

Certification Body:

CM

ABN: 81 663 250 815 JAS-ANZ Accreditation

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Certificate of Conformity

Certificate number: CM40442

THIS IS TO CERTIFY THAT

Helix Panel 50/75mm AAC Houses and Low-Rise Multi-Residential External Wall System

Type and/or use of product:

Wall Cladding System for Houses & Low Rise Multi-Residential External Walls.

Low-Rise Multi-Residential External Wall comprising several proprietary components including nonload bearing steel reinforced Autoclaved Aerated Concrete (AAC) panels. Refer A2 below.

COMPLIES WITH THE FOLLOWING BCA PROVISIONS AND STATE OR TERRITORY VARIATION(S) BCA 2022 (Amdt. 1)

Description of product:

Volume One Volume Two office@cmicert.com.au **Performance Requirement(s):** F1P4 H2P3 **Rising damp** Rising damp **Certificate Holder:** Deemed-to-Satisfy Provision(s): B1D4(b)(ii) Structural resistance of materials and forms of H1D7(4)(a) Structure - Roof and wall cladding - autoclaved aerated concrete wall cladding, AS 5146.1 construction HELIX C2D2(2) Fire resistance and stability - FRLs H2D6(4) Damp and weatherproofing – Roof and wall cladding Helix AAC Ptv Ltd ABN: 685854826 C2D9 Lightweight construction H3D3 Fire separation of external walls 497 Blackburn Road C2D10(5)(e) Mount Waverley Non-combustible building elements H4D9 Condensation management Melbourne VIC 3149. F3D5(1)(b) Weatherproofing – Roof and wall cladding H6D2(1) Energy efficiency Ph: 1300 435 427 www.helixaac.com.au F8D3 Condensation management H7D4(2)(a) Construction in bushfire prone areas G5D3 Construction in bushfire prone areas J4D6 Energy efficiency State or territory variation(s): F1P4 (SA), G5D3 (NSW), Part J4 (NT). H2P3 (NSW, SA), H4D9 (TAS), Part H6 (NSW, NT & TAS), H7D4 (NSW, QLD, SA) SUBJECT TO THE FOLLOWING LIMITATIONS AND CONDITIONS AND THE PRODUCT TECHNICAL DATA IN APPENDIX A AND EVALUATION STATEMENTS IN APPENDIX B Limitations and conditions: **Building classification/s:** 1. The Helix Panel 50/75mm AAC Houses and Low-Rise Multi-Residential External Wall System must be installed in accordance with Helix Panel 50/75mm AAC Class 1,2,3,4,5,6,7,8,9 & 10 Houses and Low-Rise Multi-Residential External Wall System, Version 1, June 2025. **ΙΔ**5-ΔΝ7 Date of issue: 25/06/2025 Glen Gugliotti - CMI Don Grehan – Unrestricted Building Certifier Date of expiry: 25/06/2028 ABCB

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- Australia
 - 2. For Class 2 to Class 9 buildings, the Helix Panel 50/75mm AAC Houses and Low-Rise Multi-Residential External Wall System is suitable for only Type C Fire-Resisting Construction when fixed to timber stud framing.
 - 3. The structural certification is limited to the cladding only and does not include the sub-structure. The Helix Panel 50/75mm AAC Houses and Low-Rise Multi-Residential External Wall System must be fixed to a structurally adequate external wall frame in accordance with the appropriate span tables in Section 6 of Helix Panel 50/75mm AAC Houses and Low-Rise Multi-Residential External Wall System, Version 1, June 2025. The structural support members are designed and engineered separately as per project requirements by building designers and engineeres. In all cases, it is a requirement that the Helix Panel 50/75mm AAC Houses and Low-Rise Multi-Residential External Wall System incorporates either;
 - a. A timber frame constructed in accordance with AS 1684 or AS 1720.1; or
 - b. A cold-formed steel frame constructed in accordance with NASH Standard for Residential and Low-rise Steel Framing, Part 1: Design Criteria; or
 - c. Framework compliant with the above minimum requirements and other standards, and the Building Code of Australia as applicable
 - 4. In all installations the minimum clearance between the underside of panel and the adjoining ground surface level below must comply with the specifications in Part 7.5.7 of the ABCB Housing Provisions.
 - 5. The Helix Panel 50/75mm AAC Houses and Low-Rise Multi-Residential External Wall System is suitable for use on buildings located in a designated Bushfire Prone Area subject to a Bushfire Attack Level (BAL) up to and including BAL–FZ when constructed in accordance with AS 3959:2018 (subject to state and territory variations) as outlined in A3 for a Class 1 building, a Class 2 building, a Class 3 building, or a Class 10a building.
 - 6. Compliance with BAL Low-FZ is limited to the tested system that achieve a minimum of FRL of 30/30/30. Refer A3 for FRL systems. It is the responsibility of the Building Designer to ensure compliance is achieved in accordance with AS 3959-2018.
 - 7. In NSW, the Helix Panel 50/75mm AAC Houses and Low-Rise Multi-Residential External Wall System is suitable for use on buildings located in a designated Bushfire-Prone Area:
 - 8. For a Class 1 building, a Class 2 building, a Class 3 building, a Class 4 part of a building, or a Class 10a building when constructed in accordance with AS 3959:2018 except as amended by Planning for Bush Fire Protection for BAL–40.
 - 9. For a Class 9 building, that is a special fire protection purpose located in an area subject to a Bushfire Attack Level (BAL) not exceeding BAL-12.5 determined in accordance with AS 3959:2018.
 - 10. 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 50mm AAC Panel 75mm AAC Panel 50mm Thickness: 75mm Thickness: Width: 600mm Width: 600mm Lengths: 2200, 2400, 2550, 2700, 2850, 3000mm Lengths: 1800, 2200, 2400, 2550, 2700, 2850, 3000 mm Reinforcement: Single layer steel mesh, centrally located **Reinforcement:** Single layer steel mesh, centrally located Steel bars: 5 x Ø 4.5mm longitudinal bars and Steel bars: 5 x Ø 4.5mm longitudinal bars and 6-8 x Ø 4.5mm transverse bars depending on panel length. 6-8 x Ø 4.5mm transverse bars depending on panel length System Components **Steel Top-Hat Battens** Steel top-hat battens shall be not less than 24 mm deep x 30 mm wide x 0.42 mm BMT, Grade G550 or equivalent, conforming with AS/NZS 4600. Steel top-hat battens shall be manufactured from AM150, Z275 or AZ150 galvanized steel conforming with AS 1397 including marking with base metal thickness, steel grade and coating. Vapour Permeable Wall Wrap must meet AS 4200.1 requirements for: Wall Wrap minimum Light Wall Duty Classification, and Water Barrier Classification, and be a Class 3 or 4 vapour control membrane in NCC Climate Zones 4 or 5; or a Class 4 vapour control membrane in NCC Climate Zones 6, 7 or 8. "Low" Flammability Index (FI) in accordance with AS 1530.2. -Wall wrap must be installed in accordance with AS 4200.2, including taping of all joins, penetrations and around the wall perimeter, see typical construction details. Damp Proof Course Damp proof course (DPC) must satisfy AS/NZS 2904 Section 6 and Table 2 performance criteria. Wall wrap tape must be minimum 48mm wide, wrap-compatible, pressure sensitive, installed in accordance with the Helix 50/75mm AAC Low-Rise External Wall System Typical Wall Wrap Tape Construction Details. It is essential that wall wrap tape effectively seals all perimeter, joins, and openings in the wall wrap. Flashings Flashings supplied by others must be designed and installed in general accordance with SA HB 39:2015 – Installation Code for Metal Roofing and Wall Cladding 4-10 Bugle Head or Hex Head Type 17 screw (Class 3 or 4) shall be used to fix Helix panel 50mm or 75mm AAC panel to light gauge steel top-hat battens from the outside of the Panel Screws building. Screw length shall be 65mm for 50mm thickness panels and 90mm for 75mm thickness panels. 14–10 Hex Head Type 17 screw (Class 3 or 4) shall be used to fix Helix panel 75mm AAC panel to light gauge steel top-hat battens from inside the building. Screw length shall be 65mm for 75mm thickness panels. Screws shall be: a) at least Class 3 for moderate and mild exposure environments; b) at least Class 4 for severe marine further than 100 m from breaking surf, marine and industrial exposure environments; and Class 4 stainless steel for severe marine exposure environments within 100 m of breaking surf. c)



Batten Screws	Screws to fix steel top-hat battens to:				
	- Timber Frame: 12–11 x 35 mm Hex Head Type 17 screw (Class 3 or 4), 2 per stud.				
	- Steel Frame: 10–16 x 16 mm Hex Head Self-drilling screw (Class 3 or 4), 2 per stud.				
	Screws shall be:				
	a) at least Class 3 for moderate and mild exposure environments;				
	b) at least Class 4 for severe marine further than 100 m from breaking surf, marine and industrial exposure environments; and				
	c) Class 4 stainless steel for severe marine exposure environments within 100 m of breaking surf.				
Thin Bed Adhesive	The thin-bed adhesive shall:				
	- have a characteristic tensile strength equal to or greater than the characteristic tensile strength of the AAC, and				
	- be C1E classification in accordance with AS ISO 13007.1				
Backing Rod	The 'backing rod' shall be a minimum of 10 mm wide expanded polyethylene tube or bead.				
External Coatings &	External coating systems providing weatherproofing in accordance with NCC requirements or durability in accordance with AS 5146.3 Table 2.5, shall be water-resistant; vapour-				
Membranes	permeable; capable of bridging up to a 1 mm crack in the substrate; and,				
	consist of a base levelling coat, and texture and finish coats.				
	For panels less than 75mm thickness AS 5146.3 Cl.2.8.4 requires that the coating system includes embedded fibreglass mesh reinforcing with a maximum aperture of 10 mm by 10				
	mm and a minimum weight of 145 g/m ² .				
	When used to provide weatherproofing in accordance with the NCC requirements, external coating systems shall be water-proof, and be capable of bridging up to a 1 mm crack in				
	the substrate, and consist of a base levelling coat, and texture coat, and finish coat				
A3 Product specification					
Structural Performance	Helix 50/75mm AAC Low-Rise External Wall System has been tested in accordance with AS 5146.1 with design and construction in accordance with AS 5146.3 in accordance with:				
(B1D4(b)(ii) &	NCC 2022(Amdt 1) Volume One B1D4(b)(ii) structural resistance of materials and forms of construction for autoclaved aerated concrete: and				
H1D7(4)(a))	 NCC 2022(Amdt.1) Volume Two. H1D7(4)(a) performance requirement H1P1 is satisfied for autoclaved aerated concrete if it is designed and constructed in accordance 				
	 NCC 2022(Amdt.1) volume 1wo, H1D7(4)(a), performance requirement H1P1 is satisfied for autoclaved aerated concrete if it is designed and constructed in accordance with AS 5146.1. 				
	Helix Panel 50/75mm AAC Houses and Low-Rise Multi-Residential External Wall System is suitable for use on buildings with AS/NZS 1170.2 design wind pressures up to -4.27kPa.				
	This includes houses with AS 4055 Wind Classifications N1w - N5w & C1w - C3w (and excludes houses with AS 4055 Wind Classifications N6w and C4w).				
	The design wind pressures for external walls of buildings are site-specific, and are dependent on many factors. The Wind Classification of a building in accordance with AS/NZS				
	1170.2 or AS 4055 must be provided by the design professional responsible for the building.				
	The building may be designed in accordance with AS 4055 if;				
	- the distance from ground level to the underside of eaves does not exceed 6.0m. and				
	- the distance from ground level to the highest point of the roof (not including chimneys) does not exceed 8.5m. and				
	- the width including roofed verandas, excluding eaves, does not exceed 16.0m, and the length not to exceed five times the width, and				
	- roof pitch is not greater than 35 degrees.				
	by the supporting structure so that in-plane racking loads are not transferred to the AAC papels				
	by the supporting structure so that in-plane racking loads are not transferred to the AAC panels.				
	Helix panels themselves are non-load-bearing elements, control joints are required at regular intervals to accommodate any building movement.				
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Fire Safety	The Helix 50/75mm AAC Low-Rise External Wall System as detailed, achieves:		
Performance (C2D2(2), H3D3)	 FRL of 90/90/90 with the 50 mm Helix Panel, and FRL of 120/120/120 with the 75 mm Helix Panel. 		
	The Helix 50/75mm AAC Low-Rise External Wall System shall be attached to either timber or steel framing compliant to the relevant framing codes.		
	The maximum height of the wall system is 12 m. Where the total wall is to exceed 12 m in height, a control joint is to be applied with appropriate shelf angle and separation where the wall can be continued. The installation, fixing and control joint is to be reviewed and designed by an appropriately qualified structural engineer.		
	Control joints must be filled by a fire resisting material. The typical joint is to have a gap no greater than 10 mm wide and be filled with a fire rated mastic to at least a 10 mm depth.		
	As a non-combustible FRL-rated external wall system, Helix 50/75mm AAC Low-Rise External Wall System is suitable for applications including:		
	 Type A construction applications in Class 2, 3 or 4 parts of buildings requiring 90/90/90 or -/90/90 as specified in S5C11(3); and Class 1 buildings less than 900mm from an allotment boundary that require an FRL of not less than 60/60/60 as specified in 9.2.3(2)(a). 		
Lightweight construction (C2D9)	Helix Panel has been subject to S6C10 material tests of (a). The relevant S6C10(a) standard adopted by reference in the BCA for Helix Panel is AS 5146.1. The material properties of Helix Panel have been determined by testing in accordance with AS 5146.1 by Accredited Testing Laboratories. Helix Panel complies with the requirements of AS 5146.1 for use in Reinforced AAC Walls in Houses and Low-Rise Multi-Residential Buildings as described in AS 5146.3.		
Non Combustibility (C2D10(5)(e))	Helix panels including mortar are classified non-combustible and may be used wherever a non-combustible material is required.		
Damp-proofing Performance (F1P4 & H2P3)	The damp-proofing performance of Helix 50/75mm AAC Low-Rise External Wall System to avoid unhealthy or dangerous conditions, or loss of amenity and undue dampness or deterioration of building elements is largely achieved on the basis of construction detailing with BCA ground clearance requirements of 50 mm to 150 mm in accordance with Part 7.5.7 of the ABCB Housing Provisions. Additionally, a damp proof course (not supplied by Helix) is detailed beneath the bottom plate, see Sections 4.4 & 6.5.1, per Part 5.7.4 of the ABCB Housing Provisions.		
Weatherproofing	Holiv 50/75mm AAC Low Rise External Wall System has been tested in accordance with AS 5146.1 with design and construction in accordance with AS 5146.2		
Daufauuranaa	Theix 30/75mm AAC Low-Rise External wail System has been tested in accordance with AS 5140.1 with design and construction in accordance with AS 5140.5.		
Performance	As referenced in NCC 2022(Amdt.1) Volume One, F3D5(1)(b), weatherproofing performance for autoclaved aerated concrete external wall cladding must comply with AS 5146.3.		
(F3D5(1)(b) & H2D6(4))	As referenced in NCC 2022(Amdt.1) Volume One, F3D5(1)(b), weatherproofing performance for autoclaved aerated concrete external wall cladding must comply with AS 5146.3. As required in NCC 2022(Amdt.1) Volume Two, H2D6(4), performance requirement H2P2 is satisfied for autoclaved aerated concrete if it is designed and constructed in accordance with AS 5146.1.		
(F3D5(1)(b) & H2D6(4))	As referenced in NCC 2022(Amdt.1) Volume One, F3D5(1)(b), weatherproofing performance for autoclaved aerated concrete external wall cladding must comply with AS 5146.3. As required in NCC 2022(Amdt.1) Volume Two, H2D6(4), performance requirement H2P2 is satisfied for autoclaved aerated concrete if it is designed and constructed in accordance with AS 5146.1. Helix 50/75mm AAC Low-Rise External Wall System achieves weatherproofing performance for:		
Performance (F3D5(1)(b) & H2D6(4))	As referenced in NCC 2022(Amdt.1) Volume One, F3D5(1)(b), weatherproofing performance for autoclaved aerated concrete external wall cladding must comply with AS 5146.3. As required in NCC 2022(Amdt.1) Volume Two, H2D6(4), performance requirement H2P2 is satisfied for autoclaved aerated concrete if it is designed and constructed in accordance with AS 5146.1. Helix 50/75mm AAC Low-Rise External Wall System achieves weatherproofing performance for: - AS 4055 Wind Classifications N1w, N2w, N3w, N4w & N5w, and C1w, C2w & C3w, and - AS/NZS 1170.2 Serviceability Limit State (SLS) Design Wind pressures up to +1.19 kPa & -1.79 kPa		
(F3D5(1)(b) & H2D6(4)) Condensation Performance	As referenced in NCC 2022(Amdt.1) Volume One, F3D5(1)(b), weatherproofing performance for autoclaved aerated concrete external wall cladding must comply with AS 5146.3. As required in NCC 2022(Amdt.1) Volume Two, H2D6(4), performance requirement H2P2 is satisfied for autoclaved aerated concrete if it is designed and constructed in accordance with AS 5146.1. Helix 50/75mm AAC Low-Rise External Wall System achieves weatherproofing performance for: - AS 4055 Wind Classifications N1w, N2w, N3w, N4w & N5w, and C1w, C2w & C3w, and - AS/NZS 1170.2 Serviceability Limit State (SLS) Design Wind pressures up to +1.19 kPa & -1.79 kPa Helix 50/75mm AAC Low-Rise External Wall System features a vapour permeable wall wrap compliant with AS 4200.1:2017 must be installed in accordance with AS 4200.2:2017. The Helix Panel 50/75mm AAC Houses and Low-Rise Multi-Residential External Wall System, Version 1, June 2025 provides details of installation between the battens & framing, and		
Condensation Performance (F8D3(1)(a) & H4D9)	As referenced in NCC 2022(Amdt.1) Volume One, F3D5(1)(b), weatherproofing performance for autoclaved aerated concrete external wall cladding must comply with AS 5146.3. As required in NCC 2022(Amdt.1) Volume Two, H2D6(4), performance requirement H2P2 is satisfied for autoclaved aerated concrete if it is designed and constructed in accordance with AS 5146.1. Helix 50/75mm AAC Low-Rise External Wall System achieves weatherproofing performance for: - AS 4055 Wind Classifications N1w, N2w, N3w, N4w & N5w, and C1w, C2w & C3w, and - AS/NZS 1170.2 Serviceability Limit State (SLS) Design Wind pressures up to +1.19 kPa & -1.79 kPa Helix 50/75mm AAC Low-Rise External Wall System features a vapour permeable wall wrap compliant with AS 4200.1:2017 must be installed in accordance with AS 4200.2:2017. The Helix 50/75mm AAC Low-Rise External Wall System features a vapour permeable wall wrap compliant with AS 4200.1:2017 must be installed in accordance with AS 4200.2:2017. The Helix 50/75mm AAC Low-Rise External Wall System features a vapour permeable wall wrap compliant with AS 4200.1:2017 must be installed in accordance with AS 4200.2:2017. The Helix panel 50/75mm AAC Low-Rise External Wall System features a vapour permeable wall wrap compliant with AS 4200.1:2017 must be installed in accordance with AS 4200.2:2017. The Helix Panel 50/75mm AAC Low-Rise External Wall System features a vapour permeable wall wrap compliant with AS 4200.1:2017 must be installed in accordance with AS 4200.2:2017. The Helix Panel 50/75mm AAC Low-Rise External Wall System features a vapour permeable wall wrap compliant with AS 4200.1:2017 must be installed in accordance with AS 4200.2:2017. The Helix Panel 50/75mm AAC Houses and Low-Rise Multi-Residential External Wall System, Version 1, June 2025 Certificate Holder for installation that are not outlined in the Helix Panel 50/75mm AAC Houses and Low-Rise Multi-Residential External Wall System, Version 1, June 2025.		

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Bushfire Performance, G5D3, H7D4(2)(a)	Helix 50/75mm AAC Low-Rise External Wall System has been assessed by an accredited testing laboratory to achieve FRL's that meet AS 3959:2018 BAL-FZ Clause 9.4.1(c) requirement for 30/30/30 when tested from the outside. This assessment is made with particular reference to requirements for joint sealing, and the detailing requirements of AS 3959:2018 Clause 3.6.1 for vents, weepholes, gaps and screening materials.					
	 Helix 50/75mm AAC Low-Rise External Wall System achieves bushfire resistance from BAL 12.5 up to BAL FZ in accordance with AS 5146.3, Clause 2.7.1, where: a) Support and fixing are in accordance with Section 6 of the Helix Panel 50/75mm AAC Houses and Low-Rise Multi-Residential External Wall System, Version 1, June 2025. b) All joints in the external surface material of walls shall be covered, sealed, overlapped, backed or butt-jointed to prevent gaps greater than 3 mm. c) Vents and weepholes in external walls shall be screened with a mesh with a maximum aperture of 2 mm, made of corrosion-resistant steel or bronze. Note that Helix 50/75mm AAC Low-Rise External Wall System above the floor level should be a closed system with no vents or weepholes. AAC cladding below the floor level may incorporate vents and weepholes if required. 					
	50/75mm AAC Low-Rise Extern incorporate vents and weephole	al Wall System above the floor level should es if required.	be a closed system with no vents or weepho	les. AAC cladding below the floor level may		
Thermal Performance, 4D6, H6D2(1) & 13.2.5	50/75mm AAC Low-Rise Extern incorporate vents and weephol Helix 50/75mm AAC Low-Rise External W achieve the following Total R-values in ac H6D2(1)(b)(i) & Housing Provisions 13.2.5	al Wall System above the floor level should es if required. all System with breathable non-reflective w cordance with AS/NZS 4859.1:2018. These r external wall insulation requirements, whe	be a closed system with no vents or weepho rall wrap, 70mm R2.0m ² K/W glasswool batts may be used to satisfy the Total R-value req ere these values are higher, or as input to ho	oles. AAC cladding below the floor level may and 10mm plasterboard lining has been assess uirements of NCC 2022(Amdt.1), Volume Two buse energy rating software to achieve a star rat		
Thermal Performance, 4D6, H6D2(1) & 13.2.5	50/75mm AAC Low-Rise Extern incorporate vents and weephol Helix 50/75mm AAC Low-Rise External W achieve the following Total R-values in ac H6D2(1)(b)(i) & Housing Provisions 13.2.5 Helix 50/75mm AAC Ext	al Wall System above the floor level should es if required. all System with breathable non-reflective w cordance with AS/NZS 4859.1:2018. These r external wall insulation requirements, whe erior Wall Cladding System	be a closed system with no vents or weepho rall wrap, 70mm R2.0m ² K/W glasswool batts may be used to satisfy the Total R-value req ere these values are higher, or as input to ho Total R-valu	bles. AAC cladding below the floor level may and 10mm plasterboard lining has been assess uirements of NCC 2022(Amdt.1), Volume Two buse energy rating software to achieve a star rat ue (m ² .K/W)		
Thermal Performance, 14D6, H6D2(1) & 13.2.5	50/75mm AAC Low-Rise Extern incorporate vents and weephol Helix 50/75mm AAC Low-Rise External W achieve the following Total R-values in ac H6D2(1)(b)(i) & Housing Provisions 13.2.5 Helix 50/75mm AAC Ext (with R2.0,	al Wall System above the floor level should es if required. all System with breathable non-reflective w cordance with AS/NZS 4859.1:2018. These r external wall insulation requirements, whe erior Wall Cladding System 70mm batts)	be a closed system with no vents or weepho rall wrap, 70mm R2.0m ² K/W glasswool batts may be used to satisfy the Total R-value req ere these values are higher, or as input to ho Total R-valu Winter (Heat flow outwards)	bles. AAC cladding below the floor level may and 10mm plasterboard lining has been assess uirements of NCC 2022(Amdt.1), Volume Two buse energy rating software to achieve a star rat are (m ² .K/W) Summer (Heat flow inwards)		
Thermal Performance, 4D6, H6D2(1) & 13.2.5	50/75mm AAC Low-Rise Extern incorporate vents and weephol Helix 50/75mm AAC Low-Rise External W achieve the following Total R-values in ac H6D2(1)(b)(i) & Housing Provisions 13.2.5 Helix 50/75mm AAC Ext (with R2.0,	al Wall System above the floor level should es if required. all System with breathable non-reflective w cordance with AS/NZS 4859.1:2018. These r is external wall insulation requirements, whe erior Wall Cladding System , 70mm batts) Timber Frame	be a closed system with no vents or weepho rall wrap, 70mm R2.0m ² K/W glasswool batts may be used to satisfy the Total R-value req ere these values are higher, or as input to ho Total R-valu Winter (Heat flow outwards) 2.59 $(U_T = 0.39)$	and 10mm plasterboard lining has been assess uirements of NCC 2022(Amdt.1), Volume Two buse energy rating software to achieve a star rat ie (m².K/W) Summer (Heat flow inwards) 2.47 (U _T = 0.41)		
Thermal Performance, 4D6, H6D2(1) & 13.2.5	50/75mm AAC Low-Rise Extern incorporate vents and weephol Helix 50/75mm AAC Low-Rise External W achieve the following Total R-values in ac H6D2(1)(b)(i) & Housing Provisions 13.2.5 Helix 50/75mm AAC Ext (with R2.0,	al Wall System above the floor level should es if required. all System with breathable non-reflective w cordance with AS/NZS 4859.1:2018. These r external wall insulation requirements, whe erior Wall Cladding System 70mm batts) Timber Frame Steel Frame	be a closed system with no vents or weepho rall wrap, 70mm R2.0m ² K/W glasswool batts may be used to satisfy the Total R-value req ere these values are higher, or as input to ho Total R-valu Winter (Heat flow outwards) 2.59 $(U_T = 0.39)$ 2.24 $(U_T = 0.45)$	bles. AAC cladding below the floor level may and 10mm plasterboard lining has been assess uirements of NCC 2022(Amdt.1), Volume Two buse energy rating software to achieve a star rat ie (m².K/W) Summer (Heat flow inwards) 2.47 (U _T = 0.41) 2.15 (U _T = 0.46)		
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hermal Performance, 4D6, H6D2(1) & 13.2.5	50/75mm AAC Low-Rise Extern incorporate vents and weephol Helix 50/75mm AAC Low-Rise External W achieve the following Total R-values in ac H6D2(1)(b)(i) & Housing Provisions 13.2.5 Helix 50/75mm AAC Ext (with R2.0,	al Wall System above the floor level should es if required. all System with breathable non-reflective w cordance with AS/NZS 4859.1:2018. These i is external wall insulation requirements, whe erior Wall Cladding System , 70mm batts) Timber Frame Steel Frame Timber Frame	be a closed system with no vents or weepho rall wrap, 70mm R2.0m ² K/W glasswool batts may be used to satisfy the Total R-value requere these values are higher, or as input to ho Total R-value (Heat flow outwards) 2.59 $(U_T = 0.39)$ 2.24 $(U_T = 0.45)$ 2.77 $(U_T = 0.36)$	bles. AAC cladding below the floor level may and 10mm plasterboard lining has been assess uirements of NCC 2022(Amdt.1), Volume Two puse energy rating software to achieve a star rat ie (m².K/W) Summer (Heat flow inwards) 2.47 (U _T = 0.41) 2.15 (U _T = 0.46) 2.66 (U _T = 0.38)		
Thermal Performance, J4D6, H6D2(1) & 13.2.5	50/75mm AAC Low-Rise Extern incorporate vents and weephol Helix 50/75mm AAC Low-Rise External W achieve the following Total R-values in ac H6D2(1)(b)(i) & Housing Provisions 13.2.5 Helix 50/75mm AAC Ext (with R2.0, 50mm	al Wall System above the floor level should es if required. all System with breathable non-reflective w cordance with AS/NZS 4859.1:2018. These r is external wall insulation requirements, whe erior Wall Cladding System , 70mm batts) Timber Frame Steel Frame Steel Frame	be a closed system with no vents or weepho rall wrap, 70mm R2.0m ² K/W glasswool batts may be used to satisfy the Total R-value req ere these values are higher, or as input to ho Total R-valu Winter (Heat flow outwards) 2.59 (U _T = 0.39) 2.24 (U _T = 0.45) 2.77 (U _T = 0.36) 2.47	bles. AAC cladding below the floor level may and 10mm plasterboard lining has been assess uirements of NCC 2022(Amdt.1), Volume Two puse energy rating software to achieve a star rat ie (m².K/W) Summer (Heat flow inwards) 2.47 (U _T = 0.41) 2.15 (U _T = 0.46) 2.66 (U _T = 0.38) 2.38		

A4 Manufacturer and manufacturing plant(s)

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

A5 Installation requirements

The Helix Panel 50/75mm AAC Houses and Low-Rise Multi-Residential External Wall System must be installed in accordance with <u>Helix Panel 50/75mm AAC Houses and Low-Rise Multi-Residential External Wall</u> <u>System, Version 1, June 2025</u>.

A6 Other relevant technical data

No other relevant technical data.



APPENDIX B – EVALUATION STATEMENTS

B1 Evaluation methods

- 1. Energy Efficiency Provisions A5G3(1)(e). A report from a professional engineer or other appropriately qualified person.
- 2. Condensation Management Provisions A5G3(1)(e)&(f). A report from a professional engineer and another form of documentary evidence.
- 3. Fire Safety Provisions A5G3(1)(d)&(e). Reports from Accredited Testing Laboratories and a professional engineer.
- 4. Structural Resistance Provisions A5G3(1)(e). A report from a professional engineer or other appropriately qualified person.
- 5. Weatherproofing Provisions A5G3(1)(e). A report from a professional engineer or other appropriately qualified person.
- 6. Thermal Provisions A5.2(1)(e). Reports from a professional engineer.

B2 Reports

- Acronem Consulting Australia Pty Ltd; Report No. ACA 250423; Sunpor Panel 50/75mm AAC Houses and Low-Rise Multi-Residential External Wall System NCC 2022 (Amdt.1), Volumes One, Two & Housing Provisions External Walls; Dated 03/06/2025. This report provides evidence and validates the below test reports for compliance with; B1D4(b)(ii), H1D7(4)(a), F3D5(1)(b), H2D6(4), C2D2, H3D3, C2D9, C2D10(6)(d), H3D2(1)(d), C2D11, J4D6, H6D2(1), G5D3 & H7D4(2)(a). Test reports validated:
 - Mahaffey Associates; Report No. 20689-50mm; AS 5146.2 App. C Mean Dry Density 2700x600x50mm, 483 kg/m3) 22/04/2025; Dated 21/05/2025. Report provides evidence for compliance with B1D4(b)(ii) and H1D7(4)(a).
 - Mahaffey Associates; Report No. 20689-75mm; AS 5146.2 App. C Mean Dry Density 1800x600x75mm, 515 kg/m3) 30/04/2025; Dated 21/05/2025. Report provides evidence for compliance with B1D4(b)(ii) and H1D7(4)(a).
 - Mahaffey Associates; Report No. 20689-50mm; AS 5146.2 App. D Compressive Strength (2700x600x50mm, 2.7, AAC 2.5) 22/04/2025; Dated 21/05/2025. Report provides evidence for compliance with B1D4(b)(ii) and H1D7(4)(a).
 - Mahaffey Associates; Report No. 20689-75mm; AS 5146.2 App. D Compressive Strength 1800x600x75mm, 3.0, AAC 3.0) 30/04/2025; Dated 21/05/2025. Report provides evidence for compliance with B1D4(b)(ii) and H1D7(4)(a).
 - Mahaffey Associates; Report No. 20689-50mm; AS 5146.2 App. H Moisture Content (2700x600x50mm, 5.6%) 22/04/2025; Dated 21/05/2025. Report provides evidence for compliance with B1D4(b)(ii) and H1D7(4)(a).
 - Mahaffey Associates; Report No. 20689-75mm; AS 5146.2 App. H Moisture Content (1800x600x75mm, 6.3%) 30/04/2025; Dated 21/05/2025. Report provides evidence for compliance with B1D4(b)(ii) and H1D7(4)(a).
 - Mahaffey Associates; Report No. 20689-50mm; AS 5146.2 App. K Dimensions of Members (2700x600x50mm, see App.D & B Report) 22/04/2024; Dated 21/05/2025. Report provides evidence for compliance with B1D4(b)(ii) and H1D7(4)(a).
 - Mahaffey Associates; Report No. 20689-75mm; AS 5146.2 App. K Dimensions of Members (1800x600x75mm, see App.D & B Report) 30/04/2025; Dated 21/05/2025. Report provides evidence for compliance with B1D4(b)(ii) and H1D7(4)(a).
 - Mahaffey Associates; Report No. 20689-50mm; AS 5146.2 App. L Corrosion Protection of steel reinforcement by salt bath, Job #20689, 50mm (2700x600x50mm, C.I.=2.4) 21/02/2025; Dated 26/02/2025. Report provides evidence for compliance with B1D4(b)(ii) and H1D7(4)(a).
 - Mahaffey Associates; Report No. 20689-75mm; AS 5146.2 App. L Corrosion Protection of steel reinforcement by salt bath, Job #20689, 75mm (2700x600x75mm, C.I.=7.0) 21/02/2025; Dated 26/02/2025. Report provides evidence for compliance with B1D4(b)(ii) and H1D7(4)(a).



- Mahaffey Associates; Report No. 20689-50mm; AS 5146.2 App. M Corrosion Protection of steel reinforcement by cover, Job #20689, 50mm (2700x600x50mm,9) Jan 2025; Dated 05/02/2025. Report provides evidence for compliance with B1D4(b)(ii) and H1D7(4)(a).
- Mahaffey Associates; Report No. 20689-75mm; AS 5146.2 App. M Corrosion Protection of steel reinforcement by cover, Job #20689, 75mm (2700x600x75mm, 21) Jan 2024; Dated 05/02/2025. Report provides evidence for compliance with B1D4(b)(ii) and H1D7(4)(a).
- Mahaffey Associates; Report No. 20689-50mm; AS 5146.2 App. N Strength of welds between the longitudinal bars and transverse bars, Job #20689, 50mm (2700x600x50, Vuk=3.91kN) 17/01/2025; Dated 20/01/2025. Report provides evidence for compliance with B1D4(b)(ii) and H1D7(4)(a).
- Mahaffey Associates; Report No. 20689-75mm; AS 5146.2 App. N Strength of welds between the longitudinal bars and transverse bars, Job #20689, 75mm (2700x600x75, Vuk=4.17kN) 17/01/2025;
 Dated 20/01/2025. Report provides evidence for compliance with B1D4(b)(ii) and H1D7(4)(a).
- Mahaffey Associates; Report No. 20689-50mm; AS 5146.2 App. P, Bending Capacity of AAC Panels, Report No: 20689, 50mm (2700x600x50, Char.Bend.Cap.0.226 kNm/m) 01/04/2025; Dated 15/05/2025. Report provides evidence for compliance with B1D4(b)(ii) and H1D7(4)(a).
- Mahaffey Associates; Report No. 20689-75mm; AS 5146.2 App. P, Bending Capacity of AAC Panels, Report No: 20689, 75mm (2700x600x75, Char.Bend.Cap.0.893 kNm/m) 11/12/2024; Dated 30/01/2025. Report provides evidence for compliance with B1D4(b)(ii) and H1D7(4)(a).
- SRG Global; Test Report No. WS223707, AS1391 Tensile testings of reinforced wires extracted from 2.7 m x 0.6 m x 50mm as per Client Instructions. (Steel Class 500L per AS 5146.3, 2.13.1 & AS/NZS 4671:2019 Table 2 Note 2 for lower yield >500MPa); Dated 31/01/2025. Report provides evidence for compliance with B1D4(b)(ii) and H1D7(4)(a).
- SRG Global; Test Report No. WS223706, Tensile testings of reinforced wires extracted from 2.7 m x 0.6 m x 75mm as per Client Instructions. (Steel Class 500L per AS 5146.3, 2.13.1 & AS/NZS 4671:2019 Table 2 Note 2 for lower yield >500MPa); Dated 31/01/2025. Report provides evidence for compliance with B1D4(b)(ii) and H1D7(4)(a).
- Mahaffey Associates; Report No. 20689; AS 4671, App. C, Para.3.3, Mass per unit length for reinforcing steel, Job No: 20689, 7/02/2025 (2700x600x75, 0.128/0.124 g/mm) (2700x600x50, 0.133/0.128 g/mm); Dated 10/02/2025. Report provides evidence for compliance with B1D4(b)(ii) and H1D7(4)(a).
- Jensen Hughes Fire Testing Pty Ltd; Report No. FRT 240082 R1.0; Fire Resistance Test Report, 50 mm AAC Load Bearing Wall Panels (50mm Vertical Panels, Steel Top-Hats, Timber Framing @450mm c/c, 90/90/90); Dated 29/11/2024. Report provides evidence for compliance with C2D2(2) & H3D2.
- Ignis Labs Pty Ltd; Test Report No. IGNE-9042-99-01R I01R00; Helix AAC Fire assessment report; Dated 27/05/2025. Report provides evidence for compliance with C2D2(2) & H3D2.
- Mahaffey Associates; Report No. 20689; ASTM E695-03 as modified by NCC 2022 S6C10, (75mm, 100/6, 250/11, 350/13); Dated 05/02/2025. Report provides evidence for compliance with C2D9.
- Mahaffey Associates; Report No. 20689; ASTM E695-03 as modified by NCC 2022 S6C10, (50mm, 100/6, 250/14, 350/18); Dated 05/02/2025. Report provides evidence for compliance with C2D9.
- Mahaffey Associates; Report No. 20689; Surface Indentation Test, NCC:2022, S6C10, 75mm (3mm render, 3.5/4.0/3.5); Dated 05/02/2025. Report provides evidence for compliance with C2D9.
- Mahaffey Associates; Report No. 20689; Surface Indentation Test, NCC:2022, S6C10, 50mm (3mm render, 4.4/3.6/3.3); Dated 05/02/2025. Report provides evidence for compliance with C2D9.
- Acronem Consulting Australia Pty Ltd; Calculation Numbers: W250523a, W250523c; Calculation of Total Thermal Resistance, Helix Pty Ltd, Helix Panel (vertical) 50mm/75mm AAC External Wall Cladding System, (R2.0 batts, 70x45mm timber studs at 450mm centres &10mm plasterboard); Dated 22/05/2025. Calculations are in accordance with H6D2(1) and J4D6.
- Acronem Consulting Australia Pty Ltd; Calculation Numbers: W250523b, W250523d; Calculation of Total Thermal Resistance, United Building Supply Pro Panel (vertical) 50mm/75mm AAC External Wall Cladding System, (R2.0 batts, 70x35mm steel studs at 450mm centres &10mm plasterboard.); Dated 22/05/2025. Calculations are in accordance with H6D2(1) and J4D6.

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