

Certification Body:



ABN: 81 663 250 815 JAS-ANZ Accreditation No. Z4450210AK PO Box 273, Palmwoods Qld 4555 Australia P: +61 7 5445 2199 www.cmicert.com.au office@cmicert.com.au

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 www.bondor.com.au

Certificate of Conformity

Certificate number: CM40183 Rev4

BCA 2022

THIS IS TO CERTIFY THAT

MetecnoSpan®

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

> MetecnoSpan® is an insulated roof/ceiling or wall 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)

Volume One Volume Two

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

> (1),(2)(a),(b)&(c) & (c)

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

F3D2(b) Weatherproofing - Roof coverings H6D2(1)(b)(i) Energy Efficiency – Contributes to the overall energy efficiency of the building - Refer A3

Weatherproofing - Wall Cladding F3D5(1)(c)

J4D4 Energy Efficiency – Roof and ceiling construction. –

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 **Building classification/s:**

Limitations and conditions:

Insulated roof/ceiling or wall panel.

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

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.

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.



Don Grehan – Unrestricted Building Certifier

Date of issue: 11/05/2023

23/03/2024

Date of expiry:



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



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Certificate of Conformity

- The Group numbers have been determined in accordance with testing conducted to AS ISO 9705 and assessment against AS 5637.1: 2015 as either Group 2 or Group 1 depending on the construction detail, refer A3.
- 5. 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 in Table S7C4 of Specification 7 of the BCA Volume 1, 2022. Refer A3
- 6. The structural support members are designed and engineered separately as per project requirements by building designers and engineers.
- 7. The size and location of any penetration through the MetecnoSpan® roof panels must be in accordance with DRAWING PIR13-RP01-00 ROOF PENETRATIONS METECNOSPAN RO. 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.
- 8. The MetecnoSpan® roof and 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.
- 9. 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.
- 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.



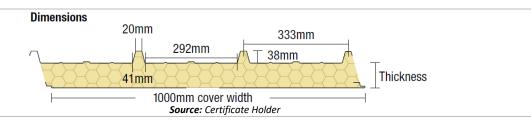
APPENDIX A – PRODUCT TECHNICAL DATA

A1 Type and intended use of product

As per page 1.

A2 Description of product

Core	PIR (Polyisocyanurate)
Width (cover mm)	1000
Thickness (mm)	40, 60, 80 & 100
Length	Up to 25m
External Material	0.42mm COLORBOND® steel
Internal Material	0.5mm G300 COLORBOND® steel
Pitch	2° Minimum



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.

Span Tables

Document Name	Version
METECNOSPAN® SPAN TABLES FOR WIND REGION A - NON-CYCLONIC (EXTERNAL ROOF APPLICATIONS ONLY) PIR Core 0.42mm hi-tensile / 0.5mm steel skins	6
METECNOSPAN® SPAN TABLES FOR WIND REGION B - NON-CYCLONIC (EXTERNAL ROOF APPLICATIONS ONLY) PIR Core 0.42mm hi-tensile / 0.5mm steel skins	6
METECNOSPAN® SPAN TABLES FOR WIND REGION C - CYCLONIC (EXTERNAL ROOF APPLICATIONS ONLY) PIR Core 0.42mm hi-tensile / 0.5mm steel skins	6
METECNOSPAN® SPAN TABLES FOR WIND REGION D - CYCLONIC (EXTERNAL ROOF APPLICATIONS ONLY) PIR Core 0.42mm hi-tensile / 0.5mm steel skins	6
METECNOSPAN® SPAN TABLES FOR WIND REGION A - NON-CYCLONIC (EXTERNAL ROOF APPLICATIONS ONLY WITH 25kg DEAD LOAD) PIR Core 0.42mm hi-tensile / 0.5mm steel skins	5
METECNOSPAN® SPAN TABLES FOR WIND REGION B - NON-CYCLONIC (EXTERNAL ROOF APPLICATIONS ONLY WITH 25kg DEAD LOAD) PIR Core 0.42mm hi-tensile / 0.5mm steel skins	5
METECNOSPAN® SPAN TABLES FOR WIND REGION C - CYCLONIC (EXTERNAL ROOF APPLICATIONS ONLY WITH 25kg DEAD LOAD) PIR Core 0.42mm hi-tensile / 0.5mm steel skins	5
METECNOSPAN® Roof Span Table for Housing Application	5
METECNOSPAN® SPAN TABLES FOR WIND REGION A - NON-CYCLONIC (EXTERNAL WALL APPLICATIONS ONLY) PIR Core 0.42mm hi-tensile / 0.5mm steel skins	1
METECNOSPAN® SPAN TABLES FOR WIND REGION B - NON-CYCLONIC (EXTERNAL WALL APPLICATIONS ONLY) PIR Core 0.42mm hi-tensile / 0.5mm steel skins	1
METECNOSPAN® SPAN TABLES FOR WIND REGION C - NON-CYCLONIC (EXTERNAL WALL APPLICATIONS ONLY) PIR Core 0.42mm hi-tensile / 0.5mm steel skins	1
METECNOSPAN® SPAN TABLES FOR WIND REGION D - NON-CYCLONIC (EXTERNAL WALL APPLICATIONS ONLY) PIR Core 0.42mm hi-tensile / 0.5mm steel skins	1

Penetrations

In order to maintain compliance with structure, the following document must be referred to which have been certified by a licensed Professional Engineer; <u>Drawing PIR13-RP01-00 ROOF PENETRATIONS - METECNOSPAN - RO</u>. The adequacy of the size, location and spacing of any penetrations outside the scope of this document through the MetecnoSpan® panel must be confirmed by a structural engineer.

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.

Group 1 - Panel thickness up to 100mm

- Roof to Wall intersection: 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.
- 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 Issue 3 dated 20/01/2023.

Group 2 - Panel thickness up to 100mm

- Roof to Wall intersection: 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.
- 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 Report No. IGNS-6238-06 Issue 1 Revision 3 dated 03/11/2022.



Thermal & Energy Efficiency

Declared & Total R-values for Nominal Sizes of MetecnoSpan® – ROOFS

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)	Total R-value (m ² K/W) at		
				6°C	15°C	30°C
40	0.023	1.95	1.85	2.20	2.10	2.00
60	0.023	2.90	2.75	3.20	3.05	2.87
80	0.023	3.80	3.65	4.19	4.00	3.74
100	0.023	4.75	4.55	5.18	4.94	4.61

Declared & Total R-values for Nominal Sizes of MetecnoPanel® - WALLS

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)	Total R-value (m ² K/W) at		
				6°C	15°C	30°C
40	0.023	1.95	1.85	2.21	2.11	1.96
60	0.023	2.90	2.75	3.21	3.06	2.83
80	0.023	3.80	3.65	4.20	4.01	3.70
100	0.023	4.75	4.55	5.19	4.95	4.57

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, hence they are compliant with NCC 2019 Volumes One and Two.
- 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 Fricker Report No. i265e dated 15/12/2020.

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

Acoustic Performance	40mm MetecnoSpan® panel achieved R_W 25, C -2 & C_{tr} -3 100mm MetecnoSpan® panel achieved R_W 24, C -1 & C_{tr} -3
	Source: CSIRO Report No. TL484 dated March 2008.
Energy efficiency	From 1 May 2023 to 30 September 2023 Part 2.6 and Part 3.12 of NCC 2019 Volume Two Amendment 1 may apply instead of Part H6 of NCC 2022 Volume Two. From 1 October 2023 Part H6 of NCC 2022 Volume Two applies.



APPENDIX B – EVALUATION STATEMENTS

B1 Evaluation methods

- 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; Certification of MetecnoSpan® Panel Span Tables in accordance with AS 1562.1, AS/NZS 1170.0, AS/NZS 1170.1, AS/NZS 1170.2, AS 4055 & AS 4040.1; Dated 06/03/2023.
- 2. BRANZ; Reference No. FC14196-01 Issue 3; 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 Specification C1.10 Clause 4; Dated 20/01/2023.
- 3. Ignis Labs Pty Ltd; Report No. IGNL-6238-06 I01R03; Product Evaluation Metecnolnspire, MetecnoPanel and MetecnoSpan; Dated 03/11/2022.
- 4. James M Fricker Pty Ltd; Report No. i265e; Declared R (thermally bridged) thermal performance calculations to AS/NZS 4859 Parts 1 & 2:2018; Dated 15/12/2020.

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