Nationwide House Energy Rating Scheme
NatHERS Certificate No. SO11807AWB

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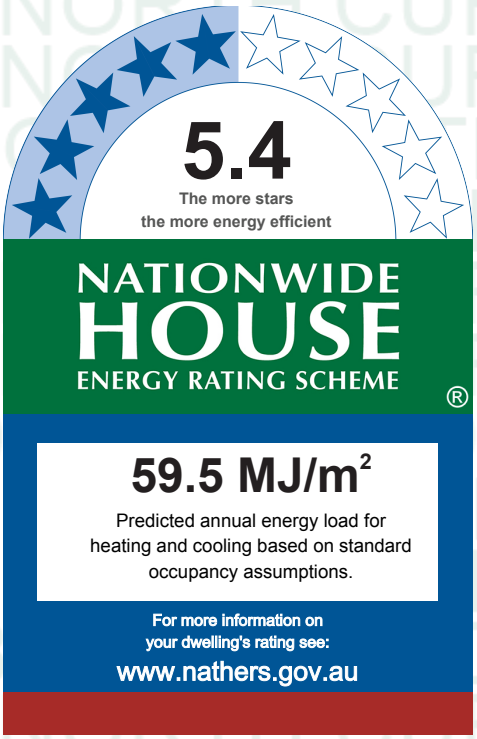

Property

Address	128 Headland Road, North Curl Curl, NSW, 2099
Lot/DP	1/772311
NCC Class*	Class 1a
Type	New Home

Plans

Main plan	2020.04 / Rev.A / 26.08.2020
Prepared by	AWB

Construction and environment

Assessed floor area (m²)*		**Exposure type**
Conditioned*	307.1	suburban
Unconditioned*	27.8	**NatHERS climate zone**
Total	334.9	56, North Curl Curl
Garage	-	

Thermal performance

Heating	Cooling
41.1	**18.4**
MJ/m²	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.

Accredited assessor

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Accreditation No.	HERA10042
Assessor Accrediting Organisation	HERA
Declaration of interest	Declaration completed: no conflicts

Verification

To verify this certificate, scan the QR code or visit https://www.fr5.com.au/QRCodeLanding?PublicId=SO11807AWB When using either link, ensure you are visiting www.FR5.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

Default ceiling penetration density calculated as lighting plan has not been provided. All openable windows other than located on ground floor or are louvre type (if applicable)are assumed to be fully openable as safety devices (STEEL MESH) are in place. If these are not in place then this Nathers must be revised.

Window and glazed door *type and performance*

Default* windows

				Substitution tolerance ranges	
Window ID	**Window description**	**Maximum U-value***	**SHGC***	SHGC lower limit	SHGC upper limit
ATB-006-04 B	Al Thermally Broken B DG Argon Fill Low Solar Gain low-E -Clear	3	0.26	0.25	0.27
ATB-005-04 B	Al Thermally Broken A DG Argon Fill Low Solar Gain low-E -Clear	3	0.27	0.26	0.28
ALM-001-01 A	Aluminium A SG Clear	6.7	0.57	0.54	0.6

Custom* windows

				Substitution tolerance ranges	
Window ID	**Window description**	**Maximum U-value***	**SHGC***	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*
B1	ATB-006-04 B	W2.01	2500	740	double_hung	45.0	S	No
B1	ATB-006-04 B	W2.03	2500	1500	fixed	0.0	E	No
B1	ATB-005-04 B	D2.03	2500	820	casement	90.0	E	No
B1	ATB-006-04 B	W2.03	2500	300	double_hung	45.0	E	No
B2	ATB-005-04 B	D2.04	2500	820	casement	90.0	E	No
B2	ATB-006-04 B	W2.03	2500	300	double_hung	45.0	E	No
B2	ATB-006-04 B	W2.03	2500	1500	fixed	0.0	E	No
B3	ATB-005-04 B	D2.05	2500	820	casement	90.0	E	No
B3	ATB-006-04 B	W2.04	2500	300	double_hung	45.0	E	No
B3	ATB-006-04 B	W2.04	2500	1500	fixed	0.0	E	No
B4	ATB-005-04 B	D2.06	2500	820	casement	90.0	E	No
B4	ATB-006-04 B	W2.05	2500	300	double_hung	45.0	E	No
B4	ATB-006-04 B	W2.05	2500	1500	fixed	0.0	E	No
GALLERY	ATB-006-04 B	W2.02	2500	1540	sliding	90.0	S	No
WC	ALM-001-01 A	W2.09	500	500	awning	90.0	W	No
LDRY	ALM-001-01 A	W2.08	500	500	awning	90.0	W	No
BA1	ALM-001-01 A	W2.07	500	500	awning	90.0	W	No
BA2	ALM-001-01 A	W2.06	500	500	awning	90.0	W	No
KLD	ATB-006-04 B	H3.02	2150	8683	sliding	72.0	E	No
KLD	ATB-006-04 B	W3.01	2750	4115	fixed	0.0	N	No
KLD	ATB-006-04 B	D3.01	3150	6275	sliding	90.0	S	No
ENTRY - FOYER	ATB-006-04 B	D3.03	2200	9000	sliding	45.0	E	No
ENTRY - FOYER	ATB-006-04 B	W3.02	2600	1900	fixed	0.0	E	No
ENTRY - FOYER	ATB-005-04 B	D3.04	2600	1400	casement	90.0	E	No
ENTRY - FOYER	ATB-006-04 B	D3.04FX	2600	240	fixed	0.0	E	No
ENTRY - FOYER	ATB-006-04 B	W3.03	1000	3140	fixed	0.0	N	No
ENTRY - FOYER	ATB-006-04 B	W3.06	1000	8000	sliding	45.0	W	No
PANTRY	ALM-001-01 A	W3.07	500	500	awning	90.0	W	No
WC	ALM-001-01 A	W3.05	500	500	awning	90.0	W	No
STORE	ALM-001-01 A	W3.04	500	500	awning	90.0	W	No
OFFICE	ATB-005-04 B	W4.01	1400	800	casement	90.0	S	No
OFFICE	ATB-005-04 B	D4.01	2330	900	casement	90.0	S	No
OFFICE	ATB-006-04 B	W4.02	1400	4400	fixed	0.0	E	No
LANDING	ATB-006-04 B	HW4.01	375	1250	fixed	0.0	E	No
LANDING	ATB-006-04 B	HW4.02	2100	200	fixed	0.0	S	No
LANDING	ATB-006-04 B	HW4.08	265	2786	fixed	0.0	W	No
LANDING	ATB-006-04 B	W4.05	640	5000	fixed	0.0	W	No
WIR	ATB-006-04 B	HW4.06	963	2345	fixed	0.0	N	No
WIR	ATB-006-04 B	HW4.07	674	4477	fixed	0.0	W	No

BATH	ATB-006-04 B	HW4.05	1095	1555	fixed	0.0	W	No
BATH	ATB-006-04 B	W4.03	1400	600	double_hung	45.0	E	No
BATH	ATB-006-04 B	HW4.03B	952	3482	fixed	0.0	E	No
BATH	ATB-006-04 B	W4.04	1400	1040	fixed	0.0	N	No
BATH	ATB-006-04 B	HW4.04	1227	4334	fixed	0.0	N	No
MBED	ATB-006-04 B	D4.02	2440	3940	sliding	45.0	S	No
MBED	ATB-006-04 B	HW4.02	240	4370	fixed	0.0	S	No
MBED	ATB-006-04 B	D4.03	1400	3900	sliding	45.0	E	No
MBED	ATB-006-04 B	HW4.03A	465	4111	fixed	0.0	E	No

Roof window *type and performance value*

Default* roof windows

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

Custom* roof windows

				Substitution tolerance ranges	
Window ID	Window description	Maximum U-value*	SHGC*	SHGC lower limit	SHGC upper limit
Velux:VEL-011-01 W	VELUX FS - Fixed Skylight DG 3mm LoE 366 / 8.5mm Argon Gap / 5.36mm Clear La	2.58	0.24		

Roof window *schedule*

Location	Window ID	Window no.	Opening %	Area (m²)	Orientation	Outdoor shade	Indoor shade
ENTRY - FOYER	Velux:VEL-011-01 W	SKYLIGHT	0.0	2.2	N	None	None

Skylight *type and performance*

Skylight ID	Skylight description
No Data Available	

Skylight *schedule*

Location	Skylight ID	Skylight No.	Skylight shaft length (mm)	Area (m²)	Orient-ation	Outdoor shade	Diffuser	Skylight shaft reflectance
No Data Available								

External door *schedule*

Location	Height (mm)	Width (mm)	Opening %	Orientation
WC	2040	820	100.0	E

External wall *type*

Wall ID	Wall type	Solar absorptance	Wall shade (colour)	Bulk insulation (R-value)	Reflective wall wrap*

* Refer to glossary.

1	Various - 90mm Brickwork - Reverse Brick Veneer	0.8	Dark	Rockwool batt (k = 0.033) (R2.7)	Yes
2	Retaining Walls - CONCRETE BLOCK WALL INSULATED	0.5	Medium	Polystyrene extruded: R2.0 (R2.0)	No
3	FR5 - Weatherboard	0.8	Dark	Rockwool batt (k = 0.033) (R2.7)	No
4	FR5 - Concrete Block 190mm Core Filled	0.3	Light	Polystyrene extruded: R2.0 (R2.0)	No
5	Various - Concrete Block Wall - Sandsrone Cladd	0.5	Medium	Polystyrene extruded: R2.0 (R2.0)	No
6	FR5 - Concrete Block 190mm Core Filled	0.5	Medium	Polystyrene extruded: R2.0 (R2.0)	No
7	Various - 90mm Brickwork - Reverse Brick Veneer	0.5	Medium	Rockwool batt (k = 0.033) (R2.7)	Yes
8	FR5 - Weatherboard	0.5	Medium	Rockwool batt (k = 0.033) (R2.7)	No
9	Retaining Walls - CONCRETE BLOCK WALL INSULATED	0.8	Dark	Polystyrene extruded: R2.0 (R2.0)	No
10	AENEC - Internal Plasterboard Stud Wall	0.5	Medium	Rockwool batt: R2.0 (R2.0)	No

External wall *schedule*

Location	Wall ID	Height (mm)	Width (mm)	Orientation	Horizontal shading feature* maximum projection (mm)	Vertical shading feature (yes/no)
B1	1	2500	4554	S	3941	Yes
B1	1	2500	4501	E	980	Yes
B2	1	2500	4489	E	989	Yes
B3	1	2500	4380	E	975	Yes
B4	1	2500	4939	E	973	Yes
B4	2	2500	4556	N	0	No
GALLERY	1	2500	1611	S	3940	Yes
GALLERY	2	2500	3393	N	0	No
GALLERY	2	2500	7383	W	0	No
WC	3	2500	1098	S	1778	Yes
WC	3	2500	2047	E	8198	Yes
WC	4	2500	2050	W	0	Yes
LDRY	4	2500	3887	W	0	Yes
LDRY	1	2500	592	S	3940	Yes
BA1	4	2500	2682	W	0	Yes
BA2	4	2500	2682	W	0	Yes
LINEN	4	2500	1583	W	0	Yes
KLD	5	3150	8677	E	280	Yes
KLD	6	3750	4672	N	674	Yes
KLD	7	3150	8690	W	0	No
KLD	7	3150	8029	S	2020	Yes

* Refer to glossary.

ENTRY - FOYER	6	2600	14123	E	4981	Yes
ENTRY - FOYER	6	2600	2149	S	5347	Yes
ENTRY - FOYER	8	2600	3585	E	2996	Yes
ENTRY - FOYER	6	2600	3638	N	0	Yes
ENTRY - FOYER	7	2600	8139	W	0	No
PANTRY	7	3150	3497	W	0	No
WC	7	2600	2398	W	0	Yes
STORE	6	2600	1746	N	0	Yes
STORE	7	2600	3343	W	0	Yes
OFFICE	1	2100	720	S	1728	Yes
OFFICE	9	500	720	S	0	No
OFFICE	1	2600	1804	S	1728	Yes
OFFICE	1	2600	5690	E	5250	Yes
OFFICE	1	2600	5684	W	0	No
LANDING	1	2600	410	S	0	Yes
LANDING	1	2600	4489	E	0	Yes
LANDING	1	2950	298	S	1124	Yes
LANDING	1	3110	586	N	0	Yes
LANDING	3	265	2790	W	450	No
LANDING	1	2600	5822	W	0	No
WIR	1	3670	2486	N	3860	Yes
WIR	3	800	4477	W	450	Yes
WIR	1	2600	340	N	3860	Yes
WIR	1	2600	4381	W	0	Yes
BATH	1	3800	1366	W	2759	Yes
BATH	1	2600	116	S	0	Yes
BATH	10	3550	247	W	0	Yes
BATH	1	3163	3367	E	664	No
BATH	9	500	3367	E	0	No
BATH	1	3925	4145	N	2253	No
MBED	9	500	4015	E	0	No
MBED	1	2950	4170	S	1125	Yes
MBED	1	2665	4015	E	665	No

Internal wall *type*

Wall ID	Wall type	Area (m²)	Bulk insulation
1	AENEC - Internal Plasterboard Stud Wall	221.8	Rockwool batt: R2.0 (R2.0)

Floor *type*

Location	Construction	Area (m²)	Sub-floor ventilation	Added insulation (R-value)	Covering

B1	FR5 - 375mm waffle pod, 100mm concrete (R0.65)	19.8	Enclosed	R0.0	Tiles
B2	FR5 - 375mm waffle pod, 100mm concrete (R0.65)	12.1	Enclosed	R0.0	Tiles
B2	FR5 - 375mm waffle pod, 100mm concrete (R0.65)	7.6	Enclosed	R0.0	Tiles
B3	FR5 - 375mm waffle pod, 100mm concrete (R0.65)	19.2	Enclosed	R0.0	Tiles
B4	FR5 - 375mm waffle pod, 100mm concrete (R0.65)	22.5	Enclosed	R0.0	Tiles
GALLERY	FR5 - 375mm waffle pod, 100mm concrete (R0.65)	44.5	Enclosed	R0.0	Tiles
GALLERY	FR5 - 375mm waffle pod, 100mm concrete (R0.65)	0.7	Enclosed	R0.0	Tiles
WC	FR5 - 375mm waffle pod, 100mm concrete (R0.65)	1.1	Enclosed	R0.0	Tiles
WC	FR5 - 375mm waffle pod, 100mm concrete (R0.65)	1.1	Enclosed	R0.0	Tiles
LDRY	FR5 - 375mm waffle pod, 100mm concrete (R0.65)	6.5	Enclosed	R0.0	Tiles
BA1	FR5 - 375mm waffle pod, 100mm concrete (R0.65)	4.5	Enclosed	R0.0	Tiles
BA2	FR5 - 375mm waffle pod, 100mm concrete (R0.65)	4.5	Enclosed	R0.0	Tiles
LINEN	FR5 - 375mm waffle pod, 100mm concrete (R0.65)	2.7	Enclosed	R0.0	Tiles
KLD	FR5 - 200mm concrete slab Lined	61	Enclosed	R0.0	Tiles
KLD	FR5 - 200mm concrete slab Lined	8.7	Elevated	R2.0	Tiles
ENTRY - FOYER	FR5 - 200mm concrete slab Lined	26.4	Enclosed	R0.0	Tiles
ENTRY - FOYER	FR5 - 375mm waffle pod, 100mm concrete (R0.65)	3	Enclosed	R0.0	Tiles
ENTRY - FOYER	FR5 - 200mm concrete slab Lined	3.9	Enclosed	R0.0	Tiles
ENTRY - FOYER	FR5 - 375mm waffle pod, 100mm concrete (R0.65)	0.3	Enclosed	R0.0	Tiles
ENTRY - FOYER	FR5 - 375mm waffle pod, 100mm concrete (R0.65)	15.4	Enclosed	R0.0	Tiles
PANTRY	FR5 - 200mm concrete slab Lined	3.5	Enclosed	R0.0	Tiles
PANTRY	FR5 - 200mm concrete slab Lined	2.8	Enclosed	R0.0	Tiles
WC	FR5 - 375mm waffle pod, 100mm concrete (R0.65)	1.9	Enclosed	R0.0	Tiles
WC	FR5 - 375mm waffle pod, 100mm concrete (R0.65)	2.3	Enclosed	R0.0	Tiles
STORE	FR5 - 375mm waffle pod, 100mm concrete (R0.65)	1.4	Enclosed	R0.0	Tiles
STORE	FR5 - 375mm waffle pod, 100mm concrete (R0.65)	4.5	Enclosed	R0.0	Tiles
OFFICE	FR5 - 200mm concrete slab Lined	14.4	Enclosed	R0.0	Tiles

LANDING	FR5 - 200mm concrete slab Lined	12.1	Enclosed	R0.0	Tiles
LANDING	FR5 - 200mm concrete slab Lined	5.2	Enclosed	R0.0	Tiles
LANDING	FR5 - 200mm concrete slab Lined	0.4	Elevated	R2.0	Tiles
WIR	FR5 - 200mm concrete slab Lined	9.9	Enclosed	R0.0	Tiles
WIR	FR5 - 200mm concrete slab Lined	1.4	Enclosed	R0.0	Tiles
WIR	FR5 - 200mm concrete slab Lined	1	Elevated	R2.0	Tiles
BATH	FR5 - 200mm concrete slab Lined	5.5	Enclosed	R0.0	Tiles
BATH	FR5 - 200mm concrete slab Lined	8.2	Elevated	R2.0	Tiles
MBED	FR5 - 200mm concrete slab Lined	16.2	Elevated	R2.0	Tiles
MBED	FR5 - 200mm concrete slab Lined	0.2	Enclosed	R0.0	Tiles

Ceiling *type*

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap*
B1	FR5 - 200mm concrete slab Lined	R0.0	No
B2	FR5 - 200mm concrete slab Lined	R0.0	No
B2	Plasterboard	R2.0	No
B3	Plasterboard	R2.0	No
B4	Plasterboard	R2.0	No
GALLERY	FR5 - 200mm concrete slab Lined	R0.0	No
GALLERY	Plasterboard	R2.0	No
WC	FR5 - 200mm concrete slab Lined	R0.0	No
WC	Plasterboard	R2.0	No
LDRY	FR5 - 200mm concrete slab Lined	R0.0	No
BA1	FR5 - 200mm concrete slab Lined	R0.0	No
BA2	FR5 - 200mm concrete slab Lined	R0.0	No
LINEN	FR5 - 200mm concrete slab Lined	R0.0	No
KLD	Plasterboard	R2.0	No
KLD	Plasterboard	R2.0	No
ENTRY - FOYER	FR5 - 200mm concrete slab Lined	R0.0	No
ENTRY - FOYER	FR5 - 200mm concrete slab Lined	R2.0	No
ENTRY - FOYER	FR5 - 200mm concrete slab Lined	R0.0	No
ENTRY - FOYER	Plasterboard	R5.0	No
ENTRY - FOYER	FR5 - 200mm concrete slab Lined	R0.0	No
ENTRY - FOYER	Plasterboard	R5.0	No
ENTRY - FOYER	FR5 - 200mm concrete slab Lined	R0.0	No
ENTRY - FOYER	FR5 - 200mm concrete slab Lined	R0.0	No
ENTRY - FOYER	FR5 - 200mm concrete slab Lined	R2.0	No
PANTRY	FR5 - 200mm concrete slab Lined	R0.0	No
PANTRY	Plasterboard	R5.0	No
WC	FR5 - 200mm concrete slab Lined	R0.0	No
WC	FR5 - 200mm concrete slab Lined	R0.0	No

* Refer to glossary.

WC	Plasterboard	R5.0	No
STORE	FR5 - 200mm concrete slab Lined	R0.0	No
STORE	Plasterboard	R5.0	No
OFFICE	Plasterboard	R5.0	No
LANDING	Plasterboard	R5.0	No
LANDING	Plasterboard	R5.0	No
WIR	Plasterboard	R5.0	No
WIR	Plasterboard	R5.0	No
WIR	Plasterboard	R5.0	No
BATH	Plasterboard	R5.0	No
BATH	Plasterboard	R5.0	No
MBED	Plasterboard	R5.0	No

Ceiling *penetrations**

Location	Quantity	Type	Diameter (mm)	Sealed/unsealed
B2	2	Downlights	50	Sealed
B3	7	Downlights	50	Sealed
B4	8	Downlights	50	Sealed
KLD	26	Downlights	50	Sealed
KLD	1	Exhaust Fans	160	Sealed
ENTRY - FOYER	1	Downlights	50	Sealed
PANTRY	1	Downlights	50	Sealed
WC	1	Downlights	50	Sealed
STORE	1	Downlights	50	Sealed
OFFICE	5	Downlights	50	Sealed
LANDING	6	Downlights	50	Sealed
WIR	2	Downlights	50	Sealed
BATH	4	Downlights	50	Sealed
MBED	6	Downlights	50	Sealed

Ceiling *fans*

Location	Quantity	Diameter (mm)
No Data Available		

Roof *type*

Construction	Added insulation (R-value)	Solar absorptance	Roof shade
Slab:Slab - Suspended Slab : 200mm: 200mm Suspended Slab	0.0	0.5	Medium
Framed:Flat - Flat Framed (Metal Deck)	0.0	0.8	Dark

* 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 NatHERSAdministrator. 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).