



Certificate of Conformity

Certificate number: CM40352 Rev1

Certification Body:



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THIS IS TO CERTIFY THAT

75mm MaxiFloor Low Rise Multi Residential Buildings and Houses Floor System

Type and/or use of product:

MaxiFloor is an Autoclaved Aerated Concrete (AAC) flooring product. Applications include houses, low-rise multi-residential and light commercial buildings.

Description of product:

MaxiFloor is 1800mmx600mmx75mm thick AAC lightweight steel reinforced flooring panel.

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(a),(b) (i), (ii)&(iii) FP5.1	P2.1.1(a),(b)(i), (ii)&(iii) Structural reliability - Refer Limitation and Condition No. 1. Sound transmission - Floors - Can be used in conjunction with other building elements to provide insulation against the transmission of airborne and impact generated sound sufficient to prevent illness or loss of amenity to the occupants. Refer A3.
Deemed-to-Satisfy Provision(s):	C1.1(b) J1.6	3.7.4.3(a)(ii) 3.12.1.5
State or territory variation(s):	Part F5 (NT)	Separating Floors - Can be used in conjunction with other Fire-Resisting Construction to achieve an FRL Separating Floor not exceeding 90/90/90. Subject to <i>Limitation and Condition No. 5</i> . Energy efficiency – Floors - Can be used in conjunction with other building elements to achieve a Total R-Value. Refer A3. 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

Limitations and conditions:

- Construction shall be in strict accordance with the [75mm MaxiFloor Low Rise Multi Residential Buildings and Houses Floor System Installation Guide \(BR-006\)](#).
- R values, FRLs and Acoustic values vary with installation configurations - Refer A3.
- FP5.1 – Sound Transmission, only applies to Class 2 or 3 buildings.

Building classification/s:

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

Richard Donarski - CMI

Don Grehan – Unrestricted Building Certifier

Date of issue: 15/03/2023

Date of expiry: 09/05/2025



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4. It is the responsibility of the architectural designer and engineering parties to ensure that the details in this Design and Installation Guide are appropriate for the intended application.
5. Compliance with FRL is dependant on the system configurations as specified in A3. Any deviation from the tested specimen does not form part of this certificate of conformity and requires a site specific performance solution.
6. 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

The MaxiFloor system consists of the following components:

Product	Description										
MaxiFloor 75mm panel	The core component of the MaxiFloor system is the 75mm thick, steel mesh reinforced AAC panel. The panel is manufactured in the following sizes. <table border="1"> <tr> <td>Thickness</td> <td>75mm</td> </tr> <tr> <td>Width</td> <td>600mm</td> </tr> <tr> <td>Length</td> <td>1800mm</td> </tr> <tr> <td>Reinforcement</td> <td>Single steel mesh, centrally located</td> </tr> <tr> <td>Steel wire</td> <td>4 longitudinal wires of 5mm diameter</td> </tr> </table>	Thickness	75mm	Width	600mm	Length	1800mm	Reinforcement	Single steel mesh, centrally located	Steel wire	4 longitudinal wires of 5mm diameter
Thickness	75mm										
Width	600mm										
Length	1800mm										
Reinforcement	Single steel mesh, centrally located										
Steel wire	4 longitudinal wires of 5mm diameter										
Timber & Steel Support Systems	Timber or steel floor framing can be used to support the MaxiFloor 75mm panel. The maximum continuous span is 600mm. The joists, bearers and other supports shall be sized in accordance with the framing manufacturer's recommendations.										
The Bin Adhesive	Factory prepared blend of carefully selected raw materials such as cement, graded aggregates and strengthening and performance additives. A dry mixed product used as a structural thin bed adhesive for adhering the panels in the construction of floors										
Construction Adhesive	Thin-bed mortar with high strength specifically manufactured for the placement of panels where levelling and bonding is required for floor construction. The mortar helps in the integrity of an airtight construction for sound insulation and fire protection at the base of the panels										
Fasteners & Fixings	<p>Screws for fixing MaxiFloor 75mm panel to Timber Joists: No.14-10 x 100 mm MP Bugle Head Type 17 Screw 75mm Panel to Timber Joist</p> <p>Screws for fixing MaxiFloor 75mm panel to Steel Joists: No.14-10 x 95 mm Hex Head Tek Screw 75mm Panel to Steel Joist</p>										
Patching Compound	Pre-mixed, water based jointing and patching compound used for repairing minor chips, cracks and damages particularly to the corners and edges of panels. It can also be used as a filler compound.										
Anti-corrosion paint	Coating and protection of the exposed steel reinforcement mesh from corrosion after cutting.										

A3 Product specification

Structural Performance

75mm MaxiFloor Low Rise Multi Residential Buildings and Houses Floor System can support a maximum uniformly distributed load of 5kPa, or concentrated (point) load of 1.8kN over a load area of 350mm² with joists at 450mm centres Section 9.0 of [75mm MaxiFloor Low Rise Multi Residential Buildings and Houses Floor System Installation Guide \(BR-006\)](#).

For loads outside this range, please contact CSR Hebel as they are outside this Scope of Certification of this Certificate of Conformity.

The designer should specify the magnitude of the gaps between the MaxiFloor panel and structure. This gap will allow movement to release any confining stresses due to movement of the supporting structure.

Fire-Resistance Level

To achieve a floor FRL of **90/90/90** when installed with a fire rated ceiling system. The floor structural element is to be shielded from the lower compartment by 2 layers of 16mm fire grade plasterboard or a fire rated **90/90/90** ceiling system.

Source: Ignis Solution report IGNS-9044 I01R03 AAC Advice dated 04/06/2021.

Sound Transmission

The acoustic performance of a single leaf 75mm thick MaxiFloor panel with no plasterboard or other lining is $R_w = 36\text{dB}$, $R_w + C_{tr} = 33\text{dB}$.

The following configuration options attains $R_w + C_{tr} \geq 50$ and $L_{n,w} \geq 62$:

- 75mm thick autoclaved aerated concrete floor panel with:
 - 8 mm ceramic tiles with flexible adhesive and waterproof membrane located above the slab; and
 - Timber joists at 600 mm centres; and $\geq R1.5$ glass wool insulation positioned between timber joists; and
 - 28 mm metal furring channels and resilient mounts fixed to underside of joists; and
 - Two layers of 13 mm plasterboard fixed to furring channels.

Refer Section 9.0 Installation Detail of the [75mm MaxiFloor Low Rise Multi Residential Buildings and Houses Floor System Installation Guide \(BR-006\)](#).

Thermal Properties

The MaxiFloor 75mm panel R-Value with no plasterboard or other lining = $0.375 \text{ m}^2 \cdot \text{K/W}$ (14% moisture content).

Source: Test report NR-12140 dated 10/10/2012.

A4 Manufacturer and manufacturing plant(s)

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

A5 Installation requirements

Only to be installed by a suitably qualified tradesperson in accordance with [75mm MaxiFloor Low Rise Multi Residential Buildings and Houses Floor System Installation Guide \(BR-006\)](#).



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A6 Other relevant technical data

No other relevant technical data.

APPENDIX B – EVALUATION STATEMENTS

B1 Evaluation methods

1. Acoustic Performance 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. Structural Provisions A5.2(1)(e). Reports from a professional engineer.
4. Thermal Provisions A5.2(1)(e). Reports from a professional engineer.

B2 Reports

1. James M Fricker Pty Ltd Report No. 107_E43pine; Thermal Performance Calculations to AS/NZS 4859 Parts 1 & 2:2018; Dated 01/09/2020 validated by Nata Accreditation No. 993; Test Report No. NR-12140 ASTM C518 Thermal Transmission Properties Measurement; Dated 10/10/2012.
2. PACE Structural; Report No. PS21052; Structural Design Certificate 75mm MaxiFloor Low Rise Multi Residential Buildings and Houses; Dated 13/04/2021.
3. PKA Acoustic Consulting Pty Ltd; Report No. PKA-A071; Acoustic Performance Assessment; Dated 07/06/2018.
4. IGNIS Solutions; Report No. IGNS-9044 I01 R03; Fire Resistance Level assessment; Dated 04/06/2021.

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