) / A5.2(1)(d) - A report issued by an Accredited Testing Laboratory – 'AWTA' Australian Wool Testing Authority (NATA accreditation No. 1356)
 - b) A2.3(2)(a) / A5.2(1)(e) – A report from an appropriately qualified person – Acronem Consulting Australia Pty Ltd.
 - c) A2.3(2)(a) / A5.2(1)(f) - Another form of documentary evidence, such as but not limited to a Product Technical Statement - Kingspan Insulation Pty Ltd.

B2 Reports

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

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1. **Exova Warrington fire Report Number 19156200.3 dated 9 January 2015 (NATA accreditation No. 3277).** *This report provides the test results for Exsulite-Kooltherm Façade System, when tested to meet the requirements of AS1530.4-2005. The system tested achieves an FRL of 90/90/60 with respect to the performance criteria listed in AS1530.4-2005.*
2. **Exova Warrington fire Report Number 27043400.1 dated 8 August 2014 (NATA accreditation No. 3277).** *This report provides the test results for a non-loadbearing Kooltherm K5 External Wall board, when tested to meet the requirements of AS1530.4-2005. The system tested achieves an FRL of -/60/60 with respect to the performance criteria listed in AS1530.4-2005.*
3. **Warringtonfire Assessment Report (Job No. 31431900.2) dated 8 January 2019 (NATA Accreditation No. 3277).** *The fire resistance performance of various non-loadbearing and loadbearing timber framed wall systems protected with Exsulite-Kooltherm Façade System if tested in accordance with AS 1530.4-2005*
4. **Kingspan Thermal Value Summary Report (Kooltherm TVSR – Final – 25/03/2020) –** *This report provides a Thermal value summary Report in conformance with AS/NZS 4859.1:2018 clause 2.3.3.9, based on test reports provided by AWTA Product Testing - Test reports for 45mm and greater (Test Numbers 18-004505, 18-005882, 18-005885, 18-005886, 18-005888, 18-005889, 18-005890, 18-005891, 18-005892, 18-005893, 18-005894,) & test reports for less than 44mm (Test Numbers 18-004500, 18-004503, 18-004504, 18-004506, 18-004507, 18-005875, 18-005876, 18-005878, 18-005881, 20-000201,)for Kingspan Kooltherm (NATA accreditation No. 1356). These reports provide results of testing to ASTM C518-2017.*
5. **Acronem Consulting Australia Pty Ltd - Thermal Conductivity Assessment of Kooltherm® K3, K5, K8, K10, K12, K17 Phenolic Foam– dated 01/08/2018 -** *This assessment provides expert judgment of the thermal conductivity of Kooltherm® at varying thicknesses when tested to achieve the noted Insulation R-Values in the product brochures. This assessment is based on AWTA Test reports (Test Numbers 17-001255, 17-001265, 17-001953, 17-001955, 17-002821, 17-002824, 17-005215, 17-005218, 17-005231, 18-000777).*