

Certification Body:

JAS-ANZ Accreditation No. Z4450210AK PO Box 7144, Sippy Downs Qld 4556 +61 (07) 5445 2199 www.CertMark.org

Certificate number: CM40145 Rev1

Structural stability and resistance to actions

Damp & Weatherproofing – Roof coverings

the Total R Value - Refer to A3

achieve a Total R Value - Refer to A3

Energy Efficiency - Roof construction can contribute to

Energy Efficiency – Attached Class 10a buildings. Can be used in conjunction with other building elements to

THIS IS TO CERTIFY THAT

SolarSpan®

Type and/or use of product:

Insulated roof panel.

Description of product:

P2.1.1(a),(b)(i),

(ii)&(iii)

P2.2.2

3.12.1.2

3.12.1.6

SolarSpan® is an insulated roofing panel comprising Expanded Polystyrene with Fire Retardant (EPS-FR) core and Colorbond steel skins. Refer A2 for further information.

COMPLIES WITH THE FOLLOWING BCA PROVISIONS AND STATE OR TERRITORY VARIATION(S)

BCA 2019 (Amdt. 1)

Certificate Holder:

Metecno Pty Ltd

Metecno.Bondor® ABN: 44 096 402 934 121 Ingram Road, Acacia Ridge Qld 4110 Ph: +61 7 3323 8555

www.bondor.com.au

Volume One Volume Two

Performance Requirement(s): BP1.1(a),(b)(i), Structural Reliability

(iii)&(iii)

Deemed-to-Satisfy Provision(s): C1.10(a)(ii) Fire Hazard Properties - Ceiling linings - Refer A3.

Damp & Weatherproofing - Roof coverings

F1.5(d)

J1.3

Roof and Ceiling Construction – Can be used in

conjunction with other building elements to achieve a Total R Value - Refer A3

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

Řichard Donarski – CMI

Don Grehan – Unrestricted Building Certifier

Date of issue:

Date of expiry:

23/09/2021

01/03/2024

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Certificate of Conformity

Limitations and conditions: Building classification/s:

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.

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

- 2. The size and location of any penetration through the SolarSpan panels must be in accordance with Drawing SOL13-RP01-00 ROOF PENETRATIONS SOLARSPAN 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.
- 3. This product has not been tested to AS 1530.1-1994 (R2016) 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.

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

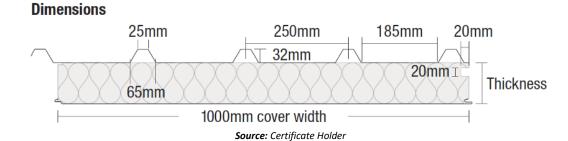
A1 Type and intended use of product

As per page 1.

A2 Description of product

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	EPS-FR (Expanded Polystyrene SL Grade with Fire		
	Retardant)		
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		



A3 Product specification

Structure & Weatherproofing

In accordance with AS 1562.1, 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		
LARSPAN® SPAN TABLES FOR WIND REGION A – NON-CYCLONIC (EXTERNAL ROOF APPLICATIONS ONLY) EPS-FR Core Grade SL 0.42mm hi-tensile/0.6mm steel skins			
SOLARSPAN® SPAN TABLES FOR WIND REGION B - NON-CYCLONIC (EXTERNAL ROOF APPLICATIONS ONLY) EPS-FR Core Grade SL 0.42mm hi-tensile/0.6mm steel skins	8		
SOLARSPAN® SPAN TABLES FOR WIND REGION C - CYCLONIC (EXTERNAL ROOF APPLICATIONS ONLY) EPS-FR Core Grade SL 0.42mm hi-tensile/0.6mm steel skins	8		
SOLARSPAN® SPAN TABLES FOR WIND REGION D - CYCLONIC (EXTERNAL ROOF APPLICATIONS ONLY) EPS-FR Core Grade SL 0.42mm hi-tensile/0.6mm steel skins	8		
SOLARSPAN® SPAN TABLES FOR WIND REGION A - NON-CYCLONIC (EXTERNAL ROOF APPLICATIONS ONLY) EPS-FR Core Grade SL 0.42mm hi-tensile/0.5mm steel skins	8		
SOLARSPAN® SPAN TABLES FOR WIND REGION B - NON-CYCLONIC (EXTERNAL ROOF APPLICATIONS ONLY) EPS-FR Core Grade SL 0.42mm hi-tensile/0.5mm steel skins	8		
SOLARSPAN® SPAN TABLES FOR WIND REGION C - CYCLONIC (EXTERNAL ROOF APPLICATIONS ONLY) EPS Core Grade SL 0.42mm hi-tensile/0.5mm steel skins	7		
SOLARSPAN® SPAN TABLES FOR WIND REGION D - CYCLONIC (EXTERNAL ROOF APPLICATIONS ONLY) EPS Core Grade SL 0.42mm hi-tensile/0.5mm steel skins	7		
SOLARSPAN® SPAN TABLES – ROOF SPAN TABLE FOR HOUSING APPLICATION EPS-FR Core Grade SL 0.42mm hi-tensile/0.6mm steel skins	10		

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.

Source: Bligh Tanner Pty Ltd; Reference Number: 2017.0493; Dated 26/03/2021



Material Group Numbers

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

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 SMOGRA_{RC} <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.

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.

Smoke Growth Rate Index SMOGRA_{RC} < 100

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 IO1RO2; dated 23/02/2019.

Thermal & Energy Efficiency

arSpan EPS-FR core SL Grade					Roof Total R-value (m ² .K/W) at		
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)	6°C	15°C	30°C	
50	0.042	1.25	1.20	1.44	1.40	1.38	
75	0.042	1.85	1.80	2.09	2.03	1.98	
100	0.042	2.45	2.40	2.73	2.65	2.57	
125	0.042	3.10	3.00	3.37	3.27	3.17	
150	0.042	3.70	3.60	4.02	3.90	3.76	
175	0.042	4.35	4.25	4.66	4.52	4.35	
200	0.042	4.95	4.85	5.30	5.15	4.95	

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 NCC2019 Volumes One and Two.
- Calculated by James Fricker, F.AIRAH F.IEAust CPEng NER APEC Engineer IntPE(Aus)

Source: James Fricker Report No. i265e updated 21/02/2021.

A4 Manufacturer and manufacturing plant(s)

This field in 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® achieved R_W 25, C -1 & C_{tr} -3

90mm SolarSpan® achieved R_W 25, C -1 & C_{tr} -4 125mm SolarSpan® 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® AS 1170.0:2002, AS 1170.1:2002, AS 1170.2:2011, AS 4040.1 & AS 1562.1; Dated 26/03/2021.
- 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® to C1.10, ISO 9705 Testing conducted by BRANZ; Dated 21/09/2019.
- 6. James M Fricker Pty Ltd; Document No. i265e; Declared R (thermally bridged) thermal performance calculations to AS/NZS 4859 Parts 1 & 2:2018; Updated 21/02/2021.

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