

Certificate number: CM40234

Certification Body:



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Certificate Holder: Metecno Ptv Ltd

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THIS IS TO CERTIFY THAT

EconoClad™

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

Insulated roof or wall panel. EconoClad™ is an insulated roof or wall panel that features an outer steel face with a high-rib trapezoidal cladding profile and an inner face of lightweight thermal foil that encases a core of PIR

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

BCA 2022

Volume One Volume Two

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

Fire Hazard Properties—Refer A3 H2D6(4) Weatherproofing - Roof and wall cladding Deemed-to-Satisfy Provision(s): C2D11(1)(b)

> F3D2(b) Weatherproofing – Roof coverings Energy Efficiency – Contributes to the overall energy efficiency H6D2(1)(b)(i)

(Polyisocyanurate). Refer A2 for details.

of the building - Refer A3

F3D5(1)(c) Weatherproofing - Wall Cladding

Energy Efficiency – Roof and ceiling construction. J4D4

Contributes to the overall energy efficiency of the

building. Refer A3

J4D6 Energy Efficiency - Wall construction. Contributes to

the overall energy efficiency of the building. Refer A3

State or territory variation(s): Not Applicable 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:

1. 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. Note, this product can be used as internal and external walls in class 1 & 10 buildings.

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: 01/03/2024

01/03/2027

Date of expiry:





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- 3. The roof and/or 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.
- 4. The size and location of any penetration through the EconClad® roof panels must be in accordance with Drawing ECP-PI-RF016-REV01 EconoClad Roof
 Penetration Details. Penetrations for flues, chimneys or exhaust of hot products of combustion are outside the scope of this certificate and require site-specific solutions. Contact Certificate Holder for site-specific solutions.
- 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 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.
- 8. In the absence of a site-specific performance solution, this product or system must not be used to facilitate the exemptions for a carport specified in Part 9.2.8 of the ABCB Housing Provisions.
- 9. The Group number has been determined in accordance with testing conducted to AS ISO 9705 and assessment against AS5637.1: 2015 as Group 2, refer A3.
- **10.** When used as internal wall and ceiling linings, this product as a 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. For installations involving Class 2 to 9 Buildings, the internal lightweight thermal foil face of the EconoClad™ Wall or Roof Panels must, to the satisfaction of the Appropriate Authority, be completely shielded from the effects of flame or heat from the internal of the building by a secondary internal lining product that has a smoke growth rate index not more than 100 or the building must be fitted with a sprinkler system complying with E1D4 of the BCA 2022, Volume 1.
- 12. It is the responsibility of the building designer to ensure fitness for purpose including, but not limited to, consideration for the corrosion resistance level of the product and the proximity to breaking surf.
- 13. 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.
- 14. 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)	Dimensions				
Width (cover mm)	1000	333mm	292mm	41mm	20mm	
Thickness (mm)	25, 40, 60, 80 & 100	20000				
Length	Up to 16m (check for availability)	↑ 38mm	Thickness			
External Material	0.42mm COLORBOND® steel	1000mm cover width				
Internal Material	Lightweight Thermal Foil					
Pitch	2° Minimum Pitch		Source: Certif	ficate Holder		

A3 Product specification

Structure & Weatherproofing

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 1562.1, AS/NZS 1170.0, AS/NZS 1170.1, AS/NZS 1170.2, AS 4055 & AS 4040.1.

Document Name	Version
ECONOCLAD™ SPAN TABLES FOR WIND REGION A NON-CYCLONIC (EXTERNAL ROOF APPLICATIONS ONLY)	4
ECONOCLAD™ SPAN TABLES FOR WIND REGION B NON-CYCLONIC (EXTERNAL ROOF APPLICATIONS ONLY)	4
ECONOCLAD™ SPAN TABLES FOR WIND REGION C CYCLONIC (EXTERNAL ROOF APPLICATIONS ONLY)	5
ECONOCLAD™ SPAN TABLES FOR WIND REGION D CYCLONIC (EXTERNAL ROOF APPLICATIONS ONLY)	5

Penetrations

In order to maintain compliance with structure, the following document must be referred to which has been certified by a licensed Professional Engineer; Drawing <u>ECP-PI-RF016-REV01 - EconoClad - Roof Penetration Details</u>. The adequacy of the size, location and spacing of any penetrations outside the scope of this document through the EconoClad™ panel must be confirmed by a structural engineer.

Source: Bligh Tanner; Reference No. 2017.0493; Certification of EconoClad Span Tables; Dated 06/03/2023.

Material Group Numbers

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

Group 2 – Smoke Growth Rate Index (SMOGRA_{RC}) is 188.6 m²s⁻² x 1000.

Source: Ignis Labs Pty Ltd; Report No. IGNL-7072-99-04 Issue 01 Revision 00 [2023]; IGNIL Advisory Note – EconoClad Group Number Evaluation; Dated 09/05/2023.



Thermal & Energy Efficiency

ared & Total R-values for EconoClad™ PIR core – ROOFS				Roof Total R-value (m ² K/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
25	0.023	1.20	1.15	1.57	1.50	1.98
40	0.023	1.95	1.85	2.32	2.22	2.64
60	0.023	2.90	2.75	3.32	3.17	3.51
80	0.023	3.80	3.65	4.31	4.12	4.38
100	0.023	4.75	4.55	5.30	5.06	5.25

Declared & Total R-values for FconoClad™ PIR core - WALLS

eclared & Total R-values for EconoClad™ PIR core – WALLS				Wall Total R-value (m ² K/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
25	0.023	1.20	1.15	1.64	1.57	1.48
40	0.023	1.95	1.85	2.39	2.29	2.14
60	0.023	2.90	2.75	3.39	3.24	3.01
80	0.023	3.80	3.65	4.38	4.19	3.88
100	0.023	4.75	4.55	5.37	5.13	4.75

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.
- The requirements of J3D5(1) & J3D6(1) of Volume 1 of the BCA and Part 13.2.3 (1) to (7) & 13.2.5(5) of the ABCB Housing Provisions do not apply to roofs and 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)

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

Fire Hazard Properties

AS/NZS 1530.3-1999 Indices

Ignitability Index	0	Range 0-20
Spread of Flame Index	0	Range 0-10
Heat Evolved Index	0	Range 0-10
Smoke Index	1	Range 0-10

Source: AWTA Product Testing Report No. 18-000627 dated 15/02/2018.



APPENDIX B – EVALUATION STATEMENTS

B1 Evaluation methods

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- 1. Fire Safety Provisions A5G3(1)(d)&(e). Reports from Accredited Testing Laboratories and 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)(e). Reports a professional engineer.

B2 Reports

- 1. Bligh Tanner; Reference No. 2017.0493; Assessment of EconoClad 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), F3D2(b) & F3D5(1)(c).
- 2. Ignis Labs Pty Ltd; Report No. IGNL-7072-99-04 Issue 01 Revision 00 [2023]; IGNIL Advisory Note EconoClad Group Number Evaluation; Dated 09/05/2023. 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).

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