Nationwide House Energy Rating Scheme
NatHERS Certificate No. #HR-YQJ27D-01

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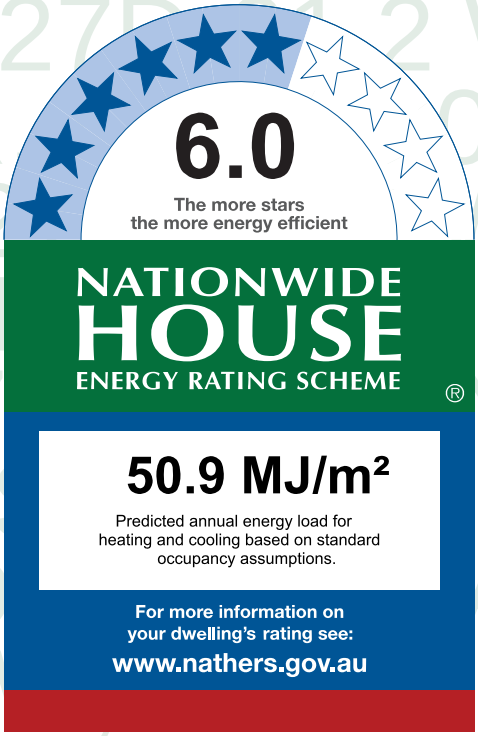

Property

Address	2 Wyadra Avenue, Freshwater, NSW, 2096
Lot/DP	Lot 202/ DP 1224100
NCC Class*	1a
Type	New

Plans

Main Plan	1 DA Issue dated 15/3/22
Prepared by	peter stutchbury architecture

Construction and environment

Assessed floor area (m²)*		**Exposure Type**
Conditioned*	174.6	Exposed
Unconditioned*	10.7	**NatHERS climate zone**
Total	185.2	56 - Mascot AMO
Garage	0.0	

Accredited assessor

Name	John Caley
Business name	Ecological Design
Email	john@ecologicaldesign.com.au
Phone	+61 418262706
Accreditation No.	20570
Assessor Accrediting Organisation	ABSA
Declaration of interest	Conflict of Interest (Managed)

Thermal Performance

Heating	Cooling
27.4 MJ/m²	23.4 MJ/m²

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 http://www.hero-software.com.au/pdf/HR-YQJ27D-01. When using either link, ensure you are visiting http://www.hero-software.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.

* Refer to glossary.

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

The assessor has provided design advice to the client

Window and glazed door *type and performance*

Default* windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
TIM-001-01 W	Timber A SG Clear	5.40	0.56	0.53	0.59

Custom* windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
A&L-025-05 A	Al Boutique Fixed Lite Window SG 4EA	3.83	0.64	0.61	0.67
BRD-108-08 A	Signature Fixed Lite INT 100TB DG 4mmET/12Ar/4mmClr	2.07	0.56	0.53	0.59
CTD-008-05 W	Westech Series 7400 uPVC Sliding Window DG 4-14-4EA (Pilk Shanghai & Pilk NAm)	2.00	0.57	0.54	0.60
SSW-022-10 A	300 SERIES - ALUMINIUM SLIDING DOOR DG 4-10Ar-4	3.71	0.64	0.61	0.67
STG-051-04 W	Siteline Clad-Tim Clad w Al Casement DG 9802/2/9802 --- 4mm Clear / 12mm Argon Gap / 4	2.72	0.55	0.52	0.58

* Refer to glossary.

Window and glazed door *schedule*

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orient-ation	Shading device*
Bathroom	CTD-008-05 W	F2.15	2400	2769	Sliding	45	N	None
Bed 4 robe	CTD-008-05 W	F2.13	2400	1500	Sliding	90	S	None
Bed_4	CTD-008-05 W	F2.9	2400	1450	Sliding	90	N	None
Bed_4	A&L-025-05 A	F2.8	2400	2777	Fixed	0	E	None
Bedroom_1	CTD-008-05 W	F2.34	1500	1432	Sliding	45	E	None
Bedroom_1	A&L-025-05 A	F1.11&F1.12	2400	3210	Fixed	0	ESE	None
Bedroom_1	SSW-022-10 A	F2.28	2400	1550	Sliding	90	ESE	None
Bedroom_2	SSW-022-10 A	F2.25	2400	1580	Sliding	90	ESE	None
Bedroom_2	A&L-025-05 A	F2.26	2400	1650	Fixed	0	ESE	None
Bedroom_2	SSW-022-10 A	F2.24	2400	1200	Sliding	50	S	None
Bedroom_2	BRD-108-08 A	F2.24 fixed	2400	650	Fixed	0	S	None
Bedroom_3	CTD-008-05 W	F2.20	2400	2174	Sliding	90	S	None
Bedroom_3	CTD-008-05 W	F2.21	2400	2750	Sliding	45	E	None
Ens_shower	CTD-008-05 W	F2.35	2400	1000	Sliding	90	N	None
Ens_shower	CTD-008-05 W	F2.34	2400	1405	Sliding	45	E	None
Hall	CTD-008-05 W	F2.14	300	2763	Sliding	50	W	None
Hall	A&L-025-05 A	F2.7	300	1000	Fixed	0	N	None
Hall	STG-051-04 W	F2.22	2700	1000	Pivot	80	S	None
Kitchen/Living/dining/TV /study	CTD-008-05 W	F1.6	3220	2745	Sliding	45	W	None
Kitchen/Living/dining/TV /study	CTD-008-05 W	F1.3	3220	2055	Sliding	45	N	None
Kitchen/Living/dining/TV /study	CTD-008-05 W	F1.2	3220	2858	Sliding	45	E	None
Kitchen/Living/dining/TV /study	CTD-008-05 W	F1.1	3220	3531	Sliding	60	N	None
Kitchen/Living/dining/TV /study	SSW-022-10 A	F1.9 sliding	3220	1200	Sliding	90	S	None
Kitchen/Living/dining/TV /study	BRD-108-08 A	F1.9 fixed	3220	650	Fixed	0	S	None
Kitchen/Living/dining/TV /study	A&L-025-05 A	F1.14	3220	1575	Fixed	0	E	None
Kitchen/Living/dining/TV /study	A&L-025-05 A	F1.11&F1.12	3220	3195	Fixed	0	ESE	None

* Refer to glossary.

Window and glazed door *schedule*

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orient-ation	Shading device*
Kitchen/Living/dining/TV /study	SSW-022-10 A	F1.10	3220	1631	Sliding	90	ESE	None
Kitchen/Living/dining/TV /study	SSW-022-10 A	F1.10	3220	3239	Sliding	90	ESE	None
Kitchen/Living/dining/TV /study	A&L-025-05 A	F1.13	3220	1515	Fixed	0	E	None
Laundry	CTD-008-05 W	F1.8	2510	987	Sliding	90	S	None
Kitchen/Living/dining/TV /study	TIM-001-01 W	internal to void	2400	2946	Fixed	0	W	None
Kitchen/Living/dining/TV /study	A&L-025-05 A	F2.1	2400	3550	Fixed	0	N	None
Kitchen/Living/dining/TV /study	A&L-025-05 A	F1.14	2400	1496	Fixed	0	E	None
Kitchen/Living/dining/TV /study	A&L-025-05 A	F1.13	2400	1456	Fixed	0	E	None

Roof window *type and performance value*

Default* roof windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
DG-Generic-02 A	Clear Al DG DEFAULT ROOF WINDOW System 02	4.22	0.72	0.68	0.76

Custom* roof windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
None					

Roof window *schedule*

Location	Window ID	Window no.	Opening %	Height (mm)	Width (mm)	Orient-ation	Outdoor shade	Indoor shade
Bathroom	DG-Generic-02 A	SKYRW 04	0	903	903	N	OP-70%	None
Hall	DG-Generic-02 A	SKYRW 06	0	1011	8712	W	OP-70%	None
Kitchen/Living/dining /TV/study	DG-Generic-02 A	SKYRW 05	0	1061	1061	E	OP-70%	None
WC_ensuite	DG-Generic-02 A	SKYRW 02	0	903	903	S	OP-70%	None

Skylight *type and performance*

Skylight ID	Skylight description
None	

* Refer to glossary.

Skylight *schedule*

Location	Skylight ID	Skylight No.	Skylight shaft length (mm)	Area (m^2)	Orient-ation	Outdoor shade	Diffuser	Shaft Reflectance
None								

External door *schedule*

Location	Height (mm)	Width (mm)	Opening %	Orientation
Bathroom	2400	370	90	W
Bed 4 robe	2400	330	90	W
Bed_4	2400	330	90	W
Bedroom_3	2400	330	90	W
Hall	2700	1000	90	N
WC_ensuite	2400	890	90	N

External wall *type*

Wall ID	Wall Type	Solar absorptance	Wall Colour	Bulk insulation (R-value)	Reflective wall wrap*
CFC-NONREFL-CAV-HW	CFC-NONREFL-CAV-HW: Fibre-Cement Clad Battened (Non-Refl Cavity) Stud Wall Hardwood lined	0.50	Medium	2.70	No
CONC-150	CONC-150: 150mm Concrete - exposed Internally	0.50	Medium	0.00	No
CONC-200-INSL-CFC	CONC-200-INSL-CFC: 200mm Concrete - exposed Internally- CFC -over 30mm foam board externally	0.50	Medium	1.07	No
HW-NONREFL-CAV-HW	HW-NONREFL-CAV-HW: Hardwood Battened (Non-Refl Cavity) hardwood timber lined Stud Wall	0.50	Medium	2.70	No

External wall *schedule*

Location	Wall ID	Height (mm)	Width (mm)	Orient-ation	Horizontal shading feature* projection (mm)	Vertical shading feature
Bathroom	CONC-150	2770	1603	W		Yes
Bathroom	CONC-150	2400	2994	N		Yes
Bed 4 robe	CFC-NONREFL-CAV-HW	2400	2766	W		Yes
Bed 4 robe	HW-NONREFL-CAV-HW	2400	3096	S		Yes
Bed_4	CFC-NONREFL-CAV-HW	2400	2818	W		Yes
Bed_4	HW-NONREFL-CAV-HW	2400	3201	N	8895	Yes
Bed_4	HW-NONREFL-CAV-HW	2400	2818	E		Yes

* Refer to glossary.

External wall *schedule*

Location	Wall ID	Height (mm)	Width (mm)	Orient-ation	Horizontal shading feature* projection (mm)	Vertical shading feature
Bed_4	HW-NONREFL-CAV-HW	2400	105	S		Yes
Bedroom_1	HW-NONREFL-CAV-HW	2400	101	N		Yes
Bedroom_1	HW-NONREFL-CAV-HW	2400	108	W		Yes
Bedroom_1	HW-NONREFL-CAV-HW	2400	1486	E	3836	Yes
Bedroom_1	HW-NONREFL-CAV-HW	2400	3213	ESE	663	No
Bedroom_1	HW-NONREFL-CAV-HW	2400	1588	ESE	439	No
Bedroom_1	CONC-150	2400	1486	W		Yes
Bedroom_2	HW-NONREFL-CAV-HW	2400	57	S		Yes
Bedroom_2	HW-NONREFL-CAV-HW	2400	4818	ESE	419	No
Bedroom_2	HW-NONREFL-CAV-HW	2400	2878	S	514	No
Bedroom_2	CONC-200-INSL-CFC	2400	3082	W		Yes
Bedroom_2	HW-NONREFL-CAV-HW	2400	49	W		Yes
Bedroom_3	CFC-NONREFL-CAV-HW	2400	2829	W		Yes
Bedroom_3	HW-NONREFL-CAV-HW	2400	3096	S	471	No
Bedroom_3	CONC-150	2400	3082	E		Yes
Bedroom_3	CFC-NONREFL-CAV-HW	2400	101	N		Yes
Bedroom_3	CFC-NONREFL-CAV-HW	2400	1006	W		Yes
Bedroom_3	CONC-150	2400	250	W		Yes
Ens_shower	CONC-150	2400	1412	W		Yes
Ens_shower	HW-NONREFL-CAV-HW	2400	1607	N	1795	Yes
Ens_shower	HW-NONREFL-CAV-HW	2400	1412	E	3836	Yes
Hall	HW-NONREFL-CAV-HW	2400	88	S		Yes
Hall	HW-NONREFL-CAV-HW	2400	3007	W		Yes
Hall	HW-NONREFL-CAV-HW	2700	1144	N	870	Yes
Hall	HW-NONREFL-CAV-HW	2700	1056	S		Yes
Hall	HW-NONREFL-CAV-HW	2400	217	W		Yes

* Refer to glossary.

External wall *schedule*

Location	Wall ID	Height (mm)	Width (mm)	Orient-ation	Horizontal shading feature* projection (mm)	Vertical shading feature
Kitchen/Living/dining/TV /study	CONC-150	2510	2751	W		No
Kitchen/Living/dining/TV /study	CONC-150	2510	360	N		Yes
Kitchen/Living/dining/TV /study	CONC-150	3220	3006	W		Yes
Kitchen/Living/dining/TV /study	HW-NONREFL-CAV-HW	3220	2655	N	1795	Yes
Kitchen/Living/dining/TV /study	HW-NONREFL-CAV-HW	3220	2911	E	3824	Yes
Kitchen/Living/dining/TV /study	HW-NONREFL-CAV-HW	3220	3627	N	4704	Yes
Kitchen/Living/dining/TV /study	HW-NONREFL-CAV-HW	3220	2882	S	689	No
Kitchen/Living/dining/TV /study	HW-NONREFL-CAV-HW	2510	56	W		Yes
Kitchen/Living/dining/TV /study	HW-NONREFL-CAV-HW	3220	1575	E	768	No
Kitchen/Living/dining/TV /study	HW-NONREFL-CAV-HW	3220	3218	ESE	660	No
Kitchen/Living/dining/TV /study	HW-NONREFL-CAV-HW	3220	6427	ESE	395	No
Kitchen/Living/dining/TV /study	HW-NONREFL-CAV-HW	3220	1515	E	755	No
Kitchen/Living/dining/TV /study	CONC-150	710	2754	W		No
Kitchen/Living/dining/TV /study	CONC-150	710	2570	W		No
Kitchen/Living/dining/TV /study	CONC-150	3220	68	W		Yes
Kitchen/Living/dining/TV /study	CONC-150	3220	248	N		Yes
Laundry	CFC-NONREFL-CAV-HW	2510	2754	W		No
Laundry	CONC-150	2510	1600	S		No
Kitchen/Living/dining/TV /study	HW-NONREFL-CAV-HW	2400	3551	N	4763	Yes
Kitchen/Living/dining/TV /study	HW-NONREFL-CAV-HW	2400	1496	E	736	No
Kitchen/Living/dining/TV /study	HW-NONREFL-CAV-HW	2400	1465	E		No
WC_ensuite	CONC-150	2400	917	N	698	Yes
WC_ensuite	CONC-150	2400	121	W		Yes
WC_ground	CONC-150	3220	67	E		Yes

* Refer to glossary.

Internal wall *type*

Wall ID	Wall Type	Area (m^2)	Bulk insulation
CFC-NONREFL-CAV-HW	Fibre-Cement Clad Battened (Non-Refl Cavity) Stud Wall Hardwood lined	8.9	2.70
CONC-200	Precast 200mm Concrete - exposed Internally	35.5	0.00
CONC-200	Precast 200mm Concrete - exposed Internally	2.2	2.00
INT-HW	Internal Hardwood clad Stud Wall	40.2	2.00

Floor *type*

Location	Construction	Area (m^2)	Sub-floor ventilation	Added insulation (R-value)	Covering
Bathroom	SUSP-CONC-200: Suspended Concrete Slab Floor (200mm)	0.6	N/A	0.00	Timber
Bathroom	SUSP-CONC-200: Suspended Concrete Slab Floor (200mm)	3.9	Enclosed (Disc.)	2.00	Exposed
Bed 4 robe	SUSP-CONC-200: Suspended Concrete Slab Floor (200mm)	8.6	Enclosed (Disc.)	2.00	Exposed
Bed_4	SUSP-CONC-200: Suspended Concrete Slab Floor (200mm)	9.0	N/A	2.00	Exposed
Bedroom_1	TIMB-001: Suspended Timber Floor	30.4	N/A	1.00	Timber
Bedroom_2	TIMB-001: Suspended Timber Floor	17.4	N/A	1.00	Timber
Bedroom_3	SUSP-CONC-200: Suspended Concrete Slab Floor (200mm)	1.4	N/A	0.00	Timber
Bedroom_3	SUSP-CONC-200: Suspended Concrete Slab Floor (200mm)	11.7	N/A	2.00	Timber
Ens_shower	TIMB-001: Suspended Timber Floor	2.3	N/A	1.00	Timber
Hall	SUSP-CONC-200: Suspended Concrete Slab Floor (200mm)	2.7	N/A	0.00	Timber
Hall	SUSP-CONC-200: Suspended Concrete Slab Floor (200mm)	1.1	N/A	2.00	Timber
Hall	TIMB-001: Suspended Timber Floor	11.0	N/A	1.00	Timber
Kitchen/Living/dining/TV /study	CSOG-150: Concrete Slab on Ground (150mm)	80.3	N/A	2.00	Exposed
Laundry	CSOG-150: Concrete Slab on Ground (150mm)	4.4	N/A	2.00	Exposed
WC_ensuite	TIMB-001: Suspended Timber Floor	1.3	N/A	1.00	Timber
WC_ground	CSOG-150: Concrete Slab on Ground (150mm)	1.8	N/A	2.00	Exposed

* Refer to glossary.

Ceiling *type*

Location	Construction	Bulk insulation (R-value)	Reflective wrap*
Bathroom	SLAB-200-EXP-01: Concrete Slab (200mm) with Exposed Concrete Ceiling	0.00	No
Bed 4 robe	SLAB-200-EXP-01: Concrete Slab (200mm) with Exposed Concrete Ceiling	0.00	No
Bed_4	SLAB-200-EXP-01: Concrete Slab (200mm) with Exposed Concrete Ceiling	0.00	No
Bedroom_1	SLAB-200-EXP-01: Concrete Slab (200mm) with Exposed Concrete Ceiling	0.00	No
Bedroom_2	SLAB-200-EXP-01: Concrete Slab (200mm) with Exposed Concrete Ceiling	0.00	No
Bedroom_3	SLAB-200-EXP-01: Concrete Slab (200mm) with Exposed Concrete Ceiling	0.00	No
Ens_shower	SLAB-200-EXP-01: Concrete Slab (200mm) with Exposed Concrete Ceiling	0.00	No
Hall	SLAB-200-EXP-01: Concrete Slab (200mm) with Exposed Concrete Ceiling	0.00	No
Kitchen/Living/dining/TV/study	SLAB-200-EXP-01: Concrete Slab (200mm) with Exposed Concrete Ceiling	0.00	No
Laundry	SLAB-200-EXP-01: Concrete Slab (200mm) with Exposed Concrete Ceiling	0.00	No
WC_ensuite	SLAB-200-EXP-01: Concrete Slab (200mm) with Exposed Concrete Ceiling	0.00	No

Ceiling *penetrations**

Location	Quantity	Type	Diameter (mm)	Sealed /unsealed
Bathroom	1	Downlight	200	Sealed
Bathroom	1	Exhaust Fan	350	Sealed
Bed 4 robe	2	Downlight	200	Sealed
Bed_4	2	Downlight	200	Sealed
Bedroom_1	7	Downlight	200	Sealed
Bedroom_2	3	Downlight	200	Sealed
Bedroom_3	2	Downlight	200	Sealed
Ens_shower	1	Downlight	200	Sealed
Ens_shower	1	Exhaust Fan	350	Sealed
Hall	3	Downlight	200	Sealed
Kitchen/Living/dining/TV/study	9	Downlight	200	Sealed
Kitchen/Living/dining/TV/study	1	Exhaust Fan	350	Sealed

* Refer to glossary.

Ceiling *penetrations**

Location	Quantity	Type	Diameter (mm)	Sealed /unsealed
Laundry	1	Downlight	200	Sealed
Void	2	Downlight	200	Sealed
WC_ensuite	1	Downlight	200	Sealed
WC_ensuite	1	Exhaust Fan	350	Sealed
WC_ground	1	Downlight	200	Sealed
WC_ground	1	Exhaust Fan	350	Sealed

Ceiling *fans*

Location	Quantity	Diameter (mm)
Bed 4 robe	1	1200
Bed_4	1	1200
Bedroom_1	1	1200
Bedroom_2	1	1200
Bedroom_3	1	1200
Kitchen/Living/dining/TV/study	2	1200

Roof *type*

Construction	Added insulation (R-value)	Solar absorptance	Roof Colour
SLAB-200-EXP-01: Concrete Slab (200mm) with Exposed Concrete Ceiling	2.68	0.30	Light

* Refer to glossary.

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).

* Refer to glossary.