

Nationwide House Energy Rating Scheme®

NatHERS® Certificate No. 0012100095

Generated on 05 Aug 2025 using BERS Pro v5.2.4 (3.23)

Property

Address Unit Main, 38 The Drive,
FRESHWATER, NSW, 2096

Lot/DP Lot DP -

NCC class* 1a

Floor/all Floors G of 4 floors

Type New Home

Plans

Main plan 31/07/2025 DA

Prepared by Tobias Partners

Construction and environment

Assessed floor area [m2]*	Exposure type
Conditioned* 519.7	Open
Unconditioned* 14.9	NatHERS climate zone
Total 559.9	56 Mascot (Sydney Airport)
Garage 25.4	



Accredited assessor

Name James Cross

Business name Northern Aspect Energy Consultants

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Phone 0499922755

Accreditation No. 61671

Assessor Accrediting Organisation ABSA

Declaration of interest Declaration completed: no conflicts

NCC Requirements

NCC provisions Volume Two

State/Territory variation Yes

National Construction Code (NCC) requirements

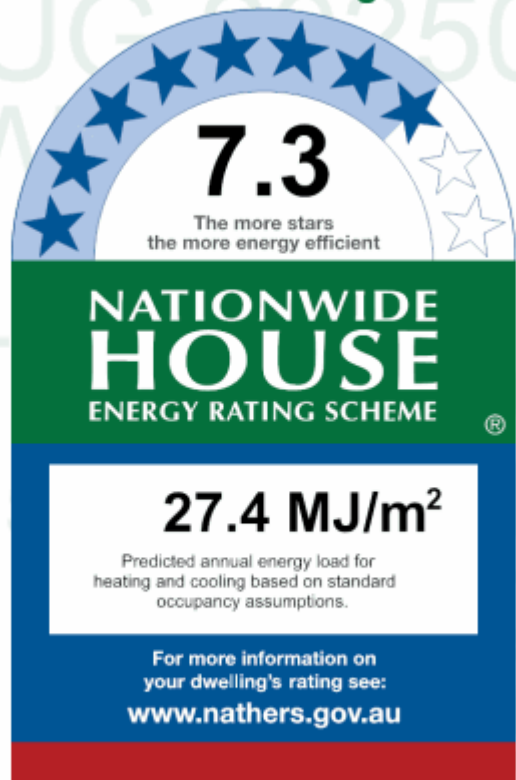
The NCC allows the use of NatHERS accredited software to comply with the energy efficiency requirements for houses (Class 1 buildings) and apartments (Class 2 sole-occupancy units and Class 4 parts of buildings). The applicable requirements for houses are detailed in Specification 42 of NCC Volume Two. For apartments the requirements are detailed in clauses J3D3 and J3D15 of NCC Volume One.

NCC 2022 includes enhanced thermal performance requirements for houses and apartments. It also includes a new whole-of-home annual energy use budget which applies to the major equipment in the home.

The NCC, and associated ABCB Standards and support material, can be accessed at www.abcb.gov.au.

Note, variations and additions to the NCC energy efficiency requirements may apply in some states and territories.

Thermal performance Star rating



Thermal performance [MJ/m²]

Limits taken from ABCB Standard 2022

	Heating	Cooling
Modelled	14.0	13.4
Load limits	N/A	N/A

Features determining load limits

Floor Type (lowest conditioned area)	CSOG
NCC climate zone 1 or 2	No
Outdoor living area	No
Outdoor living area ceiling fan	No

Whole of Home performance rating

No Whole of Home
performance rating
generated for this
certificate.

Verification

To verify this certificate,
scan the QR code or visit
www.hstar.com.au/QR/Generate?p=KwmpKlayg.
When using either link,
ensure you are visiting
www.hstar.com.au



About the ratings

Thermal performance rating

NatHERS thermal software models the expected heating and cooling energy loads using information about the design, construction, climate and common patterns of household use. The thermal performance rating (shown as a star rating on this Certificate) does not take into account appliances, apart from the airflow impacts from ceiling fans.

Whole of Home performance rating

NatHERS Whole of Home software uses the heating and cooling energy loads combined with the energy performance of the home's appliances (heating, cooling, hot water, lighting, pool/spa pump and onsite renewable energy generation and storage) and models the expected energy value* of the whole home. The Whole of Home performance rating is shown as a score out of 100 on this Certificate.

Heating & Cooling Load Limits

Additional information

In some locations under the NCC NatHERS pathway, separate heating and cooling load limits may apply. Minimum required star ratings in northern parts of Australia may also be affected by the presence or absence of an outdoor living area and/or an outdoor living area ceiling fan. Refer to the *ABC Standard 2022: NatHERS heating and cooling load limits* for details or contact the relevant local building regulating authority, noting that State and Territory variations may also apply.

Setting Options:

Floor Type:

CSOG – Concrete Slab on Ground
SF – Suspended Floor (or a mixture of CSOG and SF)
NA – Not Applicable

NCC Climate Zone 1 or 2:

Yes
No
NA – Not Applicable

Outdoor Living Area:

Yes
No
NA – Not Applicable

Outdoor Living Area Ceiling Fan:

Yes
No
NA – Not Applicable



Predicted onsite renewable energy impact

No Whole of Home performance assessment conducted for this certificate.

Predicted Whole of Home annual impact by appliance

Energy use

No Whole of Home performance assessment conducted for this certificate

Greenhouse gas emissions

No Whole of Home performance assessment conducted for this certificate

Cost

No Whole of Home performance assessment conducted for this certificate



Certificate check

The checklist covers important items impacting the dwelling's ratings. It is recommended that the accuracy of the whole certificate is checked.

Note: The boxes indicate when and by whom each item should be checked. It is not mandatory to complete this checklist.

	Approval Stage		Construction Stage		Occupancy/Other
	Assessor checked	Consent Authority/ Surveyor checked	Builder checked	Consent Authority Surveyor checked	
Genuine certificate check					
Does this Certificate match the one available at the web address or QR code verification link on the front page?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does the NatHERS certificate number on the NatHERS-stamped plans match the number on this Certificate?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Thermal performance check					
Windows and glazed doors					
Does the window size, opening type and location shown on the NatHERS-stamped plans or as installed match what is shown in 'Window and glazed door schedule' and 'Roof window schedule' tables on this Certificate?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does the installed windows meet the substitution tolerances (AFRC* based SHGC* and U-values*) as shown in the 'Window and glazed door type and performance' and 'Roof window type and performance' tables on this Certificate?			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
External walls					
Does the external wall bulk insulation (R-value) shown on the NatHERS-stamped plans or as installed match what is shown in the External wall type table on this Certificate?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does the external wall shade (colour) match what is shown in the 'External wall type' table on this Certificate?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Floor					
Does the floor insulation (R-value) shown on the NatHERS-stamped plans or as installed match what is shown in the 'Floor type' table on this certificate?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ceiling penetrations*					
Does the 'quantity' and 'type' of ceiling penetrations* (e.g. downlights, exhaust fans, etc) shown on the NatHERS-stamped plans or as installed match what is shown in the 'Ceiling penetrations' table on this Certificate?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ceiling					
Does the ceiling insulation (R-value) shown on the NatHERS-stamped plans or as installed match what is shown in the 'Ceiling type' table on this Certificate?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Roof					
Does the external roof shade (colour) on the NatHERS stamped plans or as installed match what is shown in the 'Roof type' table on this Certificate?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Apartment entrance doors (NCC Class 2 assessments only)					
Does the 'External Door Schedule' show apartment entrance doors? Please note that an "external door" between the modelled dwelling and a shared space, such as an enclosed corridor or foyer, should not be included in the assessment (because it overstates the possible ventilation) and would invalidate the Certificate.	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
Exposure*					
Has the appropriate exposure type (terrain) (shown on page 1) been applied? For example, it is unlikely that a ground-floor apartment is "exposed" or a top floor high-rise apartment is "protected".	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
Heating and cooling load limits*					
Do the load limits settings (shown on page 1) match what is shown	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



Certificate check

Continued

	Approval Stage		Construction Stage		
	Assessor checked	Consent Authority/ Surveyor checked	Builder checked	Consent Authority Surveyor checked	Occupancy/Other

Additional NCC requirements for thermal performance (not included in the NatHERS assessment)

Thermal bridging

Does the dwelling meet the NCC requirement for thermal bridging?

☐ ☐ ☐ ☐

Insulation installation method

Has the insulation been installed according to the NCC requirements?

☐ ☐ ☐

Building sealing

Does the dwelling meet the NCC requirements for Building Sealing?

☐ ☐ ☐ ☐

Whole of Home performance check (not applicable if a Whole of Home performance assessment is not conducted)

Appliances

Does the cooling appliance/s type, location and efficiency/performance shown on the NatHERS-stamped plans or as installed match the location and minimum efficiency/performance requirements shown in the Appliance schedule on this Certificate?

☐ ☐ ☐ ☐ ☐

Does the heating appliance/s type, location and efficiency/performance shown on the NatHERS-stamped plans or installed, match the location and minimum efficiency/performance requirements shown in the 'Appliance schedule' on this Certificate?

☐ ☐ ☐ ☐ ☐

Does the hot water system type and efficiency/performance shown on the NatHERS-stamped plans or as installed match the location and minimum efficiency/performance requirements shown in the 'Appliance schedule' on this Certificate?

☐ ☐ ☐ ☐ ☐

Does the pool pump efficiency/performance shown on the NatHERS-stamped plans or as installed match the minimum efficiency/performance requirements shown in the 'Appliance schedule' on this Certificate?

☐ ☐ ☐ ☐ ☐

Does the onsite renewable energy system type, orientation and system size or generation capacity shown on the NatHERS stamped plans or installed match the 'Onsite Renewable Energy schedule' on this Certificate?

☐ ☐ ☐ ☐ ☐

Additional NCC Requirements for Services (not included in the NatHERS assessment)

Does the lighting meet the artificial lighting requirements specified in the NCC?

☐ ☐ ☐ ☐

Does the hot water system meet the additional requirements specified in the NCC?

☐ ☐ ☐ ☐

Provisional values* check

Have provisional values* been used in the assessment and, if so, are they noted in 'Additional notes' table below?

☐ ☐ ☐ ☐

Other NCC requirements

Note: This Certificate only covers the energy efficiency requirements in the NCC. Additional requirements that must also be satisfied include, but are not limited to: condensation, structural and fire safety requirements and any state or territory variations to the NCC energy efficiency requirements.

Additional notes

NAEC 4345 Main Dwelling model Rev 00 NCC 2022

This dwelling is across 5 levels and the certifier requested to dwelling count as a single dwelling. Due to design

limitations and the distance between dwellings, this has been assessed as 2 separate NatHERS models with both compliant

to the maximum Basix m2 design loads. Main Dwelling loads have been entered into the Basix Certificate along with the main dwelling NatHERS numbers

All materials and specifications have been combined to show 1 dwelling

All specifications not noted on plans or below are modelled to the NatHERS Technical note applicable to date noted on the final certificate

Compliance based on U and SHGC total system values and do not need to comply to the stated materials directly

Aircell XV to cavity Brick walls excluding Garage

Concrete walls with EPS R0.6 insulation as per Basix requirements

R2.5 to internal stud walls excluding cavity sliding doors

R4.0 EPS or Bulk to all internal ceilings in the garage entry store that sit below the habitable space above

R4.0 EPS to the outside of the concrete roof on level 1

No insulation to level 1 ceilings internally

All downlights sealed and no penetrations due to concrete ceilings

Sealed exhaust fan to wet areas

Shading of the steep terrain has been included

Tiles to wet areas

Timber to office or bedrooms

Stone to all remaining modelled as tiled for closest likeness

R2.5 EPS to external suspended concrete slab

R2.0 EPS to all external concrete ceilings trafficable or green

R5.0 bulk to upper floor timber framed ceiling with metal roof cover and anticon 60 insulation

Room schedule

Room	Zone Type	Area [m ²]
bath lvl5 guest	Daytime	6.04
Bedroom 5	Bedroom	16.47
Bedroom 4	Bedroom	14.04
Media lvl 5	Living	63.51
lift lvl 5	Daytime	3.03
gym	Daytime	61.25
art wall hall	Daytime	53.17
Rumpus	Living	57.86



Room	Zone Type	Area [m ²]
lift lvl 6	Unconditioned	2.83
Kitchen/Living1	Kitchen/Living	116.52
scullery	Daytime	3.46
powder lvl6	Unconditioned	5.34
bath lvl 7	Unconditioned	9.52
Bedroom 3	Bedroom	33.45
Bedroom 2	Bedroom	30.15
landing lvl 7	Daytime	21.76
Bedroom 1	Bedroom	39.63
ensuite bed 1	Nighttime	9.26
level 4 plant	Garage	25.42

Window and glazed door type and performance

Default windows*

Window ID	Window Description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
ATB-006-03 B	Al Thermally Broken B DG Argon Fill High Solar	2.9	0.51	0.48	0.54
ATB-005-03 B	Al Thermally Broken A DG Argon Fill High Solar	2.9	0.44	0.42	0.46
ALM-002-03 A	Aluminium B SG High Solar Gain Low-E	5.4	0.58	0.55	0.61

Custom windows*

Window ID	Window Description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
No Data Available					

Window and glazed door schedule

Location	Window ID	Window no.	Height [mm]	Width [mm]	Window type	Opening %	Orientation	Window shading device*
bath lvl5 guest	ATB-006-03 B	W33	600	450	Fixed	00	E	No
Bedroom 5	ATB-006-03 B	W7	1500	450	Fixed	00	E	No
Bedroom 5	ATB-006-03 B	W28	3000	4042	Sliding	45	E	No

* Refer to glossary.



Location	Window ID	Window no.	Height [mm]	Width [mm]	Window type	Opening %	Orientation	Window shading device*
Bedroom 4	ATB-006-03 B	W5	3000	3600	Sliding	45	E	No
Media lvl 5	ATB-006-03 B	W32	3000	2379	Sliding	45	E	No
gym	ATB-006-03 B	W18	3000	4505	Sliding	45	N	No
art wall hall	ATB-006-03 B	n/a	3000	738	Fixed	00	SE	No
Rumpus	ATB-006-03 B	W17	3000	6530	Sliding	45	N	No
Kitchen/Living1	ATB-005-03 B	W16	3000	7100	Bifold	90	N	No
Kitchen/Living1	ATB-006-03 B	W15	3000	11350	Sliding	70	W	No
Kitchen/Living1	ATB-006-03 B	W9	3000	450	Fixed	00	E	No
Kitchen/Living1	ATB-006-03 B	W10	3000	450	Fixed	00	E	No
Kitchen/Living1	ATB-006-03 B	W11	3000	10320	Sliding	60	E	No
Kitchen/Living1	ATB-006-03 B	W12	2400	2400	Fixed	00	SE	No
powder lvl6	ALM-002-03 A	W14	3000	2100	Louvre	90	E	No
bath lvl 7	ALM-002-03 A	W29	600	5337	Louvre	90	W	No
Bedroom 3	ATB-006-03 B	W21	3000	450	Fixed	00	E	No
Bedroom 3	ATB-006-03 B	W27	3000	5337	Sliding	60	E	No
Bedroom 2	ATB-006-03 B	W26	3000	4890	Sliding	60	E	No
landing lvl 7	ATB-005-03 B	W22	3000	1200	Casement	90	W	No
landing lvl 7	ATB-005-03 B	W23	3000	1200	Casement	90	W	No
landing lvl 7	ATB-006-03 B	W24	3000	6390	Fixed	00	W	No
Bedroom 1	ATB-006-03 B	W25	3000	6067	Sliding	60	E	No
ensuite bed 1	ALM-002-03 A	W30	600	5337	Louvre	90	W	No

Roof window* type and performance value

Default roof windows*

Window ID	Window Description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
DG-Generic-02 A	DG-Generic-02 A Clear AI DG DEFAULT ROOF WINDOW System 02	4.2	0.72	0.68	1.40



Custom roof windows*

Window ID	Window Description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
No Data Available					

Roof window* schedule

Location	Window ID	Window no.	Opening %	Height [mm]	Width [mm]	Orientation	Outdoor shade	Indoor shade
scullery	DG-Generic-02 A	S1	0	350	900	E	Yes	Yes

Skylight* type and performance

Skylight ID	Skylight description	Skylight shaft reflectance
No Data Available		

Skylight* schedule

Location	Skylight ID	Skylight No.	Skylight shaft length [mm]	Area [m ²]	Orientation	Outdoor shade	Diffuser
No Data Available							

External door schedule

Location	Height [mm]	Width [mm]	Opening %	Orientation
level 4 plant	3000	2025	90	E

External wall type

Wall ID	Wall type	Solar absorptance	Wall shade [colour]	Bulk insulation [R-value]	Reflective wall wrap*
EW-1	Cavity Brick	0.50		Foil Sided Bubble Wrap, Anti-glare one side + Bulk Insulation R0.3	No
EW-2	Tilt up Concrete	0.50		Bulk Insulation R0.6	No
EW-3	Fibro Timber Stud Frame Panel Direct Fix	0.50		Bulk Insulation R2.5	No
EW-4	Weatherboard Timber Stud Frame Panel Direct Fix	0.50		No insulation	No



External wall schedule

Location	Wall ID	Height [mm]	Width [mm]	Orientation	Horizontal shading feature* maximum projection [mm]	Vertical shading feature [yes/no]
bath lvl5 guest	EW-1	3000	400	N	0	No
bath lvl5 guest	EW-1	3000	1768	N	0	No
bath lvl5 guest	EW-1	3000	850	E	3125	No
bath lvl5 guest	EW-2	3000	2955	W	0	No
Bedroom 5	EW-1	3000	2205	N	0	No
Bedroom 5	EW-1	3000	1744	N	0	No
Bedroom 5	EW-1	3001	800	E	0	Yes
Bedroom 5	EW-1	3000	400	N	0	No
Bedroom 5	EW-1	3000	4005	E	300	Yes
Bedroom 4	EW-1	3000	3610	E	300	Yes
Media lvl 5	EW-1	3000	2805	E	300	Yes
Media lvl 5	EW-2	3000	11108	SE	0	No
Media lvl 5	EW-2	3000	1230	SW	0	No
Media lvl 5	EW-2	3000	2746	N	2746	No
Media lvl 5	EW-2	3000	1550	W	0	No
Media lvl 5	EW-2	3000	7600	S	0	No
Media lvl 5	EW-2	3000	1705	W	0	No
Media lvl 5	EW-2	3000	7750	N	0	No
Media lvl 5	EW-2	3000	8405	W	0	No
lift lvl 5	EW-2	3000	1805	W	0	No
lift lvl 5	EW-2	3000	1700	N	0	No
lift lvl 5	EW-2	3000	1805	E	7750	No
gym	EW-1	3000	4605	N	0	No
gym	EW-2	3000	5845	S	0	No
gym	EW-2	3000	12800	W	0	No
art wall hall	EW-1	3000	1210	N	7000	No
art wall hall	EW-1	3000	9120	SE	0	No
art wall hall	EW-1	3000	1850	S	0	No
art wall hall	EW-2	3000	4690	S	0	No



Location	Wall ID	Height [mm]	Width [mm]	Orientation	Horizontal shading feature* maximum projection [mm]	Vertical shading feature [yes/no]
Rumpus	EW-1	3000	6760	N	7000	No
lift lvl 6	EW-1	3000	1695	N	7000	No
lift lvl 6	EW-1	3000	1805	E	14075	No
Kitchen/Living1	EW-1	3000	7750	N	1900	No
Kitchen/Living1	EW-1	3000	11500	W	150	Yes
Kitchen/Living1	EW-1	3000	350	N	0	No
Kitchen/Living1	EW-1	3000	1724	N	0	No
Kitchen/Living1	EW-1	3000	850	E	2950	No
Kitchen/Living1	EW-1	3000	2100	N	0	No
Kitchen/Living1	EW-1	3000	1901	N	0	No
Kitchen/Living1	EW-1	3000	850	E	0	No
Kitchen/Living1	EW-1	3000	500	N	0	No
Kitchen/Living1	EW-1	3000	10650	E	300	No
Kitchen/Living1	EW-1	3000	1151	SE	0	No
Kitchen/Living1	EW-1	3000	860	NE	0	No
Kitchen/Living1	EW-3	3000	2413	SE	0	No
Kitchen/Living1	EW-1	3000	832	W	15541	No
Kitchen/Living1	EW-1	3000	4072	S	0	No
powder lvl6	EW-1	3000	2355	E	0	Yes
powder lvl6	EW-2	3000	2345	S	0	No
bath lvl 7	EW-1	3000	1845	N	0	No
bath lvl 7	EW-1	3000	5395	W	0	No
Bedroom 3	EW-1	3000	3295	N	0	No
Bedroom 3	EW-1	3000	1744	N	0	No
Bedroom 3	EW-1	3000	800	E	0	No
Bedroom 3	EW-1	3000	900	N	0	No
Bedroom 3	EW-1	3000	5975	E	0	No
Bedroom 2	EW-1	3000	6130	E	0	No
landing lvl 7	EW-1	3000	8850	W	0	No
Bedroom 1	EW-1	3000	7255	E	0	No
Bedroom 1	EW-1	3000	5655	S	0	No

Location	Wall ID	Height [mm]	Width [mm]	Orientation	Horizontal shading feature* maximum projection [mm]	Vertical shading feature [yes/no]
ensuite bed 1	EW-1	3000	1755	S	0	No
ensuite bed 1	EW-1	3000	5355	W	0	No
level 4 plant	EW-2	3000	2850	N	550	No
level 4 plant	EW-2	3000	3350	N	150	No
level 4 plant	EW-4	3000	4100	E	0	No
level 4 plant	EW-2	3000	6200	S	0	No
level 4 plant	EW-2	3000	4100	W	0	No

Internal wall type

Wall ID	Wall type	Area [m ²]	Bulk insulation
IW-001	Tilt Concrete	266.91	No insulation
IW-002	Timber Stud Frame, Direct Fix Plasterboard	77.40	Bulk Insulation, No Air Gap R2.5

Floor type

Location	Construction	Area [m ²]	Sub-floor ventilation	Added insulation [R-value]	Covering
bath lvl5 guest / level 4 plant	Rendered Concrete 150mm	5.39		Bulk Insulation R2.5	Ceramic Tiles 8mm
bath lvl5 guest	Suspended Concrete Slab 150mm	0.10	Totally Open	No Insulation	Ceramic Tiles 8mm
Bedroom 5 / level 4 plant	Rendered Concrete 150mm	15.84		Bulk Insulation R2.5	Carpet+Rubber Underlay 18mm
Bedroom 5	Suspended Concrete Slab 150mm	0.00	Totally Open	No Insulation	Carpet+Rubber Underlay 18mm
Bedroom 4	Concrete Slab on Ground 100mm	14.04	None	No Insulation	Carpet+Rubber Underlay 18mm
Media lvl 5 / level 4 plant	Rendered Concrete 100mm	1.25		Bulk Insulation R2.5	Bare
Media lvl 5	Concrete Slab on Ground 100mm	60.78	None	No Insulation	Bare
lift lvl 5	Concrete Slab on Ground 100mm	3.03	None	No Insulation	Bare
gym	Concrete Slab on Ground 100mm	61.25	None	No Insulation	Bare
art wall hall / Media lvl 5	Rendered Concrete 100mm	0.00		No Insulation	Bare



Location	Construction	Area [m ²]	Sub-floor ventilation	Added insulation [R-value]	Covering
art wall hall	Concrete Slab on Ground 100mm	50.05	None	No Insulation	Bare
Rumpus	Concrete Slab on Ground 100mm	57.86	None	No Insulation	Bare
lift lvl 6 / lift lvl 5	Rendered Concrete 100mm	0.00		No Insulation	Bare
Kitchen/Living1 / bath lvl5 guest	Rendered Concrete 100mm	4.96		No Insulation	Bare
Kitchen/Living1 / Bedroom 5	Rendered Concrete 100mm	15.39		No Insulation	Bare
Kitchen/Living1 / Bedroom 4	Rendered Concrete 100mm	13.66		No Insulation	Bare
Kitchen/Living1 / Media lvl 5	Rendered Concrete 100mm	59.98		No Insulation	Bare
Kitchen/Living1	Concrete Slab on Ground 100mm	11.05	None	No Insulation	Bare
Kitchen/Living1	Suspended Concrete Slab 150mm	5.60	None	No Insulation	Bare
scullery	Concrete Slab on Ground 100mm	3.46	None	No Insulation	Bare
powder lvl6	Concrete Slab on Ground 100mm	5.34	None	No Insulation	Ceramic Tiles 8mm
bath lvl 7	Suspended Concrete Slab 305mm	9.52	Very Open	Bulk Insulation in Contact with Floor R2.5	Ceramic Tiles 8mm
Bedroom 3	Suspended Concrete Slab 305mm	33.45	Very Open	Bulk Insulation in Contact with Floor R2.5	Carpet+Rubber Underlay 18mm
Bedroom 2 / Rumpus	Rendered Concrete 305mm	26.14		No Insulation	Carpet+Rubber Underlay 18mm
Bedroom 2	Suspended Concrete Slab 305mm	2.08	Very Open	Bulk Insulation in Contact with Floor R2.5	Carpet+Rubber Underlay 18mm
landing lvl 7 / art wall hall	Rendered Concrete 305mm	0.84		No Insulation	Bare
landing lvl 7 / Rumpus	Rendered Concrete 305mm	0.48		No Insulation	Bare
landing lvl 7	Suspended Concrete Slab 305mm	3.75	Very Open	Bulk Insulation in Contact with Floor R2.5	Carpet+Rubber Underlay 18mm



Location	Construction	Area [m ²]	Sub-floor ventilation	Added insulation [R-value]	Covering
Bedroom 1 / art wall hall	Rendered Concrete 100mm	17.43		No Insulation	Carpet+Rubber Underlay 18mm
Bedroom 1 / Rumpus	Rendered Concrete 100mm	16.05		No Insulation	Carpet+Rubber Underlay 18mm
Bedroom 1 / powder lvl6	Rendered Concrete 100mm	3.16		No Insulation	Carpet+Rubber Underlay 18mm
ensuite bed 1 / gym	Rendered Concrete 100mm	1.42		No Insulation	Ceramic Tiles 8mm
ensuite bed 1 / art wall hall	Rendered Concrete 100mm	6.19		No Insulation	Ceramic Tiles 8mm
ensuite bed 1 / Rumpus	Rendered Concrete 100mm	0.00		No Insulation	Ceramic Tiles 8mm
level 4 plant	Concrete Slab on Ground 100mm	25.42	None	No Insulation	Bare

Ceiling type

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap* [yes/no]
bath lvl5 guest	Concrete	No insulation	
bath lvl5 guest	Rendered Concrete	No Insulation	
Bedroom 5	Concrete	No insulation	
Bedroom 5	Rendered Concrete	No Insulation	
Bedroom 4	Concrete	No insulation	
Bedroom 4	Rendered Concrete	No Insulation	
Media lvl 5	Concrete	No insulation	
Media lvl 5	Rendered Concrete	No Insulation	
lift lvl 5	Concrete	No insulation	
lift lvl 5	Rendered Concrete	No Insulation	
gym	Concrete	No insulation	
gym	Rendered Concrete	No Insulation	
art wall hall	Concrete	No insulation	
art wall hall	Rendered Concrete	No Insulation	
Rumpus	Concrete	No insulation	
Rumpus	Rendered Concrete	No Insulation	
lift lvl 6	Concrete	No insulation	
Kitchen/Living1	Concrete	No insulation	

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap* [yes/no]
scullery	Concrete	No insulation	
powder lvl6	Concrete	No insulation	
powder lvl6	Rendered Concrete	No Insulation	
bath lvl 7	Plasterboard on Timber	Bulk Insulation R5	
Bedroom 3	Plasterboard on Timber	Bulk Insulation R5	
Bedroom 2	Plasterboard on Timber	Bulk Insulation R5	
landing lvl 7	Plasterboard on Timber	Bulk Insulation R5	
Bedroom 1	Plasterboard on Timber	Bulk Insulation R5	
ensuite bed 1	Plasterboard on Timber	Bulk Insulation R5	
level 4 plant	Rendered Concrete	Bulk Insulation R2.5	

Ceiling penetrations*

Location	Quantity	Type	Diameter [mm]	Sealed/unsealed
bath lvl5 guest	3	Downlights - LED	0	Sealed
bath lvl5 guest	2	Exhaust Fans	300	Sealed
Bedroom 5	4	Downlights - LED	0	Sealed
Bedroom 4	4	Downlights - LED	0	Sealed
Media lvl 5	20	Downlights - LED	0	Sealed
gym	8	Downlights - LED	0	Sealed
gym	1	Exhaust Fans	0	Sealed
art wall hall	10	Downlights - LED	0	Sealed
Rumpus	10	Downlights - LED	0	Sealed
Kitchen/Living1	20	Downlights - LED	0	Sealed
Kitchen/Living1	1	Exhaust Fans	160	Sealed
scullery	1	Downlights - LED	0	Sealed
powder lvl6	1	Downlights - LED	0	Sealed
powder lvl6	1	Exhaust Fans	300	Sealed
bath lvl 7	4	Downlights - LED	0	Sealed
bath lvl 7	1	Exhaust Fans	300	Sealed
Bedroom 3	6	Downlights - LED	0	Sealed
Bedroom 2	6	Downlights - LED	0	Sealed
landing lvl 7	8	Downlights - LED	0	Sealed

* Refer to glossary.



Location	Quantity	Type	Diameter [mm]	Sealed/unsealed
Bedroom 1	10	Downlights - LED	0	Sealed
ensuite bed 1	6	Downlights - LED	0	Sealed
ensuite bed 1	2	Exhaust Fans	300	Sealed

Ceiling fans

Location	Quantity	Diameter [mm]
No Data Available		

Roof type

Construction	Added insulation [R-value]	Solar absorptance	Roof shade [colour]
Waterproofing Membrane	Bulk Insulation, No Air Gap Above R2	0.50	Medium
Corrugated Iron Timber Frame	Bulk, Reflective Side Down, No Air Gap Above R1.3	0.50	Medium
Corrugated Iron Timber Frame	No Insulation, Only an Air Gap	0.50	Medium

Thermal bridging schedule for steel frame elements

Building element	Steel section dimensions [height x width, mm]	Frame spacing [mm]	Steel thickness [BMT,mm]	Thermal break [R-value]
No Data Available				

Appliance schedule

(not applicable if a Whole of Home performance assessment is not conducted for this certificate)

Note: A flat assumption of 5W/m² is used for lighting, therefore lighting is not included in the appliance schedule.

Cooling system

Appliance/ system type	Location	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Data Available				

Heating system

Appliance/ system type	Location	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Data Available				



Hot water system

Appliance/ system type	Fuel type	Hot Water CER Zone	Minimum efficiency /STC	Zone 3 STC	Zone 3 Substitution tolerance ranges		Assessed daily load [litres]
					lower limit	upper limit	
No Data Available							

Pool/spa equipment

Appliance/ system type	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Data Available			

Onsite Renewable Energy Schedule

System Type	Orientation	System Size Or Generation Capacity
No Data Available		

Battery Schedule

System Type	Size [Battery Storage Capacity]
No Data Available	



Explanatory notes

About this report

NatHERS ratings are a reliable guide for comparing different dwelling designs and to demonstrate that designs meet the energy efficiency requirements in the National Construction Code.

NatHERS ratings use computer modelling to evaluate a home's energy efficiency and performance. They use localised climate data and standard assumptions on how people use their home to predict the heating and cooling energy loads and energy value* of the whole home. The thermal performance star rating uses the home's building specifications, layout, orientation and fabric (i.e. walls, windows, floors, roofs and ceilings) to predict the heating and cooling energy loads. The Whole of Home performance rating uses information about the home's appliances and onsite energy generation and storage to estimate the home's energy value*.

The actual energy loads, cost and greenhouse gas emissions of a home may vary from that predicted. This is because the assumptions will not always match the actual occupant usage patterns. For example, the number of occupants and how people use their appliances will vary.

Energy efficient homes use less energy, are warmer on cool days, cooler on hot days and cost less to run.

Accredited assessors

For quality assured NatHERS Certificates, always use an accredited or licenced assessor registered with an Assessor Accrediting Organisation (AAO). AAOs have strict quality assurance processes, and professional development requirements ensuring consistently high standards for assessments.

Non-accredited assessors (Raters) have no ongoing training requirements and

are not quality assured.

Any queries about this report should be directed to the assessor. If the assessor is unable to address questions or concerns, contact the AAO specified on the front of this certificate.

Disclaimer

The NatHERS Certificate format is developed by the NatHERS Administrator. However, the content in the certificate is entered by the assessor. It is the assessor's responsibility to use NatHERS accredited software correctly and follow the NatHERS Technical Note to produce a NatHERS Certificate.

The predicted annual energy load, cost and greenhouse gas emissions in this NatHERS Certificate are an estimate based on an assessment of the dwelling's design by the assessor. It is not a prediction of actual energy use, cost or emissions. The information and ratings may be used to compare how other dwellings are likely to perform when used in a similar way.

Information presented in this report relies on a range of standard assumptions (both embedded in NatHERS accredited software and made by the assessor who prepared this report), including assumptions about occupancy, behaviour, appliance performance, indoor air temperature and local climate.

Not all assumptions made by the assessor using the NatHERS accredited software tool are presented in this report and further details or data files may be obtained from the assessor.

Glossary

AFRC	Australian Fenestration Rating Council
Annual energy load	the predicted amount of energy required for heating and cooling, based on standard occupancy assumptions.
Assessed floor area	the floor area modelled in the software for the purpose of the NatHERS assessment. Note, this may not be consistent with the floor area in the design documents.
Ceiling penetrations	features that require a penetration to the ceiling, including downlights, vents, exhaust fans, range hoods, chimneys and flues. Excludes fixtures attached to the ceiling with small holes through the ceiling for wiring, e.g. ceiling fans; pendant lights, and heating and cooling ducts.
COP	Coefficient of performance
Conditioned	a zone within a dwelling that is expected to require heating and cooling based on standard occupancy assumptions. In some circumstances it will include garages.
Custom windows	windows listed in NatHERS software that are available on the market in Australia and have a WERS (Window Energy Rating Scheme) rating.
Default windows	windows that are representative of a specific type of window product and whose properties have been derived by statistical methods.
EER	Energy Efficiency Ratio, measure of how much cooling can be achieved by an air conditioner for a single kWh of electricity input
Energy use	This is your home's rating without solar or batteries.
Energy value	The net cost to society including, but not limited to, costs to the building user, the environment and energy networks (as defined in the ABCB Housing Provisions Standard).
Entrance door	these signify ventilation benefits in the modelling software and must not be modelled as a door when opening to a minimally ventilated corridor in a Class 2 building.
Exposure	see exposure categories below.
Exposure category – exposed	terrain with no obstructions e.g. flat grazing land, ocean-frontage, desert, exposed high-rise unit (usually above 10 floors).
Exposure category – open	terrain with few obstructions at a similar height e.g. grasslands with few well scattered obstructions below 10m, farmland with scattered sheds, lightly vegetated bush blocks, elevated units (e.g. above 3 floors).
Exposure category – protected	terrain with numerous, closely spaced obstructions below 10m e.g. suburban housing, heavily vegetated bushland areas.
Exposure category – suburban	terrain with numerous, closely spaced obstructions over 10 m e.g. city and industrial areas.
Horizontal shading feature	provides shading to the building in the horizontal plane, e.g. eaves, verandahs, pergolas, carports, or overhangs or balconies from upper levels.
National Construction Code (NCC) Class	the NCC groups buildings by their function and use, and assigns a classification code. NatHERS software models NCC Class 1, 2 or 4 buildings and attached Class 10a buildings. Definitions can be found at www.abcb.gov.au .
Net zero home	a home that achieves a net zero energy value*.
Opening percentage	the operability percentage or operable (moveable) area of doors or windows that is used in ventilation calculations.
Provisional value	an assumed value that does not represent an actual value. For example, if the wall colour is unspecified in the documentation, a provisional value of 'medium' must be modelled. Acceptable provisional values are outlined in the NatHERS Technical Note and can be found at www.nathers.gov.au
Recommended capacity	this is the capacity or size of equipment that is recommended by NatHERS to achieve the desired comfort conditions in the zone or zones serviced. This is a recommendation and the final selection sizing should be confirmed by a suitably qualified person.
Reflective wrap (also known as foil)	can be applied to walls, roofs and ceilings. When combined with an appropriate airgap and emissivity value, it provides insulative properties.
Roof window	for NatHERS this is typically an operable window (i.e. can be opened), will have a plaster or similar light well if there is an attic space, and generally does not have a diffuser.
Shading features	includes neighbouring buildings, fences, and wing walls, but excludes eaves.
Skylight (also known as roof lights)	for NatHERS this is typically a moulded unit with flexible reflective tubing (light well) and a diffuser at ceiling level.
Solar heat gain coefficient (SHGC)	the fraction of incident solar radiation admitted through a window, both directly transmitted as well as absorbed and subsequently released inward. SHGC is expressed as a number between 0 and 1. The lower a window's SHGC, the less solar heat it transmits.
STCs	Small-scale Technology Certificates, certificates created by the REC registry for renewable energy technologies that may be bought and sold as part of the Small-scale Renewable Energy Scheme operated by the Clean Energy Regulator (CER)
Thermal breaks	are materials with an R-value greater than or equal to 0.2 that must separate the metal frame from the cladding. This includes, but is not limited to, materials such as timber battens greater than or equal to 20mm thick or continuous thermal breaks such as polystyrene insulation sheathing or plastic strips
U-value	the rate of heat transfer through a window. The lower the U-value, the better the insulating ability.
Unconditioned	a zone within a dwelling that is assumed to not require heating and cooling based on standard occupancy assumptions.
Vertical shading features	provides shading to the building in the vertical plane and can be parallel or perpendicular to the subject wall/window. Includes privacy screens, other walls in the building (wing walls), fences, other buildings, vegetation (protected or listed heritage trees).
Window shading device	device fixed to windows that provides shading e.g. window awnings or screens but excludes horizontal* or vertical shading features* (eg eaves and balconies)

* Refer to glossary.