

Volume One

Certificate number: CM40191

Certification Body:



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Certificate Holder: Metecno Pty Ltd

T/A Metecno. Bondor® ABN: 44 096 402 934 121 Ingram Road, Acacia Ridge Qld 4110 Australia P· +61 7 3323 8555

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THIS IS TO CERTIFY THAT

MetecnoInspire®

Type and/or use of product: **Description of product:**

Insulated wall and ceiling panel. MetecnoInspire® is an insulated wall and ceiling panel that features an outer steel faces and a PIR (Polyisocyanurate) core. Refer A2 for details.

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

BCA 2022

B1P1(1),(2)(a),(b) & H1P1(1),(2)(a),(b), (c) & (3) Structural stability and resistance to actions Performance Requirement(s): Structural Reliability

> C1P2 Contributes to the protection from the spread of fire -

Subject to Limitations and Conditions No. 3

Deemed-to-Satisfy Provision(s): C2D11 (1)(b) Fire Hazard Properties - Ceiling & Other Insulative H2D6(4) Weatherproofing - Roof and wall cladding

Material other than sarking - Refer A3

F3D5(1)(c) Weatherproofing - Wall cladding H6D2(1)(b)(i) Energy Efficiency – Contributes to the overall energy

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efficiency of the building - Refer A3

J4D6 Energy Efficiency - Walls - Contributes to the overall

energy efficiency of the building. Refer A3

Not Applicable State or territory variation(s): Not Applicable

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:

This product has not been tested to AS 1530.1-1994 (R2016) and cannot be considered a non-combustible product.

BCA requires certain external walls, common walls or internal load bearing walls and/or ancillary elements of some Class 2 to 9 buildings to be non-combustible. In the absence of site-specific performance solution, this product or system is not suitable for use in these applications where a non-combustible product is required.

Contribution to satisfying C1P2 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. Limited to the 100mm panel with a 6mm cement sheet on the unexposed side. Limited to 10kW/m² - Refer A3.

Richard Donarski – CMI

Don Grehan - Unrestricted Building Certifier

Date of issue: 01/03/2024

01/03/2027



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



Date of expiry:



Certificate number: CM40191-I03-R00

Certificate of Conformity

- 1. The wall panels will be limited by wind load shown in the manufacturer's specifications on the span certified for the product type, thickness and fixing configuration as per the product's certified span tables referenced in A3 of this Certificate of Conformity.
- 5. 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.
- 6. The structural support members are designed and engineered separately as per project requirements by building designers and engineers.
- 7. In the absence of site-specific performance solution, this product is not suitable for use as an external roofing panel.
- 8. In wall installations the minimum clearance between the underside of panel and the adjoining ground surface level below must comply with the specifications in Part 7.5.7 of ABCB Housing Provisions.
- 9. The Group numbers have been determined in accordance with testing conducted to AS ISO 9705 and assessment against AS5637.1: 2015 as either Group 2 or Group 1 depending on the construction detail, refer A3.
- 10. When used as internal wall and ceiling linings, this product as a Group 1 or Group 2 fire rated product, must comply with the group number specified in Table S7C4 of Specification 7 of the BCA Volume 1, 2022. Refer A3.
- 11. Other than the items and information listed, the remainder of the information contained in the product's literature is outside the scope of this certification.
- 12. 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 – (Fire-retardant Polyisocyanurate)	Dimensions
Width (cover mm)	1100	
Thickness	50, 60, 80 & 100	
Length	Up to 16m	
External Material	BlueScope® COLORBOND® Steel 0.6mm G300	1100mm cover width
Internal Material	BlueScope® COLORBOND® Steel 0.5mm G300	Source: Certificate Holder

A3 Product specification

C1P2

Contribution to satisfying C1P2 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.

Testing of the 100mm Metecnopanels with a 6mm cement sheet on the unexposed side has been conducted to 10kW/m². This exposure corresponds to a distance of 6m under the Building to Building assessment and C1V1 and C1V2 of the BCA.

NJM Design Consulting Engineers Pty Ltd have reviewed the testing of Metecnopanels to 10kW/m² and the technical data sheets for the MetecnoPanel® and the MetecnoInspire® Panel to confirm that MetecnoInspire would pass the EW criteria of AS5113-2016.

Source: NJM Design Consulting Engineers Pty Ltd, Fire Engineering Report 8148 Revision 01 dated 30/05/2023.

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
METECNOINSPIRE® SPAN TABLES FOR WIND REGION A & B – NON-CYCLONIC (EXTERNAL WALL APPLICATIONS ONLY) PIR Core 0.6/0.5mm steel skins – Screw	3
METECNOINSPIRE® SPAN TABLES FOR WIND REGION A & B – NON-CYCLONIC (EXTERNAL WALL APPLICATIONS ONLY) PIR Core 0.6/0.5mm steel skins – Mushroom	3
METECNOINSPIRE® SPAN TABLES FOR WIND REGION A & B (CEILING APPLICATIONS) PIR Core 0.6/0.5mm steel skins – Screw	4
METECNOINSPIRE® SPAN TABLES FOR WIND REGION A & B (CEILING APPLICATIONS) PIR Core 0.6/0.5mm steel skins – Mushroom	4
METECNOINSPIRE® SPAN TABLES FOR WIND REGION A, B, C & D (EXTERNAL WALL APPLICATIONS ONLY) PIR Core 0.6/0.5mm steel skins – Screw	1

Source: Bligh Tanner Pty Ltd; Reference Number: 2017.0493; Dated 06/03/2023.



Material Group Numbers

Group Numbers have been determined in accordance with testing conducted to AS ISO 9705:2003 (R2016) and assessment against AS 5637.1:2015. Construction requirements for Group 1 and Group 2 are shown below, please refer Metecno® for more information.

Group 1 - Panel thickness up to 100mm

- Wall to Floor intersection: minimum of 0.6mm steel or aluminium 40 x 40mm internal and external angles, with Soudaseal FR or Gorilla Firecryl Acrylic Sealant to internal angles, Soudaseal FR or Gorilla Firecryl Acrylic Sealant or vapour seal mastic sealant to external angles, fixed with steel rivets or screws at maximum 300mm centres.
- Wall to Wall and Wall to Ceiling intersections: minimum of 0.6mm steel 40 x 40mm internal angles with Soudaseal FR or Gorilla Firecryl Acrylic Sealant, and 0.5mm steel or aluminium external angles with optional silicone or mastic sealant, fixed with steel rivets or screws at maximum 300mm centres.

Smoke Growth Rate Index (SMOGRA_{RC}) 3.7 m²/s² x 1000

Source: BRANZ Report No. FC14196-01-4 dated 06/04/2023.

Group 2 - Panel thickness up to 100mm

- Wall to Floor intersection: minimum of 0.5mm steel or 1.5mm aluminium 40 x 40 mm internal and external angles, no sealant required, fixed with rivets at maximum 300mm centres.
- Wall to Wall and Wall to Ceiling intersections: minimum of 0.5mm steel or 1.5mm aluminium 65 x 40 mm external angles, no sealant required; minimum of 0.5mm steel or 1.5mm aluminium 40 x 40 mm internal angles, no sealant required; fixed with rivets at maximum 300mm centres.

Smoke Growth Rate Index (SMOGRARC) = 45.4 - 47 m²s⁻² x 1000

Source: Ignis Labs Report No. IGNL-7072-99-01R IO1 RO2 dated 23/05/2023.

Thermal & Energy Efficiency

MetecnoInspire® PIR core					Wall Total R-value (m2K/W) at		
Thickness (mm)	$\lambda_{declared}$ at 23°C (W/m.K)	R _{declared} at 15°C (m ² K/W)	$R_{declared}$ at 23°C(m ² K/W)	6°C	15°C	30°C	
50	0.023	2.30	2.20	2.61	2.49	2.31	
60	0.023	2.75	2.65	3.10	2.96	2.74	
80	0.023	3.70	3.55	4.08	3.89	3.60	
100	0.023	4.65	4.45	5.06	4.83	4.46	

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.
- The requirements of Part 13.2.5(5) of the ABCB Housing Provisions and Volume One J3D6(1) do not apply to walls constructed using insulated sandwich panels.

Source: James M Fricker Pty Ltd, Report No. i265e dated 15/12/2020 modified 03/09/2023.



A4 Manufacturer and manufacturing plant(s)

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

A5 Installation requirements

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.

A6 Other relevant technical data

Acoustic Performance 100mm MetecnoInspire® panel achieved R_W 26, C -3 & C_{tr} -5

Source: CSIRO Report No. TL678-01-1 dated 23 May 2019.

APPENDIX B – EVALUATION STATEMENTS

B1 Evaluation methods

- 1. Fire Safety Provisions A5G3(1)(d)&(e). Reports from Accredited Testing Laboratories and reports from a professional engineer.
- 2. Structural Provisions A5G3(1)(e). Reports from a professional engineer.
- **3.** Thermal Provisions A5G3(1)(e). Reports from a professional engineer.
- 4. Weatherproofing Provisions A5G3(1)(d). Reports from Accredited Testing Laboratories.

B2 Reports

- 1. Bligh Tanner; Reference No. 2017.0493; Assessment of MetecnoInspire® Panel Span Tables in accordance with AS/NZS 1170.0, AS/NZS 1170.1, AS/NZS 1170.2, AS 4055 & AS 4040.1; Dated 06/03/2023. Report confirms compliance with B1P1(1),(2)(a),(b),(c), H1P1(1),(2)(a),(b),(c)&(3), H2D6(4) & F3D5(1)(c).
- 2. BRANZ; Reference No. FC14196-01-4; Group number classification of MetecnoPanel®, MetecnoInspire® and MetecnoSpan® with thicknesses in a range of 40 mm to 100 mm inclusive in accordance with Australia NCC 2019 Specification C1.10 Clause 4 and NCC 2022 Specification S7C4; Dated 06/04/2023. Report provide evidence for compliance with C2D11(1)(b).
- 3. James M Fricker; Report No. i265e; Declared R (thermally bridged) thermal performance calculations to AS/NZS 4859 Parts 1 & 2:2018; Dated 15/12/2020 modified 03/09/2023. Report provides thermal performance values in accordance with the requirements of J4D4, J4D6 and H6D2(1)(b)(i).
- 4. Ignis Labs Pty Ltd; Report No. IGNL-7072-99-01R I01 R02; Product Evaluation Bondor PIR MetecnoInspire, MetecnoPanel and MetecnoSpan; Dated 23/05/2023. Report provide evidence for compliance with C2D11(1)(b).
- 5. NJM Design Consulting Engineers Pty Ltd; Fire Engineering Report 8148, Revision 01; Metecno Advice on Fire Compliance; Dated 30/05/2023. Report supports compliance with C1P2.

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