Certificate of Conformity

Certification Body:

CMI CERTIFICATION
ABN: 81 663 250 815
JASANZ Accreditation No. Z4450210AK
PO Box 273,
Palmwoods Qld 4555
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Certificate Holder:

Metecno Pty Ltd
T/A Metecno, Bondor®
ABN: 44 096 402 934
121 Ingram Road,
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www.bondor.com.au

Certificate number: CM40415

THIS IS TO CERTIFY THAT

MetecnoTherm™

Type and/or use of product:

Insulation board used in wall, ceiling and underfloor applications.

Description of product:

MetecnoTherm™ is a rigid thermal insulation board made from polyisocyanurate (PIR) core thermoset between two layers of flexible facings.
MetecnoThermPB™ – comprises of MetecnoTherm™ with an additional finished surface of Plasterboard sheeting.
MetecnoThermFC™ – comprises of MetecnoTherm™ with an additional finished surface of Fibre Cement sheeting.
MetecnoTherm™ UnderSlab – comprises of MetecnoTherm™ sandwiched between the subsoil and concrete slab.
MetecnoCast® – comprises of MetecnoTherm™ sandwiched between two wythes of concrete with HK Standard non-conductive wall ties.

COMPLIES WITH THE FOLLOWING BCA PROVISIONS AND STATE OR TERRITORY VARIATION(S) **BCA 2022**

	Volume One		Volume Two	
Performance Requirement(s):	Not Applicable		Not Applicable	
Deemed-to-Satisfy Provision(s):	C2D11	Fire hazard properties – Refer A3 and *limitations and conditions No. 3 & 4.*	H6D2	Energy efficiency – Must be used in conjunction with other building elements to achieve a Total R Value.
	J4D3	Thermal construction – Must be used in conjunction with other building elements to achieve a Total R Value.		
State or territory variation(s):	J4D3 NSW		H6D2 Vic	

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 has not been tested to AS 1530.1-1994 (R2016) and cannot be considered a non-combustible product.
2. The structural support members are designed and engineered separately as per project requirements by building designers and engineers

Building classification/s:

Class 1,2,3,4,5,6,7,8,9 & 10

Richard Donarski – CMI

Don Grehan – Unrestricted Building Certifier

Date of issue: 29/08/2024

Date of expiry: 29/08/2027

3. Group numbers has been determined in accordance with testing conducted to AS ISO 9705 and assessment against AS5637.1: 2015 and excludes MetecnoTherm™ UnderSlab and MetecnoCast®.
4. The use of MetecnoTherm™ as internal wall and ceiling linings must comply with the group number specified in Table S7C4 of Specification 7 of the BCA Volume 1, 2022. Refer A3 for the determined Group Number for MetecnoTherm™, MetecnoThermFC™ and MetecnoThermPB™.
5. Installation MetecnoTherm™, MetecnoThermPB™, MetecnoThermFC™, MetecnoTherm™ UnderSlab & MetecnoCast® of must be in accordance with the MetecnoTherm™ Design & Install Guide - v5.
6. The use of the certified product/system is subject to these Limitations and Conditions and must be read in conjunction with the Scope of Certification below.

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.

Only criteria as identified within this Certificate of Conformity can be used for CodeMark certification claims. Where other claims are made in a client's Installation Manual, Website or other documents that are outside the criteria on this Certificate of Conformity, such criteria cannot be used or claimed to meet the requirements of this CodeMark certification.

The NCC defines a Performance Solution as one that complies with the Performance Requirements by means other than a Deemed-to-Satisfy Solution. A Building Solution that relies on a CodeMark Certificate of Conformity that certifies a product against the Performance Requirements cannot be considered as Deemed-to-Satisfy Solution.

This Certificate of Conformity may only relate to a part of a Performance Solution. In these circumstances other evidence of suitability is needed to demonstrate that the relevant Performance Requirements have been met. The relevant provisions of the Governing Requirements in Part A of the NCC will also need to be satisfied.

This Certificate of Conformity is issued based on the evidence of compliance as detailed herein. Any deviation from the specifications contained in this Certificate of Conformity is outside of this document's scope and the installation of the certified product will not be covered by this Certificate of Conformity.

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.

When using the CodeMark logo in relation to or on the product/system, the Certificate Holder makes a declaration of compliance with the Scope of Certification and confirms that the product is identical to the product certified herein. In issuing this Certificate of Conformity, CMI Certification Pty Ltd (CMI) has relied on the experience and expertise of external bodies (laboratories and technical experts).

Nothing in this document should be construed as a warranty or guarantee by CMI, and the only applicable warranties will be those provided by the Certificate Holder.

APPENDIX A – PRODUCT TECHNICAL DATA

A1 Type and intended use of product

As per page 1.

A2 Description of product

Core	PIR (Polyisocyanurate)
Width (cover mm)	1200
Thickness (mm)	MetecnoTherm™ & MetecnoCast® - 25 to 100 in 5mm increments MetecnoThermFC™ - 29.5 to 104.5 in 5mm increments (with 4.5mm FC) MetecnoThermFC™ - 31 to 106 in 5mm increments (with 6.0mm FC) MetecnoThermPB™ - 35 to 110 in 5mm increments (with 10mm PB) MetecnoThermPB™ - 38 to 113 in 5mm increments (with 13mm PB) MetecnoTherm™ UnderSlab - 30 to 50mm
Length	2.4m
Inner Face	Embossed Foil, Paper, Coated Glass Fibre
Outer Face	MetecnoTherm™, MetecnoTherm™ UnderSlab & MetecnoCast® - Embossed Foil, Paper, Coated Glass Fibre MetecnoThermFC™ - 4.5mm, 6.0mm Fibre Cement MetecnoThermPB™ - 10mm, 13mm Plasterboard

A3 Product specification

Material Group Numbers

Group Number have been determined in accordance with testing conducted to ISO 9705 and assessment against AS 5637.1:2015.

MetecnoTherm™		**MetecnoThermFC™**		**MetecnoThermPB™**	
The MetecnoTherm™ with Embossed Foil individual group number when tested to AS ISO 9705:2003		MetecnoTherm™ with 4.5mm or 6.0mm thick Fibre Cement Sheet		MetecnoTherm™ with standard grade 10mm or 13mm paper faced plasterboard	
Group Number:	2	**Group Number:**	1	**Group Number:**	1
$SMOGRA_{RC}$:	$137.4 m^2 s^{-2} x1000$	**Average Specific Extinction Area:**	$<250\ m^2/kg$	**Average Specific Extinction Area:**	$<250\ m^2/kg$

Source: *Ignis Labs Pty Ltd; Report No. IGNL-8205-99-01R I01 R02; Dated 27/08/2024.*

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Thermal & Energy Efficiency

Declared & Total R-values for MetecnoTherm™ & MetecnoCast® PIR core				Ceiling Total R-value (m^2K/W) at			Wall Total R-value (m^2K/W) at		
Thickness (mm)	$\lambda_{declared}$ at 23°C (W/m.K)	$R_{declared}$ at 15°C (m^2K/W)	$R_{declared}$ at 23°C (m^2K/W)	6°C	15°C	30°C	6°C	15°C	30°C
25	0.024	1.10	1.05	1.33	1.28	1.24	1.34	1.29	1.20
30	0.024	1.35	1.25	1.57	1.50	1.44	1.58	1.51	1.40
35	0.024	1.55	1.50	1.81	1.73	1.65	1.82	1.74	1.61
40	0.024	1.80	1.70	2.04	1.95	1.86	2.05	1.96	1.82
45	0.024	2.00	1.90	2.28	2.18	2.07	2.29	2.19	2.03
50	0.024	2.25	2.15	2.52	2.40	2.27	2.53	2.41	2.23
55	0.024	2.45	2.35	2.75	2.63	2.48	2.76	2.64	2.44
60	0.024	2.70	2.55	2.99	2.85	2.69	3.00	2.86	2.65
65	0.024	2.90	2.80	3.23	3.08	2.90	3.24	3.09	2.86
70	0.024	3.15	3.00	3.46	3.30	3.10	3.47	3.31	3.06
75	0.024	3.35	3.20	3.70	3.53	3.31	3.71	3.54	3.27
80	0.024	3.60	3.40	3.94	3.75	3.52	3.95	3.76	3.48
85	0.024	3.80	3.65	4.17	3.98	3.73	4.18	3.99	3.69
90	0.024	4.05	3.85	4.41	4.20	3.93	4.42	4.21	3.89
95	0.024	4.25	4.05	4.65	4.43	4.14	4.66	4.44	4.10
100	0.024	4.50	4.30	4.88	4.65	4.35	4.89	4.66	4.31

Declared & Total R-values for MetecnoThermFC™ (with 4.5mm FC) PIR core				Ceiling Total R-value (m^2K/W) at			Wall Total R-value (m^2K/W) at		
Thickness (mm)	$\lambda_{declared}$ at 23°C (W/m.K)	$R_{declared}$ at 15°C (m^2K/W)	$R_{declared}$ at 23°C (m^2K/W)	6°C	15°C	30°C	6°C	15°C	30°C
29.5	0.024	1.10	1.05	1.35	1.29	1.25	1.36	1.30	1.21
34.5	0.024	1.35	1.25	1.59	1.52	1.46	1.60	1.53	1.42
39.5	0.024	1.55	1.50	1.82	1.74	1.67	1.83	1.75	1.63
44.5	0.024	1.80	1.70	2.06	1.97	1.88	2.07	1.98	1.84
49.5	0.024	2.00	1.90	2.30	2.19	2.08	2.31	2.20	2.04
54.5	0.024	2.25	2.15	2.53	2.42	2.29	2.54	2.43	2.25
59.5	0.024	2.45	2.35	2.77	2.65	2.50	2.78	2.66	2.46
64.5	0.024	2.70	2.55	3.01	2.87	2.71	3.02	2.88	2.67
69.5	0.024	2.90	2.80	3.24	3.10	2.91	3.25	3.11	2.84
74.5	0.024	3.15	3.00	3.48	3.32	3.12	3.49	3.33	3.08
79.5	0.024	3.35	3.20	3.72	3.55	3.33	3.73	3.56	3.29
84.5	0.024	3.60	3.40	3.95	3.77	3.54	3.96	3.78	3.50
89.5	0.024	3.80	3.65	4.19	4.0	3.74	4.20	4.01	3.70
94.5	0.024	4.05	3.85	4.43	4.22	3.95	4.44	4.23	3.91
99.5	0.024	4.25	4.05	4.66	4.45	4.16	4.67	4.46	4.12
104.5	0.024	4.50	4.30	4.90	4.67	4.37	4.91	4.68	4.33

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Declared & Total R-values for MetecnoThermFC™ (with 6.0mm FC) PIR core				Ceiling Total R-value (m^2K/W) at			Wall Total R-value (m^2K/W) at		
Thickness (mm)	$\lambda_{declared}$ at 23°C (W/m.K)	$R_{declared}$ at 15°C (m^2K/W)	$R_{declared}$ at 23°C (m^2K/W)	6°C	15°C	30°C	6°C	15°C	30°C
31	0.024	1.15	1.10	1.36	1.30	1.26	1.37	1.31	1.22
36	0.024	1.35	1.30	1.59	1.53	1.47	1.60	1.54	1.43
41	0.024	1.60	1.50	1.83	1.75	1.68	1.84	1.76	1.64
46	0.024	1.80	1.70	2.07	1.98	1.88	2.08	1.99	1.84
51	0.024	2.05	1.95	2.30	2.20	2.09	2.31	2.21	2.05
56	0.024	2.25	2.15	2.54	2.43	2.30	2.55	2.44	2.26
61	0.024	2.50	2.35	2.78	2.65	2.51	2.79	2.66	2.47
66	0.024	2.70	2.60	3.01	2.88	2.71	3.02	2.89	2.67
71	0.024	2.95	2.80	3.25	3.10	2.92	3.26	3.11	2.88
76	0.024	3.15	3.00	3.49	3.33	3.13	3.50	3.34	3.09
81	0.024	3.40	3.25	3.72	3.55	3.33	3.73	3.56	3.29
86	0.024	3.60	3.45	3.96	3.78	3.54	3.97	3.79	3.50
91	0.024	3.85	3.65	4.20	4.00	3.75	4.21	4.01	3.71
96	0.024	4.05	3.90	4.43	4.23	3.96	4.44	4.24	3.92
101	0.024	4.30	4.10	4.67	4.45	4.16	4.68	4.46	4.12
106	0.024	4.50	4.30	4.91	4.68	4.37	4.92	4.68	4.33

Declared & Total R-values for MetecnoThermPB™ (with 10mm PB) PIR core				Ceiling Total R-value (m^2K/W) at			Wall Total R-value (m^2K/W) at		
Thickness (mm)	$\lambda_{declared}$ at 23°C (W/m.K)	$R_{declared}$ at 15°C (m^2K/W)	$R_{declared}$ at 23°C (m^2K/W)	6°C	15°C	30°C	6°C	15°C	30°C
35	0.024	1.15	1.10	1.39	1.34	1.30	1.40	1.35	1.26
40	0.024	1.40	1.35	1.63	1.56	1.50	1.64	1.57	1.46
45	0.024	1.60	1.55	1.87	1.79	1.71	1.88	1.80	1.67
50	0.024	1.85	1.75	2.10	2.01	1.92	2.11	2.02	1.88
55	0.024	2.05	1.95	2.34	2.24	2.13	2.35	2.25	2.09
60	0.024	2.30	2.20	2.58	2.46	2.33	2.59	2.47	2.29
65	0.024	2.50	2.40	2.81	2.68	2.54	2.82	2.70	2.50
70	0.024	2.75	2.60	3.05	2.91	2.75	3.06	2.92	2.71
75	0.024	2.95	2.85	3.29	3.14	2.95	3.30	3.15	2.91
80	0.024	3.20	3.05	3.52	3.36	3.16	3.53	3.37	3.12
85	0.024	3.40	3.25	3.76	3.59	3.37	3.77	3.60	3.33
90	0.024	3.65	3.50	4.00	3.81	3.58	4.01	3.82	3.54
95	0.024	3.85	3.70	4.23	4.04	3.78	4.24	4.05	3.74
100	0.024	4.10	3.90	4.47	4.26	3.99	4.48	4.27	3.95
105	0.024	4.30	4.15	4.71	4.49	4.20	4.72	4.50	4.16
110	0.024	4.55	4.35	4.94	4.71	4.41	4.95	4.72	4.37

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Declared & Total R-values for MetecnoThermPB™ (with 13mm PB) PIR core				Ceiling Total R-value (m^2K/W) at			Wall Total R-value (m^2K/W) at		
Thickness (mm)	**$\lambda_{declared}$ at 23°C (W/m.K)**	**$R_{declared}$ at 15°C (m^2K/W)**	**$R_{declared}$ at 23°C (m^2K/W)**	**6°C**	**15°C**	**30°C**	**6°C**	**15°C**	**30°C**
38	0.024	1.20	1.15	1.41	1.35	1.31	1.42	1.36	1.27
43	0.024	1.40	1.35	1.65	1.58	1.52	1.66	1.59	1.48
48	0.024	1.65	1.55	1.88	1.80	1.73	1.89	1.81	1.68
53	0.024	1.85	1.80	2.12	2.03	1.94	2.13	2.04	1.90
58	0.024	2.10	2.00	2.36	2.25	2.14	2.37	2.26	2.10
63	0.024	2.30	2.20	2.59	2.48	2.35	2.60	2.49	2.31
68	0.024	2.55	2.40	2.83	2.70	2.56	2.84	2.71	2.52
73	0.024	2.75	2.65	3.07	2.93	2.77	3.08	2.94	2.73
78	0.024	3.00	2.85	3.30	3.15	2.97	3.31	3.16	2.93
83	0.024	3.20	3.05	3.54	3.38	3.18	3.55	3.39	3.14
88	0.024	3.45	3.30	3.78	3.61	3.39	3.79	3.62	3.35
93	0.024	3.65	3.50	4.01	3.83	3.60	4.02	3.84	3.56
98	0.024	3.90	3.70	4.25	4.06	3.80	4.26	4.07	3.76
103	0.024	4.10	3.95	4.49	4.28	4.01	4.50	4.29	3.97
108	0.024	4.35	4.15	4.72	4.51	4.22	4.73	4.52	4.18
113	0.024	4.55	4.35	4.96	4.73	4.42	4.97	4.74	4.38

Declared & Total R-values for MetecnoTherm™ UnderSlab PIR core				Ceiling Total R-value (m^2K/W) at			Wall Total R-value (m^2K/W) at		
Thickness (mm)	**$\lambda_{declared}$ at 23°C (W/m.K)**	**$R_{declared}$ at 15°C (m^2K/W)**	**$R_{declared}$ at 23°C (m^2K/W)**	**6°C**	**15°C**	**30°C**	**6°C**	**15°C**	**30°C**
25	0.024	1.10	1.05	1.33	1.28	1.24	1.34	1.29	1.20
30	0.024	1.35	1.25	1.57	1.50	1.44	1.58	1.51	1.40
35	0.024	1.55	1.50	1.81	1.73	1.65	1.82	1.74	1.61
40	0.024	1.80	1.70	2.04	1.95	1.86	2.05	1.96	1.82
45	0.024	2.00	1.90	2.28	2.18	2.07	2.29	2.19	2.03
50	0.024	2.25	2.15	2.52	2.40	2.27	2.53	2.41	2.23

Notes:

- Declared R-values are Product R-values and exclude air film resistances.
- Total R-values include default air film resistances for the applications.
- The results are compliant with AS/NZS 4859 Parts 1&2:2018, Thermal insulation materials for buildings.

A4 Manufacturer and manufacturing plant(s)

This field is optional. Contact the Certificate Holder for details.

A5 Installation requirements

Installation MetecnoTherm™, MetecnoThermPB™, MetecnoThermFC™, MetecnoTherm™ UnderSlab & MetecnoCast® of must be in accordance with the MetecnoTherm™ Design & Install Guide - v5.

A6 Other relevant technical data

Fire Hazard Properties

MetecnoTherm™ Testing in accordance with AS/NZS 1530.3-1999

Ignitability Index	0	Range 0-20
Spread of Flame Index	0	Range 0-10
Heat Evolved Index	0	Range 0-10
Smoke Developed Index	2	Range 0-10

Source: *AWTA Product Testing Report No. 24-002345 issued 20/08/2024.*

Acoustic Properties

MetecnoThermFC™ (with 4.5mm FC)	Rw 26
MetecnoThermFC™ (with 6.0mm FC)	Rw 27
MetecnoThermPB™ (with10mm or 13mm PB)	Rw 27

Source: *Renzo Tonn & Associates Report No. MC861-01F02 dated 14/03/2019*

APPENDIX B – EVALUATION STATEMENTS

B1 Evaluation methods

1. Energy Efficiency Provisions A5G3(1)(e). A report issued by a professional engineer.
2. Fire Safety Provisions A5G3(1)(d)&(e). A report issued by an Accredited Testing Laboratory & a certificate or report from a professional engineer or other appropriately qualified person.

B2 Reports

1. Ignis Labs Pty Ltd; NATA Accreditation No. 20534; Report No. IGNL-8205-99-01R I01 R02; MetecnoTherm Board Installation Product Advice; Dated 27/08/2024. Report provides determination of Group Numbers in compliance with C2D11.
2. Exova Warrintonfire; NATA Accreditation No. 3277; RTF230123; Results of testing in accordance with AS ISO 9705-2003; Dated 22/11/2023. Report has been refenced in compliance with C2D11 by Ignis Labs Pty Ltd Report No. IGNL-8205-99-01R I01 R02 dated 27/08/2024.
3. AWTA Product Testing; NATA Accreditation No. 1356; Report No. 24-002345 issued Dated 20/08/2024. Report has been refenced in compliance with C2D11 by Ignis Labs Pty Ltd Report No. IGNL-8205-99-01R I01 R02 dated 27/08/2024.
4. James M Fricker Pty Ltd; Report No. i265e; Thermal Insulation Evaluation by Calculations of Metecno Panels; Dated 15/12/2020. Report provides thermal calculations to be used in conjunction with other building elements to achieve a Total R Value for compliance with H6D2 & J4D3.

The Certificate Holder has chosen not to make the above evidence of compliance publicly available, due to the documents being considered commercial in confidence.