



Certificate of Conformity

Certificate number: CM40328 Rev2

THIS IS TO CERTIFY THAT

NASAHI 50mm Party Wall System

Certification Body:



ABN: 81 663 250 815
JAS-ANZ Accreditation
No. Z4450210AK
PO Box 273,
Palmwoods Qld 4555
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Certificate Holder:



AAC Building
Products Pty Ltd
T/A NASAHI
ABN: 74621069207
1331 Stud Road
Rowville, Victoria 3178
Australia
Ph: 1300 26 27 24
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Type and/or use of product:

Internal Walls in Class 2 – 9 buildings and Separating Walls in Class 1 & 10.

Description of product:

50mm Party Wall System incorporating 50mm Nasahi AAC Panels and proprietary components providing fire, acoustic and thermal performance.

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)(i), (ii) & (iii) Structural reliability	P2.1.1(b)(i), (ii) & (iii) Structural stability and resistance
	FP5.2, Sound transmission through walls	P2.4.6 Sound Insulation
	FP5.5 Sound transmission through walls in residential care buildings	
Deemed-to-Satisfy Provision(s):	C1.1(b) Fire Resistance and Stability – FRL varies, dependant of the configuration of the wall. Refer <i>Limitation and Condition 2</i> .	3.7.3.2(a)(i)(A) Fire protection of separating walls - FRL varies, dependant of the configuration of the wall. Refer <i>Limitation and Condition 2</i> .
	C1.9 Non-combustible building elements – Limited to AAC panel only	3.8.6.2(a), (b) Sound insulation requirements
State or territory variation(s):	Part F5 (NT)	P2.4.6 (NT); Part 3.12 (NSW, NT, SA, Qld, Tas, ACT); Part 3.8.6 (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:

- Construction shall be in strict accordance with the [Nasahi Party Wall System, Design and Installation Guide, 50mm, June 2021](#).
- Compliance with FRL is dependent on the system components being as specified in A3. Any deviation from the tested specimen does not form part of this certificate of conformity.
 - Maximum wall height for FRL 60/60/60 configuration is 15m.
 - Maximum wall height for FRL 90/90/90 configuration is 10m.
 - Maximum distance between concrete floor and concrete soffit is 3m for the FRL -/120/90 system.
 - For FRL 90/90/90 Configuration, a layer of 16mm Fire Rated plasterboard to extend 150mm above bottom plate and below top plate.

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: 03/03/2023

Date of expiry: 09/11/2024



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3. Typical service penetrations may penetrate the outer linings without special treatments but Penetrations through the Nasahi AAC Panel for service installations are not permitted. Penetrations through the Nasahi panel are outside of the scope of this certification and a fire engineer must be consulted.
4. The structural support members are designed and engineered separately as per project requirements by building designers and engineers.
5. In all cases, it is a requirement that the Nasahi 50mm Party Wall System incorporates;
 - a. A timber frame constructed in accordance with AS 1720.1 and/or AS 1684 as applicable with a minimum 70mm depth; or
 - b. A cold-formed steel frame constructed in accordance with AS/NZS 4600 or AS3623 as applicable, with and a minimum thickness of 0.75mm BMT: a minimum 51 mm stud depth for non-loadbearing applications; a minimum 76mm stud depth for loadbearing applications.
 - c. A 20mm minimum gap between framing and panels.
 - d. Wall linings of minimum 10mm thickness standard core plasterboard.
 - e. Wall cavity fully filled with Glasswool or Rockwool.
6. Discontinuous construction can only be achieved where walls do not exceed 3.0m in height to ensure aluminium angle bracket installation is restricted to the periphery.
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

Nasahi 50mm Party Wall System incorporates:

- Min. 10 mm thick non-fire rated plasterboard internal wall lining on each exposed face, fixed with 6G x 32 mm needle point bugle head screws at 400mm maximum spacing, to either;
 - o timber framing designed by an accredited engineer in accordance with AS 1720.1-2010 and/or AS 1684 with a minimum stud depth of 70mm, or
 - o steel framing designed by an accredited engineer in accordance with AS/NZS 4600:2018 or AS 3623-1993 (Reconfirmed 2018), with a minimum stud depth of 76 mm.
- A 20mm minimum gap between framing and Nasahi panel.
- Wall cavities fully filled with Glasswool or Rockwool insulation.
- For a 90 minute wall system, an additional layer of 16mm thick fire grade plasterboard continuously fitted to one side of the Nasahi Panel where there is a discontinuity in the outer wall lining.
- Service penetrations are allowed in the wall linings though not through the Nasahi Panel.
- Floor framing shall be optionally arranged such that the joists are parallel or perpendicular to the wall and do not require solid blocking at the ends for fire.
- Fire sealed joints and edges.
- Aluminium angle brackets 45mm (tall) x 75 mm (deep) x 50 mm (wide) x 1.5 mm fixed to the timber framing with 2 x 12-11 x 25mm Hex Head Type 17 Class 3 screws or fixed to steel frame with 10-16 x 20mm Hex Head Self-Drilling Class 3 screws and attached to Nasahi panel with 2 x 12G x 45 mm, Type 17 screws.

A3 Product specification

Fire Resistance and Stability

The following table is the conclusion of the assessment conducted by WarringtonFire and must be read in conjunction with the construction details contained in Nasahi Party Wall System, Design and Installation Guide, 50mm, June 2021, pages 32 to 41.

Wall Framing	Maximum Wall Height	Maximum Vertical Space of Aluminum Brackets	Maximum Horizontal Space of Aluminum Brackets	FRL
Min. 70mm deep timber or 76mm steel framing	15m	3.0m	1100mm	60/60/60
	6.6m	3.0m	400mm	90/90/90
	10m	3.0m	250mm	90/90/90
Min. 70mm deep timber or min. 51mm deep steel framing	3m	3.0m	1100mm	-/120/90

Variations to the tested systems

FRL 90/90/90 up to 3m in height	<ul style="list-style-type: none"> • Timber framing sizes can be varied provided they are designed and constructed in accordance with AS 1720.1 and/or AS 1684 and a minimum 70 mm deep. • The steel structural framing is to be designed in accordance with the AS/NZS 4600 or AS 3623 and a minimum 76 mm deep.
FRL 60/60/60 up to 15m in height	<ul style="list-style-type: none"> • The height of the central membrane can be up to 15 m high where clips are spaced at maximum 3000 mm centres vertically and maximum 1100 mm centres horizontally as shown in Detail 1 in Nasahi Party Wall System, Design and Installation Guide, 50mm, June 2021, pages 31. • Floor framing can be optionally arranged such that joists are parallel or perpendicular to wall and do not require solid blocking at the ends. • The critical aspects of the increase in the height of the wall are the increased weight applied to the central membrane, the influence of discontinuities in the wall linings at the joist locations and influence of removal of the wall linings in the ceiling space. Ok

- FRL 90/90/90 up to 10m in height
- The height of the central membrane can be up to 10 m high where clips are spaced at maximum of 3000 mm vertically and maximum 250 mm centres horizontally for each floor level.
 - The height of the central membrane can be up to 6.6 m high where clips are spaced at maximum of 3000 mm vertically and maximum 400 mm centres horizontally for each floor level.
 - Floor framing may be optionally arranged such that joists are parallel or perpendicular to wall and do not require solid blocking at the ends.

Multi-storey party wall systems

- Wall height can be maximum 15 m high.
- Timber framing sizes can be varied provided they are minimum 70 mm deep and are designed and constructed in accordance with AS 1720.1 and/or AS 1687.
- The steel structural framing must be minimum 76 mm deep and is to be designed in accordance with AS/NZS 4600 or AS 3623.
- The minimum gap between the framing and the panels must be 20 mm. This gap may be increased up to 45 mm.
- Linings fixed to the wall frames on each side must be minimum 10 mm thick standard grade plasterboard.
- Framing and linings will not extend into ceiling space.
- Wall cavity must be fully filled glass fibre or mineral fibre insulation.
- For 90-minute wall system, an additional layer of 16 mm thick fire rated plasterboard must be continuously fitted to one side of the central membrane where there is a discontinuity in the outer wall lining.
- Service penetrations are allowed in the wall linings though not through the Nasahi Super50 panels.
- Floor framing may be optionally arranged such that joists are parallel or perpendicular to wall and do not require solid blocking at the ends.
- Intertency wall corner detail is as shown in Detail 3.5. (of the Nasahi Party Wall Design and Installation Guide, 50mm, June 2021).
- Optional panel end detail as shown in Detail 1.1, Detail 1.2 and End Detail (page 41 of the Nasahi Party Wall Design and Installation Guide, 50mm, June 2021).
- Party wall to external wall junction details as shown in Detail 4.1, Detail 4.1A, Detail 4.2 and Detail 4.3. (of the Nasahi Party Wall Design and Installation Guide, 50mm, June 2021).

Single storey walls between slabs

- Wall height must be maximum 3m high between concrete slabs.
- Timber framing sizes can be varied provided they are minimum 70 mm deep and are designed and constructed in accordance with AS 1720.1 and/or AS 1684.
- The steel structural framing must be minimum 51 mm deep and is to be designed in accordance with AS/NZS 4600 or AS 3623.
- The minimum gap between the framing and the panels must be 20 mm. This gap may be increased up to 45 mm.
- Wall cavity must be fully filled glass fibre or mineral fibre insulation.
- Linings fixed to the wall frames on each side must be minimum 10 mm thick standard grade plasterboard.
- Intertency wall corner detail is as shown in Detail 3.5.
- Optional panel end detail as shown in Detail 1.1, Detail 1.2 and *End Detail* (page 41 of Design and Installation Guide, 50mm, June 2021).
- Party wall to external wall junction details as shown in Detail 4.1, Detail 4.1A, Detail 4.2 and Detail 4.3.

Source: WarringtonFire; NATA Accreditation No. 165; Assessment Report39410000 R8.2; Dated 18/06/2021.

Sound transmission through walls including in residential care buildings

Predicted acoustic ratings of internal (inter-tenancy) wall systems:

Party Wall System	Wall Structure	R _w	C _{tr}	Party Wall System	Wall Structure	R _w	C _{tr}
Option 1	<ul style="list-style-type: none"> One layer of 10mm standard grade plasterboard 90mm timber stud R2 insulation 10-70mm cavity* 50mm Nasahi Panel 10-70mm cavity* R2 insulation 90mm timber stud One layer of 10mm standard grade plasterboard 	60	-8	Option 5	<ul style="list-style-type: none"> One layer of 13mm acoustic grade plasterboard 90mm timber stud R2 insulation 10-70mm cavity* 50mm Nasahi Panel 10-70mm cavity* R2 insulation 90mm timber stud One layer of 13mm acoustic grade plasterboard 	58	-3
Option 2	<ul style="list-style-type: none"> One layer of 10mm standard grade plasterboard 76mm metal stud R2 insulation 10-70mm cavity* 50mm Nasahi Panel 10-70mm cavity* R2 insulation 76mm metal stud One layer of 10mm standard grade plasterboard 	65	-15	Option 6	<ul style="list-style-type: none"> One layer of 13mm fire rated plasterboard 90mm timber stud R2 insulation 10-70mm cavity* 50mm Nasahi Panel 10-70mm cavity* R2 insulation 90mm timber stud One layer of 13mm fire rated plasterboard 	59	-4
Option 3	<ul style="list-style-type: none"> One layer of 10mm standard grade plasterboard 92mm metal stud R2 insulation 10-70mm cavity* 50mm Nasahi Panel 10-70mm cavity* R2 insulation 92mm metal stud One layer of 10mm standard grade plasterboard 	66	-13	Option 7	<ul style="list-style-type: none"> One layer of 10mm water resistant plasterboard 90mm timber stud R2 insulation 10-70mm cavity* 50mm Nasahi Panel 10-70mm cavity* R2 insulation 90mm timber stud One layer of 10mm water resistant plasterboard 	59	-6
Option 4	<ul style="list-style-type: none"> One layer of 13mm standard grade plasterboard 90mm timber stud R2 insulation 10-70mm cavity* 50mm Nasahi Panel 10-70mm cavity* R2 insulation 90mm timber stud One layer of 13mm standard grade plasterboard 	59	-4	Option 8	<ul style="list-style-type: none"> One layer of 6mm fibre cement 90mm timber stud R2 insulation 10-70mm cavity* 50mm Nasahi Panel 10-70mm cavity* R2 insulation 90mm timber stud One layer of 6mm fibre cement 	64	-8

Source: Renzo Tonin & Associates Report No. TH736-01F02 Acoustic Opinions (r8) dated 16/04/2020.



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A4 Manufacturer and manufacturing plant(s)

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

A5 Installation requirements

Only to be installed in accordance with [Nasahi Party Wall System, Design and Installation Guide, 50mm, June 2021](#).

- Refer page 18 for Party Wall System Installation Process and pages 32 to 41 for FRL construction details.

A6 Other relevant technical data

Non-combustibility

The certificate holder has provided the Certificate of Test for Combustibility for Materials in accordance with AS 1530.1:1994 for Nasahi 50mm Autoclaved Aerated Concrete (AAC) Dry Density 503.16kg/m³.

The material is NOT deemed combustible - Limited to the panel only.

Source: Exova Warringtonfire, Test Report No. 365312-00.1 dated 25/08/2015.

Thermal Performance

The R-Value of the bare Nasahi 50mm AAC panel is 0.39 (m².K/W).

The overall Total R-value based on the worst case scenario for the Nasahi Party wall system is 3.8 Winter and 3.6 Summer. See below worst case scenario inputs.

- 76mm steel studs at 450mm c/c
- R2.0 Glasswool 70mm Batts
- 10mm Std Plasterboard.

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. Acoustic Provisions A5.2(1)(e). Reports from a professional engineer.

B2 Reports

1. Acronem Consulting Australia Pty Ltd; Report No. ACA 210329; Assessment of Nasahi 50mm Party Wall System test reports; Dated 18/06/2021.
2. Venn Engineering; Report VE-NAS2005061; NCC Compliance Report, Nasahi AAC Low-rise External Wall System; Dated 03/08/2020.
3. Sharp & Howells; NATA Accreditation No. 658; Test Report 19-0125B; Nasahi 50mm & 62mm panel; Dated 17/10/2019.
4. Sharp & Howells; NATA Accreditation No. 658; Test Report 19-0247; Nasahi 50mm & 62/75mm panel reinforcement testing to AS/NZS 4671; Dated 17/10/2019.
5. Acronem Consulting Australia Pty Ltd; Report No. ACA 210329; Calculation of Design Ultimate Wind Load Capacity (kPa) of Nasahi 50mm Panel and Nasahi H-section (I-stud) during construction; Dated 03/06/2021.
6. Renzo Tonin & Associates; Report No. TH736-01F02; Acoustic Opinions (r8); Dated 16/04/2020.
7. Renzo Tonin & Associates; Report No. TH736-01F03; Opinion letter (r0); Dated 29/02/2016.
8. Exova Warringtonfire Australia Pty Ltd; Nata Accreditation No. 3277; Report No. 365312-00.1; Testing in accordance with AS1530.1-1994; Dated 25/08/2015.
9. Warringtonfire Australia Pty Ltd; Nata Accreditation No. 3277; Report No. 39410000 Revision 8.2; Testing in accordance with AS 1530.4-2014 – Determination of FRL; Dated 03/11/2021.
10. TC Fire Engineering; Report No. TCFE0014, Version 5; Party wall details; Dated 27/09/2021.

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