

Certificate number: CM40145 Rev5

Certification Body:


 ABN: 80 111 217 568
 JAS-ANZ Accreditation
 No. Z4450210AK
 PO Box 7144, Sippy
 Downs Qld 4556
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Certificate Holder:

Metecno Pty Ltd
 T/A Metecno,
 Bondor®
 ABN: 44 096 402 934
 121 Ingram Road,
 Acacia Ridge Qld 4110
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THIS IS TO CERTIFY THAT

SolarSpan®

Type and/or use of product:

SolarSpan® is certified as an insulated roof panel.

Description of product:

SolarSpan® is an insulated roofing panel consisting of:

- External face - BlueScope® Steel G550
- Core material - EPS-FR - 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

| | 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) &(ix) Fire Hazard Properties – Ceiling & Other Insulative Material other than sarking - Refer A3. F1.5(d) Damp & Weatherproofing - Roof coverings J1.3 Roof and Ceiling Construction – Can be used in conjunction with other building elements to achieve a Total R Value. Refer A3 | P2.2.2 Damp & Weatherproofing – Roof coverings 3.12.1.2(a)(i) Energy Efficiency - Roof construction can contribute to the Total R Value. Refer to A3 |
| State or territory variation(s): | 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

Limitations and conditions:

- 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.

Building classification/s:

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


John Thorpe - CMI


Don Grehan – Unrestricted Building Certifier

Date of issue: 02/07/2019

Date of expiry: 28/02/2021



Certificate of Conformity

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 3.7.1.6(d) of Volume 2 of the BCA.
5. Installation requirements are outside the scope of this certificate and subject to project specific engineering advice. The Certificate Holder has made available the [BON0535 Drawing Pack - SolarSpan v2](#).
6. The structural support members are designed and engineered separately as per project requirements by building designers and engineers.
7. 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.

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

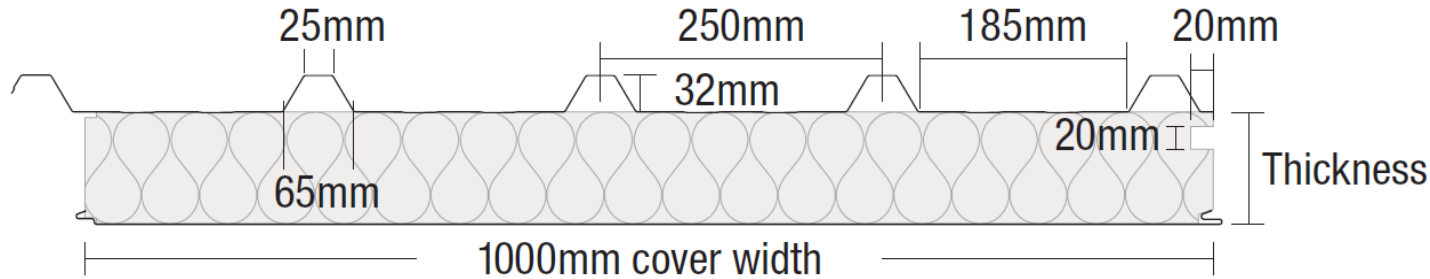
A1 Type and intended use of product

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.

Dimensions



Source: Certificate Holder

| | |
|----------------------|---|
| Core | EPS-FR (Expanded Polystyrene 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 Zinalume™ or Colorbond® steel |
| Interior Facing Skin | 0.5mm, 0.6mm G300 Colorbond® steel |
| Pitch | 2° Minimum |

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 |
|--|---------|
| SOLARSPAN® SPAN TABLES FOR WIND REGION A – NON-CYCLONIC (EXTERNAL ROOF APPLICATIONS ONLY) EPS Core 0.42mm hi-tensile/0.6mm steel skins | 4 |
| SOLARSPAN® SPAN TABLES FOR WIND REGION B – NON-CYCLONIC (EXTERNAL ROOF APPLICATIONS ONLY) EPS Core 0.42mm hi-tensile/0.6mm steel skins | 4 |
| SOLARSPAN® SPAN TABLES FOR WIND REGION C – CYCLONIC (EXTERNAL ROOF APPLICATIONS ONLY) EPS Core 0.42mm hi-tensile/0.6mm steel skins | 4 |
| SOLARSPAN® SPAN TABLES FOR WIND REGION D – CYCLONIC (EXTERNAL ROOF APPLICATIONS ONLY) EPS Core 0.42mm hi-tensile/0.6mm steel skins | 4 |
| SOLARSPAN® SPAN TABLES FOR WIND REGION A – NON-CYCLONIC (EXTERNAL ROOF APPLICATIONS ONLY) EPS Core 0.42mm hi-tensile/0.5mm steel skins | 4 |
| SOLARSPAN® SPAN TABLES FOR WIND REGION B – NON-CYCLONIC (EXTERNAL ROOF APPLICATIONS ONLY) EPS Core 0.42mm hi-tensile/0.5mm steel skins | 4 |
| SOLARSPAN® SPAN TABLES FOR WIND REGION C – CYCLONIC (EXTERNAL ROOF APPLICATIONS ONLY) EPS Core 0.42mm hi-tensile/0.5mm steel skins | 3 |
| SOLARSPAN® SPAN TABLES FOR WIND REGION D – CYCLONIC (EXTERNAL ROOF APPLICATIONS ONLY) EPS Core 0.42mm hi-tensile/0.5mm steel skins | 3 |
| SOLARSPAN® SPAN TABLES – ROOF SPAN TABLE FOR HOUSING APPLICATION EPS Core 0.42mm hi-tensile/0.6mm steel skins | 6 |

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_{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.

Smoke Growth Rate Index

SMOGR_{RC} <100

Panels with a nominal thickness greater than 150mm, 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, however, the above, is as stated in the testing conducted by BRANZ and subsequently assessed by Ignis Solutions Report 5396 I01R02; Dated 23/02/2019.

Fire Hazard Properties

AS/NZS 1530.3-1999 Indices

| | |
|-----------------------|-----|
| Ignitability Index | 0 |
| Spread of Flame Index | 0 |
| Heat Evolved Index | 0 |
| Smoke Index | 2-3 |

Thermal & Energy Efficiency

| Panel Thickness (mm) | 50 | 75 | 100 | 125 | 150 | 175 | 200 |
|---------------------------|------|------|------|------|------|------|------|
| Mass (kg/m ²) | 10.6 | 10.9 | 11.3 | 11.6 | 12.0 | 12.3 | 12.7 |

| | | | | | | | |
|--|-----|-----|-----|-----|-----|-----|-----|
| SL Grade Total R-value (m ² K/W) | 1.4 | 2.1 | 2.7 | 3.3 | 4.0 | 4.6 | 5.2 |
| M Grade Total R-value Value (m ² K/W) | 1.5 | 2.2 | 2.9 | 3.5 | 4.2 | 4.9 | 5.6 |

Note: The above Total R-values are for insulation average temperatures of 15°C. Contact Certificate Holder for other temperatures and different EPS core grades.

A4 Manufacturer and manufacturing plant(s)

Metecno Pty Ltd
103 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 and the Certificate Holder has made available the [BON0535 Drawing Pack - SolarSpan v2](#).

A6 Other relevant technical data

Acoustic Properties

R_w 24 – R_w 25 Depending on thickness. Contact Certificate Holder for more information.

APPENDIX B – EVALUATION STATEMENTS

B1 Evaluation methods

1. Structural Provisions – A5.2(1)(e). Reports from a professional engineer.
2. Fire Safety 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. Damp and Weatherproofing Provisions – A5.2(1)(e). Reports from a professional engineer.

B2 Reports

1. AWTA; NATA Accreditation No. 1356; Report No. 7-563460-CQ; Testing to AS/NZS 1530.3 1999 fire Indices; Dated 25/11/2008.
2. Bligh Tanner Pty Ltd; Reference Number: 2017.0493; Certification of Solarspan® AS 1170.0:2002, AS 1170.1:2002, AS 1170.2:2011, AS 4040.1-1992 & AS 1562.1:2018; Dated 17/08/2018.
3. 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.
4. 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.
5. 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.
6. David W. Yarbrough, R&D services; Verification of Thermal Calculation performed by James M Fricker; Dated 27/01/2018.
7. Ignis Solutions; Evaluation No. IGNS-5396 Issue 01 Revision 02 (2017); Verification of Solarspan® to C1.10, ISO 9705 Testing conducted by BRANZ; Dated 23/02/2019.
8. James M Fricker Pty Ltd; Report 265w01; Thermal Performance Calculations to AS/NZS 4859.1:2002/Amdt 1 (Dec 2006); Dated 28/01/2018.

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