Certificate of Conformity

Certification Body:

CMI CERTIFICATION
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JAS-ANZ Accreditation
No. Z4450210AK
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Certificate Holder:

Metecno Pty Ltd
T/A Metecno,
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121 Ingram Road,
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Certificate number: CM40203

THIS IS TO CERTIFY THAT

LuxeWall®

Type and/or use of product:

Insulated wall panel system.

Description of product:

LuxeWall® is an insulated wall panel comprising Expanded Polystyrene with Fire Retardant (SL Grade EPS-FR) core and COLORBOND® steel skins with conceal fixed in a vertical orientation to metal or timber stud wall framing. Refer A2 for further information.

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

	Volume One		Volume Two	
Performance Requirement(s):	B1P1(1),(2)(a),(b)&(c)	Structural Reliability	H1P1(1),(2)(a),(b)&(c)	Structural stability and resistance to actions
	F8P1	Condensation and water vapour management	H4P7	Condensation and water vapour management
Deemed-to-Satisfy Provision(s):	C2D11 (1)(b)	Fire Hazard Properties – Walls, Ceiling & Other Insulative Material other than sarking - Refer A3		
	F3D5(1)(c)	Weatherproofing – Wall cladding	H2D6(4)	Weatherproofing – Wall cladding
	J4D6	Energy Efficiency – Walls – Contributes to the overall energy efficiency of the building - Refer A3	H6D2(1)(b)(i)	Energy Efficiency – Walls – 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 and cannot be considered a non-combustible product.
2. 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.
3. In the absence of site specific engineering advice, LuxeWall® panels can be used in external situations in non-cyclonic areas only.
4. The wall panels will be limited by wind load shown in the manufacturer's specifications on the span certified for the product type, thickness, core density and fixing configuration as per the product's certified span tables referenced in A3 of this Certificate of Conformity.

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: 22/03/2024

Date of expiry: 01/03/2027

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 all 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. Condensation management compliance with F8P1 is satisfied through verification method F8V1. Compliance with H4P7 Condensation management is satisfied through verification method H4V5.
9. It is the responsibility of the architectural designer and engineering parties to ensure that the details in this Design and Installation Guide are appropriate for the intended application.
10. 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.
11. 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	EPS-FR - Expanded Polystyrene SL Grade with fire retardant.
Width (cover mm)	900, 1200
Thickness (mm)	50, 75
Length (m)	Up to 6.5
External Material	0.6mm G300 COLORBOND® Steel
Internal Material	0.6mm G300 COLORBOND® Steel with HygienePlus®

Dimensions

Source: *Certificate Holder*

A3 Product specification

Structure

In accordance with AS/NZS 1170.0, AS/NZS 1170.1, AS/NZS 1170.2, AS 4055 & AS 4040.1. 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
LuxeWall® SPAN TABLES FOR WIND REGION A & B – NON-CYCLONIC (EXTERNAL WALL APPLICATIONS ONLY) EPS Core Grade SL 0.6mm steel skins	1
LuxeWall® Wall Span Table for Housing Application – 50mm Panel EPS Core Grade SL 0.6mm Steel Skins	1
LuxeWall® Wall Span Table for Housing Application – 75mm Panel EPS Core Grade SL 0.6mm Steel Skins	1

Source: *Bligh Tanner Pty Ltd; Reference No. 2017.0493; Certification of LuxeWall® Span Tables; Dated 06/03/2023.*

Material Group Numbers

Group Numbers have been determined in accordance with testing conducted to ISO 9705 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:

- Wall to Floor intersection: aluminium internal and external angles with silicone sealant, fixed with rivets at maximum 300mm centres. Silicone sealant applied at the internal panel joints.
- Wall to Wall and Wall to Ceiling intersections: steel angles fixed with steel rivets or screws at maximum 300mm centres. Ceiling panel joints require steel stitching rivets at minimum 1200mm centres. Silicone sealant applied at the internal panel joints.

Smoke Growth Rate Index $SMOGRA_{RC}$ $2.4m^2/s^2$

Source: *Ignis Labs Advisory Note 8092-99 Issue 01 Revision 00 [2024] – Bondor Panels ISO 9705 Testing dated 19/03/2024 & CSIRO Report CMIT-(C)-2004-089 dated March 2004.*

Material Group Numbers

Group Numbers have been determined in accordance with testing conducted to ISO 9705 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 2:

- Wall to Floor intersection: aluminium internal and external angles with silicone sealant, fixed with rivets at maximum 300mm centres. Silicone sealant applied at the internal panel joints.
- Wall to Wall and Wall to Ceiling intersections: aluminium angles fixed with aluminium rivets or screws at maximum 300mm centres. Silicone sealant applied at the internal panel joints.

Smoke Growth Rate Index $SMOGRA_{RC}$ 12.0 m^2/s^2

Source: *Ignis Labs Advisory Note 8092-99 Issue 01 Revision 00 [2024] – Bondor Panels ISO 9705 Testing dated 19/03/2024 & CSIRO Report CMIT-(C)-2004-089 dated March 2004.*

Energy Efficiency

EPS Thermal Performance

LuxeWall® Systems with Horizontal Tophats, Vapour Permeable Sarking & Plasterboard (steel framing)	Insulation path Total R, m^2 K/W		Overall Total R, m^2 K/W		Product Declared R @ 23°C
	Summer	Winter	Summer	Winter	
50mm R1.22 LuxeWall® Standard system with horizontal tophats, vapour permeable Sarking, 70mm non-reflective air space and steel studs at 600mm centres (10mm plasterboard)	R1.73	R1.84	R1.72	R1.82	1.20
75mm R1.82 LuxeWall® Standard system with horizontal tophats, vapour permeable Sarking, 70mm non-reflective air space and steel studs at 600mm centres (10mm plasterboard)	R2.33	R2.46	R2.31	R2.44	1.80
50mm R1.22 LuxeWall® Standard system with horizontal tophats, vapour permeable Sarking, 70mm R1.50 glasswool insulation and steel studs at 600mm centres (10mm plasterboard)	R3.01	R3.23	R2.77	R2.96	1.20
75mm R1.82 LuxeWall® Standard system with horizontal tophats, vapour permeable Sarking, 70mm R1.50 glasswool insulation and steel studs at 600mm centres (10mm plasterboard)	R3.60	R3.85	R3.39	R3.62	1.80
50mm R1.22 LuxeWall® Standard system with horizontal tophats, vapour permeable Sarking, 90mm R2.00 glasswool insulation and steel studs at 600mm centres (10mm plasterboard)	R3.49	R3.75	R3.13	R3.36	1.20
75mm R1.82 LuxeWall® Standard system with horizontal tophats, vapour permeable Sarking, 90mm R2.00 glasswool insulation and steel studs at 600mm centres (10mm plasterboard)	R4.08	R4.38	R3.77	R4.03	1.80

Notes:

- The above shows determinations based upon AS/NZS 4859 Parts 1&2:2018, Thermal insulation materials for buildings. "Overall" results show reportable Total R after thermal bridging calculations.
- Total Transmittance (U) can be calculated by U=1/R
- 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 Fricker Reports; i265LXwi011; Thermal Calculation of LuxeWall® Wall Panels on steel studs; Dated 07/09/2023.*

Energy Efficiency

LuxeWall® Systems with Horizontal Tophats, Vapour Permeable Sarking & Plasterboard (pine framing)	Insulation path Total R, m^2 K/W		Overall Total R, m^2 K/W		Product Declared R @ 23°C
	Summer	Winter	Summer	Winter	
50mm R1.22 LuxeWall® Standard system with horizontal tophats, vapour permeable Sarking, 70mm non-reflective air space and pine studs at 600mm centres (10mm plasterboard)	R1.73	R1.84	R1.78	R1.88	1.20
75mm R1.82 LuxeWall® Standard system with horizontal tophats, vapour permeable Sarking, 70mm non-reflective air space and pine studs at 600mm centres (10mm plasterboard)	R2.33	R2.46	R2.37	R2.51	1.80
50mm R1.22 LuxeWall® Standard system with horizontal tophats, vapour permeable Sarking, 70mm R1.50 glasswool insulation and pine studs at 600mm centres (10mm plasterboard)	R3.01	R3.23	R2.88	R3.08	1.20
75mm R1.82 LuxeWall® Standard system with horizontal tophats, vapour permeable Sarking, 70mm R1.50 glasswool insulation and pine studs at 600mm centres (10mm plasterboard)	R3.60	R3.85	R3.48	R3.71	1.80
50mm R1.22 LuxeWall® Standard system with horizontal tophats, vapour permeable Sarking, 90mm R2.00 glasswool insulation and pine studs at 600mm centres (10mm plasterboard)	R3.49	R3.75	R3.31	R3.54	1.20
75mm R1.82 LuxeWall® Standard system with horizontal tophats, vapour permeable Sarking, 90mm R2.00 glasswool insulation and pine studs at 600mm centres (10mm plasterboard)	R4.08	R4.38	R3.91	R4.18	1.80

Notes:

- The above shows determinations based upon AS/NZS 4859 Parts 1&2:2018, Thermal insulation materials for buildings. "Overall" results show reportable Total R after thermal bridging calculations.
- Total Transmittance (U) can be calculated by U=1/R
- 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: *Report i265LXw011; Thermal Calculation of LuxeWall® Wall Panels on pine timber studs; Dated 07/09/2023.*

A4 Manufacturer and manufacturing plant(s)

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

A5 Installation requirements

To be installed in accordance with LuxeWall Installation Guide v 29 – 29042020 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. It is the builder's responsibility to ensure that the reveal is sized correctly to suit LuxeWall® Wall Panel and the intended application.

A6 Other relevant technical data

Acoustic Opinion of Weighted Sound Reduction Index (R_W)

Exterior cladding	Frame->cladding cavity	Frame	Interior lining	Total wall thickness	Weighted sound reduction index performance
LuxeWall® 75mm Standard (ESP-FR) without insulation	24mm steel top hat	90mm timber studs	Standard 10mm Plasterboard	199mm	$R_W \geq 35$
LuxeWall® 75mm Standard (ESP-FR) with 75mm 11kg/m^3 Glasswool	24mm steel top hat	90mm timber studs	Standard 10mm Plasterboard	199mm	$R_W \geq 40$

Source: *Renzo Tonin & Associates Reference No. MC637-02F02 Acoustic Opinion (r1) dated 6 June 2018.*

AS/NZS 1530.3-1999 (R2016) Regulatory Fire Indices

Ignitability Index	0	Range 0-20
Spread of Flame Index	0	Range 0-10
Heat Evolved Index	0	Range 0-10
Smoke Index	3	Range 0-10

Source: *AWTA Fire Test Report No. 7-563000-CQ, Testing to AS/NZS 1530.3:1999 dated 25/11/2008.*

APPENDIX B – EVALUATION STATEMENTS

B1 Evaluation methods

1. Condensation Management Provisions – A5G3(1)(e). Reports from an appropriately qualified person.
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 from a professional engineer.

B2 Reports

1. BCA Energy Pty Ltd; Reference No: 116984-NCC Condensation Management LuxeWall® Report -r3; NCC Condensation Management Report LuxeWall® Product by Bondor; Dated 15/02/2023. Report confirms LuxeWall® complies with F8P1 and H4P7 in accordance with verification methods F8V1 and H4V5.
2. Bligh Tanner Pty Ltd; Reference No. 2017.0493; Certification of LuxeWall® Span Tables; 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).
3. James M Fricker Pty Ltd; Report i265LXw011; Overall "Total R" (Thermally Bridged) Thermal Calculations To AS/NZS 4859 Parts 1 & 2:2018 Pine timber studs; Dated 07/09/2023. Report provides thermal performance values in accordance with the requirements of J4D6 and H6D2(1)(b)(i).
4. James M Fricker Pty Ltd; Report i265LXwi011; Overall "Total R" (Thermally Bridged) Thermal Calculations To AS/NZS 4859 Parts 1 & 2:2018 Steel studs; Dated 07/09/2023. Report provides thermal performance values in accordance with the requirements of J4D6 and H6D2(1)(b)(i).
5. Ignis Labs; Evaluation No. IGNL-8092-99 Issue 01 Revision 00 [2024]; IGNIL Advisory Note – BONDOR Panels ISO Testing; Dated 19/03/2024. Report provide evidence for compliance with C2D11(1)(b).
6. CSIRO; Report No. CMIT-(C)-2004-089; Assessment of the performance of sandwich panels; Dated March 2004. Report provide evidence for compliance with C2D11(1)(b).

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