

Certificate of Conformity

Certificate number: CM40195 Rev2

THIS IS TO CERTIFY THAT

Equideck®

Certification Body:


 ABN: 80 111 217 568
 JAS-ANZ Accreditation
 No. Z4450210AK
 PO Box 7144, Sippy
 Downs Qld 4556
 +61 (07) 5445 2199
www.CertMark.org

Type and/or use of product:

Insulated Roof Panel.

Description of product:

Equideck® is an insulated roof sandwich panel with an outer steel faces and an inner core of EPS-FR (Expanded Polystyrene with fire-retardant). Refer A2 for details.

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

BCA 2019

Volume One

Volume Two

Certificate Holder:

Metecno Pty Ltd
 T/A Metecno,
 Bondor®
 ABN: 44 096 402 934
 121 Ingram Road,
 Acacia Ridge Qld 4110
 Ph: +61 7 3323 8555
www.bondor.com.au

Performance Requirement(s):

BP1.1(a)&
(b)(i),(ii)&(iii) Structural reliability

P2.1.1(a), Structural stability and resistance to actions
(b)(i),(ii),(iii)

Deemed-to-Satisfy Provision(s):

C1.10(a)(ii) Fire Hazard Properties – Refer A3.
&(ix)

P2.2.2 Weatherproofing – Roof applications
 3.1.2.1.2 Energy Efficiency - Roof construction can contribute to the
 Total R Value. Refer to A3.

F1.5 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.

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: 16/06/2020

Date of expiry: 16/05/2021



Certificate of Conformity

Limitations and conditions:

1. The Equideck[®] panels are limited to the use in Type C Construction in Class 2 to 9 buildings when being used as external walls.
2. The Group numbers achieved in accordance with AS ISO 9705-2003 as either Group 2 or Group 1 depending on the thickness and construction detail, refer A3.
3. The Equideck[®] panel as a Group 2 fire rated product, is only suitable for use as a ceiling lining as specified in Table 3 of Specification C1.10 of the BCA 2019.
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(d) of Volume 2 of the BCA.
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 [EDE03-RP01-00 ROOF PENETRATIONS - EQUIDECK- 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 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.
8. 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.
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. 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

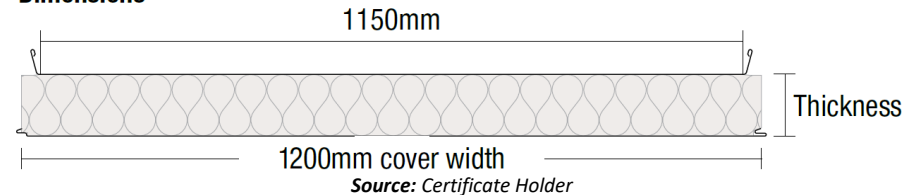
A1 Type and intended use of product

As per page 1.

A2 Description of product

Core	EPS-FR (Expanded Polystyrene with fire retardant) SL Grade
Width (cover mm)	1200
Thickness (mm)	50, 75, 100, 125, 150, 200 & 250
Length	Up to 16m
External Material	BlueScope® Colorbond® Steel 0.6mm G300
Internal Material	BlueScope® Colorbond® Steel 0.6mm G300
Pitch	3° Minimum

Dimensions



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
EQUIDECK® SPAN TABLES FOR WIND REGION A & B – NON-CYCLONIC (EXTERNAL ROOF APPLICATIONS ONLY) EPS Core Grade SL 0.6/0.6mm steel skins	4
EQUIDECK® SPAN TABLES FOR WIND REGION A & B – NON-CYCLONIC (EXTERNAL ROOF APPLICATIONS ONLY) EPS Core Grade SL 0.6/0.6mm steel skins – Tek Screw	4
EQUIDECK® 0.6mm Steel Skins - Roof Span Table for Housing Application	3

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 EDE03-RP01-00 ROOF PENETRATIONS - EQUIDECK- R0](#). The adequacy of the size, location and spacing of any penetrations outside the scope of this document through the Equideck® panel must be confirmed by a structural engineer.

Material Group Numbers	Group 1: Panel up to 250mm thick with steel ‘wall-wall’ and ‘wall-ceiling’ angles fixed with steel rivets or screws at maximum 300mm centres is classified as Group 1. Smoke Growth Rate (SMOGR_{RC}) Index was 2.4 m²/s².
	Group 2: Panel 250mm or less with an aluminium ‘wall-wall’ and ‘wall-ceiling’ angles fixed with aluminium rivets or screws at 300mm centres is classified as Group 2. Panel thicker than 150mm requires steel ‘wall-wall’ and ‘wall-ceiling’ angles fixed with steel rivets or screws at 300mm centres to be classified as Group 2. Smoke Growth Rate (SMOGR_{RC}) Index was 12.0m²/s².

Fire Hazard Properties

AS/NZS 1530.3-1999 Indices

Ignitability Index	0	Range 0-20
Spread of Flame Index	0	Range 0-10
Heat Evolved Index	0	Range 0-10
Smoke Index	2	Range 0-10

Source: AWTA Product Testing Report No. 7-563460-CQ dated 25/11/2008.

Thermal & Energy Efficiency

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

Calculated Panel Thermal Resistance								
Nominal (minimum) thickness, mm	50	75	100	125	150	200	250	
Panel Insulation R (m².K/W)								
Insulation R @ 6°C	1.3	2.0	2.6	3.3	3.9	5.2	6.5	
Insulation R @ 15°C	1.3	1.9	2.5	3.2	3.8	5.1	6.3	
Insulation R @ 23°C	1.2	1.8	2.5	3.1	3.7	4.9	6.1	
Insulation R @ 30°C	1.2	1.8	2.4	3.0	3.6	4.8	6.0	
Total R for Application as Roof Panels (m².K/W)								
Total R @ 6°C (heat flow out)	1.5	2.1	2.8	3.4	4.1	5.4	6.7	
Total R @ 15°C (heat flow out)	1.4	2.0	2.7	3.3	3.9	5.2	6.5	
Total R @ 23°C (heat flow out)	1.4	2.0	2.6	3.2	3.8	5.1	6.3	
Total R @ 30°C (heat flow in)	1.4	2.0	2.6	3.2	3.8	5.0	6.2	

The temperatures are the average for the insulation material

Notes:

- Determinations based upon AS/NZS 4859.1:2018, 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:

- 0.6mm steel outdoor and 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 m².K/W.
- Winter indoor air film, R=0.11 m².K/W.
- Summer indoor air film, R=0.16 m².K/W.



Certificate of Conformity

A4 Manufacturer and manufacturing plant(s)

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 Properties

Depending on construction, Equideck® may achieve an R_w 24 – 25. 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 Provision A5.2(1)(e). Reports from a professional engineer.

B2 Reports

1. AWTA; NATA Accreditation No.983; Test Report No. 7-563460-CQ; Testing in accordance with AS/NZS 1530.3:1999 - Fire Indices; Dated 25/11/2008.
2. Blight Tanner; Reference No. 2017.0493; Certification of Equideck® 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.
3. CSIRO; Report No. CMIT-(C)-2004-089; Assessment of the performance of sandwich panels ISO 9705 Testing; Dated March 2004.
4. Ignis Solutions; Evaluation No. IGNS-5396 Issue 02 Revision 00; Assessment of Bondor panels ISO 9705 Testing; Dated 21/09/2019.
5. James Fricker Pty Ltd; Report No. i265c; Thermal Insulation evaluation by Calculation AS/NZS 4859.1:2018; 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.