

**Certification Body:**

  
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 JAS-ANZ Accreditation  
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**Certificate Holder:**

**Metecno Pty Ltd**  
 T/A  
 Metecno, Bondor®  
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**Certificate number: CM40145 Rev6**

**THIS IS TO CERTIFY THAT**

**SolarSpan®**

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

Insulated roof panel.

**Description of product:**

SolarSpan® is an insulated roofing panel consisting of:

- External face - BlueScope® Steel G550
- Core material – EPS-FR Grade SL - Expanded Polystyrene with fire-retardant
- Internal face - BlueScope® Steel G300

Refer A2 for further information.

**COMPLIES WITH THE FOLLOWING BCA PROVISIONS AND STATE OR TERRITORY VARIATION(S) BCA 2019 (Amdt. 1)**

	Volume One	Volume Two
<b>Performance Requirement(s):</b>	BP1.1(a),(b)(i), (ii)&(iii) Structural Reliability	P2.1.1(a),(b)(i), (ii)&(iii) Structural stability and resistance to actions
<b>Deemed-to-Satisfy Provision(s):</b>	C1.10(a)(ii) Fire Hazard Properties – Ceiling linings - Refer A3.	P2.2.2 Damp & Weatherproofing – Roof coverings
	F1.5(d) Damp & Weatherproofing - Roof coverings	3.12.1.2 Energy Efficiency - Roof construction can contribute to the Total R Value. Refer to A3
	J1.3 Roof and Ceiling Construction – Can be used in conjunction with other building elements to achieve a Total R Value. Refer 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
<b>State or territory variation(s):</b>	Not Applicable	Part 3.12 (NSW, NT)

**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:** 28/08/2020

**Date of expiry:** 28/02/2021



# Certificate of Conformity

## Limitations and conditions:

1. The roof 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.
2. The adequacy of the size, location and spacing of any penetrations through the roof panel for flues, skylights and services etc. must be confirmed by a structural engineer.
3. This product has not been tested to AS 1530.1-1994 and cannot be considered a non-combustible product.
4. 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(a) of Volume 2 of the BCA.
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. This certificate is limited to the details within this certificate including the above compliance elements, product description, purpose or use.
8. 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.
9. 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](http://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

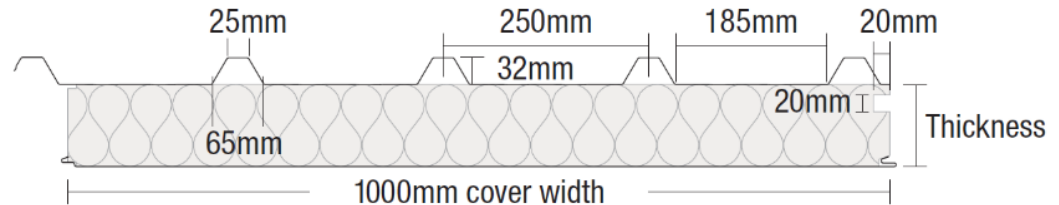
As per page 1.

### A2 Description of product

SolarSpan® is a long-spanning commercial and residential insulated roof panel system that combines roofing, EPS-FR insulation and a pre-painted ceiling in one. The product contains SolarSpan® insulated metal roof panels, fixings, flashings, channels, and sealant (where required). The structural support members are designed and engineered separately to the metal roof panels.

Core	FR-EPS SL Grade
Width (cover mm)	1000
Thickness (mm)	50, 75, 100, 125, 150, 175 & 200
Length	Up to 24m
Exterior Facing Skin	0.42mm G550 Colorbond Steel
Interior Facing Skin	0.6mm G300 Colorbond Steel
Finishes	Plain, Elegance

### Dimensions



Source: Certificate Holder

### A3 Product specification

#### Structure

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
<a href="#">SOLARSPAN® SPAN TABLES FOR WIND REGION A – NON-CYCLONIC (EXTERNAL ROOF APPLICATIONS ONLY) EPS Core Grade SL 0.42mm hi-tensile/0.6mm steel skins</a>	7
<a href="#">SOLARSPAN® SPAN TABLES FOR WIND REGION B – NON-CYCLONIC (EXTERNAL ROOF APPLICATIONS ONLY) EPS Core Grade SL 0.42mm hi-tensile/0.6mm steel skins</a>	7
<a href="#">SOLARSPAN® SPAN TABLES FOR WIND REGION C – CYCLONIC (EXTERNAL ROOF APPLICATIONS ONLY) EPS Core Grade SL 0.42mm hi-tensile/0.6mm steel skins</a>	6
<a href="#">SOLARSPAN® SPAN TABLES FOR WIND REGION D – CYCLONIC (EXTERNAL ROOF APPLICATIONS ONLY) EPS Core Grade SL 0.42mm hi-tensile/0.6mm steel skins</a>	6
<a href="#">SOLARSPAN® SPAN TABLES FOR WIND REGION A – NON-CYCLONIC (EXTERNAL ROOF APPLICATIONS ONLY) EPS Core Grade SL 0.42mm hi-tensile/0.5mm steel skins</a>	7
<a href="#">SOLARSPAN® SPAN TABLES FOR WIND REGION B – NON-CYCLONIC (EXTERNAL ROOF APPLICATIONS ONLY) EPS Core Grade SL 0.42mm hi-tensile/0.5mm steel skins</a>	7
<a href="#">SOLARSPAN® SPAN TABLES FOR WIND REGION C – CYCLONIC (EXTERNAL ROOF APPLICATIONS ONLY) EPS Core Grade SL 0.42mm hi-tensile/0.5mm steel skins</a>	5
<a href="#">SOLARSPAN® SPAN TABLES FOR WIND REGION D – CYCLONIC (EXTERNAL ROOF APPLICATIONS ONLY) EPS Core Grade SL 0.42mm hi-tensile/0.5mm steel skins</a>	5
<a href="#">SOLARSPAN® SPAN TABLES – ROOF SPAN TABLE FOR HOUSING APPLICATION EPS Core Grade SL 0.42mm hi-tensile/0.6mm steel skins</a>	9

#### Penetrations

In order to maintain compliance with structure, the following document must be referred to which has been certified by a licensed Professional Engineer; Drawing [SOL13-RP01-00 ROOF PENETRATIONS - SOLARSPAN - RO](#). The adequacy of the size, location and spacing of any penetrations outside the scope of this document through the SolarSpan® panel must be confirmed by a structural engineer.

# Certificate of Conformity

**Material Group Numbers**

**Group 1:**

Panels with a nominal thickness of 250mm or less, panel to panel junctions require steel angles fixed to the steel skins at not more than 300mm centres, with steel rivets. Ceiling panel to panel joins require a steel (stitch) rivet connecting the metal skins at not more than 1200mm centres.

**Smoke Growth Rate Index**

SMOGR<sub>RC</sub> <100

**Group 2:**

Panels with a nominal thickness of 150mm or less, panel to panel corner junctions require aluminium angles fixed to the steel skins at not more than 300mm centres, with aluminium rivets.

**Smoke Growth Rate Index**

SMOGR<sub>RC</sub> <100

Panels with a nominal thickness of 250mm or less, panel to panel junctions require steel angles fixed to the steel skins at not more than 300mm centres, with steel rivets.

*Note: This Certification does not extend to a 250mm panel, the above, is as stated in the testing conducted by BRANZ and subsequently assessed by Ignis Solutions Report 5396 I01R02; dated 23/02/2019.*

**Thermal & Energy Efficiency**

**Core: SL Grade EPS, k=0.0407 W/m·K @ 23°C**

Calculated Panel Thermal Resistance							
Nominal (minimum) thickness, mm	50	75	100	125	150	175	200
Panel Insulation R (m <sup>2</sup> .K/W)							
Insulation R @ 6°C	1.3	2.0	2.6	3.3	3.9	4.6	5.2
Insulation R @ 15°C	1.3	1.9	2.5	3.2	3.8	4.4	5.1
Insulation R @ 23°C	1.2	1.8	2.5	3.1	3.7	4.3	4.9
Insulation R @ 30°C	1.2	1.8	2.4	3.0	3.6	4.2	4.8
Total R for Application as Roof Panels (m <sup>2</sup> .K/W)							
Total R @ 6°C (heat flow out)	1.5	2.1	2.8	3.4	4.1	4.7	5.4
Total R @ 15°C (heat flow out)	1.4	2.0	2.7	3.3	3.9	4.6	5.2
Total R @ 30°C (heat flow in)	1.4	2.0	2.6	3.2	3.8	4.4	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 0.6mm steel indoor skins, k=45 W/m·K.
- Indoor surface is painted.

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

- Outdoor air film, R=0.04 m<sup>2</sup>.K/W.
- Winter indoor air film, R=0.11 m<sup>2</sup>.K/W.
- Summer indoor air film, R=0.16 m<sup>2</sup>.K/W.

## A4 Manufacturer and manufacturing plant(s)

This field is voluntary. 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** 50mm SolarSpan<sup>®</sup> achieved  $R_w$  25, C -1 &  $C_{tr}$  -3  
90mm SolarSpan<sup>®</sup> achieved  $R_w$  25, C -1 &  $C_{tr}$  -4  
125mm SolarSpan<sup>®</sup> achieved  $R_w$  24, C -2 &  $C_{tr}$  -4

*Source: CSIRO Report No. TL484 dated March 2008.*

## 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)(e). Reports from a professional engineer.
3. Thermal Provisions A5.2(1)(e). Reports from a professional engineer.
4. Weatherproofing Provision A5.2(1)(e). Reports from a professional engineer.

### B2 Reports

1. Bligh Tanner Pty Ltd; Reference Number: 2017.0493; Certification of Solarspan<sup>®</sup> AS 1170.0:2002, AS 1170.1:2002, AS 1170.2:2011, AS 4040.1-1992 & AS 1562.1:2018; Dated 07/08/2019.
2. BRANZ; IANZ Accreditation No. 37; Fire Test Certificate 372; Group 2 to AS ISO 9705:2013 Insulating panel with a thickness of 250mm or less; Dated 29/04/2005.
3. BRANZ; IANZ Accreditation No. 37; Fire Test Certificate 373; Group 2 to AS ISO 9705:2013 Insulating panel with a thickness of 150mm or less; Dated 29/04/2005.
4. BRANZ; IANZ Accreditation No. 37; Fire Test Certificate 374; Group 1 to AS ISO 9705:2013 Insulating panel with a thickness of 250mm or less; Dated 29/04/2005.
5. Ignis Solutions; Evaluation No. IGNS-5396 Issue 02 Revision 00; Verification of Solarspan<sup>®</sup> to C1.10, ISO 9705 Testing conducted by BRANZ; Dated 21/09/2019.
6. James M Fricker Pty Ltd; Document No. 265r07-r073 1; Thermal Performance Calculations to AS/NZS 4859:2018; Dated 23/04/2020.

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