

Certificate number: CM40203 Rev2

### **Certification Body:**



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JAS-ANZ Accreditation

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## Certificate Holder: Metecno Pty Ltd

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THIS IS TO CERTIFY THAT

## LuxeWall®

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

Insulated wall panel system.

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) & (i)	Fire hazard properties. Walls, Ceiling & Other Insulative Material other than sarking - Refer A3	H2D6(4)	Weatherproofing – Wall cladding
	F3D5(1)(c)	Weatherproofing – Wall cladding	H6D2(1)(b)(i)	Energy Efficiency – Walls – Contributes to the overall energy efficiency of the building - Refer A3
	J4D6	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: Building classification/s:

- 1. 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 Class 1,2,3,4,5,6,7,8,9 & 10 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.
- 2. This product has not been tested to AS 1530.1-1994 (R2016) and cannot be considered a non-combustible product.
- 3. In the absence of site specific engineering advice, LuxeWall® panels can be used in external situations in non-cyclonic areas only.

Richard Donarski – CMI

Don Grehan – Unrestricted Building Certifier

**Date of issue:** 12/05/2023

25/03/2024

Date of expiry:





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# **Certificate of Conformity**

- 4. The metal 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. Refer A3 below.
- 5. Condensation management compliance with F8P1 is satisfied through verification method F8V1. Compliance with H4P7 Condensation management is satisfied through verification method H4V5.
- 6. 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 the ABCB Housing Provisions.
- 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. 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.
- 9. The structural support members are designed and engineered separately as per project requirements by building designers and engineers.
- 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.

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.	Dimensions
Width (cover mm)	900, 1200	
Thickness (mm)	50, 75	Thickness
Length (m)	Up to 6.5	900, 1200mm cover width
External Material	0.6mm G300 COLORBOND® Steel	•
Internal Material	0.6mm G300 COLORBOND® Steel with HygienePlus®	<b>Source:</b> 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.

# 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	3	Range 0-10

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

### Condensation Management

The LuxeWall® has been assessed for Class 1a, 2, and 4 dwellings in line with the Verification Method F8V1 and H4V5 using WUFI Pro Software to perform hygrothermal modelling and found to comply with the mould growth index for Climate Zones 4 – 8 in North, South, East and West Orientations.

Source: BCA Energy Pty Ltd Reference No. 116984-NCC Condensation Management Report Luxewall-r3; NCC Condensation Management Report dated 15/02/2023.



## **Energy Efficiency**

### **EPS Thermal Performance**

LuxeWall® Systems with Horizontal Tophats, Vapour Permeable Sarking & Plasterboard (steel framing)	Insulation path Total R, m² K/W		Overall Total R, m² K/W	
	Summer	Winter	Summer	Winter
50mm R1.23 LuxeWall® Standard system with horizontal tophats, vapour permeable Sarking, 70mm non-reflective air space and steel studs at 600mm centres (10mm plasterboard)	R1.7	R1.9	R1.7	R1.8
75mm R1.84 LuxeWall® Standard system with horizontal tophats, vapour permeable Sarking, 70mm non-reflective air space and steel studs at 600mm centres (10mm plasterboard)	R2.3	R2.5	R2.3	R2.5
50mm R1.23 LuxeWall® Standard system with horizontal tophats, vapour permeable Sarking, 70mm R1.50 glasswool insulation and steel studs at 600mm centres (10mm plasterboard)	R3.0	R3.2	R2.8	R3.0
75mm R1.84 LuxeWall® Standard system with horizontal tophats, vapour permeable Sarking, 70mm R1.50 glasswool insulation and steel studs at 600mm centres (10mm plasterboard)	R3.6	R3.9	R3.4	R3.6
50mm R1.23 LuxeWall® Standard system with horizontal tophats, vapour permeable Sarking, 90mm R2.00 glasswool insulation and steel studs at 600mm centres (10mm plasterboard)	R3.5	R3.8	R3.1	R3.4
75mm R1.84 LuxeWall® Standard system with horizontal tophats, vapour permeable Sarking, 90mm R2.00 glasswool insulation and steel studs at 600mm centres (10mm plasterboard)	R4.1	R4.4	R3.8	R4.1

LuxeWall® Systems with Horizontal Tophats, Vapour Permeable Sarking & Plasterboard (pine framing)		Insulation path Total R, m² K/W		Overall Total R, m² K/W	
	Summer	Winter	Summer	Winter	
50mm R1.23 LuxeWall® Standard system with horizontal tophats, vapour permeable Sarking, 70mm non-reflective air space and pine studs at 600mm centres (10mm plasterboard)	R1.7	R1.9	R1.8	R1.9	
75mm R1.84 LuxeWall® Standard system with horizontal tophats, vapour permeable Sarking, 70mm non-reflective air space and pine studs at 600mm centres (10mm plasterboard)	R2.3	R2.5	R2.4	R2.5	
50mm R1.23 LuxeWall® Standard system with horizontal tophats, vapour permeable Sarking, 70mm R1.50 glasswool insulation and pine studs at 600mm centres (10mm plasterboard)	R3.0	R3.2	R2.9	R3.1	
75mm R1.84 LuxeWall® Standard system with horizontal tophats, vapour permeable Sarking, 70mm R1.50 glasswool insulation and pine studs at 600mm centres (10mm plasterboard)	R3.6	R3.9	R3.5	R3.7	
50mm R1.23 LuxeWall® Standard system with horizontal tophats, vapour permeable Sarking, 90mm R2.00 glasswool insulation and pine studs at 600mm centres (10mm plasterboard)	R3.5	R3.8	R3.3	R3.6	
75mm R1.84 LuxeWall® Standard system with horizontal tophats, vapour permeable Sarking, 90mm R2.00 glasswool insulation and pine studs at 600mm centres (10mm plasterboard)	R4.1	R4.4	R3.9	R4.2	

#### 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.



### 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 <u>LuxeWall Installation Guide v 29 – 29042020</u> 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 Performance	Acoustic Opinion of Weighted Sound Reduction Index (R <sub>W</sub> )								
	Wall System	Exterior cladding	Frame->cladding cavity	Insulation	Frame	Interior lining	Total wall thickness	Weighted sound reduction index performance	
	2	LuxeWall® 75mm Standard (ESP-FR) LuxeWall® 75mm Standard (ESP-FR)	24mm steel top hat 24mm steel top hat	- 75mm 11kg/m³ Glasswool	90mm timber studs 90mm timber studs	Standard 10mm Plasterboard Standard 10mm Plasterboard	199mm 199mm	R <sub>W</sub> ≥ 35	
								R <sub>W</sub> ≥ 40	
	Source: Renzo Tonin & Associates Reference No. MC637-02F02 Acoustic Opinion (r1) dated 6 June 2018.								
Condensation	From 1 May 2023 to	30 September 2023 P2.4	4.7, V2.4.7 and Part 3.8.	7 of NCC 2019 Volum	e Two Amendment 1 ma	ay apply instead of H4P7	7, H4V5 and H4D9 o	f NCC 2022 Volume Two	
management	From 1 October 2023	3 H4P7, H4V5 and H4D9	of NCC 2022 Volume Tw	o applies.					
Energy efficiency	•	30 September 2023 Par 2022 Volume Two appli		CC 2019 Volume Two	Amendment 1 may appl	y instead of Part H6 of N	NCC 2022 Volume Tv	vo. From 1 October	



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

#### **B1** Evaluation methods

- 1. Condensation Management Provisions A5G3(1)(e). Reports from an appropriately qualified person.
- 2. Fire Safety Provisions A5G3(1)(d). Reports from Accredited Testing Laboratories.
- 3. Structural Provisions A5G3(1)(e). Reports from a professional engineer.
- 4. Thermal Provisions A5G3(1)(e). Reports from a professional engineer.
- 5. Weatherproofing Provisions A5G3(1)(d). Reports from Accredited Testing Laboratories.

#### **B2** Reports

- 1. AWTA Product Testing; NATA Accreditation No. 1356; Test Report No. 7-563000-CQ; Fire testing to AS/NZS 1530.3-1999, Fire Indices; Dated 28/10/2008.
- 2. 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.
- 3. Bligh Tanner Pty Ltd; Reference No. 2017.0493; Certification of LuxeWall® Span Tables; Dated 06/03/2023.
- 4. James M Fricker Pty Ltd; Report i265lx; Thermal Calculation of LuxeWall® Wall Panels on steel studs; Dated 24/04/2020.
- 5. James M Fricker Pty Ltd; Report i265lx; Thermal Calculation of LuxeWall® Wall Panels on pine timber studs; Dated 24/04/2020.

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