

Certificate number: CM40334

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

Certificate Holder:


 Askin Pty Ltd
 ABN: 13 156 186 033
 Level 3, Suite 3.01, 150
 Albert Road, South
 Melbourne VIC 3205
<https://www.askin.net.au/>

THIS IS TO CERTIFY THAT

Volcore Internal Wall & Ceiling System

Type and/or use of product:

The Volcore Internal Wall & Ceiling system is made from insulated composite panels intended for use in internal wall and ceiling systems.

Description of product:

The Volcore Internal Wall & Ceiling system include 'Volcore Panel' and/or 'Volcore Panel FRL'. Volcore Panel and Volcore Panel FRL comprise of mineral wool fibre cores adhered between two steel facers made of a minimum thickness of 0.6mm G300 Colorbond. Both products are adhered between steel and core with a 2-part polyurethane adhesive, refer to A2 for further details.

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

| | Volume One | Volume Two |
|---|--|----------------|
| Performance Requirement(s): | BP1.1(b)(iii) Structural reliability – Refer to <i>Limitation and Condition 3 & A3.</i> | Not Applicable |
| Deemed-to-Satisfy Provision(s): | C1.1(b) Fire Resistance and Stability – Refer to <i>Limitation and Condition 2 & A3.</i> | Not Applicable |
| | C1.9(e)(vii) Non-combustible building materials - Refer A3 | |
| | C1.10(a)(ii) Fire hazard properties - Refer A3 | |
| | F5.2 Determination of airborne sound and insulation ratings. Can be used in conjunction with other building elements. – Refer A3 | |
| | F5.5 Sound insulation rating of walls. Can be used in conjunction with other building elements. – Refer A3 | |
| State or territory variation(s): | Part F5 (NT) | Not Applicable |


 Richard Donarski - CMI


 Don Grehan – Unrestricted Building Certifier

Date of issue: 28/10/2022

Date of expiry: 28/10/2025



Certificate of Conformity

SUBJECT TO THE FOLLOWING LIMITATIONS AND CONDITIONS AND THE PRODUCT TECHNICAL DATA IN APPENDIX A AND EVALUATION STATEMENTS IN APPENDIX B

Limitations and conditions:

1. Construction shall be in strict accordance with the Installation Requirements detailed in Section A5 of this Certificate of Conformity.
2. Compliance with FRL is limited to the system components being as specified in A3. Any deviation from the tested specimen does not form part of this certificate of conformity.
3. Volcore Panel and Volcore Panel FRL for internal walls and ceilings must be fixed to a structurally adequate wall / ceiling frame in accordance with the appropriate span tables in section A3. The structural support members are designed and engineered separately as per project requirements by building designers and engineers.
4. Allowable penetrations through the Volcore panel FRL are listed in Table 16 of the WarringtonFire Report. See A3 for more information
5. 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:

Classes 2,3,4,5,6,7,8 & 9

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.

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

Volcore Internal Walls & Ceiling range of panels consist of two types of panels, the Volcore Panel and the Volcore Panel FRL.

- The Volcore Panel has 0.6/0.6mm Colorbond G300 steel facers with a mineral wool fibre core material adhered to the steel facers with a 2-part polyurethane adhesive.
- The Volcore Panel FRL has a minimum 0.6/0.6mm Colorbond G300 steel facers with a mineral wool fibre core material adhered to the steel facers with a 2-part polyurethane adhesive.

The Volcore Internal Walls & Ceiling panels are available in the following thicknesses:

| Panel | Thickness | Core Density |
|-------------------|-------------------------|-------------------------------|
| Volcore Panel | 50, 75, 100, 120, 150mm | 110 kg/m ³ +/- 10% |
| Volcore Panel FRL | 100, 150mm | 110 kg/m ³ +/- 10% |

A3 Product specification

Structure In order to maintain compliance with structure, the Span Tables located in the following Product Specification Sheets must be referred to for which have been certified by a licensed Professional Engineer.

| Document Name | Version |
|---|--------------|
| Product Specification Sheet – Internal Walls & Ceilings | October 2022 |
| Product Specification Sheet –FRL Systems | October 2022 |

Source: Askin Engineering, Report ref. Volcore Panel – REV5; CodeMark span table analysis; Dated 08/08/2022, Ian Bennie & Associates; Report No. 2022-010 ASKIN_AS4040.2_VolcorePanel_01; Dated May 2022, Askin Engineering, Report ref. Volcore Panel – REV1; CodeMark Volcore Panel SINGLE SPAN; Dated 23/06/2022 & Ian Bennie & Associates; Report No. 2022_010_S55_Report; Dated June 2022.

Non-Combustibility Each lamina of the Volcore Panel and Volcore Panel FRL for internal walls & ceilings has been tested in accordance with AS 1530.1-1994 and is **NOT** deemed combustible.

Source: CSIRO; NATA Accreditation no. 165; Report FNC12842; Testing of Steel Sheeting in accordance with AS 1530.1:1994; Dated 17/02/2022 & Warringtonfire Australia Pty Ltd; Report RTF190172, R1.0; Combustibility Test for Materials in Accordance with AS 1530.1-1994; dated 10/09/2019.

Fire Properties AS/NZS 1530.3-1999 Methods for Fire Tests on Building Materials, Components and Structures Part 3: Simultaneous Determination of Ignitability, Flame Propagation, Heat Release and Smoke Release Indices for the Volcore range of panels.

| | | |
|------------------------------|---|------------|
| Ignitability Index | 0 | Range 0-20 |
| Spread of Flame Index | 0 | Range 0-10 |
| Heat Evolved Index | 0 | Range 0-10 |
| Smoke Index | 1 | Range 0-10 |

Source: AWTA Product Testing, Report 16-002279 Testing in accordance with AS/NZS 1530.3-1999, dated 10/05/2016.

Certificate of Conformity

Material Group Numbers

The Group Number has been determined in accordance with testing conducted to ISO 9705:2003 (R2016) and AS 5637.1:2015.

| | |
|---|--------------------------------------|
| Group Number | 1 |
| Smoke Growth Rate Index (SMOGR_{RC}) | < 100 m ² /s ² |

Source: Warringtonfire Australia Pty Ltd; Report FAS200369, R1.0 dated 16/11/2020.

Fire Resistance Levels (FRLs)

Volcore Panel FRL Wall systems:

| Panel Thickness (mm) | Panel Orientation | Stitching requirement | Joint treatment | Perimeter rivets spacing (mm) | Maximum distance between supports | FRL |
|----------------------|-------------------|--|--|-------------------------------|-----------------------------------|-----------|
| 100 | Vertical | 1000mm wide panels must be secured to each other using Askin Slip-joint® with blind rivets at 250 mm centers | Sika® Firerate intumescent sealant | 150 | 3.0m | -/60/60 |
| 100 | Vertical | 1200mm wide panels must be secured to each other using Askin Slip-joint® with blind rivets at 300 mm centers | Sika® Firerate intumescent sealant | 150 | 3.0m | -/60/60 |
| 150 | Vertical | 1200mm wide panels must be secured to each other using cement fiber sheet spine | Flamex One fire rated acrylic sealant and Sika® Firerate intumescent sealant | 100 | 7.5m | -/60/60 |
| | | | | 100 | 6.0m | -/90/90 |
| | | | | 150 | 3.0m | -/120/120 |
| 150 | Vertical | 1000mm wide panels must be secured to each other using Askin Slip-joint® with blind rivets at 250 mm centers | Sika® Firerate intumescent sealant | 150 | 3.0m | -/120/120 |
| 150 | Vertical | 1200mm wide panels must be secured to each other using Askin Slip-joint® with blind rivets at 300 mm centers | Sika® Firerate intumescent sealant | 100 | 7.5m | -/60/60 |
| | | | | 100 | 6.0m | -/90/90 |
| | | | | 150 | 3.0m | -/120/120 |
| 150 | Horizontal | 1200mm wide panels must be secured to each other using cement fiber sheet spine and rivets at 500 mm centers | Sika® Firerate intumescent sealant | 150 | 3.0m | -/120/120 |
| | | | | 100 | 7.5m | -/120/120 |

Source: Warringtonfire Assessment Report No. FAS210329 R1.2 dated 26/05/2022 & Warringtonfire Assessment Report No. FAS190117-R2.0 dated 22/08/2022

Volcore Panel FRL Ceiling systems:

| Panel Thickness (mm) | Stitching requirement | Joint treatment | Perimeter rivets spacing (mm) | | Maximum distance between supports | FRL |
|----------------------|--|---|-------------------------------|----------------|-----------------------------------|-----------|
| | | | Exposed side | Unexposed side | | |
| 150 | Panels must be stitched using rivets at 500 mm and 300 mm spacings on the unexposed and exposed side, respectively | KAO mineral wool with Flamex One fire rate acrylic sealant | 75 | 125 | 7.5m | -/30/30 |
| | | | 75 | 150 | 6.0m | -/60/60 |
| | | | 100 | 200 | 3.0m | -/90/90 |
| | | | 100 | 200 | 7.5m | -/120/120 |
| 150 | Panels must be stitched using rivets at 500 mm and 300 mm spacings on the unexposed and exposed side, respectively | KAO ceramic wool with Flamex One fire rated acrylic sealant | 150 | 250 | 3.0m | -/240/210 |

Source: Warringtonfire Assessment Report No. FRT190223 R1.0 dated 10/10/2019 & Warringtonfire Assessment Report No. FAS210329 R1.2 dated 26/05/2022.

Allowed penetrations through the FRL Panels systems:

| Service | Referenced figure | Local protection | FRL |
|---|-------------------------|---|-----------------|
| Blank seal up to 1200mm x 600mm | Figure 29 | TBA Firefly Intubatt with Firetherm Intumastic used on the interface between the panel surface and Intubatt. A maximum annular gap of 6mm must be maintained. | Up to -/120/120 |
| 40 – 100 mm uPVC pipes | Figure 30 and Figure 31 | FC Promat collar with PROMASEAL® - An Acrylic sealant applied to the annular gap between the pipe and panel to a minimum depth of 20 mm. A maximum annular gap of 6 mm must be maintained. | Up to -/120/120 |
| Up to 50 mm HDPE pipes | Figure 32 | FC50 Promat collar with PROMASEAL® - An Acrylic sealant applied to the annular gap between the pipe and panel to a minimum depth of 20 mm. | Up to -/120/120 |
| 40 – 100 mm copper pipes | Figure 33 and Figure 34 | PROMASEAL® SupaWrap to 600 mm with PROMASEAL® - An Acrylic sealant applied to the annular gap between the pipe and panel to a minimum depth of 20 mm. A maximum annular gap of 6 mm must be maintained. | Up to -/120/120 |
| Maximum 30 mm diameter, 3 × 2.5 mm ² 2C + E TPS cables | Figure 35 | PROMASEAL® - An Acrylic sealant applied to the annular gap between the pipe and panel to a minimum depth of 20 mm and a 25 mm × 25 mm fillet around the cable bundle at the wall on both sides. | Up to -/120/120 |
| Maximum 130 × CAT 6 cables | Figure 36 | FC100 Promat collar with PROMASEAL® Grafitex paste applied to the annular gap between the cable bundle and collar. | Up to -/120/120 |

Any service penetrating through the TBA Firefly Intubatt with an established FRL achieved through testing or assessment by an accredited testing laboratory can be installed through the TBA Firefly Intubatt applied to the blank seal in the Volcore panel wall system.
FRL of the services will be governed by the lesser FRL of the separating element and the service.

Source: Warringtonfire Assessment Report No. FAS210329 R1.2 dated 26/05/2022.

Acoustics

The following acoustic values have been tested in accordance with AS 1191-2002 and assessed against AS/NZS ISO 717.1: 2004 with the following results:

| Panel Thickness (mm) | R _w | R _w + C _{tr} |
|-------------------------------|----------------|----------------------------------|
| Askin Volcore Panel 75mm | 28 | 25 |
| Askin Volcore Panel 100mm | 29 | |
| Askin Volcore Panel FRL 100mm | | |
| Askin Volcore Panel 120mm | 30 | |
| Askin Volcore Panel 150mm | 31 | |
| Askin Volcore Panel FRL 150mm | | |

Source:

75mm Panel - Acoustic Laboratories Australia Pty Ltd, Report No. ALA 09-080-2 dated 26/03/2009,
100mm Panel – SLR Consulting Australia Pty Ltd, Opinion Report No. 640.11482 ASK2 20170628 dated 28/06/2017,
120mm Panel - SLR Consulting Australia Pty Ltd, Opinion Report No. 640.11482 ASK5 20170629 dated 29/06/2017,
150mm Panel - SLR Consulting Australia Pty Ltd, Opinion Report No. 640.11482 ASK6 20170629 dated 29/06/2017,

A4 Manufacturer and manufacturing plant(s)

This field is voluntary. Contact Certificate Holder for details.

A5 Installation requirements

Installation must be in accordance with the following Technical Drawings manuals as appropriate:

- [ASKIN Interiors - Cold Storage Standard Details – 06-10-2022](#)
- [ASKIN Interiors – Standard Details – 19-09-2022](#)
- [ASKIN FRL Systems - Volcore Panel FRL \(Walls\) \(100mm\) - 21-10-2022](#)
- [ASKIN FRL Systems - Volcore Panel FRL \(Walls / Ceilings / Penetrations\) \(150mm\) - 27-10-2022](#)

A6 Other relevant technical data

Thermal

The Declared Material R-values of ASKIN Volcore mineral wool insulated core panel have been determined in accordance with AS/NZS 4859.1:2018.

| | | Declared Material R-Value [(m ² .K)/W] | | | | | | | |
|---------------|----------------|---|------|------|------|------|------|------|------|
| Volcore | Thickness (mm) | 50 | 75 | 100 | 120 | 150 | 160 | 175 | 180 |
| | | 0°C | 1.35 | 2.00 | 2.70 | 3.25 | 4.05 | 4.30 | 4.75 |
| Mean Temp(°C) | 15°C | 1.30 | 1.95 | 2.60 | 3.10 | 3.90 | 4.15 | 4.55 | 4.65 |
| | 23°C | 1.25 | 1.85 | 2.50 | 3.00 | 3.75 | 4.00 | 4.40 | 4.50 |

Calculations of Total R-value of ASKIN Volcore panels for Internal Wall applications performed in accordance with AS/NZS 4859.1:2018 are provided below. In all cases the construction is assumed to consist of the panel

| Australia | | Total R-Value [(m ² .K)/W] (Summer/Winter) & System U-Value [W/(m ² .K)] (Summer/Winter) | | | | | | | |
|---------------|----------------------|--|------|------|------|------|------|------|------|
| Volcore | Thickness (mm) | 50 | 75 | 100 | 120 | 150 | 160 | 175 | 180 |
| | | R _(Sum.) | 1.5 | 2.10 | 2.7 | 3.2 | 3.9 | 4.2 | 4.5 |
| Internal Wall | U _(Sum.) | 0.68 | 0.48 | 0.37 | 0.31 | 0.25 | 0.24 | 0.22 | 0.21 |
| | R _(Wint.) | 1.5 | 2.2 | 2.8 | 3.3 | 4.1 | 4.4 | 4.8 | 4.9 |
| | U _(Wint.) | 0.65 | 0.46 | 0.35 | 0.30 | 0.24 | 0.23 | 0.21 | 0.20 |

Source: Acronem Consulting Australia Pty Ltd letter dated 13/09/2021.

APPENDIX B – EVALUATION STATEMENTS

B1 Evaluation methods

1. Structural Provisions A5.2(1)(d)&(e). Reports from Accredited Testing Laboratories and a professional engineer.
2. Fire Safety Provisions A5.2(1)(d)&(e). Reports from Accredited Testing Laboratories and a professional engineer.
3. Acoustic Provisions A5.2(1)(e). Reports from Accredited Testing Laboratories and a professional engineer.

B2 Reports

1. CSIRO; NATA Accreditation no. 165; Report FNC12842; Testing of Rockwool Stonewool | Conrock core in accordance with AS 1530.1:1994; Dated 17/02/2022.
2. Warringtonfire Australia Pty Ltd; Nata Accreditation No. 3277; Report RTF190172, R1.0; Combustibility Test for Materials in Accordance with AS 1530.1-1994; dated 10/09/2019.
3. AWTA Product Testing, Nata Accreditation No. 1356; Report 16-002279; Testing in accordance with AS/NZS 1530.3-1999, Dated 10/05/2016.
4. Warringtonfire Australia Pty Ltd; Nata Accreditation No. 3277; Report FAS200369 R1.0, Fire Hazard properties of Volcore Panels in accordance with AS 5637.1:2015; Dated 16/11/2020.
5. Warringtonfire Australia Pty Ltd; Nata Accreditation No. 3277; Report No. FAS210329 R1.2; Assessment of Volcore panel wall system to AS 1530.4-2014; Dated 26/05/2022.
6. Warringtonfire Australia Pty Ltd; Nata Accreditation No. 3277; Report No. FAS190117-R2.0; Assessment of Volcore panel wall system to AS 1530.4-2014; Dated 22/08/2022.
7. Askin Engineering, Report ref. Volcore Panel – REV5; CodeMark span table analysis; Dated 08/08/2022.
8. Ian Bennie & Associates Pty Ltd; NATA Accreditation No. 2371; Report No. 2022-010 ASKIN_AS4040.2_VolcorePanel_01; Dated May 2022.
9. Askin Engineering, Report ref. Volcore Panel SINGLE SPAN REV1; Dated June 2022.
10. Ian Bennie & Associates Pty Ltd; NATA Accreditation No. 2371; Report No. ASKIN_2022_010_S55_Report; Dated June 2022.
11. Acoustic Laboratories Australia Pty Ltd; Report No. ALA 09-080-2; Determination of the Airborne Sound Insulation of 75mm thick panel; Dated 26/03/2009.
12. SLR Consulting Australia Pty Ltd, Opinion Report No. 640.11482 ASK2 20170628; Acoustical Opinion of Airborne Sound Insulation (Rw Rating) 100mm thick panel; Dated 28/06/2017.
13. SLR Consulting Australia Pty Ltd, Opinion Report No. 640.11482 ASK5 20170629; Acoustical Opinion of Airborne Sound Insulation (Rw Rating) 120mm thick panel; Dated 29/06/2017.
14. SLR Consulting Australia Pty Ltd, Opinion Report No. 640.11482 ASK6 20170629; Acoustical Opinion of Airborne Sound Insulation (Rw Rating) 150mm thick panel; Dated 29/06/2017.

The Certificate Holder has chosen not to make the above evidence of compliance publicly available, due to the documents being considered commercial in confidence however they are available upon request from the certificate holder.