

Certificate number: CM40340



ABN: 81 663 250 815 JAS-ANZ Accreditation No. Z4450210AK PO Box 273, Palmwoods Qld 4555 Australia P: +61 7 5445 2199 www.cmicert.com.au office@cmicert.com.au

#### **Certification Body:**

#### THIS IS TO CERTIFY THAT

### **ASKIN XFLAM Roofing System**

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

ASKIN XFLAM Metric panels are insulated composite panels intended for use in Roofing Systems.

The XFLAM Roofing system includes XFLAM Metric panels.

The XFLAM Metric panel has an external face of 0.5mm and internal face of 0.6mm Colorbond G300 solid steel facers with a syntactic phenolic composite closed cell foam core material adhered to the steel facers with a 2-part polyurethane adhesive. Refer A2 for further details.

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

**BCA 2022** 

#### Certificate Holder:



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

Limitations and conditions:

**Volume One** Volume Two

Performance Requirement(s): B1P1(1)&(2)(c) Structural reliability Not Applicable

**Deemed-to-Satisfy Provision(s):** C2D11 (1)(b) Fire hazard properties – Group Number classification. Refer Not Applicable

limitation and condition 6.

F3D2(b) Roof and wall cladding - Roof coverings

Energy Efficiency - Roof and Ceiling Construction. Must be J4D4

used in conjunction with other building elements to achieve a

Total R Value.

State or territory variation(s): Not Applicable Not Applicable

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

Panel fixing, number and type must be determined to the satisfaction of the Appropriate Authority for the relevant site specific wind loads.

2. 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.

3. Any penetrations made into the certified products will void all nominated structural performance. The adequacy of the size, location and spacing of any penetrations through the roof panels including penetrations for flues, chimneys or exhaust of hot products of combustion are outside the scope of this certificate and require site-specific solutions.

The structural support members are designed and engineered separately as per project requirements by building designers and engineers.

Richard Donarski - CMI

Date of issue: 06/12/2024



**Building classification/s:** 

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



**Don Grehan – Unrestricted Building Certifier** 

Date of expiry: 06/12/2027



- 5. 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.
- 6. The Group number has been determined in accordance with testing conducted to AS ISO 9705 and assessment against AS 5637.1: 2015, refer A3.
- 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.

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, CMI Certification Pty Ltd (CMI) 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

XFLAM Roofing range of panels consist the XFLAM Metric panel.

The XFLAM Metric panel has an external face of 0.5mm and internal face of 0.6mm Colorbond G300 solid steel facers with a syntactic phenolic composite closed cell foam core material adhered to the steel facers with a 2-part polyurethane adhesive and come in the following thicknesses:

Panel	Thickness (mm)	Core Density
XFLAM Metric panel	50, 75, 100, 125, 150, 175, 200,250	32-36 kg/m <sup>3</sup>

#### A3 Product specification

### Structure & Weatherproofing

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 in accordance with the relevant Australian standards (AS 1170.0, AS 4040, AS 1562) for application in Australian wind regions A & B to AS 1170.2 for Vol One, from static load testing undertaken in accordance with AS 4040.

Document Name	Version
Product Specification Sheet – Roofing Metric XFLAM	November 2024

#### **Penetrations**

In order to maintain compliance with structure, the adequacy of the size, location and spacing of any penetrations through the roof panels is outside the scope of this Certificate of Conformity and must be confirmed by a structural engineer.

#### 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
SMOGRA <sub>RC</sub>	<100 me/s <sup>2</sup>

Source: Warringtonfire Australia Pty Ltd; Report FAS220049 R1.0 dated 23/12/2022.

#### **Thermal**

The Declared Material R-values of ASKIN XFLAM foam insulated core panel have been determined in accordance with AS/NZS 4859.1:2018 as:

Declared Material R-Value [(m².K)/W]									
XFLAM Core	Thickness (mm)	50	75	100	125	150	175	200	250
	0°C	1.50	2.20	2.95	3.70	4.45	5.20	5.95	7.40
Mean Temp(°C)	15°C	1.40	2.10	2.80	3.50	4.25	4.95	5.65	7.05
	23°C	1.40	2.05	2.75	3.45	4.15	4.85	5.55	6.90

**Source:** Acronem Consulting Australia Pty Ltd letter, dated 01/04/2022.



Calculations of Total R-value of ASKIN XFLAM panels for Metric Roofing construction 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 [(m².K)/W] (Summer/Winter) & System U-Value [W/(m².K)] (Summer/Winter)								
XFLAM Core	Thickness (mm)	50	75	100	125	150	175	200	250
External Roof	R <sub>(Sum.)</sub>	1.5	2.2	3.0	3.7	4.2	4.9	5.6	6.9
	U <sub>(Sum.)</sub>	0.63	0.45	0.33	0.27	0.23	0.20	0.18	0.14
	R <sub>(Wint.)</sub>	1.6	2.2	3.1	3.8	4.4	5.1	5.8	7.2
	U <sub>(Wint)</sub>	0.62	0.44	0.32	0.26	0.23	0.19	0.17	0.14

**Source:** Acronem Consulting Australia Pty Ltd letter, dated 02/12/2024.

#### A4 Manufacturer and manufacturing plant(s)

This field is optional. Contact the Certificate Holder for details.

#### **A5 Installation requirements**

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

ASKIN Roofing - Metric & Metric Acoustic Standard Details - 2022-09

#### A6 Other relevant technical data

Acoustic
Performance

The 75mm ASKIN EPS-FR Panels have been tested in accordance with AS 1191-2002 and assessed against AS/NZS ISO 717.1: 2004 by Acoustic Laboratories Australia Pty Ltd and achieve the following acoustic value.

Panel Thickness (mm)	R <sub>W</sub>	R <sub>w</sub> + C <sub>tr</sub>	R <sub>W</sub> (C, C <sub>tr</sub> )
Askin XFLAM Panel 75mm	25	23	25 (-2, -2)

Source: Acoustic Laboratories Australia Pty Ltd; Report No.: ALA 09-080-3, Determination of the Airborne Sound Insulation of 75mm XFLAM PANEL™; Dated 27/03/2009

#### **Fire Properties**

An evaluation has identified that based on the testing of the XFLAM range of panels consistency between the panel thicknesses of 50 mm to 300 mm and in accordance with 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 XFLAM range of panels are shown below.

Ignitability Index	0	Range 0-20	Heat Evolved Index	0	Range 0-10
Spread of Flame Index	0	Range 0-10	Smoke Index	1-2	Range 0-10

**Source:** Ignis Labs Report No. IGNL-6259-01-01 IO1 R00 Dated 16/12/2022.

#### Wind Driven Debris

The 100mm XFLAM Panel has been subjected to the simulated wind driven debris impact test. The Wall Panel was deemed to have passed the requirements for wind driven debris test.

**Source:** Azuma Design Pty Ltd Report No. AZT0339.12 dated 21/12/2012.



#### **APPENDIX B – EVALUATION STATEMENTS**

#### **B1** Evaluation methods

Certificate number: CM40340-I01-R00

- 1. Energy Efficiency Provisions A5G3(1)(e). A report issued by a professional engineer or other appropriately qualified person.
- 2. Fire Safety Provisions A5G3(1)(d)&(e). A report issued by an Accredited Testing Laboratory & a certificate or report from a professional engineer or other appropriately qualified person.
- 3. Structural Resistance Provisions A5G3(1)(d)&(e). A report issued by an Accredited Testing Laboratory & a certificate or report from a professional engineer or other appropriately qualified person.
- 4. Weatherproofing Provisions A5G3(1)(d)&(e). A report issued by an Accredited Testing Laboratory & a certificate or report from a professional engineer or other appropriately qualified person.

#### **B2** Reports

- 1. Acronem Consulting Australia Pty Ltd; Report No. ACA-220829; Askin Roofing 'Xflam Metric' Metal Sheet Roofing NCC 2019(Amdt.1), Volume One Part F1 Damp & Weatherproofing, F1.5(D) Roof Coverings, Complying with AS 1562.1; Dated 30/08/2022. Report outlines compliance with F3D2(b) in accordance with A5G3.
- 2. Acronem Consulting Australia Pty Ltd; Thermal Performance of ASKIN XFLAM Core Panels Roofing, External Wall & Internal Wall Applications Letter; Dated 02/12/2024. Report outlines the Declared Material R-values and Calculations of Total R-value of the ASKIN XFlam Panels based on testing conducted by an Accredited Testing Laboratories.
- 3. Warringtonfire Australia Pty Ltd; NATA Accreditation No. 3277; Report No. FAS220049 R1.0; Fire assessment report Fire hazard properties of XFLAM panels in accordance with AS 5637.1:2015; Dated 23/12/2022. Report provides determination of Group Number classification and variations that cover the range of XFLAM Panels for complying with C2D11(1)(b).
- **4.** Warringtonfire Australia Pty Ltd; NATA Accreditation No. 3277; Report No. RTF220052 R1.0; Reaction to fire test report; Dated 23/12/2022. Report provides determination of Group Number classification for XFLAM panel for complying with C2D11(1)(b) and is a referenced document in Report No. FAS220049 R1.0.
- 5. Azuma Design Pty Ltd; Report No. AZT0339.12; Simulated Wind Driven Debris Impact Testing; Dated 21/12/2012. Report outlines Wind Driven Impact testing shown in A6.
- 6. Askin Engineering; Report No. REV2.ASKIN Engineering Xflam Metric CodeMark Span Table Analysis; Dated 08/08/2022. Report provides compliance with B1P1(1),(2)(c)
- 7. Askin Engineering; Report No. REV2.; CodeMark Span Table Cyclone Design Pressure Analysis; Dated 27/09/2022. Report provides compliance with B1P1(1),(2)(c)
- 8. Acoustic Laboratories Aystralia Pty Ltd; Report ALA 09-080-3; Determination of the Airborne sound insulation of 75mm XFLAM PANEL™; Dated 27/03/2009. Report outlines acoustic performance shown in A6.
- 9. Ignis Labs Pty Ltd; NATA Accreditation No. 20534; Report No. IGNL-6259-01-01 I01 R00; ASKIN Product Evaluation XFLAM Panel 50 mm 300 mm; Dated 16/12/2022. Report outlines regulatory Fire Indices shown in A6.
- 10. Ian Bennie & Associates Pty Ltd; NATA Accreditation No. 2371; IBA Test Report No. ASKIN\_AS4040.2\_XflamMetric\_02 (Amended) TEST REPORT; Static Serviceability limit state & Strength limit state WIND LOAD TESTS by the methods of AS:4040.2-1992(R2016) To the requirements of AS 1562.1:2018; Dated 04/08/2022. Report supports compliance with B1P1(1),(2)(c).

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