

# Nationwide House Energy Rating Scheme

## NatHERS Certificate No. 0008521510-02

Generated on 27 Mar 2023 using AccuRate Sustainability V2.4.3.21 SP1

### Property

**Address** 7 New Street , Balgowlah Heights , NSW , 2093  
**Lot/DP** Lot 10 DP 9561  
**NCC Class\*** 1a  
**Type** New Home

### Plans

**Main Plan** J1797  
**Prepared by** Atria Designs

### Construction and environment

<b>Assessed floor area (m<sup>2</sup>)*</b>	<b>Exposure Type</b>
Conditioned* 205.7	Suburban
Unconditioned* 60.2	<b>NatHERS climate zone</b>
Total 265.9	56
Garage 43.5	



### Accredited assessor

**Name** Jeremy Moy  
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**Accreditation No.** DMN/15/1685

### Assessor Accrediting Organisation

Design Matters National

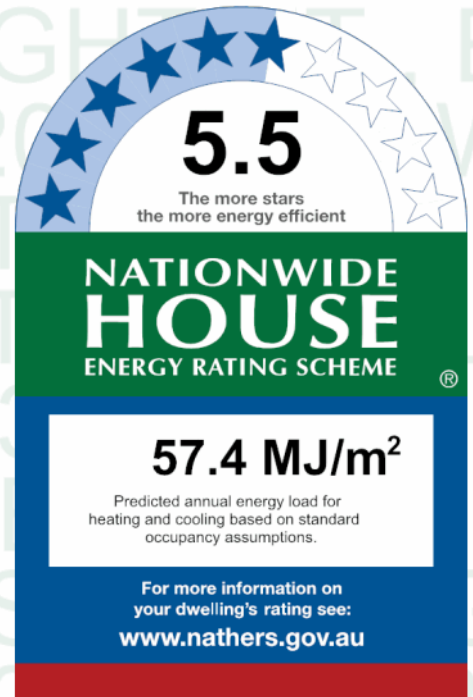
**Declaration of interest** Declaration completed: no conflicts

### National Construction Code (NCC) requirements

The NCC's requirements for NatHERS-rated houses are detailed in 3.12.0(a)(i) and 3.12.5 of the NCC Volume Two. For apartments the requirements are detailed in J0.2 and J5 to J8 of the NCC Volume One.

In NCC 2019, these requirements include minimum star ratings and separate heating and cooling load limits that need to be met by buildings and apartments through the NatHERS assessment. Requirements additional to the NatHERS assessment that must also be satisfied include, but are not limited to: insulation installation methods, thermal breaks, building sealing, water heating and pumping, and artificial lighting requirements. The NCC and NatHERS Heating and Cooling Load Limits (Australian Building Codes Board Standard) are available at [www.abcb.gov.au](http://www.abcb.gov.au).

State and territory variations and additions to the NCC may also apply.



### Thermal performance

<b>Heating</b>	<b>Cooling</b>
<b>34.0</b>	<b>23.4</b>
<b>MJ/m<sup>2</sup></b>	<b>MJ/m<sup>2</sup></b>

### About the rating

NatHERS software models the expected thermal energy loads using information about the design and construction, climate and common patterns of household use. The software does not take into account appliances, apart from the airflow impacts from ceiling fans.

### Verification

To verify this certificate, scan the QR code or visit [hstar.com.au/QR/Generate?p=akiHimGsZ](http://hstar.com.au/QR/Generate?p=akiHimGsZ).

When using either link, ensure you are visiting [hstar.com.au](http://hstar.com.au)





Certificate check

Ensure the dwelling is designed and then built as per the NatHERS Certificate. While you need to check the accuracy of the whole Certificate, the following spot check covers some important items impacting the dwelling’s rating.

Genuine certificate

Does this Certificate match the one available at the web address or QR code in the verification box on the front page? Does the set of NatHERS-stamped plans for the dwelling have a Certificate number on the stamp that matches this Certificate?

Ceiling penetrations\*

Does the ‘number’ and ‘type’ of ceiling penetrations (e.g. downlights, exhaust fans, etc) shown on the stamped plans or installed, match what is shown in this Certificate?

Windows

Does the installed window meet the substitution tolerances (SHGC and U-value) and window type, of the window shown on this Certificate? Substituted values must be based on the Australian Fenestration Rating Council (AFRC) protocol.

Apartment entrance doors

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.

Exposure\*

Has the appropriate exposure level (terrain) been applied? For example, it is unlikely that a ground-floor apartment is “exposed” or a top floor high-rise apartment is “protected”.

Provisional\* values

Have provisional values been used in the assessment and, if so, noted in “additional notes” below?

Additional notes

Lighting - IC rated LEDs.

Roof colour - Lutum tiles 'Slate Satin'

Wall colour - Austral brick 'Sculptured Sands Granite'

Rangehood, bathroom exhaust fans and gas fire place - ducted with 50mm insulation clearance

Substituted custom windows

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
No Data Available					

Custom\* windows

Window ID	Window Description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
VER-003-03 A	Aluminium Double Hung Window SG 6.38CP	4.5	0.48	0.46	0.50

## Custom\* windows

Window ID	Window Description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
WID-011-05 A	Al Architectural Paragon Stacker Door DG 4mm Clear / 6mm Air Gap / 4mm Clear	4.5	0.55	0.52	0.58
WID-010-05 A	Al Architectural Paragon Sliding Door DG 4/6/4	4.5	0.55	0.52	0.58
CAP-040-35 A	Capral 400 Fixed Window SG 6mmLoEi89	4.3	0.63	0.60	0.66

Window and glazed door *schedule*

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orientation	Window shading device*
Kitchen / Dining	VER-003-03 A	W11	2400	2700	Double Hung	30	S	None
Kitchen / Dining	CAP-040-35 A	W10	2400	1300	Other	00	S	None
Kitchen / Dining	WID-011-05 A	D02	2400	4000	Sliding	30	W	None
Kitchen / Dining	CAP-040-35 A	W15	600	1800	Other	00	E	None
Kitchen / Dining	CAP-040-35 A	W14	600	1800	Other	00	E	None
Kitchen / Dining	VER-003-03 A	W13	2400	600	Double Hung	00	E	None
Kitchen / Dining	VER-003-03 A	W12	2400	600	Double Hung	00	E	None
Family	WID-010-05 A	D04	2400	2800	Sliding	45	S	None
Family	VER-003-03 A	W09	2400	900	Double Hung	45	S	None
Family	VER-003-03 A	W08	2400	900	Double Hung	45	N	None
Family	WID-011-05 A	D03	2400	3800	Sliding	30	N	None
Hall	VER-003-03 A	W07	2400	1800	Double Hung	45	W	None
Master Bed	VER-003-03 A	W06	2400	3000	Double Hung	30	S	None
Ens	VER-003-03 A	W05	1800	1600	Double Hung	45	W	None
Study	VER-003-03 A	W04	2100	1200	Double Hung	45	N	None
Study	VER-003-03 A	W03	2100	1200	Double Hung	45	N	None
Entry	CAP-040-35 A	W01	2400	500	Other	00	NW	None
Entry	CAP-040-35 A	W02	2400	500	Other	00	NW	None
Garage	VER-003-03 A	W23	2100	1200	Double Hung	45	N	None
Garage	VER-003-03 A	W22	2100	1200	Double Hung	45	N	None
Garage	VER-003-03 A	W21	2100	1200	Double Hung	45	N	None
Bed 3	VER-003-03 A	W20	1500	2400	Double Hung	30	E	None
WC	VER-003-03 A	W19	1500	900	Double Hung	45	E	None
Bath	VER-003-03 A	W18	1800	1600	Double Hung	22	E	None
Bed 2	VER-003-03 A	W17	1500	2400	Double Hung	30	E	None
Laundry	VER-003-03 A	W16	1500	600	Double Hung	45	E	None



Roof window type and performance

Default\* roof windows

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

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
No Data Available								

Skylight type and performance

Skylight ID	Skylight description
GEN-04-004a	GENERIC_SKYLIGHTS: Double-glazed clear: norma

Skylight schedule

Location	Skylight ID	Skylight No.	Skylight shaft length (mm)	Area (m²)	Orientation	Outdoor shade	Diffuser	Skylight shaft reflectance
Master Bed	GEN-04-004a	SL 1	1000	0.36	W	None	Yes	0.75

External door schedule

Location	Height (mm)	Width (mm)	Opening %	Orientation
Entry	2400	1050	100	NW
Garage	2400	6000	100	W
Laundry	2400	920	100	E

External wall type

Wall ID	Wall type	Solar absorptance	Wall shade (colour)	Bulk insulation (R-value)	Reflective wall wrap*
EW-003	Brick wall	62	Medium		No
EW-013	Brick wall	62	Medium		No
EW-017	Plasterboard	62	Medium	Polystyrene expanded (k = 0.039): R0.4/Glass fibre batt: R2.5	Yes

## External wall *schedule*

Location	Wall ID	Height (mm)	Width (mm)	Orientation	Horizontal shading feature* maximum projection (mm)	Vertical shading feature (yes/no)
Kitchen / Dining	EW-017	2750	5850	S	550	No
Kitchen / Dining	EW-017	2750	4550	W	4450	Yes
Kitchen / Dining	EW-017	2750	10250	E	550	Yes
Family	EW-017	2750	5650	S	550	No
Family	EW-017	2750	5500	W	550	Yes
Family	EW-017	2750	5400	N	550	Yes
Hall	EW-017	2750	2250	W	4450	Yes
Master Bed	EW-017	2750	5400	S	550	Yes
Master Bed	EW-017	2750	3400	W	550	Yes
Ens	EW-017	2750	750	S	550	Yes
Ens	EW-017	2750	3800	W	550	Yes
Study	EW-017	2750	4350	W	550	Yes
Study	EW-017	2750	4300	N	550	Yes
Study	EW-017	2750	1000	NE	2100	Yes
Entry	EW-017	2750	2100	NW	2800	Yes
Garage	EW-003	2750	1000	SW	2100	Yes
Garage	EW-013	2750	6800	W	550	Yes
Garage	EW-003	2750	6500	N	550	No
Garage	EW-003	2750	7600	E	550	Yes
Bed 3	EW-017	2750	3850	E	550	Yes
WC	EW-017	2750	450	N		Yes
WC	EW-017	2750	2100	E		Yes
Bath	EW-017	2750	2400	E		Yes
Bath	EW-017	2750	450	S		Yes
Bed 2	EW-017	2750	3150	E	550	Yes
Laundry	EW-017	2750	2700	E	550	Yes

## Internal wall *type*

Wall ID	Wall type	Area (m <sup>2</sup> )	Bulk insulation
IW-001	Plasterboard	205.70	
IW-002	Brick wall	14.30	

## Floor *type*

Location	Construction	Area Sub-floor (m <sup>2</sup> )	Sub-floor ventilation	Added insulation (R-value)	Covering
Kitchen / Dining/Ground	300mm waffle pod with 85mm slab: tile covering	55.30		R0.6	Ceramic tile

Location	Construction	Area (m <sup>2</sup> )	Sub-floor ventilation	Added insulation (R-value)	Covering
Family/Ground	300mm waffle pod with 85mm slab: tile covering	26.90		R0.6	Ceramic tile
Hall/Ground	300mm waffle pod with 85mm slab: tile covering	21.70		R0.6	Ceramic tile
Master Bed/Ground	300mm waffle pod with 85mm slab: carpet covering	28.40		R0.6	Carpet 10 + felt underlay 10
Ens/Ground	300mm waffle pod with 85mm slab: tile covering	10.20		R0.6	Ceramic tile
Study/Ground	300mm waffle pod with 85mm slab: tile covering	18.80		R0.6	Ceramic tile
Entry/Ground	300mm waffle pod with 85mm slab: tile covering	17.30		R0.6	Ceramic tile
Garage/Ground	Concrete Slab: bare/bare	43.50			
Bed 3/Ground	300mm waffle pod with 85mm slab: carpet covering	13.90		R0.6	Carpet 10 + felt underlay 10
WC/Ground	300mm waffle pod with 85mm slab: tile covering	1.80		R0.6	Ceramic tile
Bath/Ground	300mm waffle pod with 85mm slab: tile covering	6.20		R0.6	Ceramic tile
Bed 2/Ground	300mm waffle pod with 85mm slab: carpet covering	13.20		R0.6	Carpet 10 + felt underlay 10
Laundry/Ground	300mm waffle pod with 85mm slab: tile covering	8.70		R0.6	Ceramic tile
Roof Space/Kitchen / Dining	Plasterboard + R6.0 bulk insulation	55.30		R6.1	
Roof Space/Family	Plasterboard + R6.0 bulk insulation	26.90		R6.1	
Roof Space/Hall	Plasterboard + R6.0 bulk insulation	21.70		R6.1	
Roof Space/Master Bed	Plasterboard + R6.0 bulk insulation	28.40		R6.1	
Roof Space/Ens	Plasterboard + R6.0 bulk insulation	10.20		R6.1	
Roof Space/Study	Plasterboard + R6.0 bulk insulation	18.80		R6.1	
Roof Space/Entry	Plasterboard + R6.0 bulk insulation	17.30		R6.1	
Roof Space/Garage	Plasterboard	43.50			
Roof Space/Bed 3	Plasterboard + R6.0 bulk insulation	13.90		R6.1	
Roof Space/WC	Plasterboard + R6.0 bulk insulation	1.80		R6.1	
Roof Space/Bath	Plasterboard + R6.0 bulk insulation	6.20		R6.1	
Roof Space/Bed 2	Plasterboard + R6.0 bulk insulation	13.20		R6.1	
Roof Space/Laundry	Plasterboard + R6.0 bulk insulation	8.70		R6.1	

## Ceiling type

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap*
Roof Space/Kitchen / Dining	Plasterboard + R6.0 bulk insulation	R6.1	No
Roof Space/Family	Plasterboard + R6.0 bulk insulation	R6.1	No
Roof Space/Hall	Plasterboard + R6.0 bulk insulation	R6.1	No
Roof Space/Master Bed	Plasterboard + R6.0 bulk insulation	R6.1	No
Roof Space/Ens	Plasterboard + R6.0 bulk insulation	R6.1	No
Roof Space/Study	Plasterboard + R6.0 bulk insulation	R6.1	No



Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap*
Roof Space/Entry	Plasterboard + R6.0 bulk insulation	R6.1	No
Roof Space/Garage	Plasterboard		No
Roof Space/Bed 3	Plasterboard + R6.0 bulk insulation	R6.1	No
Roof Space/WC	Plasterboard + R6.0 bulk insulation	R6.1	No
Roof Space/Bath	Plasterboard + R6.0 bulk insulation	R6.1	No
Roof Space/Bed 2	Plasterboard + R6.0 bulk insulation	R6.1	No
Roof Space/Laundry	Plasterboard + R6.0 bulk insulation	R6.1	No

## Ceiling penetrations\*

Location	Quantity	Type	Diameter (mm <sup>2</sup> )	Sealed/unsealed
Kitchen / Dining	1	Ceiling exhaust fan	200	Sealed
Family	1	Ceiling exhaust fan	200	Sealed

## Ceiling fans

Location	Quantity	Diameter (mm)
No Data Available		

## Roof type

Construction	Added insulation (R-value)	Solar absorptance	Roof shade
Tiles + Sarking		78	Dark

## Explanatory notes

### About this report

A NatHERS rating is a comprehensive, dynamic computer modelling evaluation of a home, using the floorplans, elevations and specifications to estimate an energy load. It addresses the building layout, orientation and fabric (i.e. walls, windows, floors, roofs and ceilings), but does not cover the water or energy use of appliances or energy production of solar panels.

Ratings are based on a unique climate zone where the home is located and are generated using standard assumptions, including occupancy patterns and thermostat settings. The actual energy consumption of a home may vary significantly from the predicted energy load, as the assumptions used in the rating will not match actual usage patterns. For example, the number of occupants and personal heating or cooling preferences will vary.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparing different dwelling designs and to demonstrate that the design meets the energy efficiency requirements in the National Construction Code. Homes that are energy efficient use less energy, are warmer on cool days, cooler on hot days and cost less to run. The higher the star rating the more thermally efficient the dwelling is.

### Accredited assessors

To ensure the NatHERS Certificate is of a high quality, always use an accredited or licenced assessor. NatHERS accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

Australian Capital Territory (ACT) licensed assessors may only produce assessments for regulatory purposes using software for which they have a licence endorsement. Licence endorsements can be confirmed on the ACT licensing register

AAOs have specific quality assurance processes in place, and continuing professional development requirements, to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any ongoing training requirements.

Any questions or concerns about this report should be directed to the assessor in the first instance. If the assessor is unable to address these questions or concerns, the AAO specified on the front of this certificate should be contacted.

### Disclaimer

The format of the NatHERS Certificate was developed by the NatHERS Administrator. However the content of each individual certificate is entered and created by the assessor to create a NatHERS Certificate. It is the responsibility of the assessor who prepared this certificate to use NatHERS accredited software correctly and follow the NatHERS Technical Notes to produce a NatHERS Certificate.

The predicted annual energy load in this NatHERS Certificate is an estimate based on an assessment of the building by the assessor. It is not a prediction of actual energy use, but may be used to compare how other buildings 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, indoor air temperature and local climate.

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

## Glossary

<b>Annual energy load</b>	the predicted amount of energy required for heating and cooling, based on standard occupancy assumptions.
<b>Assessed floor area</b>	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.
<b>Ceiling penetrations</b>	features that require a penetration to the ceiling, including downlights, vents, exhaust fans, rangehoods, 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.
<b>Conditioned</b>	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.
<b>Custom windows</b>	windows listed in NatHERS software that are available on the market in Australia and have a WERS (Window Energy Rating Scheme) rating.
<b>Default windows</b>	windows that are representative of a specific type of window product and whose properties have been derived by statistical methods.
<b>Entrance door</b>	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.
<b>Exposure category – exposed</b>	terrain with no obstructions e.g. flat grazing land, ocean-frontage, desert, exposed high-rise unit (usually above 10 floors).
<b>Exposure category – open</b>	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).
<b>Exposure category – suburban</b>	terrain with numerous, closely spaced obstructions below 10m e.g. suburban housing, heavily vegetated bushland areas.
<b>Exposure category – protected</b>	terrain with numerous, closely spaced obstructions over 10m e.g. city and industrial areas.
<b>Horizontal shading feature</b>	provides shading to the building in the horizontal plane, e.g. eaves, verandahs, pergolas, carports, or overhangs or balconies from upper levels.
<b>National Construction Code (NCC) Class</b>	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 <a href="http://www.abcb.gov.au">www.abcb.gov.au</a> .
<b>Opening percentage</b>	the openability percentage or operable (moveable) area of doors or windows that is used in ventilation calculations.
<b>Provisional value</b>	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 <a href="http://www.nathers.gov.au">www.nathers.gov.au</a>
<b>Reflective wrap</b> (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.
<b>Roof window</b>	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.
<b>Shading device</b>	a device fixed to windows that provides shading e.g. window awnings or screens but excludes eaves.
<b>Shading features</b>	includes neighbouring buildings, fences, and wing walls, but excludes eaves.
<b>Solar heat gain coefficient (SHGC)</b>	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.
<b>Skylight</b> (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.
<b>U-value</b>	the rate of heat transfer through a window. The lower the U-value, the better the insulating ability.
<b>Unconditioned</b>	a zone within a dwelling that is assumed to not require heating and cooling based on standard occupancy assumptions.
<b>Vertical shading features</b>	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).