

Certificate number: CM40196 Rev1

Certification Body:


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 JAS-ANZ Accreditation
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Certificate Holder:

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THIS IS TO CERTIFY THAT

MetecnoPanel®

Description of product:

MetecnoPanel® is an insulated wall and ceiling panel comprising of a Polyisocyanurate (PIR) core and Colorbond steel skins. Refer A2 for further information.

Type and/or use of product:

Insulated wall & ceiling panel.

COMPLIES WITH THE FOLLOWING BCA PROVISIONS AND STATE OR TERRITORY VARIATION(S) BCA 2019 (Amdt. 1)

	Volume One	Volume Two
Performance Requirement(s):	BP1.1(a),(b)(i), (ii)&(iii) FP1.4 CP2	P2.1.1(a),(b)(i), (ii)&(iii) P2.2.2
	Structural reliability Weatherproofing – Subject to <i>Limitation and Condition No. 5</i> Protection from the spread of fire – Contributes to the protection from the spread of fire – Limited to the external wall - See limitations and conditions	Structural stability and resistance to actions Weatherproofing – Subject to <i>Limitation and Condition No. 5</i>
Deemed-to-Satisfy Provision(s):	C1.1(b) C1.10(a)(ii) G5.2 J1.5(d)	3.7.2.4(b)(i) 3.10.5.0 3.12.1.4 3.12.1.6
	Fire-resistance of building elements – FRL -/60/30 limited to 200mm thick panel Fire Hazard Properties—Walls and ceiling linings and other materials Construction in bushfire prone areas - Protection – BAL FZ External walls limited to 200mm thicker panel Energy Efficiency – External Walls - Refer A3	Protection from the spread of fire – FRL -/60/30 limited to 200mm thick panel Bushfire areas – BAL FZ External walls limited to 200mm or thick panel Energy Efficiency – External Walls. Can be used in conjunction with other building elements to achieve a Total R Value. Refer to A3. Energy Efficiency - Attached Class 10a buildings. Can be used in conjunction with other building elements to achieve a Total R Value. Refer to A3.
State or territory variation(s):	G5.2 (NSW)	3.10.5.0 (NSW, Qld), Part 3.12 (NSW, NT, SA, Qld, Tas, ACT)

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


 Richard Donarski – CMI


 Don Grehan – Unrestricted Building Certifier

Date of issue: 12/05/2021

Date of expiry: 25/03/2024



Certificate of Conformity

Limitations and conditions:

1. Contribution to satisfying CP2 is limited to the external wall; classified EW, tested to AS 5113:2016 as appropriate for non-loadbearing external cladding systems fixed to and supported by a structural steel frame.
2. The MetecnoPanel as a Group 2 fire rated product, is only suitable for use as a wall and ceiling lining as specified in Table 3 of Specification C1.10 of the BCA 2019. Refer A3.
3. In the absence of a site-specific performance solution, this product or system is not suitable for use in or on Class 2 to 9 buildings where BCA requires external walls, common walls or internal loadbearing walls and/or ancillary elements to be non-combustible.
4. This product has not been tested to AS 1530.1-1994 (R2016) and cannot be considered a non-combustible product.
5. To satisfy FP1.4 & P2.2.2 via verification, the relevant design is required to meet the criteria of FV1.1 and/or V2.2.1 to the satisfaction of the Appropriate Authority as defined by the NCC. The site specific building must;
 - (a)(i) have a risk score of 20 or less, when the sum of all risk factor scores is determined in accordance with Table FV1.1/V2.2.1a; and
 - (a)(ii) not be subjected to an ultimate limit state wind pressure of more than 2.5kPa; and
 - (a)(iii) include only windows that comply with AS 2047.
 Compliance with Weatherproofing is limited to the tested specimen detailed in A3, deviations from this specimen, is subject to site specific design and approval by the regulatory authority.
6. The structural support members are designed and engineered separately as per project requirements by building designers and engineers.
7. Installation requirements are outside the scope of this certificate and subject to project specific engineering advice. The minimum fixing requirements are outlined in the Span Tables referenced in A3 of this Certificate of Conformity.
8. The metal wall panels will be limited by wind load depending on the span panels certified for the product type, thickness, core density and fixing configuration as per the product's certified span tables.
9. The MetecnoPanel is not suitable for use as an external roofing panel.
10. 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.

Building classification/s:

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

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. This may result in the product being classified as a non-conforming building product.

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, CertMark International 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.

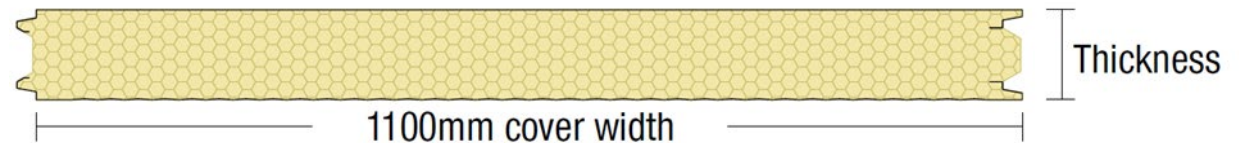
APPENDIX A – PRODUCT TECHNICAL DATA

A1 Type and intended use of product

As per page 1.

A2 Description of product

Core	PIR (Fire-retardant Polyisocyanurate)
Width (cover mm)	1100
Thickness	50, 75, 100, 125, 150 & 200
Length	Up to 16m (check for availability)
External Material	BlueScope® Steel 0.5mm, 0.6mm G300
Internal Material	BlueScope® Steel 0.5mm, 0.6mm G300



Source: Certificate Holder

A3 Product specification

Structure In order to maintain compliance with structure, the following Span Tables must be referred to which have been certified by a licensed Professional Engineer in accordance with AS/NZS 1170.0, AS/NZS 1170.1, AS/NZS 1170.2, AS 4055 & AS 4040.1.

Document Name	Version
METECNOPANEL® SPAN TABLES FOR WIND REGION A & B – NON-CYCLONIC (EXTERNAL WALL APPLICATIONS ONLY) PIR Core 0.6mm steel skins	4
METECNOPANEL® SPAN TABLES FOR WIND REGION C & D – CYCLONIC (EXTERNAL WALL APPLICATIONS ONLY) PIR Core 0.6mm steel skins	2
METECNOPANEL® SPAN TABLES FOR WIND REGION A & B – NON-CYCLONIC (EXTERNAL WALL APPLICATIONS WITH SINGLE MUSHROOM FIXING) PIR Core 0.6mm steel skins	2
METECNOPANEL® SPAN TABLES FOR WIND REGION A & B – NON-CYCLONIC (EXTERNAL WALL APPLICATIONS ONLY) PIR Core 0.5mm steel skins	4
METECNOPANEL® SPAN TABLES (INTERNAL WALL, CEILING & COLD STORAGE APPLICATIONS) PIR Core 0.5mm steel skins	6
METECNOPANEL® SPAN TABLES (INTERNAL WALL, CEILING & COLD STORAGE APPLICATIONS) PIR Core 0.6mm steel skins	8
METECNOPANEL® 0.6mm Steel Skins Wall Span Table for Housing Application – Non-Cyclonic	2
METECNOPANEL® 0.6mm Steel Skins Wall Span Table for Housing Application - Cyclonic	1
METECNOPANEL® SPAN TABLES FOR WIND REGION A– NON-CYCLONIC (EXTERNAL ROOF APPLICATIONS ONLY) PIR Core 0.6mm steel skins	2
METECNOPANEL® SPAN TABLES FOR WIND REGION B– NON-CYCLONIC (EXTERNAL ROOF APPLICATIONS ONLY) PIR Core 0.6mm steel skins	2
METECNOPANEL® SPAN TABLES FOR WIND REGION A&B– NON-CYCLONIC (EXTERNAL ROOF APPLICATIONS ONLY) PIR Core 0.5mm steel skins	2

EW Classification When tested in accordance with AS 5113:2016 as appropriate for non-loadbearing external cladding systems fixed to and supported by a structural steel frame the 100mm Panel achieved the Classification of EW.

Certificate of Conformity

Fire Resistance Levels

Fire resistance testing of a non-loadbearing MetecnoPanel® wall systems comprising of 200mm thick panels achieved the following results.

EWFA Report No. 2464400.2 dated 31/05/2010.

Criteria	Result
Structural adequacy	Not applicable
Integrity	No failure at 62 minutes
Insulation	52 minutes
FRL	-/60/30

EWFA Report No. 47868300.1 dated 20/09/2017.

Criteria	Result
Structural adequacy	Not applicable
Integrity	No failure at 40 minutes
Insulation	40 minutes
FRL	-/30/30

Material Group Numbers

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

Group 2

50 - 200mm Panel with steel 'wall-wall' and 'wall-ceiling' angles fixed with steel rivets or screws at maximum 200mm centres is classified as Group 2.

Smoke Growth Rate Index (SMOGR_{RC}) 21.1 m²s⁻² x 1000

Group 2

50 - 200mm Panel with aluminium 'wall-wall' and 'wall-ceiling' angles fixed with aluminium rivets or screws at 300mm centres is classified as Group 2.

Smoke Growth Rate Index (SMOGR_{RC}) 47 m²s⁻² x 1000.

Thermal & Energy Efficiency

MetecnoPanel® PIR core	Thickness (mm)	λ _{declared at 23°C (W/m.K)}	R _{declared at 15°C (m²K/W)}	R _{declared at 23°C (m²K/W)}	Wall Total R-value (m ² K/W) at		
					6°C	15°C	30°C
	50	0.023	2.30	2.20	2.61	2.49	2.31
	75	0.023	3.45	3.30	3.84	3.66	3.38
	100	0.023	4.65	4.45	5.06	4.83	4.46
	125	0.023	5.80	5.55	6.29	5.99	5.53
	150	0.023	6.95	6.65	7.51	7.16	6.60
	200	0.023	9.30	8.90	9.96	9.49	8.75

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, hence they are compliant with NCC2019 Volumes One and Two.

Source: James M Fricker Pty Ltd, Report No. i265e dated 15/12/2020.

Weatherproofing Vertical panel configuration installed as a Direct Fix System in accordance with Verification Methods V2.2.1 & FV1 with AS/NZS 4284:2008. Nominated serviceability limit state pressures: +1190 Pa and -1790 Pa. Weatherproofing requirements are detailed in [Commercial Walling Design & Install Guide v1 2021](#). The minimum fixing requirements are outlined in the Span Tables referenced in A3 of this Certificate of Conformity.

Source: Ian Bennie And Associates; Report No.2019-020-S4; NCC-2019 Verification Methods FV1 & V2.1.1 in accordance with AS/NZS 4284:2008; Dated 02/08/2019.

A4 Manufacturer and manufacturing plant(s)

This field is voluntary. Contact Certificate Holder for details.

A5 Installation requirements

Installation and configuration of FRL Systems comprising of 200mm panels only referenced in the FRL tables in A3 of the Certificate of Conformity, must in accordance with the requirements outlined in following Exova Warringtonfire Reports:

FRL -/60/30 EWFA Report No. 2464400.2 dated 31/05/2010.

FRL -/30/30 EWFA Report No. 47868300.1 dated 20/09/2017.

The minimum fixing requirements are outlined in the Span Tables referenced in A3 of this Certificate of Conformity. Weatherproofing requirements are detailed in [Commercial Walling Design & Install Guide v1 2021](#).

A6 Other relevant technical data

Acoustic Properties 50mm **MetecnoPanel**® achieved R_w 25, C -1 & C_{tr} -3.
100mm **MetecnoPanel**® achieved R_w 25, C -1 & C_{tr} -3.
200mm **MetecnoPanel**® achieved R_w 27, C -2 & C_{tr} -4.

Source: CSIRO Report No. TL484 dated March 2008.

APPENDIX B – EVALUATION STATEMENTS

B1 Evaluation methods

1. Fire Safety Provisions – A.5.2(1)(d)&(e). Reports from Accredited Testing Laboratories and a professional engineer.
2. Structural Provisions – A.5.2(1)(e). Reports from a professional engineer.
3. Thermal Provisions – A.5.2(1)(e). Reports from a professional engineer.
4. Weatherproofing Provisions – A.5.2(1)(d). Reports from Accredited Testing Laboratories.

B2 Reports

1. Bligh Tanner; Report No. 2017.0493; Certification of MetecnoPanel Panel Span Tables in accordance with AS/NZS 1170.0, AS/NZS 1170.1, AS/NZS 1170.2, AS 4055 & AS 4040.1; Dated 26/03/2021.
2. EXOVA Warringtonfire Australia Pty Ltd; NATA Accreditation No. 3277; Certificate No. SFC50791800.1; Testing to AS 5113:2016; Dated 21/11/2017.
3. EXOVA Warringtonfire Australia Pty Ltd; NATA Accreditation No. 3277; Report No. 2464400.2; Testing in accordance with AS 1530.4-2005; Dated 31/05/2010.
4. EXOVA Warringtonfire Australia Pty Ltd; NATA Accreditation No. 3277; Report No. 47868300.1; Testing to AS 1530.4-2014; Dated 05/04/2017.
5. Ian Bennie and Associates; NATA Accreditation No. 2371; Test Report No. 2019-02-S4; NCC-2019 Verification methods FV1 and V2.2.1; Dated 02/08/2019.
6. Ignis Solutions; Report No. 5396 I02 R01; Product Evaluation - MetecnoPanel PIR Steel clad sandwich panel compliance to AS 5637.1:2015 based on below testing; Dated 07/10/2019.
 - a. CSIRO; Report EP141961 Rev B; AS/ISO 9705:2003 Testing with Steel flashings, Internal angle & rivets; Dated 27/02/2014; and
 - b. CSIRO; Report CSME-(C)-2008-75; AS/ISO 9705:1993 Testing with Aluminium flashings, Internal angle & rivets; Dated 06/02/2008.
7. James M Fricker Pty Ltd; Report No. i265e; Declared R (thermally bridged) thermal performance calculations to AS/NZS 4859 Parts 1 & 2:2018; Dated 15/12/2020.

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