

Certificate number: CM40183 Rev1

### **Certification Body:**



ABN: 80 111 217 568

JAS-ANZ Accreditation

No. Z4450210AK

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## Certificate Holder: Metecno Pty Ltd

T/A Metecno,
Bondor®

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#### THIS IS TO CERTIFY THAT

## MetecnoSpan®

Type and/or use of product:

Insulated roof/ceiling or wall panel.

## **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) BCA 2019 (Amdt. 1)

		Volume One		Volume Two		
	Performance Requirement(s):	BP1.1(a)&(b)(i), (ii)&(iii)	Structural reliability	P2.1.1(a),(b)(i), (ii)&(iii)	Structural stability and resistance to actions	
				P2.2.2	Weatherproofing – Limited to roof applications only. Refer Limitations & Conditions No. 8.	
)	Deemed-to-Satisfy Provision(s):	C1.10(a)(ii)	Fire Hazard Properties – Refer A3.	3.12.1.2	Energy Efficiency – Roofs. Can be used in conjunction with other building elements to achieve a Total R Value. Refer to A3.	
		F1.5	Weatherproofing – Limited to roof applications only.	3.12.1.4	Energy Efficiency – External Walls. Can be used in conjunction with other building elements to achieve a Total R Value. Refer to A3.	
		J1.3	Energy Efficiency – Roof and ceiling construction. Can be used in conjunction with other building elements to achieve a Total R Value. Refer to A3.	3.12.1.6	Energy Efficiency – Attached Class 10a buildings. Can be used in conjunction with other building elements to achieve a Total R Value. Refer to A3.	
		J1.5	Energy Efficiency – Wall construction. Can be used in conjunction with other building elements to achieve a Total R Value. Refer to A3.			
		Niet Arrelinie		D- + 2 42 /NCM N	T CA OLD To ACT	

State or territory variation(s): Not Applicable Part 3.12 (NSW, NT, SA, Qld, Tas, ACT)

SUBJECT TO THE FOLLOWING LIMITATIONS AND CONDITIONS AND THE PRODUCT TECHNICAL DATA IN APPENDIX A AND EVALUATION STATEMENTS IN APPENDIX B

Richard Donarski – CMI

Certificate number: CM40183 Rev1

**Date of issue:** 12/05/2021

23/03/2024

ABCE



Don Grehan – Unrestricted Building Certifier

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Date of expiry:

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## **Certificate of Conformity**

## Limitations and conditions: Building classification/s:

- 1. This product has not been subject to AS 1530.1-1994 (R2016) testing and can not be considered to be a non-combustible material.
- 2. The MetecnoSpan® panels are limited to the use in Type C Construction in Class 2 to 9 buildings when being used as external walls.
- 3. 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 3.7.2.6 Open carports of Volume 2 of the BCA 2019.
- 4. The MetecnoSpan® panel as a Group 2 fire rated product, is only suitable for use as a wall and ceiling lining as specified in Table 3 of Specification C1.10 of the BCA 2019. Refer A3.
- 5. The structural support members are designed and engineered separately as per project requirements by building designers and engineers.
- 6. The size and location of any penetration through the MetecnoSpan® panels must be in accordance with <u>Drawing PIR13-RP01-00 ROOF PENETRATIONS METECNOSPAN RO</u>. 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.
- 7. 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, core density and fixing configuration as per the product's certified span tables referenced in A3.
- 8. The weatherproofing requirements of P2.2.2 in relation to external walls, including openings around windows and doors, do not form part of this Certificate of Conformity.
- 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. This may result in the product being classified as a non-conforming building product.

**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, CertMark International 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.

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



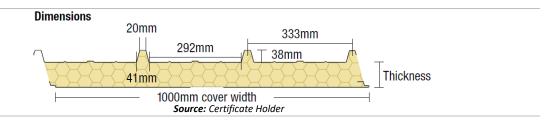
#### APPENDIX A – PRODUCT TECHNICAL DATA

### 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	5
METECNOSPAN® SPAN TABLES FOR WIND REGION D - CYCLONIC (EXTERNAL ROOF APPLICATIONS ONLY) PIR Core 0.42mm hi-tensile / 0.5mm steel skins	5
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	4
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.



## Material Group Numbers

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

#### Group 2

40 - 100mm Panel with steel 'wall-wall' and 'wall-ceiling' angles fixed with steel rivets or screws at maximum 200mm centres is classified as Group 2.

Smoke Growth Rate Index (SMOGRA<sub>RC</sub>) 21.1 m<sup>2</sup>s<sup>-2</sup> x 1000

#### Group 2

40 – 100mm Panel with aluminium 'wall-wall' and 'wall-ceiling' angles fixed with aluminium rivets or screws at 300mm centres is classified as Group 2.

Smoke Growth Rate Index (SMOGRA<sub>RC</sub>) 47 m<sup>2</sup>s<sup>-2</sup> x 1000.

## 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 <sup>2</sup> K/W)	R declared at 23°C(m²K/W)	Total R-value (m <sup>2</sup> K/W) at		
inickness (mm)				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)	λ <sub>declared</sub> at 23°C (W/m.K)	R <sub>declared</sub> at 15°C (m <sup>2</sup> K/W)	R <sub>declared</sub> at 23°C(m <sup>2</sup> K/W)	Total R-value (m <sup>2</sup> K/W) at		
mickness (mm)				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.

Source: James Fricker Report No. i265e dated 15/12/2020.

#### A4 Manufacturer and manufacturing plant(s)

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This field is optional. Contact Certificate Holder for manufacturing locations.



#### 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<sub>W</sub> 25, C -2 & C<sub>tr</sub> -3

100mm MetecnoSpan® panel achieved R<sub>W</sub> 24, C -1 & C<sub>tr</sub> -3

Source: CSIRO Report No. TL484 dated March 2008.

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

#### **B1** Evaluation methods

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- 1. Fire Safety Provisions A5.2(1)(d)&(e). Reports from Accredited Testing Laboratories and a professional engineer.
- 2. Structural Provisions A5.2(1)(d)&(e). Reports from Accredited Testing Laboratories and a professional engineer.
- 3. Thermal Provisions A5.2(1)(e). Reports from a professional engineer.
- **4.** Weatherproofing Provisions A5.2(1)(e). Reports from 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 26/03/2021.
- 2. Ignis Solutions; Report No. 5396 IO2 RO1; Product Evaluation MetecnoSpan PIR Steel clad sandwich panel compliance to AS 5637.1:2015 based on below testing; Dated 07/10/2019.
  - a. CSIRO; Report EP141961 Rev B; AS/ISO 9705:2003 Testing with Steel flashings, Internal angle & rivets; Dated 27/02/2014; and
  - b. CSIRO; Report CSME-(C)-2008-75; AS/ISO 9705:1993 Testing with Aluminium flashings, Internal angle & rivets; Dated 06/02/2008.
- 3. 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.