Nationwide House Energy Rating Scheme
NatHERS Certificate No. 0005681218-07

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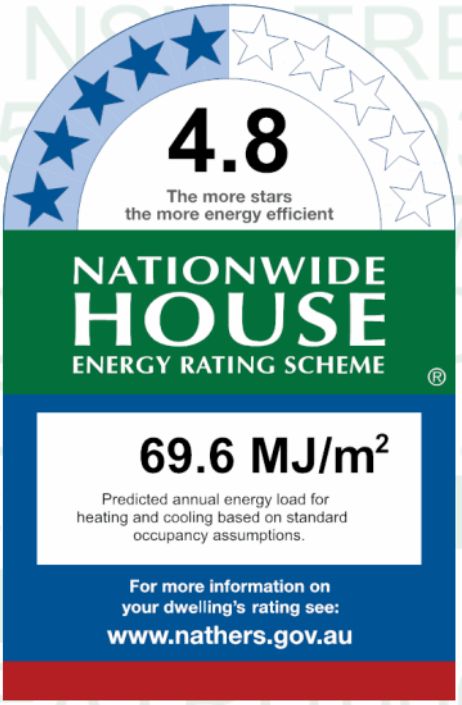

Property

Address	30 Beatrice Street , Clontarf , NSW , 2093
Lot/DP	1/345209
NCC Class*	1A
Type	New Dwelling

Plans

Main Plan	1920-071
Prepared by	Building Design Drafting Services

Construction and environment

Assessed floor area (m^2)*		**Exposure Type**
Conditioned*	295.0	Suburban
Unconditioned*	87.0	**NatHERS climate zone**
Total	382.0	56
Garage	67.0	

Thermal performance

Heating	Cooling
44.7 MJ/m^2	24.8 MJ/m^2

Accredited assessor

Name	Terry Chapman
Business name	CHAPMAN ENVIRONMENTAL SERVICES PTY LTD
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Phone	0414 265 292
Accreditation No.	20920
Assessor Accrediting Organisation	ABSA
Declaration of interest	Declaration completed: no conflicts

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=wEqCpbvRQ.
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
No Data Available					

Custom* windows

Window ID	Window Description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
AWS-008-59 A	AWS-008-59 A 516 Al Awining Window DG 010_AGG PLUS Clr 6_10_4	3.5	0.44	0.42	0.46
AWS-089-58 A	AWS-089-58 A RES SERIES 704 FLUSH SLIDING DOOR DG LightBridge_ClrSll_65-12-5	2.2	0.52	0.49	0.55
AWS-067-41 A	AWS-067-41 A RES SERIES 516 FIXED WINDOW DG 010_AGG PLUS Clr 6_10_4	2.2	0.54	0.51	0.57
AWS-016-18 A	AWS-016-18 A 548 BF Al BiFold Door SG 638CP	4.6	0.47	0.45	0.49
AWS-018-06 A	AWS-018-06 A 549 ED Al Entry Door SG 6.38CP	4.4	0.35	0.33	0.37

Custom* windows

Window ID	Window Description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
AWS-066-03 A	AWS-066-03 A RES SERIES 516 FIXED WINDOW SG 638ComPlsClr	3.9	0.62	0.59	0.65
AWS-001-19 A	AWS-001-19 A 502/504 Al Sliding Window SG 638CP	4.5	0.59	0.56	0.62
AWS-007-19 A	AWS-007-19 A 516 Al Awining Window SG 638CP	4.9	0.53	0.50	0.56
AWS-011-18 A	AWS-011-18 A 541/542 Al Sliding Door SG 638CP	4.4	0.59	0.56	0.62
VAN-004-08 A	VAN-004-08 A SERIES 525 LOUVRE WINDOW SG 6ET	4.5	0.54	0.51	0.57

Window and glazed door *schedule*

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orientation	Window shading device*
Kitchen/Living	AWS-008-59 A	n/a	800	5110	n/a	15	W	No
Kitchen/Living	AWS-089-58 A	n/a	2800	4940	n/a	60	W	No
Kitchen/Living	AWS-067-41 A	n/a	1800	5110	n/a	00	W	No
Kitchen/Living	AWS-016-18 A	n/a	1700	2450	n/a	90	E	No
Kitchen/Living	AWS-018-06 A	n/a	2600	1000	n/a	90	E	No
Kitchen/Living	AWS-066-03 A	n/a	2800	600	n/a	00	S	No
Hall 2	AWS-066-03 A	n/a	1700	700	n/a	00	S	No
B Panty	AWS-001-19 A	n/a	750	2000	n/a	45	E	No
Music Room	AWS-007-19 A	n/a	1700	4930	n/a	15	S	No
Music Room	AWS-007-19 A	n/a	800	1000	n/a	90	N	No
Music Room	AWS-007-19 A	n/a	800	1000	n/a	90	N	No
Bedroom 1	AWS-011-18 A	n/a	2400	1800	n/a	45	S	No
Bedroom 1	VAN-004-08 A	n/a	1800	1070	n/a	45	W	Yes
Bedroom 1	AWS-066-03 A	n/a	1800	2150	n/a	00	W	Yes
Bedroom 1	VAN-004-08 A	n/a	1800	1070	n/a	45	W	Yes
Bed 1 Ensuite	AWS-007-19 A	n/a	400	1500	n/a	10	W	No
Bed 1 Ensuite	VAN-004-08 A	n/a	900	800	n/a	90	W	No
Bed 1 Ensuite	VAN-004-08 A	n/a	900	800	n/a	90	N	No
Stair 1/1	VAN-004-08 A	n/a	2250	800	n/a	90	E	No
Living 2	VAN-004-08 A	n/a	500	2000	n/a	90	S	No
Living 2	VAN-004-08 A	n/a	500	800	n/a	90	S	No
Living 2	AWS-011-18 A	n/a	2400	4620	n/a	80	W	No
Guest	VAN-004-08 A	n/a	1700	800	n/a	90	N	No
Guest	AWS-011-18 A	n/a	2600	1700	n/a	45	N	No
Laundry	AWS-018-06 A	n/a	2600	820	n/a	90	N	No
Bath 1	VAN-004-08 A	n/a	2500	800	n/a	90	N	No
Bedroom 2	VAN-004-08 A	n/a	2250	800	n/a	90	N	No

* Refer to glossary.

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orientation	Window shading device*
Ens 2	VAN-004-08 A	n/a	900	800	n/a	90	N	No
Bedroom 3	VAN-004-08 A	n/a	2250	800	n/a	90	E	No
Ens 3	VAN-004-08 A	n/a	900	800	n/a	50	E	No
Stair 1	AWS-066-03 A	n/a	1450	1450	n/a	00	E	No
Stair 1	VAN-004-08 A	n/a	400	1450	n/a	90	E	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-010-01 W	Glass	2.5	0.21	0.20	0.22

Roof window *schedule*

Location	Window ID	Window no.	Opening %	Height (mm)	Width (mm)	Orientation	Outdoor shade	Indoor shade
Bed 1 Ensuite	VEL-010-01 W	n/a	90	870	1275	E	No	No
Hall 3	VEL-010-01 W	n/a	90	1275	665	E	No	Yes
Ens 2	VEL-010-01 W	n/a	90	665	665	E	No	No
Ens 3	VEL-010-01 W	n/a	90	665	665	E	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
Kitchen/Living	2600	1100	90	S

* Refer to glossary.

Location	Height (mm)	Width (mm)	Opening %	Orientation
Garage 1	2400	5200	90	W
Cellar/Mudroom	2040	1000	90	N

External wall *type*

Wall ID	Wall type	Solar absorptance	Wall shade (colour)	Bulk insulation (R-value)	Reflective wall wrap*
EW-1	Fibro Cavity Panel Direct Fix	0.30	Light	Anti-glare foil with bulk no gap R2.5	No
EW-2	Reverse Brick Veneer	0.30	Light	Foil, Anti-glare one side + Bulk Insulation R2.5	No
EW-3	Fibro Cavity Panel Direct Fix	0.30	Light	Anti-glare foil with bulk no gap R2.5	No
EW-4	Tilt up Concrete	0.50	Medium	No insulation	No
EW-5	Tilt up concrete, lined	0.50	Medium	Bulk Insulation 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)
Kitchen/Living	EW-1	2800	11795	W	2000	YES
Kitchen/Living	EW-1	2800	5790	E	0	NO
Kitchen/Living	EW-1	2800	2195	S	0	YES
Kitchen/Living	EW-1	2800	1000	E	0	YES
Kitchen/Living	EW-1	2800	4500	S	0	NO
Hall 2	EW-1	2800	1945	S	11800	YES
B Panty	EW-1	2800	1795	N	0	NO
B Panty	EW-1	2800	3195	E	0	NO
Music Room	EW-2	2800	7200	S	100	NO
Music Room	EW-2	2800	4100	W	0	NO
Music Room	EW-2	2800	7145	N	0	NO
Bedroom 1	EW-1	2700	2000	S	5300	YES
Bedroom 1	EW-1	2700	5395	W	600	NO
Bed 1 Ensuite	EW-1	2700	3595	W	600	NO
Bed 1 Ensuite	EW-1	2700	3295	N	0	NO
Stair 1/1	EW-1	2700	5295	E	0	NO
Stair 1/1	EW-1	2700	1995	S	0	NO
Living 2	EW-1	2700	6695	S	0	NO
Living 2	EW-1	2700	5295	W	3700	YES
Guest	EW-1	2800	1795	N	0	NO
Guest	EW-1	2800	600	E	0	YES
Guest	EW-1	2800	1995	N	0	YES
Laundry	EW-1	2800	2390	N	0	NO
Bath 1	EW-1	2800	2640	N	0	NO

* Refer to glossary.

Location	Wall ID	Height (mm)	Width (mm)	Orientation	Horizontal shading feature* maximum projection (mm)	Vertical shading feature (yes/no)
Bedroom 2	EW-1	2700	5690	N	0	NO
Ens 2	EW-1	2700	1695	N	0	NO
Ens 2	EW-1	2700	2395	E	0	NO
Bedroom 3	EW-1	2700	4490	E	600	NO
Ens 3	EW-1	2700	2090	E	600	NO
Stair 1	EW-3	2800	5295	E	0	NO
Stair 1	EW-1	2800	1995	S	0	NO
Garage 1	EW-4	2650	8005	N	0	NO
Garage 1	EW-4	2650	8005	S	0	NO
Garage 1	EW-4	2650	6200	W	0	NO
Plant/Store	EW-4	2650	1510	N	0	NO
Plant/Store	EW-4	2650	4410	S	0	NO
Cellar/Mudroom	EW-5	2650	2105	N	0	NO
Cellar/Mudroom	EW-5	2650	1400	E	0	YES
Cellar/Mudroom	EW-5	2650	4800	N	0	YES
Cellar/Mudroom	EW-5	2650	4800	E	0	NO
Cellar/Mudroom	EW-5	2650	4005	S	0	NO

Internal wall *type*

Wall ID	Wall type	Area (m^2)	Bulk insulation
IW-1 - Cavity wall, direct fix plasterboard, single gap		208.00	No insulation
IW-2 - Brick Veneer		11.00	No insulation
IW-3 - Cavity wall, direct fix plasterboard, single gap		15.00	Bulk Insulation, No Air Gap R2.5
IW-4 - Tilt Concrete		16.00	No insulation
IW-5 - Tilt Concrete		24.00	Bulk Insulation, No Air Gap R2.5

Floor *type*

Location	Construction	Area (m^2)	Sub-floor ventilation	Added insulation (R-value)	Covering
Kitchen/Living /Plant/Store	Concrete Above Plasterboard 100mm	18.20		Bulk Insulation R2.5	Cork Tiles or Parquetry 8mm
Kitchen/Living /Cellar/Mudroom	Concrete Above Plasterboard 100mm	18.00		Bulk Insulation R2.5	Cork Tiles or Parquetry 8mm
Kitchen/Living	Suspended Concrete Slab 100mm	54.70	Enclosed	Bulk Insulation in Contact with Floor R1.9	Cork Tiles or Parquetry 8mm
Hall 2	Suspended Concrete Slab 100mm	5.40	Enclosed	Bulk Insulation in Contact with Floor R1.9	Cork Tiles or Parquetry 8mm
B Panty	Suspended Concrete Slab 150mm	5.50	Enclosed	Bulk Insulation in Contact with Floor R1.9	Cork Tiles or Parquetry 8mm
Music Room	Suspended Concrete Slab 150mm	29.00	Enclosed	Bulk Insulation in Contact with Floor R1.9	Carpet+Rubber Underlay 18mm
Bedroom 1/Kitchen/Living	Timber Above Plasterboard 150mm	22.60		No Insulation	Carpet+Rubber Underlay 18mm

* Refer to glossary.

Location	Construction	Area (m)	Sub-floor ventilation	Added insulation (R-value)	Covering
Bedroom 1	Suspended Timber Floor 150mm	10.60	Totally Open	No Insulation	Carpet+Rubber Underlay 18mm
Bed 1 Ensuite/Hall 2	Timber Above Plasterboard 150mm	4.50		No Insulation	Ceramic Tiles 8mm
Bed 1 Ensuite/Guest	Timber Above Plasterboard 150mm	1.20		No Insulation	Ceramic Tiles 8mm
Bed 1 Ensuite/Bath 1	Timber Above Plasterboard 150mm	5.50		No Insulation	Ceramic Tiles 8mm
Stair 1/1/Kitchen/Living	Timber Above Plasterboard 150mm	1.70		No Insulation	Cork Tiles or Parquetry 8mm
Stair 1/1/Stair 1	Timber Above Plasterboard 150mm	8.50		No Insulation	Cork Tiles or Parquetry 8mm
Living 2/Kitchen/Living	Timber Above Plasterboard 150mm	36.30		No Insulation	Carpet+Rubber Underlay 18mm
Hall 3/Kitchen/Living	Timber Above Plasterboard 150mm	5.30		No Insulation	Carpet+Rubber Underlay 18mm
Hall 3/Laundry	Timber Above Plasterboard 150mm	0.80		No Insulation	Carpet+Rubber Underlay 18mm
Guest	Suspended Concrete Slab 150mm	10.80	Enclosed	Bulk Insulation in Contact with Floor R1.9	Carpet+Rubber Underlay 18mm
Laundry	Suspended Concrete Slab 150mm	7.30	Enclosed	Bulk Insulation in Contact with Floor R1.9	Ceramic Tiles 8mm
Bath 1	Suspended Concrete Slab 19mm	6.70	Enclosed	Bulk Insulation in Contact with Floor R1.9	Cork Tiles or Parquetry 8mm
Bedroom 2/Kitchen/Living	Timber Above Plasterboard 19mm	1.20		No Insulation	Carpet+Rubber Underlay 18mm
Bedroom 2/Hall 2	Timber Above Plasterboard 19mm	1.30		No Insulation	Carpet+Rubber Underlay 18mm
Bedroom 2/Guest	Timber Above Plasterboard 19mm	8.50		No Insulation	Carpet+Rubber Underlay 18mm
Bedroom 2/Laundry	Timber Above Plasterboard 19mm	5.60		No Insulation	Carpet+Rubber Underlay 18mm
Ens 2/B Panty	Timber Above Plasterboard 19mm	3.90		No Insulation	Ceramic Tiles 8mm
Bedroom 3/Kitchen/Living	Timber Above Plasterboard 19mm	11.10		No Insulation	Carpet+Rubber Underlay 18mm
Bedroom 3/B Panty	Timber Above Plasterboard 19mm	1.40		No Insulation	Carpet+Rubber Underlay 18mm
Bedroom 3/Laundry	Timber Above Plasterboard 19mm	1.00		No Insulation	Carpet+Rubber Underlay 18mm
Ens 3/Kitchen/Living	Timber Above Plasterboard 19mm	6.10		No Insulation	Carpet+Rubber Underlay 18mm
Stair 1/Cellar/Mudroom	Concrete Above Plasterboard 150mm	6.20		Bulk Insulation R2.5	Cork Tiles or Parquetry 8mm
Stair 1	Suspended Concrete Slab 150mm	2.40	Enclosed	Bulk Insulation in Contact with Floor R1.9	Cork Tiles or Parquetry 8mm
Garage 1	Concrete Slab on Ground 100mm	49.60	None	No Insulation	Bare
Plant/Store	Concrete Slab on Ground 100mm	17.00	None	No Insulation	Bare
Cellar/Mudroom	Concrete Slab on Ground 100mm	27.80	None	No Insulation	Bare

Ceiling *type*

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap*
Kitchen/Living	Plasterboard	Bulk Insulation R4	No
Kitchen/Living	Timber Above Plasterboard	No Insulation	No

* Refer to glossary.

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap*
Hall 2	Timber Above Plasterboard	No Insulation	No
B Panty	Timber Above Plasterboard	No Insulation	No
Music Room	Plasterboard	Bulk Insulation R6	No
Bedroom 1	Plasterboard	Bulk Insulation R6	No
Bed 1 Ensuite	Plasterboard	Bulk Insulation R6	No
Stair 1/1	Plasterboard	Bulk Insulation R6	No
Living 2	Plasterboard	Bulk Insulation R6	No
Hall 3	Plasterboard	Bulk Insulation R6	No
Guest	Plasterboard	Bulk Insulation R4	No
Guest	Timber Above Plasterboard	No Insulation	No
Laundry	Timber Above Plasterboard	No Insulation	No
Bath 1	Plasterboard	Bulk Insulation R4	No
Bath 1	Timber Above Plasterboard	No Insulation	No
Bedroom 2	Plasterboard	Bulk Insulation R6	No
Ens 2	Plasterboard	Bulk Insulation R6	No
Bedroom 3	Plasterboard	Bulk Insulation R6	No
Ens 3	Plasterboard	Bulk Insulation R6	No
Stair 1	Timber Above Plasterboard	No Insulation	No
Garage 1	Concrete	No insulation	No
Plant/Store	Concrete Above Plasterboard	Bulk Insulation R2.5	No
Cellar/Mudroom	Concrete, Plasterboard	Bulk Insulation R2.5	No
Cellar/Mudroom	Concrete Above Plasterboard	Bulk Insulation R2.5	No

Ceiling *penetrations**

Location	Quantity	Type	Diameter (mm^2)	Sealed/unsealed
Kitchen/Living	20	Downlights - LED	150	Sealed
Kitchen/Living	1	Exhaust Fans	300	Sealed
Hall 2	1	Downlights - LED	150	Sealed
B Panty	2	Downlights - LED	150	Sealed
Music Room	6	Downlights - LED	150	Sealed
Bedroom 1	5	Downlights - LED	150	Sealed
Bed 1 Ensuite	3	Downlights - LED	150	Sealed
Bed 1 Ensuite	1	Exhaust Fans	300	Sealed
Stair 1/1	2	Downlights - LED	150	Sealed
Living 2	8	Downlights - LED	150	Sealed
Hall 3	2	Downlights - LED	150	Sealed
Guest	1	Downlights - LED	150	Sealed
Laundry	1	Downlights - LED	150	Sealed

Location	Quantity	Type	Diameter (mm)	Sealed/unsealed
Laundry	1	Exhaust Fans	300	Sealed
Bath 1	1	Downlights - LED	150	Sealed
Bath 1	1	Exhaust Fans	300	Sealed
Bedroom 2	3	Downlights - LED	150	Sealed
Ens 2	1	Downlights - LED	150	Sealed
Ens 2	1	Exhaust Fans	300	Sealed
Bedroom 3	2	Downlights - LED	150	Sealed
Ens 3	1	Downlights - LED	150	Sealed
Ens 3	1	Exhaust Fans	300	Sealed

Ceiling *fans*

Location	Quantity	Diameter (mm)
Kitchen/Living	2	1200
Music Room	1	1200
Bedroom 1	1	1200
Living 2	1	1200
Guest	1	1200
Bedroom 2	1	1200
Bedroom 3	1	1200

Roof *type*

Construction	Added insulation (R-value)	Solar absorptance	Roof shade
Corrugated Iron	Foil, Gap Above, Reflective Side Down, Anti-glare Up	0.50	Medium
Waterproofing Membrane	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).