Nationwide House Energy Rating Scheme
NatHERS Certificate No. 0006012967-03

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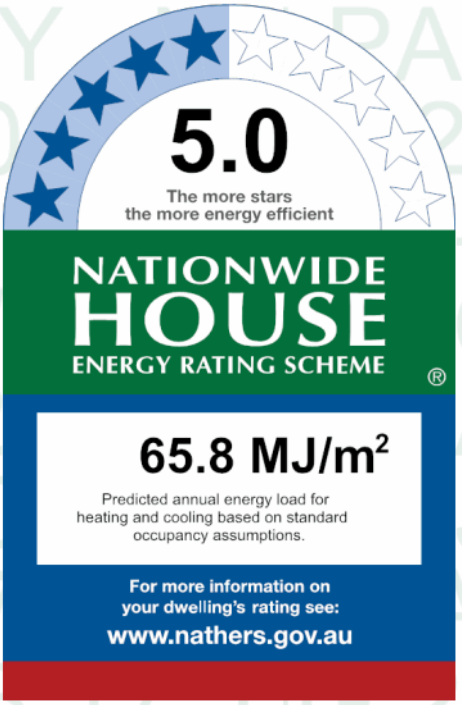

Property

Address	17 Jamieson Parade , Collaroy , NSW , 2097
Lot/DP	21/7392
NCC Class*	1A
Type	New Dwelling

Plans

Main Plan	21-1787
Prepared by	Brianna Emily Design

Construction and environment

Assessed floor area (m^2)*		**Exposure Type**
Conditioned*	246.0	Suburban
Unconditioned*	154.0	**NatHERS climate zone**
Total	401.0	56
Garage	130.0	

Thermal performance

Heating	Cooling
43.1 MJ/m^2	22.7 MJ/m^2

Accredited assessor

Name	Tracey Cools
Business name	Efficient Living Pty Ltd
Email	admin@efficientliving.com.au
Phone	02 9970 6181
Accreditation No.	HERA10033
Assessor Accrediting Organisation	HERA
Declaration of interest	Declaration not completed

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=LfuzhTVpy.
When using either link, ensure you are visiting hstar.com.au

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.

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

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?

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

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
ALM-004-01 A	ALM-004-01 A Aluminium B DG Air Fill Clear-Clear	4.8	0.59	0.56	0.62
ALM-003-01 A	ALM-003-01 A Aluminium A DG Air Fill Clear-Clear	4.8	0.51	0.48	0.54

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*
Studio	ALM-004-01 A	n/a	2600	2400	n/a	00	N	No

* Refer to glossary.

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orientation	Window shading device*
Studio	ALM-004-01 A	n/a	2600	5000	n/a	90	S	No
Studio	ALM-004-01 A	n/a	2600	300	n/a	90	S	No
Studio	ALM-004-01 A	n/a	2600	2000	n/a	00	W	Yes
Bath 1	ALM-004-01 A	n/a	740	750	n/a	90	N	No
Bath 1	ALM-004-01 A	n/a	2600	300	n/a	90	E	No
Entry/living/mu	ALM-004-01 A	n/a	2600	3000	n/a	90	N	No
Entry/living/mu	ALM-004-01 A	n/a	2600	1910	n/a	00	N	No
Entry/living/mu	ALM-004-01 A	n/a	2600	300	n/a	90	N	No
Entry/living/mu	ALM-004-01 A	n/a	2600	600	n/a	90	E	No
Entry/living/mu	ALM-003-01 A	n/a	2700	900	n/a	90	N	No
Entry/living/mu	ALM-004-01 A	n/a	2700	2400	n/a	90	N	No
Entry/living/mu	ALM-004-01 A	n/a	2600	500	n/a	90	S	No
Entry/living/mu	ALM-004-01 A	n/a	2600	1750	n/a	00	S	No
Entry/living/mu	ALM-004-01 A	n/a	1000	350	n/a	90	S	No
Entry/living/mu	ALM-004-01 A	n/a	2600	1200	n/a	00	S	No
Entry/living/mu	ALM-004-01 A	n/a	2600	1860	n/a	00	E	No
Entry/living/mu	ALM-004-01 A	n/a	2600	600	n/a	90	E	No
Entry/living/mu	ALM-004-01 A	n/a	1200	3400	n/a	00	W	Yes
Entry/living/mu	ALM-004-01 A	n/a	500	3400	n/a	90	W	Yes
Entry/living/mu	ALM-004-01 A	n/a	2600	1200	n/a	90	W	No
Entry/living/mu	ALM-004-01 A	n/a	655	2400	n/a	00	E	No Shading
Powder Room	ALM-004-01 A	n/a	500	1800	n/a	90	S	No
Laundry	ALM-004-01 A	n/a	1500	300	n/a	90	S	No
Laundry	ALM-004-01 A	n/a	1500	300	n/a	90	S	No
Laundry	ALM-004-01 A	n/a	2400	900	n/a	00	S	No
Kitchen/Living	ALM-004-01 A	n/a	2700	13500	n/a	90	N	No
Kitchen/Living	ALM-004-01 A	n/a	2180	800	n/a	90	E	No
Kitchen/Living	ALM-004-01 A	n/a	650	2955	n/a	90	S	No
Bedroom 1	ALM-004-01 A	n/a	500	2400	n/a	90	N	No
Bedroom 1	ALM-004-01 A	n/a	1200	1600	n/a	90	E	No
Bedroom 2	ALM-004-01 A	n/a	500	2400	n/a	90	W	Yes
Bedroom 2	ALM-004-01 A	n/a	1200	2400	n/a	00	W	Yes
Bath 2	ALM-004-01 A	n/a	500	2599	n/a	90	W	Yes
Bedroom 3	ALM-004-01 A	n/a	1700	750	n/a	90	E	No
Bedroom 3	ALM-004-01 A	n/a	500	2400	n/a	90	S	No
Bedroom 3	ALM-004-01 A	n/a	1700	800	n/a	30	W	Yes
Hall	ALM-004-01 A	n/a	1700	850	n/a	90	E	No
Hall	ALM-004-01 A	n/a	1700	850	n/a	90	E	No
Hall	ALM-004-01 A	n/a	2400	500	n/a	00	E	No

* Refer to glossary.

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orientation	Window shading device*
Stairs	ALM-004-01 A	n/a	1800	2600	n/a	90	N	No
Stairs	ALM-004-01 A	n/a	2000	350	n/a	90	S	No
Stairs	ALM-004-01 A	n/a	2400	1200	n/a	00	S	No
Master Bed	ALM-004-01 A	n/a	1700	800	n/a	90	N	No
Master Bed	ALM-004-01 A	n/a	1700	800	n/a	90	E	No
Master Bed	ALM-004-01 A	n/a	500	1600	n/a	90	E	No
Master Bed	ALM-004-01 A	n/a	1200	1600	n/a	00	E	No
Master Bed	ALM-004-01 A	n/a	1700	600	n/a	90	W	No
Ensuite	ALM-004-01 A	n/a	500	3200	n/a	90	S	No
Pantry	ALM-003-01 A	n/a	2300	750	n/a	90	S	No

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
VEL-011-01 W	Glass	2.6	0.24	0.23	0.25

Roof window *schedule*

Location	Window ID	Window no.	Opening %	Height (mm)	Width (mm)	Orientation	Outdoor shade	Indoor shade
Bath 2	VEL-011-01 W	n/a	0	400	2700	N	No	No
Ensuite	VEL-011-01 W	n/a	0	400	3300	N	No	No

Skylight *type and performance*

Skylight ID	Skylight description
No Data Available	

Skylight *schedule*

Location	Skylight ID	Skylight No.	Skylight shaft length (mm)	Area (m^2)	Orientation	Outdoor shade	Diffuser	Skylight shaft reflectance
No Data Available								

External door *schedule*

Location	Height (mm)	Width (mm)	Opening %	Orientation
Garage 1	2040	820	90	E
Garage 1	2040	5500	90	W

External wall *type*

Wall ID	Wall type	Solar absorptance	Wall shade (colour)	Bulk insulation (R-value)	Reflective wall wrap*
EW-1	Tilt up Concrete	0.30	Light	No insulation	No
EW-2	Tilt up Concrete	0.30	Light	No insulation	No
EW-3	Cavity Brick	0.30	Light	Foil reflective both sides of the Bulk Insulation R1.2	Yes
EW-4	Fibro Cavity Panel Direct Fix	0.30	Light	Bulk Insulation R2.7	No

External wall *schedule*

Location	Wall ID	Height (mm)	Width (mm)	Orientation	Horizontal shading feature* maximum projection (mm)	Vertical shading feature (yes/no)
Garage 1	EW-1	2250	9900	N	0	NO
Garage 1	EW-1	2250	2500	E	0	NO
Garage 1	EW-2	2250	4000	E	0	YES
Garage 1	EW-1	2250	2110	N	0	YES
Garage 1	EW-1	2250	5500	E	0	NO
Garage 1	EW-1	2250	11600	S	0	NO
Garage 1	EW-2	2250	5800	W	375	YES
Garage 1	EW-1	2250	400	S	5800	YES
Garage 1	EW-1	2250	6400	W	25	NO
Studio	EW-3	2700	10495	N	0	NO
Studio	EW-3	2700	9728	S	2784	NO
Studio	EW-3	2700	3600	W	1500	NO
Bath 1	EW-4	2700	995	N	0	NO
Bath 1	EW-4	2700	2650	E	0	NO
Bath 1	EW-4	2700	1801	S	2886	NO
Entry/living/mu	EW-3	2700	7628	N	727	NO
Entry/living/mu	EW-3	2700	1204	N	1105	NO
Entry/living/mu	EW-3	2700	1150	E	3500	YES
Entry/living/mu	EW-3	2700	4845	N	75	YES
Entry/living/mu	EW-3	2700	4145	S	850	YES
Entry/living/mu	EW-4	2700	1950	S	0	NO
Entry/living/mu	EW-4	2700	2850	W	1500	YES
Entry/living/mu	EW-3	2700	1500	S	0	YES

Location	Wall ID	Height (mm)	Width (mm)	Orientation	Horizontal shading feature* maximum projection (mm)	Vertical shading feature (yes/no)
Entry/living/mu	EW-3	2700	2850	E	1500	YES
Entry/living/mu	EW-3	2700	4000	S	850	NO
Entry/living/mu	EW-3	2700	5500	W	275	NO
Entry/living/mu	EW-3	2700	1983	NE	7516	YES
Entry/living/mu	EW-3	2700	950	N	7900	YES
Entry/living/mu	EW-3	2700	1012	NE	1879	YES
Entry/living/mu	EW-3	2700	1477	W	5798	YES
Powder Room	EW-3	2700	1895	S	0	NO
Powder Room	EW-3	2700	850	W	3800	YES
Laundry	EW-3	2700	2390	S	0	NO
Kitchen/Living	EW-3	2700	14450	N	1100	NO
Kitchen/Living	EW-3	2700	4750	E	0	NO
Kitchen/Living	EW-3	2700	14445	S	0	NO
Kitchen/Living	EW-3	2700	600	W	1350	YES
Bedroom 1	EW-4	2600	4400	N	0	NO
Bedroom 1	EW-4	2600	3045	E	800	NO
Bedroom 1	EW-4	2600	3045	W	0	NO
Bedroom 2	EW-4	2600	4190	W	0	NO
Bath 2	EW-4	2600	2590	W	0	NO
Bedroom 3	EW-4	2600	3045	E	1500	NO
Bedroom 3	EW-4	2600	4400	S	0	NO
Bedroom 3	EW-4	2600	3045	W	0	NO
Hall	EW-4	2600	4595	E	800	YES
Hall	EW-4	2600	645	E	1500	YES
Stairs	EW-4	2600	3840	N	800	YES
Stairs	EW-4	2600	2345	S	0	YES
Stairs	EW-4	2600	2850	W	1500	YES
Stairs	EW-4	2600	1495	S	0	YES
Master Bed	EW-4	2600	2950	N	0	NO
Master Bed	EW-4	2600	1600	N	0	NO
Master Bed	EW-4	2600	5045	E	0	NO
Master Bed	EW-4	2600	1050	W	8250	YES
Ensuite	EW-4	2600	1245	E	0	NO
Ensuite	EW-4	2600	4550	S	0	NO
Ensuite	EW-4	2600	850	W	3850	YES
Pantry	EW-3	2700	1740	S	0	NO

* Refer to glossary.

Internal wall *type*

Wall ID	Wall type	Area (m^2)	Bulk insulation
IW-1 - Cavity wall, direct fix plasterboard, single gap		52.00	Bulk Insulation, No Air Gap R2
IW-2 - Cavity wall, direct fix plasterboard, single gap		76.00	No insulation
IW-3 - Cavity Brick		6.00	No insulation

Floor *type*

Location	Construction	Area (m^2)	Sub-floor ventilation	Added insulation (R-value)	Covering
Garage 1	Concrete Slab on Ground 300mm	130.20	None	No Insulation	Bare
Studio/Garage 1	Rendered Concrete 300mm	30.30		Bulk Insulation R2.5	Bare
Studio	Suspended Concrete Slab 300mm	1.60	Enclosed	Bulk Insulation in Contact with Floor R1.4	Bare
Bath 1	Suspended Concrete Slab 300mm	3.70	Enclosed	Bulk Insulation in Contact with Floor R1.4	Bare
Entry/living/mu/Garage 1	Rendered Concrete 300mm	49.70		Bulk Insulation R2.5	Bare
Entry/living/mu	Concrete Slab on Ground 300mm	9.30	None	Bulk Insulation in Contact with Floor R1.4	Bare
Powder Room	Concrete Slab on Ground 300mm	5.40	None	Bulk Insulation in Contact with Floor R1.4	Bare
Laundry	Concrete Slab on Ground 300mm	6.90	None	Bulk Insulation in Contact with Floor R1.4	Bare
Kitchen/Living	Concrete Slab on Ground 300mm	68.50	None	Bulk Insulation in Contact with Floor R1.4	Bare
Bedroom 1/Studio	Rendered Concrete 300mm	8.80		No Insulation	Bare
Bedroom 1	Suspended Concrete Slab 300mm	4.40	Totally Open	No Insulation	Bare
Bedroom 2/Studio	Rendered Concrete 300mm	3.50		No Insulation	Bare
Bedroom 2	Suspended Concrete Slab 300mm	8.90	Totally Open	No Insulation	Bare
Bath 2/Entry/living/mu	Rendered Concrete 300mm	6.30		No Insulation	Bare
Bath 2	Suspended Concrete Slab 300mm	1.50	Totally Open	No Insulation	Bare
Bedroom 3/Entry/living/mu	Rendered Concrete 300mm	8.70		No Insulation	Bare
Bedroom 3	Suspended Concrete Slab 300mm	4.60	Totally Open	No Insulation	Bare
Hall/Studio	Rendered Concrete 300mm	1.30		No Insulation	Bare
Hall/Entry/living/mu	Rendered Concrete 300mm	2.40		No Insulation	Bare
Hall	Suspended Concrete Slab 300mm	4.30	Totally Open	No Insulation	Bare
Stairs/Entry/living/mu	Rendered Concrete 200mm	12.40		No Insulation	Bare
Master Bed/Entry/living/mu	Rendered Concrete 300mm	17.70		No Insulation	Bare
Master Bed/Powder Room	Rendered Concrete 300mm	1.30		No Insulation	Bare
Master Bed	Suspended Concrete Slab 300mm	3.50	Totally Open	No Insulation	Bare
Ensuite/Entry/living/mu	Rendered Concrete 300mm	1.50		No Insulation	Bare
Ensuite/Powder Room	Rendered Concrete 300mm	0.90		No Insulation	Bare
Ensuite	Suspended Concrete Slab 300mm	3.10	Totally Open	No Insulation	Bare
Pantry	Concrete Slab on Ground 300mm	5.00	None	Bulk Insulation in Contact with Floor R1.4	Bare

Ceiling *type*

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap*
Garage 1	Concrete	Bulk Insulation R2.5	No
Garage 1	Rendered Concrete	Bulk Insulation R2.5	No
Studio	Plasterboard	Bulk Insulation R2.5	No
Studio	Rendered Concrete	No Insulation	No
Bath 1	Plasterboard	Bulk Insulation R2.5	No
Entry/living/mu	Plasterboard	Bulk Insulation R2.5	No
Entry/living/mu	Rendered Concrete	No Insulation	No
Powder Room	Plasterboard	Bulk Insulation R2.5	No
Powder Room	Rendered Concrete	No Insulation	No
Laundry	Plasterboard	Bulk Insulation R2.5	No
Kitchen/Living	Plasterboard	Bulk Insulation R2.5	No
Bedroom 1	Plasterboard	Bulk Insulation R2.5	No
Bedroom 2	Plasterboard	Bulk Insulation R2.5	No
Bath 2	Plasterboard	Bulk Insulation R2.5	No
Bedroom 3	Plasterboard	Bulk Insulation R2.5	No
Hall	Plasterboard	Bulk Insulation R2.5	No
Stairs	Plasterboard	Bulk Insulation R2.5	No
Master Bed	Plasterboard	Bulk Insulation R2.5	No
Ensuite	Plasterboard	Bulk Insulation R2.5	No
Pantry	Plasterboard	Bulk Insulation R2.5	No

Ceiling *penetrations**

Location	Quantity	Type	Diameter (mm^2)	Sealed/unsealed
Studio	12	Downlights - LED	50	Sealed
Bath 1	1	Downlights - LED	150	Sealed
Bath 1	1	Exhaust Fans	150	Sealed
Entry/living/mu	10	Downlights - LED	50	Sealed
Powder Room	2	Downlights - LED	50	Sealed
Powder Room	1	Exhaust Fans	50	Sealed
Laundry	2	Downlights - LED	50	Sealed
Laundry	1	Exhaust Fans	50	Sealed
Kitchen/Living	10	Downlights - LED	50	Sealed
Kitchen/Living	1	Exhaust Fans	50	Sealed
Bedroom 1	4	Downlights - LED	50	Sealed
Bedroom 2	4	Downlights - LED	50	Sealed
Bath 2	2	Downlights - LED	50	Sealed

* Refer to glossary.

Location	Quantity	Type	Diameter (mm)	Sealed/unsealed
Bath 2	1	Exhaust Fans	50	Sealed
Bedroom 3	4	Downlights - LED	50	Sealed
Hall	3	Downlights - LED	50	Sealed
Stairs	4	Downlights - LED	50	Sealed
Master Bed	8	Downlights - LED	50	Sealed
Ensuite	2	Downlights - LED	50	Sealed
Ensuite	1	Exhaust Fans	50	Sealed
Pantry	2	Downlights - LED	50	Sealed

Ceiling *fans*

Location	Quantity	Diameter (mm)
Studio	2	1400
Entry/living/mu	2	1200
Kitchen/Living	2	1400
Bedroom 1	1	1200
Bedroom 2	1	1200
Bedroom 3	1	1200
Master Bed	1	1200

Roof *type*

Construction	Added insulation (R-value)	Solar absorptance	Roof shade
Waterproofing Membrane	No Insulation, Only an Air Gap	0.50	Medium
Corrugated Iron	No Added Insulation, No air Gap	0.50	Medium
Corrugated Iron	No Added Insulation, No air Gap	0.50	Medium

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

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, 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.
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.
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 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 – suburban	terrain with numerous, closely spaced obstructions below 10m e.g. suburban housing, heavily vegetated bushland areas.
Exposure category – protected	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.
Opening percentage	the openability 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
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 device	a device fixed to windows that provides shading e.g. window awnings or screens but excludes eaves.
Shading features	includes neighbouring buildings, fences, and wing walls, but excludes eaves.
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.
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.
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).