

Certificate of Conformity

Certificate number: CM40183 Rev3

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®
 ABN: 44 096 402 934
 103 Ingram Road,
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THIS IS TO CERTIFY THAT

MetecnoSpan®

Type and/or use of product:
 Insulated roof or wall panel.

Description of product:

MetecnoSpan® is an insulated roof 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

	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
Deemed-to-Satisfy Provision(s):	C1.10(a)(ii)	Fire Hazard Properties – Refer A3.	P2.2.2	Weatherproofing - Roof applications
	F1.5	Weatherproofing – Roof coverings.	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.
	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.	3.12.1.4	Energy Efficiency – External Walls. 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.	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.
State or territory variation(s):	Not Applicable		Part 3.12 (NSW, NT, 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


 Don Grehan – Unrestricted Building Certifier

Date of issue: 19/06/2020

Date of expiry: 09/05/2021



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Limitations and conditions:

1. This product has not been subject to AS 1530.1-1994 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.
5. The structural support members are designed and engineered separately as per project requirements by building designers and engineers.
6. Any penetrations made into the certified products must be in accordance with Drawing [PIR13-RP01-00 ROOF PENETRATIONS - METECNOSPAN - R0](#). The adequacy of the size, location and spacing of any penetrations outside the scope of this document through the roof panel must be confirmed by a structural engineer.
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 Parts FP1.4 and 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.

Building classification/s:

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

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.

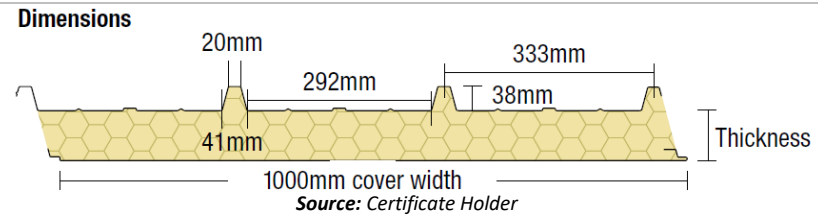
APPENDIX A – PRODUCT TECHNICAL DATA

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

Span Tables

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
METECNOSPAN® SPAN TABLES FOR WIND REGION A – NON-CYCLONIC (EXTERNAL ROOF APPLICATIONS ONLY) PIR Core 0.42mm hi-tensile / 0.5mm steel skins	4
METECNOSPAN® SPAN TABLES FOR WIND REGION B – NON-CYCLONIC (EXTERNAL ROOF APPLICATIONS ONLY) PIR Core 0.42mm hi-tensile / 0.5mm steel skins	4
METECNOSPAN® SPAN TABLES FOR WIND REGION C – CYCLONIC (EXTERNAL ROOF APPLICATIONS ONLY) PIR Core 0.42mm hi-tensile / 0.5mm steel skins	4
METECNOSPAN® SPAN TABLES FOR WIND REGION D – CYCLONIC (EXTERNAL ROOF APPLICATIONS ONLY) PIR Core 0.42mm hi-tensile / 0.5mm steel skins	4
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	3
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	3
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	3
METECNOSPAN® Roof Span Table for Housing Application	4
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; [Drawing PIR13-RP01-00 ROOF PENETRATIONS - METECNOSPAN - RO](#). 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 Number 2

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 (SMOGR_{RC}) 21.1m²s⁻² x 1000.

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 (SMOGR_{RC}) 47m²s⁻² x 1000.

Thermal & Energy Efficiency

Core: PIR, k=0.020355 W/m·K @ 23°C

Calculated Panel Thermal Resistance				
Nominal (minimum) thickness, mm	40	60	80	100
Panel Insulation R (m².K/W)				
Insulation R @ 6°C	2.3	3.4	4.4	5.5
Insulation R @ 15°C	2.1	3.2	4.2	5.3
Insulation R @ 23°C	2.1	3.1	4.0	5.0
Insulation R @ 30°C	2.0	2.9	3.9	4.8
Total R for Application as Roof Panels (m².K/W)				
Total R @ 6°C (heat flow out)	2.4	3.5	4.6	5.7
Total R @ 15°C (heat flow out)	2.3	3.3	4.4	5.4
Total R @ 23°C (heat flow out)	2.2	3.2	4.2	5.2
Total R @ 30°C (heat flow in)	2.2	3.1	4.1	5.0
The temperatures are the average for the insulation material				
Total R for Application as Wall Panels (m².K/W)				
Total R @ 6°C (heat flow out)	2.4	3.5	4.6	5.7
Total R @ 15°C (heat flow out)	2.3	3.4	4.4	5.4
Total R @ 23°C (heat flow out)	2.2	3.2	4.2	5.2
Total R @ 30°C (heat flow in)	2.2	3.1	4.1	5.0
The temperatures are the average for the insulation material				

Notes:

- Determinations based upon AS/NZS 4859:2018, Materials for the thermal insulation of buildings.
- Insulation R adjusted for temperature per AS/NZS 4859.2:2018 Clause 5.
- The Total R values for insulation average temperatures of 6°C correspond to surface temperatures of -6° outdoors for 18° indoors.
- The Total R values for insulation average temperatures of 15°C correspond to surface temperatures of 12° outdoors for 18° indoors.
- The Total R values for insulation average temperatures of 30°C correspond to surface temperatures of 36° outdoors for 24° indoors.

The following are assumed:

- 0.42mm steel outdoor and 0.5mm steel indoor skins, k=45 W/m·K. Indoor surface is painted.

Total R assumes still air within the room and the following air film resistances:

- Outdoor air film, R=0.04 m².K/W.
- Winter indoor air film, R=0.11 m².K/W.
- Summer indoor air film, R=0.16 m².K/W.



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A4 Manufacturer and manufacturing plant(s)

Metecno Pty Ltd.
111 Ingram Road,
Acacia Ridge QLD 4110.

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 Properties

Depending on construction, Metecnospan® may achieve an R_w 25 for 40mm & R_w 24 for 100mm. Contact Certificate Holder for construction details.

APPENDIX B – EVALUATION STATEMENTS

B1 Evaluation methods

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® panels in accordance with AS 1170.0:2002, AS 1170.1:2002, AS 1170.2:2011, AS 4040.1-1992 & AS 1562.1:2018; Dated 27/05/2020.
2. Ignis Solutions; Report No. IGNS-5396 I02 R01; MetecnoPanel® PIR Steel Clad Sandwich Panels compliance to AS 5367.1:2015; Dated 07/10/2019.
3. James M Fricker Pty Ltd; Report No. i265c; Thermal Insulation Evaluation by Calculation; Dated 14/05/2020.

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