

Nationwide House Energy Rating Scheme

NatHERS Certificate No. 0006039036-02

Generated on 29 May 2021 using AccuRate Sustainability V2.4.3.21

Property

Address 10 Molong Street, North Curl Curl, NSW, 2099

Lot/DP Lot 6 DP 224946

NCC Class* 1a

Type New Home

Plans

Main Plan May, 2021

Prepared by CM Studio

Construction and environment

Assessed floor area (m²*)	Exposure Type
Conditioned* 347.0	Suburban
Unconditioned* 226.5	NatHERS climate zone
Total 573.5	56
Garage 210.0	



Accredited assessor

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Accreditation No. 20069

Assessor Accrediting Organisation ABSA

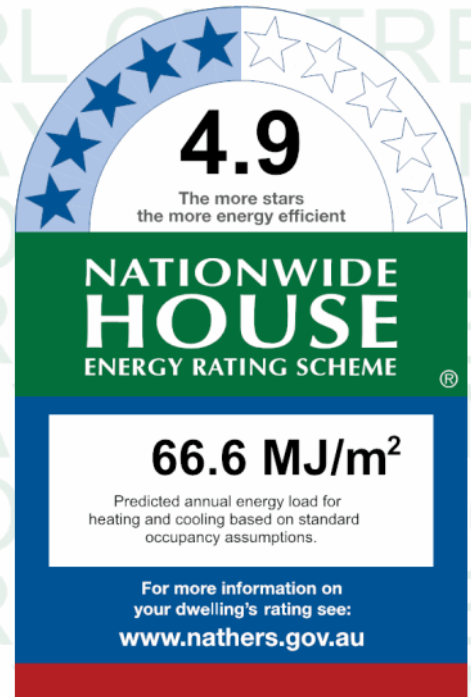
Declaration of interest Declaration completed: no conflicts

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.

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



Thermal performance

Heating	Cooling
40.7	25.8
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.

Verification

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

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

Rated with sealed exhaust ventilation.

Not rated with recessed lighting.

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-002-03 A	Aluminium B SG High Solar Gain Low-E	5.4	0.58	0.55	0.61
ATB-005-03 B	Al Thermally Broken A DG Argon Fill High Solar Gain low-E -Clear	2.9	0.44	0.42	0.46
ATB-006-03 B	Al Thermally Broken B DG Argon Fill High Solar Gain low-E -Clear	2.9	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*
living	ALM-002-03 A	W02	3000	1200	Louvre	90	W	None
living	ALM-002-03 A	W02b	3000	1200	Louvre	90	W	None
living	ATB-005-03 B	W01	2150	4585	Other	90	S	None
living	ATB-006-03 B	W11	3000	4894	Sliding	90	E	None
laundry/mud	ATB-005-03 B	W03	3000	950	Other	90	W	None
laundry/mud	ALM-002-03 A	W03	3000	750	Louvre	90	W	None
laundry/mud	ATB-006-03 B	W03b	600	3400	Other	00	W	None
kitchen/dining	ALM-002-03 A	W04	3000	10125	Other	90	N	None
kitchen/dining	ATB-006-03 B	W05	3000	1723	Sliding	90	E	None
kitchen/dining	ATB-006-03 B	W09	3000	3785	Sliding	45	S	None
kitchen/dining	ATB-006-03 B	W10	3000	1800	Other	90	S	None
rumpus	ATB-005-03 B	W07	3000	3785	Sliding	45	S	None
rumpus	ALM-002-03 A	W08	3000	900	Louvre	90	W	None
powder	ALM-002-03 A	W06	2000	900	Louvre	90	E	None
bed1	ALM-002-03 A	W17	2000	1200	Louvre	90	W	None
bed1	ATB-005-03 B	W18	2000	3091	Other	00	W	Miniature Louvres
bed1	ATB-005-03 B	W28	2740	1300	Sliding	45	E	None
bed1	ATB-005-03 B	W16	3000	4800	Sliding	60	S	Outdoor Venetians
bed 2	ATB-005-03 B	W26	3000	6050	Sliding	60	S	Outdoor Venetians
bed 2	ALM-002-03 A	W25	2000	900	Louvre	90	E	None
bed 3	ALM-002-03 A	W22	2000	900	Louvre	90	E	None
bed 3	ATB-005-03 B	W21	3000	6050	Sliding	60	N	Outdoor Venetians
ensuite1	ATB-005-03 B	W19	2000	2700	Sliding	45	N	Outdoor Venetians
ensuite2	ALM-002-03 A	W24	2000	900	Louvre	90	E	None
ensuite3	ALM-002-03 A	W23	2000	900	Louvre	90	E	None
office/upper hall	ATB-005-03 B	W27	2740	1200	Sliding	90	S	None
office/upper hall	ATB-005-03 B	W27	2740	2857	Other	00	S	None
office/upper hall	ALM-002-03 A	W27	2740	600	Louvre	90	S	None
office/upper hall	ATB-005-03 B	W20	2740	4657	Other	00	N	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-04-005a	GENERIC_SKYLIGHTS: Double-glazed opal: norma

Skylight schedule

Location	Skylight ID	Skylight No.	Skylight shaft length (mm)	Area (m ²)	Orientation	Outdoor shade	Diffuser	Skylight shaft reflectance
ensuite1	GEN-04-005a	SK02	1000	1.80	N	None	Yes	0.75
office/upper hall	GEN-04-005a	SK01	1000	1.80	E	None	Yes	0.75

External door schedule

Location	Height (mm)	Width (mm)	Opening %	Orientation
garage	2500	3800	100	S

External wall type

Wall ID	Wall type	Solar absorptance	Wall shade (colour)	Bulk insulation (R-value)	Reflective wall wrap*
EW-001	Timber/Brick wall/Plasterboard	50	Medium	Glass fibre batt: R2.5	No
EW-002	Retaining Plasterboard	50	Medium	Polystyrene expanded: R1.5	No
EW-003	Limestone/Brick wall/Plasterboard	30	Light	Glass fibre batt: R2.5	No
EW-004	Brick wall	50	Medium		No
EW-005	Brick wall/Plasterboard	30	Light	Glass fibre batt: R2.5	No

External wall schedule

Location	Wall ID	Height (mm)	Width (mm)	Orientation	Horizontal shading feature* maximum projection (mm)	Vertical shading feature (yes/no)
garage	EW-002	3000	17000	N		No
garage	EW-002	3000	3500	SE		No
garage	EW-002	3000	2500	SW		No

Location	Wall ID	Height (mm)	Width (mm)	Orientation	Horizontal shading feature* maximum projection (mm)	Vertical shading feature (yes/no)
garage	EW-002	3000	15000	W		No
garage	EW-002	3000	4700	E		No
garage	EW-002	3000	4000	S		No
garage	EW-004	3000	4000	S		No
gym	EW-002	3000	4000	E		No
gym	EW-002	3000	5500	S		No
mud lower	EW-002	3000	2000	E		No
lower stairwell	EW-002	3000	3500	E		No
living	EW-003	3000	7800	W	17500	Yes
living	EW-003	3000	5000	S	1000	Yes
living	EW-003	3000	7000	E	7000	Yes
laundry/mud	EW-003	3000	5800	W	800	Yes
pantry	EW-005	3000	2200	W		No
pantry	EW-005	3000	2300	N	1500	Yes
kitchen/dining	EW-005	3000	10130	N	1000	Yes
kitchen/dining	EW-005	3000	3700	N	4800	Yes
kitchen/dining	EW-005	3000	3800	E	4000	Yes
kitchen/dining	EW-005	3000	3500	E		No
kitchen/dining	EW-003	3000	7000	S	3000	Yes
rumpus	EW-005	3000	3000	E		No
rumpus	EW-003	3000	3800	S		No
rumpus	EW-003	3000	3000	W	7000	Yes
powder	EW-005	3000	1500	E		No
bed1	EW-005	1000	9000	W		No
bed1	EW-001	2000	9000	W	700	Yes
bed1	EW-005	3000	1400	E	4700	Yes
bed1	EW-005	3000	1100	E		No
bed1	EW-005	3000	4800	S	2000	Yes
bed 2	EW-005	3000	6050	S	1300	Yes
bed 2	EW-005	3000	1000	W	4700	Yes
bed 2	EW-005	1000	1700	E		No
bed 2	EW-001	2000	1700	E	600	Yes
bed 3	EW-005	1000	1600	E		No
bed 3	EW-001	2000	1600	E	600	Yes
bed 3	EW-005	3000	6050	N	900	Yes
bed 3	EW-005	3000	500	W		No
ensuite1	EW-005	1000	4600	W		No
ensuite1	EW-001	2000	4600	W	700	Yes
ensuite1	EW-005	1000	4800	N	1000	Yes

Location	Wall ID	Height (mm)	Width (mm)	Orientation	Horizontal shading feature* maximum projection (mm)	Vertical shading feature (yes/no)
ensuite1	EW-001	2000	4800	N	1000	Yes
ensuite2	EW-005	1000	2600	E		No
ensuite2	EW-001	2000	2600	E	600	Yes
ensuite3	EW-005	1000	2600	E		No
ensuite3	EW-001	2000	2600	E	600	Yes
office/upper hall	EW-005	3000	4700	S	1300	Yes
office/upper hall	EW-005	3000	4700	N	600	Yes
office/upper hall	EW-005	1000	3500	E		No
office/upper hall	EW-001	1000	3500	E		No

Internal wall type

Wall ID	Wall type	Area (m ²)	Bulk insulation
IW-002	Brick wall	102.00	
IW-003	Glass	6.00	
IW-004	Brick wall	247.50	

Floor type

Location	Construction	Area (m ²)	Sub-floor ventilation	Added insulation (R-value)	Covering
garage/Ground	as_FLOR-B003 #2006 © 200mm Concrete Floor slab (no insul)	210.00			
gym/Ground	as_FLOR-B003 #2006 © 200mm Concrete Floor slab (no insul)	22.00			
mud lower/Ground	as_FLOR-B003 #2006 © 200mm Concrete Floor slab (no insul)	11.00			
lower stairwell/Ground	as_FLOR-B003 #2006 © 200mm Concrete Floor slab (no insul)	19.00			
living/garage	as_FLOR-B007 #2032 © 250mm Concrete Floor slab with timber on packing strips (R1.0 insul under)	39.00		R1.0	
living/Outdoor Air	as_FLOR-B007 #1003 © 250mm Concrete Floor slab with timber on packing strips (no insul)	1.00			
laundry/mud/garage	as_FLOR-B007 #2052 © 250mm Concrete Floor slab with Ceramic tile floor (R1.0 insul under)	13.00		R1.0	Ceramic tile
pantry/garage	as_FLOR-B007 #2032 © 250mm Concrete Floor slab with timber on packing strips (R1.0 insul under)	5.00		R1.0	
kitchen/dining/lower stairwell	as_FLOR-B007 #1003 © 250mm Concrete Floor slab with timber on packing strips (no insul)	19.00			
kitchen/dining/garage	as_FLOR-B007 #2032 © 250mm Concrete Floor slab with timber on packing strips (R1.0 insul under)	85.00		R1.0	
rumpus/mud lower	as_FLOR-B007 #1003 © 250mm Concrete Floor slab with timber on packing strips (no insul)	2.00			
rumpus/gym	as_FLOR-B007 #1003 © 250mm Concrete Floor slab with timber on packing strips (no insul)	9.00			
powder/mud lower	as_FLOR-B007 #1005 © 250mm Concrete Floor slab with ceramic tiles (no insul)	3.50			Ceramic tile
bed1/laundry/mud	as_FLOR-B007 #1003 © 250mm Concrete Floor slab with timber on packing strips (no insul)	8.00			
bed1/kitchen/dining	as_FLOR-B007 #1003 © 250mm Concrete Floor slab with timber on packing strips (no insul)	13.00			
bed1/living	as_FLOR-B007 #1003 © 250mm Concrete Floor slab with timber on packing strips (no insul)	19.00			

Location	Construction	Area (m ²)	Sub-floor ventilation	Added insulation Covering (R-value)
bed 2/kitchen/dining	as_FLOR-B007 #1003 © 250mm Concrete Floor slab with timber on packing strips (no insul)	5.00		
bed 2/rumpus	as_FLOR-B007 #1003 © 250mm Concrete Floor slab with timber on packing strips (no insul)	9.50		
bed 2/Outdoor Air	as_FLOR-B007 #2032 © 250mm Concrete Floor slab with timber on packing strips (R1.0 insul under)	6.50		R1.0
bed 3/kitchen/dining	as_FLOR-B007 #1003 © 250mm Concrete Floor slab with timber on packing strips (no insul)	8.00		
bed 3/Outdoor Air	as_FLOR-B007 #2032 © 250mm Concrete Floor slab with timber on packing strips (R1.0 insul under)	12.00		R1.0
ensuite1/pantry	as_FLOR-B007 #1005 © 250mm Concrete Floor slab with ceramic tiles (no insul)	5.00		Ceramic tile
ensuite1/laundry/mud	as_FLOR-B007 #1005 © 250mm Concrete Floor slab with ceramic tiles (no insul)	3.00		Ceramic tile
ensuite1/kitchen/dining	as_FLOR-B007 #1005 © 250mm Concrete Floor slab with ceramic tiles (no insul)	13.00		Ceramic tile
ensuite2/powder	as_FLOR-B007 #1005 © 250mm Concrete Floor slab with ceramic tiles (no insul)	2.50		Ceramic tile
ensuite2/rumpus	as_FLOR-B007 #1005 © 250mm Concrete Floor slab with ceramic tiles (no insul)	1.50		Ceramic tile
ensuite3/Outdoor Air	as_FLOR-B007 #2052 © 250mm Concrete Floor slab with Ceramic tile floor (R1.0 insul underl)	4.00		R1.0 Ceramic tile
office/upper hall/Outdoor Air	as_FLOR-B007 #2032 © 250mm Concrete Floor slab with timber on packing strips (R1.0 insul under)	7.00		R1.0
office/upper hall/kitchen/dining	as_FLOR-B007 #1003 © 250mm Concrete Floor slab with timber on packing strips (no insul)	71.00		
roofspace1/bed1	as_CEIL-A001.flr - 2017 © 10mm Plasterboard ceiling fixed to ceiling joists above + R4.0 bulk insulation	43.00		R4.0
roofspace1/ensuite1	as_CEIL-A001.flr - 2017 © 10mm Plasterboard ceiling fixed to ceiling joists above + R4.0 bulk insulation	21.00		R4.0
roofspace2/ensuite2	as_CEIL-A001.flr - 2017 © 10mm Plasterboard ceiling fixed to ceiling joists above + R4.0 bulk insulation	4.00		R4.0
roofspace2/bed 2	as_CEIL-A001.flr - 2017 © 10mm Plasterboard ceiling fixed to ceiling joists above + R4.0 bulk insulation	21.00		R4.0
roofspace2/bed 3	as_CEIL-A001.flr - 2017 © 10mm Plasterboard ceiling fixed to ceiling joists above + R4.0 bulk insulation	21.00		R4.0
roofspace2/ensuite3	as_CEIL-A001.flr - 2017 © 10mm Plasterboard ceiling fixed to ceiling joists above + R4.0 bulk insulation	4.00		R4.0
roofspace2/office/upper hall	as_CEIL-A001.flr - 2017 © 10mm Plasterboard ceiling fixed to ceiling joists above + R4.0 bulk insulation	21.00		R4.0

Ceiling type

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap*
living/garage	as_FLOR-B007 #2032 © 250mm Concrete Floor slab with timber on packing strips (R1.0 insul under)	R1.0	No
laundry/mud/garage	as_FLOR-B007 #2052 © 250mm Concrete Floor slab with Ceramic tile floor (R1.0 insul underl)	R1.0	No
pantry/garage	as_FLOR-B007 #2032 © 250mm Concrete Floor slab with timber on packing strips (R1.0 insul under)	R1.0	No
kitchen/dining/garage	as_FLOR-B007 #2032 © 250mm Concrete Floor slab with timber on packing strips (R1.0 insul under)	R1.0	No
rumpus/gym	as_FLOR-B007 #1003 © 250mm Concrete Floor slab with timber on packing strips (no insul)		No
rumpus/mud lower	as_FLOR-B007 #1003 © 250mm Concrete Floor slab with timber on packing strips (no insul)		No
powder/mud lower	as_FLOR-B007 #1005 © 250mm Concrete Floor slab with ceramic tiles (no insul)		No

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap*
kitchen/dining/lower stairwell	as_FLOR-B007 #1003 © 250mm Concrete Floor slab with timber on packing strips (no insul)		No
bed1/living	as_FLOR-B007 #1003 © 250mm Concrete Floor slab with timber on packing strips (no insul)		No
bed1/laundry/mud	as_FLOR-B007 #1003 © 250mm Concrete Floor slab with timber on packing strips (no insul)		No
ensuite1/laundry/mud	as_FLOR-B007 #1005 © 250mm Concrete Floor slab with ceramic tiles (no insul)		No
ensuite1/pantry	as_FLOR-B007 #1005 © 250mm Concrete Floor slab with ceramic tiles (no insul)		No
bed1/kitchen/dining	as_FLOR-B007 #1003 © 250mm Concrete Floor slab with timber on packing strips (no insul)		No
bed 2/kitchen/dining	as_FLOR-B007 #1003 © 250mm Concrete Floor slab with timber on packing strips (no insul)		No
bed 3/kitchen/dining	as_FLOR-B007 #1003 © 250mm Concrete Floor slab with timber on packing strips (no insul)		No
ensuite1/kitchen/dining	as_FLOR-B007 #1005 © 250mm Concrete Floor slab with ceramic tiles (no insul)		No
office/upper hall/kitchen/dining	as_FLOR-B007 #1003 © 250mm Concrete Floor slab with timber on packing strips (no insul)		No
bed 2/rumpus	as_FLOR-B007 #1003 © 250mm Concrete Floor slab with timber on packing strips (no insul)		No
ensuite2/rumpus	as_FLOR-B007 #1005 © 250mm Concrete Floor slab with ceramic tiles (no insul)		No
ensuite2/powder	as_FLOR-B007 #1005 © 250mm Concrete Floor slab with ceramic tiles (no insul)		No
roofspace1/bed1	as_CEIL-A001.flr - 2017 © 10mm Plasterboard ceiling fixed to ceiling joists above + R4.0 bulk insulation	R4.0	No
roofspace2/bed 2	as_CEIL-A001.flr - 2017 © 10mm Plasterboard ceiling fixed to ceiling joists above + R4.0 bulk insulation	R4.0	No
roofspace2/bed 3	as_CEIL-A001.flr - 2017 © 10mm Plasterboard ceiling fixed to ceiling joists above + R4.0 bulk insulation	R4.0	No
roofspace1/ensuite1	as_CEIL-A001.flr - 2017 © 10mm Plasterboard ceiling fixed to ceiling joists above + R4.0 bulk insulation	R4.0	No
roofspace2/ensuite2	as_CEIL-A001.flr - 2017 © 10mm Plasterboard ceiling fixed to ceiling joists above + R4.0 bulk insulation	R4.0	No
roofspace2/ensuite3	as_CEIL-A001.flr - 2017 © 10mm Plasterboard ceiling fixed to ceiling joists above + R4.0 bulk insulation	R4.0	No
roofspace2/office/upper hall	as_CEIL-A001.flr - 2017 © 10mm Plasterboard ceiling fixed to ceiling joists above + R4.0 bulk insulation	R4.0	No

Ceiling penetrations*

Location	Quantity	Type	Diameter (mm ²)	Sealed/unsealed
laundry/mud	1	Ceiling exhaust fan	180	Sealed
kitchen/dining	1	Ceiling exhaust fan	180	Sealed
powder	1	Ceiling exhaust fan	180	Sealed
ensuite1	1	Ceiling exhaust fan	180	Sealed
ensuite2	1	Ceiling exhaust fan	180	Sealed
ensuite3	1	Ceiling exhaust fan	180	Sealed

Ceiling fans

Location	Quantity	Diameter (mm)
No Data Available		

Roof type

Construction	Added insulation (R-value)	Solar absorptance	Roof shade
as_ROOF-A032 #3015 © 15 deg Slate roof + Anticon R1.0 insul with no ceiling under	R1.0	85	Dark
as_ROOF-A002 #E016 © SLATE tiled roof + Anticon R1.0 insul with R4.0 bulk insul + Plasterb'd ceiling under	R5.0	50	Medium
as_ROOF-B013.rof #2025 © Concrete slab 200mm - Timber deck walking surface - R1.5 insulation under slab - Susp. Ceiling under	R2.5	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 10m 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).