

Certificate number: CM40196 Rev2

### **Certification Body:**



ABN: 80 111 217 568

JAS-ANZ Accreditation

No. Z4450210AK

PO Box 7144, Sippy

Downs Qld 4556

+61 (07) 5445 2199

www.CertMark.org

#### **Certificate Holder:**

Metecno Pty Ltd
T/A Metecno,
Bondor®
ABN: 44 096 402 934
121 Ingram Road,
Acacia Ridge Qld 4110
Ph: +61 7 3323 8555
www.bondor.com.au

#### THIS IS TO CERTIFY THAT

# MetecnoPanel®

## Type and/or use of product:

MetecnoPanel® is certified as an insulated wall & ceiling panel.

**Description of product:** 

MetecnoPanel® is an insulated wall and ceiling panel consisting of:

- External face BlueScope® Steel G300
- Core-material PIR fire-retardant Polyisocyanurate
- Internal face BlueScope® Steel G300

Refer A2 for further information.

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

**BCA 2019** 

	Volume One		Volume Two	
Performance Requirement(s):	BP1.1(a),(b)(i), (ii)&(iii)	Structural reliability	P2.1.1(a),(b)(i), (ii)&(iii)	Structural stability and resistance to actions
	FP1.4	Weatherproofing	P2.2.2	Weatherproofing
	CP2	Protection from the spread of fire – Contributes to the protection from the spread of fire – Limited to the external wall - See limitations and conditions		
Deemed-to-Satisfy Provision(s):	C1.1(b)	Fire-resistance of building elements – FRL -/60/30 limited to 200mm or thicker panels	3.7.2.4(b)(i)	Protection from the spread of fire – FRL -/60/30 limited to 200mm or thicker panels
	C1.10(a)(ii)&(ix)	Fire Hazard Properties—Walls and ceiling linings and other materials	3.10.5.0	Bushfire areas – BAL FZ External walls limited to 200mm or thicker panels
	G5.2	Construction in bushfire prone areas - Protection – BAL FZ External walls limited to 200mm or thicker panels	3.12.1.4(b)	Energy Efficiency – External Walls - Refer A3
	J1.5(d)	Energy Efficiency – External Walls - Refer A3	3.12.1.6(a)	Energy Efficiency - Attached Class 10a buildings - Refer A3
State or territory variation(s):	G5.2 (NSW)		3.10.5.0 (NSW, Q	d), Part 3.12 (NSW, NT, Qld, Tas, ACT)

John Thorpe - CMI

Don Grehan - Unrestricted Building Certifier

**Date of issue:** 10/10/2019

**Date of expiry:** 15/08/2021







Certificate number: CM40196 Rev2

# **Certificate of Conformity**

#### 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. 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 Class 1,2,3,4,5,6,7,8,9 & 10 fixed to and supported by a structural steel frame.
- 2. The MetecnoPanel, as a group 2 material, is not suitable for use as a wall and ceiling lining in;
  - a. Fire-isolated exits and fire control rooms in Class 2 buildings (excluding accommodation for the aged, people with disabilities, and children)
  - b. Fire-isolated exits and fire control rooms in Class 3, 5, 6, 7, 8, 9a, 9b and 9c buildings
  - c. Public Corridors in Class 3, 9a and 9b (other than schools) buildings not fitted with a sprinkler system complying with Specification E1.5 of the 2019 BCA Vol 1.
- 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. Installation requirements are outside the scope of this certificate and subject to project specific engineering advice. The Certificate Holder has made available the BON0535 Drawing Pack-MetecnoPanel v1
- 5. The metal wall panels will be limited by wind load depending on the span certified for the product type, thickness, core density and fixing configuration as per the product's certified span tables.
- 6. The Thermal R values of the MetecnoPanel varies with panel thickness; refer to A3 for specific values.
- 7. The MetecnoPanel is not suitable for use as an external roofing panel.
- 8. 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.

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	Thiskness
Thickness	50, 75, 100, 125, 150 & 200	Thickness
Length	Up to 16m (check for availability)	1100mm cover width
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.

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	2
steel skins	
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 0.6mm steel skins	7
METECNOPANEL® SPAN TABLES (INTERNAL WALL, CEILING & COLD STORAGE APPLICATIONS) PIR Core 0.5mm steel skins	5
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	1
METECNOPANEL® SPAN TABLES FOR WIND REGION B— NON-CYCLONIC (EXTERNAL ROOF APPLICATIONS ONLY) PIR Core 0.6mm steel skins	1
METECNOPANEL® SPAN TABLES FOR WIND REGION A&B – NON-CYCLONIC (EXTERNAL ROOF APPLICATIONS ONLY) PIR Core 0.5mm steel skins	1

Certificate number: CM40196 Rev2



### **Material Group Numbers**

#### Group 2 - 100mm Panel

In test report - EP141691 (applicable to 100mm panel) Each corner of the room was supported and sealed by a 100 x 100mm steel angle which was fixed with 4mm steel rivets at 200 centres along each edge. This angle and fixing was also applied to the perimeter of the ceiling to the vertical wall edges. Any gaps between the floor and the vertical panels were filled using "Sika Boom FR" expanding polyurethane foam. An aluminium 40 x 40mm angle was riveted (aluminium rivets 4mm x 13.6mm) to the base of the wall panels and anchored to the floor using 6mm x 30mm "ShureDrive" Anchors at 400mm centres.

## Smoke Growth Rate Index (SMOGRARC) = 21.1 (m2s-2 x 1000)

#### Group 2 - 200mm Panel

In test report CMSW(C)-2008-075 – 200mm (applicable to 200mm or less panel) The base of the wall panels was mounted with 1.5mm thick aluminium 40 x 40mm angle on the internal and external of the panel and screw fixed to the floor with screws at 300mm centres.

### Smoke Growth Rate Index (SMOGRARC) = 47 (m2s-2 x 1000)

#### **Fire Hazard Properties**

AS/NZS 1530.3-1999 Indices			
Ignitability Index	0		
Spread of Flame Index	0		
Heat Evolved Index	0		
Smoke Index	1		

The edge of each specimen was sealed using aluminium foil so that direct exposure of the core or edge of the sample would not influence the test results. Testing was concentrated on the face of the specimen tested.

# Thermal & Energy Efficiency

Panel Thickness (mm)	50	75	100	125	150	200
Typical Mass (kg/m²)	12.0	13.0	14.0	14.7	15.5	17.4
Total R-value (m <sup>2</sup> K/W) @ 6°C	2.9	4.3	5.6	7.0	8.3	11.1
Total R-value (m <sup>2</sup> K/W) @ 15°C	2.7	4.0	5.3	6.6	7.9	10.5

Note: The above Total R-Values are for insulation average temperature of 6°C & 15°C. Contact the Certificate Holder for other temperatures.

## A4 Manufacturer and manufacturing plant(s)

Metecno Pty Ltd 111 Ingram Rd Acacia Ridge, QLD 4110



### A5 Installation requirements

Installation requirements are outside the scope of this certificate and subject to project specific engineering advice. The Certificate Holder has made available the BON0535 Drawing Pack-MetecnoPanel v1.

#### A6 Other relevant technical data

### **Acoustic Properties**

R<sub>W</sub> 25 – R<sub>W</sub> 27 Depending on thickness. Contact Certificate Holder for more information.

#### **APPENDIX B – EVALUATION STATEMENTS**

#### B1 Evaluation methods

Certificate number: CM40196 Rev2

- 1. Structural Provisions A.5.2(1)(e). Reports from a professional engineer.
- 2. Fire Safety Provisions A.5.2(1)(d)&(e). Reports from Accredited Testing Laboratories and 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. AWTA Textile Testing; NATA Accreditation No. 1356; Report No. 7-539731-CQ; Testing in accordance with AS/NZS 1530.3-1999, Fire Indices Test; Dated 22/09/2005.
- 2. Bligh Tanner; Report No. 2017.0493; Certification of MetecnoPanel Span Tables; Dated 23/07/2019.
- 3. EXOVA Warringtonfire Australia Pty Ltd; NATA Accreditation No. 3277; Certificate No. SFC50791800.1; Testing to AS 5113:2016; Dated 21/11/2017.
- 4. 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.
- 5. EXOVA Warringtonfire Australia Pty Ltd; NATA Accreditation No. 3277; Report No. 50791800.1; Testing to AS 5113:2016; Dated 25/08/2017.
- 6. EXOVA Warringtonfire Australia Pty Ltd; NATA Accreditation No. 3277; Report No. 42649600.1; Testing to BS 8414.2-2015; Dated 06/10/2016.
- 7. EXOVA Warringtonfire Australia Pty Ltd; NATA Accreditation No. 3277; Report No. 47868300.1; Testing to AS 1530.4-2014; Dated 05/04/2017.
- 8. 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.
- 9. Ignis Solutions; Report No. 5396 IO2 RO1; Product Evaluation MetecnoPanel PIR Steel clad sandwich panel compliance to AS 5367.1:2015; Dated 07/10/2019.
- 10. James M Fricker; Report No. 265c; Thermal performance calculations in accordance with AS/NZS 4859.1:2001/AMDT 1 (Dec 2006) Verified by R&D Engineering (below); Dated 14/02/2018.
- 11. R&D Engineering; Report RD18212-R1; Review of Thermal Insulation Evaluations in accordance with AS/NZS 4859.1:2001/AMDT 1 (Dec 2006); Dated 23/03/2018.

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