

**Certification Body:** 

CMI

ABN: 81 663 250 815 JAS-ANZ Accreditation

No. Z4450210AK

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www.cmicert.com.au office@cmicert.com.au Type and/or use of product:

External façade wall system

# Certificate of Conformity

Certificate number: CM40281 Rev1

### THIS IS TO CERTIFY THAT

### STAAC Wall 75<sup>®</sup> House & Low Rise Multi-Residential External Wall

### Description of product:

STAAC Wall 75<sup>®</sup> House & Low Rise Multi-Residential External Wall comprises a steel reinforced 75mm Autoclaved Aerated Concrete (AAC) 400kg/m<sup>3</sup> panel and proprietary components vertically installed across horizontal top hats with top hats fixed to steel or timber stud framing.

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

**BCA 2022** 

once@cmcert.com.au		Volume One		Volume Two						
Certificate Holder:	Performance Requirement(s):	B1P1(1), (2)(a (b), (c) & (d)	Structural reliability	H1P1(1), (2)(a), (b), (c) & (d)	Structural reliability and	l resistance				
		F3P1	Weatherproofing – Subject to Limitation and Condition 8.	H2P2	Weatherproofing – Subj 8.	ect to Limitation and Condition				
Stoddart Group Pty Ltd ABN: 82 010 744 751	Deemed-to-Satisfy Provision(s):	C2D2(2)	Fire resistance and Stability – Subject to <i>Limitation and condition 2.</i> Refer A3 for FRLs achieved.	H3D2	Non-combustible buildir STAAC Wall 75 <sup>®</sup> Panel o	ng elements – Limited to the nly				
37 Gravel Pit Road Darra QLD 4076 Australia		C2D10	Non-combustible building elements – Limited to the STAAC Wall 75 <sup>®</sup> Panel only	H3D3	Fire separation of extern and condition 2. Refer A	nal walls – Subject to <i>Limitation</i> 3 for FRLs achieved.				
Ph: (07) 3725 5935 www.stoddartgroup.com		F8D3	Condensation management - Pliable building membrane. Refer <i>Limitation and condition 7</i>	H4D9	Condensation managem Refer <i>Limitation and cor</i>	nent - Pliable building membrane. ndition 7				
		J4D6	Energy efficiency - Walls – Refer A3	H6D2(1)(b)(i)	Energy Efficiency – Exter	rnal walls – Refer A3				
	State or territory variation(s): Not Applicable			H4D9 (Tas)						
	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:					
						Class 1,2,3,4,5,6,7,8,9 & 10				
n i										
"Algerandis"	•	í.	J-K-	Date of iss	ue: 13/09/2023	JAS-ANZ				

Richard Donarski – CMI

Don Grehan – Unrestricted Building Certifier

**Date of expiry:** 05/05/2026



Certificate number: CM40281-I02-R01

This certificate is only valid when reproduced in its entirety. Page 1 of 9



- 1. For Type A & B construction, the use of the STAAC Wall 75<sup>®</sup> Houses and Low Rise Multi Residential 75mm External Walls cladding system must be supported by a site-specific Performance Solution where the BCA requires building elements and/or ancillary elements to be non-combustible. Acceptance or otherwise of the site-specific Performance Solution is at the discretion of the appropriate Authority subject to the regulatory framework of the relevant State or Territory.
- 2. 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.
- 3. The installation of the STAAC Wall 75<sup>®</sup> Houses and Low Rise Multi Residential 75mm External Walls cladding system must not deviate from the contents of the STAAC Wall 75<sup>®</sup> Houses and Low Rise Multi Residential 75mm External Walls Design and Installation Guide July2023.
- 4. The scope of this Certification does not include penetrations through the STAAC Wall 75<sup>®</sup> Panel. Any proposed penetrations must be referred to the Certificate Holder.
- 5. Construction methods for external walls required to be fire resisting in relation to Class 1 and 10 buildings and structures must comply with Part 9.2.3 of the ABCB Housing Provisions.
- 6. STAAC Wall 75° External Wall has not been tested and certified for impact loading from windborne debris in Region C and D as denoted in AS/NZS 1170.2:2011 (R2016). The building designer should take into consideration internal pressure resulting from dominant openings.
- 7. Compliance with Condensation Management Provisions requires the installation of pliable building membrane that complies with AS/NZS 4200.1:2017 and that is installed in accordance with AS 4200.2:2017 as detailed in the <u>STAAC Wall 75® Houses and Low Rise Multi Residential 75mm External Walls Design and Installation Guide July2023</u> to protect water sensitive framing materials as per the requirements of the BCA. Such membrane must be vapour permeable for installations in climate zones 6, 7 and 8.
- 8. To satisfy F3P1 & H2P2 via verification, limited to N1 N3, the relevant design is required to meet the criteria of F3V1 and/or V2.2.1 to the satisfaction of the Appropriate Authority as defined by the NCC. The site specific building must;
  - (a)(i) have a risk score of 20 or less, when the sum of all risk factor scores is determined in accordance with Table F3V1a/H2V1a; and
  - (a)(ii) not be subjected to an ultimate limit state wind pressure of more than 2.5kPa; and
  - (a)(iii) include only windows that comply with AS 2047.
  - Compliance with Weatherproofing is limited to the tested specimen detailed in A3, deviations from this specimen, is subject to site specific design and approval by the regulatory authority.
- 9. The structural support members are designed and engineered separately as per project requirements by building designers and engineers.
- 10. In all installations the minimum clearance between the underside of panel and the adjoining surface level below must comply with the specification in Part 7.5.7 of the ABCB Housing Provisions.
- **11.** This certification is limited to low rise construction of maximum two storeys.
- 12. Other than the items and information listed in this Certificate of Conformity, the remainder of the information contained in any product's literature is outside the scope of this certification.
- 13. 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

### STAAC Wall 75<sup>®</sup>mm Panel Physical Properties

Thickness:	75mm, tolerance: ±1.5mm
Standard Width:	600mm, tolerance: ±1.5mm
Standard Length:	2400, 2550, 2700, 2800, 2850, 3000, 3300mm, tolerance: ±5mm
Edge Straightness Deviation (max.):	±1.5mm
Reinforcement:	4 x 4mm longitudinal steel bars and 6-8 x 4mm diameter transverse steel bars per panel
Nominal Dry Density:	400 kg/m³
Average working density:	540 kg/m <sup>3</sup> at 35% moisture content
Average service life density:	440 kg/m <sup>3</sup> at 10% moisture content

### System Components

STAAC Wall 75 <sup>®</sup> mm panel	Length (mm)	Mass (kg)					
	2400	58					
	2550	62					
	2700	66	_				
	2800	68	_				
	2850	69	_				
	3000	73	_				
	3300	80					
Hebel <sup>®</sup> Steel Battens	Perforated steel hat bat	tens in 24mm and 35	5mm depth to provide immediate support to STAAC Wall 75 <sup>®</sup> panels.				
Fasteners and Fixings	- Internal fixing of top hat to timber stud frame; 12-11x35mm hex head type 17 screw.						
	<ul> <li>Fixing of top hat to steel framing; 10-16x16mm hex head self drilling screw.</li> </ul>						
	<ul> <li>Fixing of STAAC V</li> </ul>	Vall 75 <sup>®</sup> panels to wa	ll batten from batten side (fixing from inside of building) 14-10x65mm hex head type 17 screw.				
	<ul> <li>Fixing of STAAC V</li> </ul>	Vall 75 <sup>®</sup> panels to wa	ll batten from panel side (fixing from outside of building) 14-10x90mm hex head type 17 screw.				
Hebel <sup>®</sup> 24mm & 35mm Batten	Direct Fixing Clip For su	pporting battens in c	onstrained space.				
Hebel <sup>®</sup> Mortar	Mortar (supplied in 20k	g bags) when require	d Is used as a thick bed mortar base to provide a level base for STAAC Wall 75 <sup>®</sup> installation as well as providing acoustic and				
	fire protection at the ba	ise of the panels.					
Hebel <sup>®</sup> Adhesive	Hebel <sup>®</sup> Adhesive (suppli	ed in 20kg bags) is us	ed for gluing the STAAC Wall 75 <sup>®</sup> panels together at vertical and horizontal joints.				
Hebel <sup>®</sup> Patch	Minor chips or damage	to STAAC Wall 75 <sup>®</sup> pa	anels are to be repaired using Hebel <sup>®</sup> Patch (supplied in 10kg bags).				
Hebel <sup>®</sup> Anti-Corrosion	Protection Paint to coat	exposed reinforcem	ent during cutting.				
Backing Rod/Backing Strip	Filling of joints with sea	lant.					
Wall Wrap	Thermoseal Wall Wrap	XP, Enviroseal Procto	rWrap RW, Polyair Performa 4.0 XHD.				



### A3 Product specification

### Fire resistance Level (FRL 180/180/180)

Compliance with FRL 180/180/180 subject to the following conditions:

- The STAAC Wall 75<sup>®</sup> panel density may vary from that tested to one of the products in Table 1
- The wall may vary to include structural steel framing designed in accordance with AS 4600-2018 or NASH Standard part 2 for ambient temperature and where appropriate, designed to support the weight of the panels
- The wall may vary to include structural timber framing designed in accordance with AS 1720.1-2010 or AS 1684 part 2, 3 or 4 for ambient temperature and where appropriate, designed to support the weight of the panels
- Wall framing spacing may be up to 600-mm centres
- The STAAC Wall 75<sup>®</sup> panel shall be vertically orientated and fixed to steel tophats or timber battens as tested in FSV 0356
- Panels will be fixed through the panel into the battens
- Where the height per level is 3300mm or less, the panels are fixed to framing by steel tophat sections spaced at maximum 1200mm centres over the panel height, and top and bottom top hat at maximum 150mm from the panel ends
- The STAAC Wall 75<sup>®</sup> panel shall be vertically orientated as tested in FSV 0356, though may vary in length from 2.4m to 3.3m.
- The wall length may increase
- Panel to batten fixings spacings may decrease not increase
- Batten spacings may decrease not increase
- The wall cavity may include sarking between batten and framing
- The wall cavity may include glasswool, rockwool or any non-combustible insulation
- The wall linings shall be one of the following:
  - o 10mm Gyprock plus.
  - o Any other standard grade, water grade, acoustic grade, fire grade plasterboard
  - $\circ$  ~ manufactured in accordance with AS 2589 and with a density greater than 5.7kg/m^2 ~
  - Fibre cement 6mm or thicker with or without tiles adhered
- Where more than one level is constructed, a horizontal joint as shown in Figure 5 is required.
- Where a vertical control joint is required, it is to be as shown in Figure 6
- The inclusion of Selleys FireBlock XT sealant as an alternative to the FireSeal sealant
- The gap at the base of the panels when used in conjunction with a concrete slab rebate as shown in Figure 3
  - Gaps less than 3mm wide Hebel thick bed mortar
  - o Gaps less than 10mm wide Selleys Fireblock XT or CSR FireSeal for 10mm depth
  - $\circ$   $\hfill\hfilt$
- Where STAAC Wall 75<sup>®</sup> panel are supported by a steel shelf angle fixed to the vertical face of the concrete slab as shown in Figure 4
  - Selleys Fireblock XT is to be applied to all gaps at the base of the panels and between the steel shelf angle and the vertical face of the concrete slab.
  - The steel shelf angle is required to have a horizontal angle leg length of 75mm (BMT 1.2-mm) with a minimum of 40mm cover to the bottom of the STAAC Wall 75<sup>®</sup>. The steel shelf angle is to be kept a minimum of 15mm clear of the timber bottom plate;
  - The steel shelf angle shall be installed in sections up to 3m long and at the ends or any joins in the angle, a 10mm gap filled with Selleys Fireblock XT is required. The angle is fixed to the slab edge at up to 900mm centres with a metal anchor.
- All soffit and eaves linings are to be designed to maintain the FRL of the external wall system.
- The proposed construction details are to be as shown in Figures 1-10 of FC0-3003



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Table 2: FRL of STAAC Wa	all 75 <sup>®</sup> wall system									
Panel Construction		Construction Details Wall syste		FRL from panel side of the wall						
				m without construction joints			Wall system with construction joir		n joints	
As specified in Table 1		Table 1 and Figures 1 to 4 and 7 to 10		180/180/180				-		
		Table 1 and Figures 1 to 10					90/90/90			
Source: CSIPO Pof No. ECO.2	002/SD2672 dated 8 Ma	rch 2022	I							
Source. CSINO NEJ NO. PCO-S	005/3F3072 uuleu 8 Mul									
Non-combustibility	The certificate hol (AAC) of density 4	der has provided the Certificate of Test for Combustibility for Mat 00kgm <sup>3</sup> .	erials in accorda	nce with AS	1530.1:199	94 for STAAC V	Vall 75® – Auto	claved Aerate	d Concrete	
	The material is NO Source: CSIRO; NATA	<b>DT deemed combustible - Limited to the panel only.</b> A Accreditation No. 165; Report No. FNC12491 dated 11/11/2019.								
Thermal Properties										
75mm STAAC Wall 75® 413kg/m3 External Wall System			Insulati Total R,	Insulation path Total R, m <sup>2</sup> K/W		erall g 12.13% area) , m² K/W	Overall (Steel Framing 5.3% area) Total R, m <sup>2</sup> K/W			
				Summer	Winter	Summer	Winter	Summer	Winter	
75mm STAAC Wall 75® (4% M.C.), 24+64=88mm unventilated unreflective air space, 10mm Gyprock Plasterboard Plus (5.7kg/m <sup>2</sup> )				R0.91	R0.92	R0.95	R0.97	R0.91	R0.93	
75mm STAAC Wall 75 <sup>®</sup> (4% M.C.), 24mm unventilated semi-reflective air space, Bradford Thermoseal Wall Wrap XP Plus e0.09/0.05, 64mm unventilated unreflective air space (stud frame), 10mm Gyprock Plasterboard Plus (5.7kg/m <sup>2</sup> )			9/0.05, 64mm	R1.84	R1.88	R1.87	R1.91	R1.79	R1.84	
75mm STAAC Wall 75 <sup>®</sup> (4% M.C.), 20mm unventilated semi-reflective air space, Bradford Polyair Performa 4.0HXD e0.05/0.03, 64mm unventilated unreflective air space (stud frame). 10mm Gyprock Plasterboard Plus (5.7kg/m <sup>2</sup> )			3, 64mm	R2.10	R2.14	R2.13	R2.16	R2.05	R2.09	
75mm STAAC Wall 75 <sup>®</sup> (4% M.C.), 24mm unventilated semi-reflective air space, Bradford Thermoseal Wall Wrap XP Plus e0.09/0.87, Bradford New Generation SoundScreen R2.0. 10mm Gyprock Plasterboard Plus (5.7kg/m <sup>2</sup> )			R3.05	R3.19	R2.89	R3.01	R2.81	R2.94		
75mm STAAC Wall 75 <sup>®</sup> (4% M.C.), 24mm unventilated semi-reflective air space, Bradford Enviroseal ProctorWrap RW, Bradford New Generation Soundscreen B2 0, 10mm Gyprock Plasterboard Plus (5, 7kg/m <sup>2</sup> )			R2.71	R2.85	R2.55	R2.66	R2.43	R2.55		
75mm STAAC Wall 75® (4%	75mm STAAC Wall 75 <sup>®</sup> (4% M.C.). 35+64=99mm unventilated unreflective air space. 10mm Gyprock Plasterboard Plus (5.7kg/m <sup>2</sup> )			R0.91	R0.92	R0.95	R0.97	R0.91	R0.93	
75mm STAAC Wall 75 <sup>®</sup> (4% unventilated unreflective a	m STAAC Wall 75 <sup>®</sup> (4% M.C.), 35mm unventilated semi-reflective air space, Bradford Thermoseal Wall Wrap XP Plus e0.09/0.05, 64mm rentilated unreflective air space (stud frame). 10mm Gyprock Plasterboard Plus (5.7kg/m <sup>2</sup> )			R1.84	R1.88	R1.87	R1.91	R1.79	R1.84	
75mm STAAC Wall 75 <sup>®</sup> (4% unventilated unreflective a	STAAC Wall 75 <sup>®</sup> (4% M.C.), 31mm unventilated semi-reflective air space, Bradford Polyair Performa 4.0HXD e0.05/0.03, 64mm lated unreflective air space (stud frame), 10mm Gyprock Plasterboard Plus (5.7kg/m <sup>2</sup> )			R2.10	R2.14	R2.13	R2.16	R2.05	R2.09	
75mm STAAC Wall 75 <sup>®</sup> (4% New Generation SoundScre	STAAC Wall 75 <sup>®</sup> (4% M.C.), 35mm unventilated semi-reflective air space, Bradford Thermoseal Wall Wrap XP Plus e0.09/0.87, Bradford eneration SoundScreen R2.0, 10mm Gyprock Plasterboard Plus (5.7kg/m <sup>2</sup> )		9/0.87, Bradford	R3.05	R3.19	R2.89	R3.01	R2.81	R2.94	
75mm STAAC Wall 75 <sup>®</sup> (4% Generation SoundScreen R	STAAC Wall 75 <sup>®</sup> (4% M.C.), 35mm unventilated semi-reflective air space, Bradford Enviroseal ProctorWrap RW, Bradford New ation SoundScreen R2.0. 10mm Gyprock Plasterboard Plus (5.7kg/m <sup>2</sup> )			R2.71	R2.85	R2.55	R2.66	R2.43	R2.55	
75mm STAAC Wall 75® (4%	M.C.), 24+70=94mm un	nventilated unreflective air space, 10mm Gyprock Plasterboard Plus (5.7kg/m <sup>2</sup> )			R0.92	R0.95	R0.97	R0.91	R0.93	
75mm STAAC Wall 75 <sup>®</sup> (4% unventilated unreflective a	M.C.), 24mm unventilat ir space (stud frame), 10	ed semi-reflective air space, Bradford Thermoseal Wall Wrap XP Plus e0.C mm Gyprock Plasterboard Plus (5.7kg/m²)	9/0.05, 70mm	R1.91	R1.98	R1.97	R2.01	R1.89	R1.93	
75mm STAAC Wall 75 <sup>®</sup> (4% unventilated unreflective a	75mm STAAC Wall 75 <sup>®</sup> (4% M.C.), 20mm unventilated semi-reflective air space, Bradford Polyair Performa 4.0HXD e0.05/0.03, 70mm unventilated unreflective air space (stud frame). 10mm Gyprock Plasterboard Plus (5.7kg/m <sup>2</sup> )			R2.10	R2.14	R2.13	R2.16	R2.05	R2.09	
75mm STAAC Wall 75 <sup>®</sup> (4% New Generation SoundScre	5mm STAAC Wall 75 <sup>®</sup> (4% M.C.), 24mm unventilated semi-reflective air space, Bradford Thermoseal Wall Wrap XP Plus e0.09/0.87, Bradford ew Generation SoundScreen B2 0, 10mm Gyprock Plasterboard Plus (5, 7kg/m <sup>2</sup> )			R3.18	R3.34	R3.00	R3.13	R2.92	R3.05	
75mm STAAC Wall 75 <sup>®</sup> (4% M.C.), 24mm unventilated semi-reflective air space, Bradford Enviroseal ProctorWrap RW, Bradford New Generation SoundScreen B2 0, 10mm Gyprock Plasterboard Plus (5, 7kg/m <sup>2</sup> )										



75mm STAAC Wall 75 <sup>®</sup> (4% M.C.), 35+70=105mm unventilated unreflective air space, 10mm Gyprock Plasterboard Plus (5.7kg/m <sup>2</sup> )	R0.91	R0.93	R0.96	R0.99	R0.92	R0.94
75mm STAAC Wall 75® (4% M.C.), 35mm unventilated semi-reflective air space, Bradford Thermoseal Wall Wrap XP Plus e0.09/0.05, 70mm	D1 04	D1 00	D1 07	D1 01	D1 70	D1 04
unventilated unreflective air space (stud frame), 10mm Gyprock Plasterboard Plus (5.7kg/m²)	K1.84	K1.00	K1.87	R1.91	K1.79	K1.64
75mm STAAC Wall 75 <sup>®</sup> (4% M.C.), 31mm unventilated semi-reflective air space, Bradford Polyair Performa 4.0HXD e0.05/0.03, 70mm	P2 10	P2 1/	D2 12	P2 16	P2 05	P2 00
unventilated unreflective air space (stud frame), 10mm Gyprock Plasterboard Plus (5.7kg/m <sup>2</sup> )	NZ.10	NZ.14	N2.15	K2.10	N2.05	K2.09
75mm STAAC Wall 75® (4% M.C.), 35mm unventilated semi-reflective air space, Bradford Thermoseal Wall Wrap XP Plus e0.09/0.87, Bradford	D2 10	D2 2/	P2 00	D2 12	P2 02	P2 05
New Generation SoundScreen R2.0, 10mm Gyprock Plasterboard Plus (5.7kg/m <sup>2</sup> )	NJ.10	N3.34	K3.00	K3.15	N2.92	K3.05
75mm STAAC Wall 75 <sup>®</sup> (4% M.C.), 35mm unventilated semi-reflective air space, Bradford Enviroseal ProctorWrap RW, Bradford New	R2 8/	R3 00	R2 65	R2 77	R2 53	R2 65
Generation SoundScreen R2.0, 10mm Gyprock Plasterboard Plus (5.7kg/m <sup>2</sup> )	112.04	113.00	112.05	112.77	12.55	112.05
75mm STAAC Wall 75 <sup>®</sup> (4% M.C.), 24+90=114mm unventilated unreflective air space, 10mm Gyprock Plasterboard Plus (5.7kg/m <sup>2</sup> )	R0.91	R0.93	R0.97	R0.99	R0.92	R0.94
75mm STAAC Wall 75 <sup>®</sup> (4% M.C.), 24mm unventilated semireflective air space, Bradford Thermoseal Wall Wrap XP Plus e0.09/0.05, 90mm	R1 88	R1 97	R1 Q1	R1 05	R1 83	R1 87
unventilated reflective air space (stud frame), 10mm Gyprock Plasterboard Plus (5.7kg/m <sup>2</sup> )	N1.00	K1.92	K1.91	K1.95	K1.85	K1.87
75mm STAAC Wall 75 <sup>®</sup> (4% M.C.), 20mm unventilated semi-reflective air space, Bradford Polyair Performa 4.0HXD e0.05/0.03, 90mm	P2 10	P2 1/	D2 12	P2 16	P2 05	P2 00
unventilated unreflective air space (stud frame), 10mm Gyprock Plasterboard Plus (5.7kg/m <sup>2</sup> )	NZ.10	NZ.14	N2.15	K2.10	N2.05	K2.09
75mm STAAC Wall 75® (4% M.C.), 24mm unventilated semi-reflective air space, Bradford Thermoseal Wall Wrap XP Plus e0.09/0.87, Bradford	R3 17	R3 36	R2 00	R3 15	R2 Q1	R3 07
Gold Wall Batts R2.0, 10mm Gyprock Plasterboard Plus (5.7kg/m <sup>2</sup> )	1.5.17	13.50	112.55	N3.15	12.51	1.5.07
75mm STAAC Wall 75® (4% M.C.), 24mm unventilated nonreflective air space, Bradford Enviroseal ProctorWrap RW, Bradford Gold Wall Batts	B3 33	R3 57	R3 00	R3 15	R2 87	B3 02
R2.5, 10mm Gyprock Plasterboard Plus (5.7kg/m <sup>2</sup> )	1.5.55	13.52	13.00	1.5.15	112.07	1.5.02
75mm STAAC Wall 75® (4% M.C.), 24mm unventilated nonreflective air space, Bradford Enviroseal ProctorWrap RW, Bradford Polymax Wall	R3 33	R3 52	R3 00	R3 15	R2 87	B3 02
Batt R2.5, 10mm Gyprock Plasterboard Plus (5.7kg/m²)	1.5.55	113.32	13.00	N3.15	112.07	1.5.02
75mm STAAC Wall 75® (4% M.C.), 24mm unventilated nonreflective air space, Bradford Enviroseal ProctorWrap RW, Bradford Gold Wall Batts	R3 53	R3 71	R3 15	R3 29	R3 01	R3 16
R2.7 HP, 10mm Gyprock Plasterboard Plus (5.7kg/m <sup>2</sup> )	1.5.55	1.5.71	113.13	113.25	10.01	
75mm STAAC Wall 75 <sup>®</sup> (4% M.C.), 35+90=125mm unventilated unreflective air space, 10mm Gyprock Plasterboard Plus (5.7kg/m <sup>2</sup> )	R0.91	R0.93	R0.97	R0.99	R0.92	R0.94
75mm STAAC Wall 75 <sup>®</sup> (4% M.C.), 35mm unventilated semi-reflective air space, Bradford Thermoseal Wall Wrap XP Plus e0.09/0.05, 90mm	R1 84	R1 88	R1 87	R1 91	R1 79	R1 84
unventilated reflective air space (stud frame), 10mm Gyprock Plasterboard Plus (5.7kg/m <sup>2</sup> )	N1.04	N1.00	N1.07	N1.91	N1.75	N1.04
75mm STAAC Wall 75 <sup>®</sup> (4% M.C.), 31mm unventilated semi-reflective air space, Bradford Polyair Performa 4.0HXD e0.05/0.03, 90mm	R2 10	R2 14	R2 13	R2 16	R2 05	B2 09
unventilated reflective air space (stud frame), 10mm Gyprock Plasterboard Plus (5.7kg/m²)	112.10	112.14	112.15	112.10	112.05	112.05
75mm STAAC Wall 75® (4% M.C.), 35mm unventilated semi-reflective air space, Bradford Thermoseal Wall Wrap XP Plus e0.09/0.87, Bradford	R3 17	R3 36	R2 99	R3 15	R2 91	R3 07
Gold Wall Batts R2.5, 10mm Gyprock Plasterboard Plus (5.7kg/m <sup>2</sup> )	1.5.17	113.30	112.55	13.15	112.51	10.07
75mm STAAC Wall 75® (4% M.C.), 35mm unventilated nonreflective air space, Bradford Enviroseal ProctorWrap RW, Bradford Gold Wall Batts	R3 33	R3 52	R3 00	R3 15	R2 87	B3 02
R2.5, 10mm Gyprock Plasterboard Plus (5.7kg/m <sup>2</sup> )	10.00	113.32	113.00	1.5.15	112.07	113.02
75mm STAAC Wall 75® (4% M.C.), 35mm unventilated nonreflective air space, Bradford Enviroseal ProctorWrap RW, Bradford Polymax Wall	R3 33	R3 52	R3 00	R3 15	R2 87	R3 02
Batt R2.5, 10mm Gyprock Plasterboard Plus (5.7kg/m²)	1.5.55	1.3.32		1.5.15	1.2.07	1.3.02
75mm STAAC Wall 75® (4% M.C.), 35mm unventilated nonreflective air space, Bradford Enviroseal ProctorWrap RW, Bradford Gold Wall Batts	R3.53	R3.71	R3.15	R3.29	R3.01	R3.16
R2.7 HP, 10mm Gyprock Plasterboard Plus (5.7kg/m <sup>2</sup> )						

### Notes: Above all for 10mm Plasterboard Plus lining .

- The above results are for 75mm 413kg/m<sup>3</sup> External Wall System. For 400kg/m<sup>3</sup> product, Total R values will be slightly higher, thus the displayed values can be used conservatively for 400kg/m<sup>3</sup> product ٠ systems.
- Pine framing assumed to be 45mm thick and studs 600mm centres + top and bottom plates and one noggin. ٠
  - Steel framing assumed to be 35mm thick and studs 600mm centres + top and bottom plates and one noggin (No thermal break present).

Source: James M Fricker; Report i107e; Thermal performance calculations to AS/NZS 4859 Parts 1 & 2:2018; Dated 03/03/2020.

### A4 Manufacturer and manufacturing plant(s)

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

Certificate number: CM40281-I02-R01



### **A5 Installation requirements**

The installation of the STAAC Wall 75<sup>®</sup> Houses and Low Rise Multi Residential 75mm External Walls cladding system must not deviate from the contents of the <u>STAAC Wall 75<sup>®</sup> Houses and Low Rise Multi</u> <u>Residential 75mm External Walls Design and Installation Guide July2023</u>.

- The STAAC Wall 75<sup>®</sup> Houses and Low Rise Multi Residential 75mm External Walls cladding system is only to be installed by a suitably qualified tradesperson or a builder.
- The walls are constructed in accordance with AS 5146.3:2018.
- Stud wall support frame to be designed and certified by others.
- AAC panels must be separated from water sensitive framing materials by a pliable building membrane that complies with AS/NZS 4200.1:2017 and that is installed in accordance with AS 4200.2:2017.
- Such membrane must be vapour permeable for installations in climate zones 6, 7 and 8.
- External coating system to be in accordance with AS 5146.3:2018 and comply with AS/NZS 4548.5:1999(R2013) and must be suitable and compatible with AAC substrate (with priming where required).
- The first (texture) coat and second (finish) coats must be acrylic latex coatings complying with AS/NZS 4548 part 2 and part 4 1999(R2013).
- The coatings must be suitable and compatible with AAC STAAC Wall 75<sup>®</sup> substrate (with priming where required).
- Coatings to comply with AS/NZS 4548.5:1999(R2013).
- Coating manufacturer to specify minimum coating dry film thickness to comply with AS/NZS 4548.5:1999(R2013).
- The following External coating systems are acceptable for use with STAAC Wall 75<sup>®</sup> Houses and Low Rise Multi Residential 75mm External Walls cladding system:
  - 1. Rockcote Armorflex
  - 2. Dulux AcraTex

### A6 Other relevant technical data

Acoustic Properties Panel only with no plasterboard or other lining: R<sub>w</sub> = 34dB, R<sub>w</sub>+Ctr = 30dB.

Source: Acoustic Logic Report 2010861.15/2602A/R2 GW.



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

### **B1** Evaluation methods

- **1.** Energy Efficiency Provisions A5G3(1)(e). A report issued by a professional engineer.
- 2. Fire Safety Provisions A5G3(1)(d). A report issued by an Accredited Testing Laboratory.
- **3.** Structural Resistance Provisions A5G3(1)(e). A report issued by a professional engineer.
- 4. Weatherproofing Provisions A5G3(1)(d)&(f). Reports from Accredited Testing Laboratories and other form of documentary evidence.
- 5. Condensation Management Provisions A5G3(1)(f). Other form of documentary evidence.

### **B2** Reports

- 1. CSIRO; NATA Accreditation No. 165; Ref No. FCO-3003/SP3672; The fire-resistance of CSR Hebel 75mm single reinforcement PowerPanel external wall system in accordance with AS 1530.4-2014; Dated March 2023. Report provides Compliance with C2D2(2) H3D3.
- CSIRO; NATA Accreditation No. 165; Report No. FNC12491; Test for Combustibility for Materials in accordance with AS 1530.1:1994 for STAAC Wall 75<sup>®</sup> Autoclaved Aerated Concrete (AAC) of density 400kgm<sup>3</sup>; Dated 11/11/2019. Certificate confirms that the AAC panel is not deemed combustible in compliance with C2D10 & H3D2.
- 3. PACE Structural Pty Ltd; File No. PS23051; Structural Design Certificate for STAACWall75 Houses and Low Rise Multi Residential 75mm External Walls; Dated 01/08/2023. Report confirms the structural design capacity calculations on the Stoddart STAAC Wall 75<sup>®</sup> Houses and Low Rise Multi Residential 75mm External Walls cladding system (vertically installed) comply with B1P1(1), (2)(a), (b), (c) & (d) H1P1(1), (2)(a), (b), (c) & (d)
- 4. AECOM; Expert opinion on the weathertightness testing by CSIRO (Rep. DTF1021) to FV1 & V2.2.1; Dated 02/04/2020. Report provides professional opinion that Performance Requirements for weatherproofing have been met based on previous testing of Hebel AAC systems (F3P1 and H2P2).
- 5. CSIRO; NATA Accreditation No. 165; Report No. DTF1021; Water penetration testing to the Verification Methods FV1 & V2.2.1; Dated 27/01/2015. Report has been referenced in AECOM report for compliance with Performance Requirements for weatherproofing (F3P1 and H2P2).
- 6. The Coatings Consultancy Pty Ltd; Coatings to provide weatherproofing; Dated 29/08/2018. Report provides professional opinion relating to the coatings to provide weatherproofing (F3P1 and H2P2).
- 7. The Coatings Consultancy Pty Ltd; Assessment of Rockcote Armour Flex coating systems for Hebel High Rise facade walls; Dated 17/04/2019. Report provides professional opinion relating to the coatings to provide weatherproofing (F3P1 and H2P2).
- 8. Stoddart Group; STAAC Wall 75<sup>®</sup> Houses and Low Rise Multi Residential 75mm External Walls Design and Installation Guide in support of Condensation Management; Version July2023. Manual provides details the requirements for installation of pliable building membrane that complies with AS/NZS 4200.1:2017 and that is installed in accordance with AS 4200.2:2017 and F8D3 & H4D9
- 9. James M Fricker; Report i107e; Thermal performance calculations to AS/NZS 4859 Parts 1 & 2:2018; Dated 03/03/2020. Report confirms R-value achieved by the STAAC Wall Systems (J4D6 & H6D2(1)(b)(i)).

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