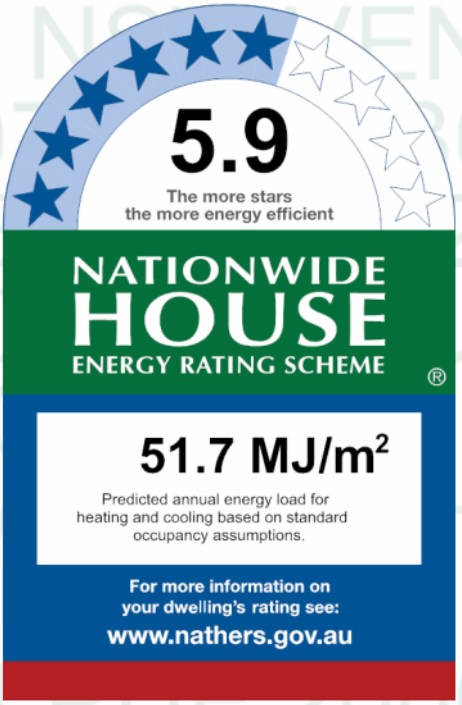
Nationwide House Energy Rating Scheme
NatHERS Certificate No. 0007766736-02

Generated on 23 Aug 2022 using BERS Pro v4.4.0.6 (3.21)



Property

Address	18 Olphert Avenue , Vaucluse , NSW , 2030
Lot/DP	66/5139
NCC Class*	1A
Type	New Dwelling

Plans

Main Plan	Campbell
Prepared by	Louise St John Kennedy

Construction and environment

Assessed floor area (m^2)*		**Exposure Type**
Conditioned*	521.0	Suburban
Unconditioned*	49.0	**NatHERS climate zone**
Total	570.0	56
Garage	45.0	

Thermal performance

Heating	Cooling
34.0	**17.7**
MJ/m^2	MJ/m^2

Accredited assessor

Name	David Gradwell
Business name	Gradwell Consulting
Email	info@gradwellconsulting.com
Phone	1800 11 24 25
Accreditation No.	DMN/12/1451

Assessor Accrediting Organisation

Design Matters National

Declaration of interest	The Assessor has provided design advice to the Applicant

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=JgOPoedFM.
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.

* 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? Substituted values must be based on the Australian Fenestration Rating Council (AFRC) protocol.

Apartment entrance doors

Does the 'External Door Schedule' show apartment entrance doors? Please note that an "external door" between the modelled dwelling and a shared space, such as an enclosed corridor or foyer, should not be included in the assessment (because it overstates the possible ventilation) and would invalidate the Certificate.

Exposure*

Has the appropriate exposure level (terrain) been applied? For example, it is unlikely that a ground-floor apartment is "exposed" or a top floor high-rise apartment is "protected".

Provisional* values

Have provisional values been used in the assessment and, if so, noted in "additional notes" below?

Additional notes

Window and glazed door *type and performance*

Default* windows

Window ID	Window Description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
ALM-002-03 A	ALM-002-03 A Aluminium B SG High Solar Gain Low-E	5.4	0.58	0.55	0.61
ALM-001-03 A	ALM-001-03 A Aluminium A SG High Solar Gain Low-E	5.4	0.49	0.47	0.51

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*
Guest bed	ALM-002-03 A	n/a	3100	2700	n/a	45	N	Yes

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orientation	Window shading device*
pool room and b	ALM-002-03 A	n/a	3100	8800	n/a	90	N	Yes
pool room and b	ALM-001-03 A	n/a	3100	900	n/a	90	N	Yes
pool room and b	ALM-002-03 A	n/a	1300	2600	n/a	30	E	Yes
Bedroom 2	ALM-002-03 A	n/a	3100	3500	n/a	45	N	Yes
Bedroom 3	ALM-002-03 A	n/a	3100	2800	n/a	45	W	No
Bedroom 4	ALM-002-03 A	n/a	3100	2800	n/a	45	W	No
Bed 4 ENS	ALM-002-03 A	n/a	500	2100	n/a	45	S	No
Bath 2	ALM-001-03 A	n/a	3100	900	n/a	90	W	No
Bath 2	ALM-002-03 A	n/a	3100	1500	n/a	45	N	No
Bedroom 5	ALM-002-03 A	n/a	3100	3700	n/a	45	N	Yes
Parents bathroo	ALM-002-03 A	n/a	3100	3300	n/a	45	N	Yes
Parents bathroo	ALM-002-03 A	n/a	3100	900	n/a	00	E	Yes
Studio	ALM-002-03 A	n/a	3100	1500	n/a	45	E	Yes
Studio	ALM-002-03 A	n/a	3100	4300	n/a	00	E	Yes
sculpture galle	ALM-002-03 A	n/a	3100	1100	n/a	00	N	Yes
Ldry	ALM-001-03 A	n/a	3100	900	n/a	90	E	No
Ldry	ALM-002-03 A	n/a	2300	2300	n/a	45	E	No
Kitchen/Living	ALM-002-03 A	n/a	3100	5600	n/a	45	E	Yes
Living	ALM-002-03 A	n/a	3100	1900	n/a	00	S	No
Living	ALM-001-03 A	n/a	3100	200	n/a	90	S	No
Living	ALM-002-03 A	n/a	3100	9508	n/a	90	N	Yes
Living	ALM-002-03 A	n/a	3100	4884	n/a	90	E	Yes
Study	ALM-002-03 A	n/a	3100	1050	n/a	45	S	No
Study	ALM-002-03 A	n/a	3100	900	n/a	45	W	No
Study	ALM-002-03 A	n/a	3100	1600	n/a	00	N	No
Roof Stairs	ALM-002-03 A	n/a	1200	1200	n/a	00	NW	No
Roof Stairs	ALM-001-03 A	n/a	2100	900	n/a	90	N	No

Roof window *type and performance*

Default* roof windows

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

Custom* roof windows

Window ID	Window Description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
VEL-011-02 W	Glass	2.7	0.24	0.23	0.25

* Refer to glossary.

Roof window *schedule*

Location	Window ID	Window no.	Opening %	Height (mm)	Width (mm)	Orientation	Outdoor shade	Indoor shade
Roof Stairs	VEL-011-02 W	n/a	0	3650	3650	W	No	No

Skylight *type and performance*

Skylight ID	Skylight description
GEN-04-006a	Single-glazed clear, Timber and Aluminium Frame

Skylight *schedule*

Location	Skylight ID	Skylight No.	Skylight shaft length (mm)	Area (m^2)	Orientation	Outdoor shade	Diffuser	Skylight shaft reflectance
PDR	GEN-04-006a	n/a	50	0.40	N	None	No	0.50

External door *schedule*

Location	Height (mm)	Width (mm)	Opening %	Orientation
Parents dressin	2040	820	90	E
Garage 1	2040	820	90	N
Garage 1	2400	5200	90	S
Living	3100	1500	90	S

External wall *type*

Wall ID	Wall type	Solar absorptance	Wall shade (colour)	Bulk insulation (R-value)	Reflective wall wrap*
EW-1	Tilt up concrete, lined	0.50	Medium	Bulk Insulation R1.5	No
EW-2	Cavity Brick	0.50	Medium	No insulation	No
EW-3	Cavity BrickZ:3W2:4	0.50	Medium	No insulation	No
EW-4	Cavity Brick	0.50	Medium	Foil Anti-glare one side and Reflective other of the Bulk Insulation R1.2	Yes
EW-5	Cavity Brick	0.50	Medium	Foil Anti-glare one side and Reflective other of the Bulk Insulation R1.2	Yes

External wall *schedule*

Location	Wall ID	Height (mm)	Width (mm)	Orientation	Horizontal shading feature* maximum projection (mm)	Vertical shading feature (yes/no)
Guest bed	EW-1	3100	4253	W	302	YES
Guest bed	EW-1	3100	2824	N	1867	YES
pool room and b	EW-1	3100	11461	N	3371	YES
pool room and b	EW-1	900	10645	E	0	NO

* Refer to glossary.

Location	Wall ID	Height (mm)	Width (mm)	Orientation	Horizontal shading feature* maximum projection (mm)	Vertical shading feature (yes/no)
pool room and b	EW-3	2200	10645	E	200	NO
Cellar	EW-1	3100	5000	S	7250	YES
Cellar	EW-1	3100	900	W	300	NO
Cellar	EW-1	3100	1764	N	293	YES
Bedroom 2	EW-4	3100	4253	W	325	YES
Bedroom 2	EW-4	3100	4217	N	1946	YES
Bedroom 3	EW-4	3100	3490	W	300	NO
Bedroom 4	EW-4	3100	4445	S	2700	NO
Bedroom 4	EW-4	3100	3545	W	300	NO
Bed 4 ENS	EW-4	3100	3290	S	2700	NO
Bath 2	EW-4	3100	945	W	300	NO
Bath 2	EW-4	3100	1764	N	316	YES
Bedroom 5	EW-4	3100	4998	N	3394	YES
Parents bathroo	EW-4	3100	3661	N	3000	YES
Parents bathroo	EW-4	3100	6800	E	125	NO
Parents bathroo	EW-4	3100	1000	S	18350	YES
Parents dressin	EW-4	3100	3990	E	1200	YES
Studio	EW-4	3100	2362	E	772	YES
Studio	EW-4	3100	5200	E	200	NO
Studio	EW-4	3100	5345	S	6875	NO
sculpture galle	EW-4	3100	1190	N	2679	YES
Garage 1	EW-2	3200	6745	W	400	YES
Garage 1	EW-2	3200	2300	N	100	YES
Garage 1	EW-2	3200	6800	E	200	NO
Garage 1	EW-2	3200	6600	S	350	NO
Ldry	EW-4	3200	4390	E	175	YES
Kitchen/Living	EW-4	3200	7039	E	1504	NO
Kitchen/Living	EW-4	3200	745	E	150	NO
Living	EW-4	3200	4245	S	2700	YES
Living	EW-4	3200	4253	W	325	YES
Living	EW-4	3200	9508	N	2433	NO
Living	EW-4	3200	4830	E	3877	NO
Study	EW-4	3200	4645	S	2700	NO
Study	EW-4	3200	8200	W	200	NO
Study	EW-4	3200	1654	N	506	YES
Roof Stairs	EW-5	2100	949	SW	293	NO
Roof Stairs	EW-5	2100	1077	W	214	NO
Roof Stairs	EW-5	2100	1603	NW	100	NO
Roof Stairs	EW-5	2100	949	NW	214	NO

* Refer to glossary.

Location	Wall ID	Height (mm)	Width (mm)	Orientation	Horizontal shading feature* maximum projection (mm)	Vertical shading feature (yes/no)
Roof Stairs	EW-5	2100	1616	NW	460	NO
Roof Stairs	EW-5	2100	1432	N	548	NO
Roof Stairs	EW-5	2100	3231	E	135	NO
Roof Stairs	EW-5	2100	1552	E	206	NO
Roof Stairs	EW-5	2100	894	SE	671	NO
Roof Stairs	EW-5	2100	922	S	567	NO
Roof Stairs	EW-5	2100	1500	S	200	NO
Equipment store	EW-1	3100	7545	E	200	NO
Equipment store	EW-1	3100	8300	S	25	NO
Equipment store	EW-1	3100	7245	W	5300	YES

Internal wall *type*

Wall ID	Wall type	Area (m^2)	Bulk insulation
IW-1 - Single Skin Brick		365.00	No insulation
IW-2 - Single Skin Brick		14.00	Bulk Insulation, No Air Gap R2
IW-3 - Cavity Brick		30.00	No insulation

Floor *type*

Location	Construction	Area (m^2)	Sub-floor ventilation	Added insulation (R-value)	Covering
Guest bed	Concrete Slab on Ground 100mm	12.20	None	Bulk Insulation in Contact with Floor R1	Bare
Bathroom 4	Concrete Slab on Ground 100mm	3.90	None	Bulk Insulation in Contact with Floor R1	Bare
pool room and b	Concrete Slab on Ground 100mm	77.80	None	Bulk Insulation in Contact with Floor R1	Bare
Cellar	Concrete Slab on Ground 100mm	12.30	None	Bulk Insulation in Contact with Floor R1	Bare
Bedroom 2/Guest bed	Rendered Concrete 100mm	12.20		No Insulation	Bare
Bedroom 2/Bathroom 4	Rendered Concrete 100mm	3.90		No Insulation	Bare
Bedroom 2/pool room and b	Rendered Concrete 100mm	1.70		No Insulation	Bare
Bedroom 3	Concrete Slab on Ground 100mm	17.30	None	Bulk Insulation in Contact with Floor R1	Bare
Bedroom 4	Concrete Slab on Ground 100mm	17.00	None	Bulk Insulation in Contact with Floor R1	Bare
Bed 4 ENS/Equipment store	Rendered Concrete 150mm	3.70		No Insulation	Bare
Bath 2/Cellar	Rendered Concrete 100mm	4.20		No Insulation	Bare
Bedroom 5/pool room and b	Rendered Concrete 100mm	29.20		No Insulation	Bare
Parents bathroo/pool room and b	Rendered Concrete 100mm	14.90		No Insulation	Bare
Parents dressin/pool room and b	Rendered Concrete 100mm	14.80		No Insulation	Bare
Studio/pool room and b	Rendered Concrete 150mm	0.60		No Insulation	Bare
Studio/Equipment store	Rendered Concrete 150mm	26.50		No Insulation	Bare

* Refer to glossary.

Location	Construction	Area (m)	Sub-floor ventilation	Added insulation (R-value)	Covering
sculpture galle/pool room and b	Rendered Concrete 150mm	9.90		No Insulation	Bare
sculpture galle/Cellar	Rendered Concrete 150mm	8.00		No Insulation	Bare
sculpture galle/Equipment store	Rendered Concrete 150mm	23.60		No Insulation	Bare
Garage 1	Suspended Concrete Slab 100mm	44.60	Enclosed	No Insulation	Bare
Ldry/Studio	Rendered Concrete 150mm	8.10		No Insulation	Bare
PDR/Studio	Rendered Concrete 150mm	2.40		No Insulation	Bare
Kitchen/Living /Bedroom 5	Rendered Concrete 150mm	6.00		No Insulation	Bare
Kitchen/Living /Parents dressin	Rendered Concrete 150mm	12.30		No Insulation	Bare
Kitchen/Living /Studio	Rendered Concrete 150mm	10.40		No Insulation	Bare
Living/Bedroom 2	Rendered Concrete 150mm	18.00		No Insulation	Carpet 10mm
Living/Bedroom 3	Rendered Concrete 150mm	7.40		No Insulation	Carpet 10mm
Living/Bedroom 4	Rendered Concrete 150mm	2.30		No Insulation	Carpet 10mm
Living/Bed 4 ENS	Rendered Concrete 150mm	4.20		No Insulation	Carpet 10mm
Living/Bath 2	Rendered Concrete 150mm	2.20		No Insulation	Carpet 10mm
Living/Bedroom 5	Rendered Concrete 150mm	18.60		No Insulation	Carpet 10mm
Living/Studio	Rendered Concrete 150mm	5.50		No Insulation	Carpet 10mm
Living/sculpture galle	Rendered Concrete 150mm	43.30		No Insulation	Carpet 10mm
Living	Suspended Concrete Slab 150mm	0.70	Totally Open	No Insulation	Bare
Study/Bedroom 3	Rendered Concrete 150mm	10.60		No Insulation	Bare
Study/Bedroom 4	Rendered Concrete 150mm	15.20		No Insulation	Bare
Study/Bath 2	Rendered Concrete 150mm	2.60		No Insulation	Bare
Roof Stairs/Living	Rendered Concrete 100mm	16.10		No Insulation	Bare
Equipment store	Concrete Slab on Ground 100mm	56.80	None	Bulk Insulation in Contact with Floor R1	Bare

Ceiling *type*

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap*
Guest bed	Plasterboard	No insulation	No
Guest bed	Rendered Concrete	No Insulation	No
Bathroom 4	Plasterboard	No insulation	No
Bathroom 4	Rendered Concrete	No Insulation	No
pool room and b	Plasterboard	No insulation	No
pool room and b	Rendered Concrete	No Insulation	No
Cellar	Plasterboard	No insulation	No
Cellar	Rendered Concrete	No Insulation	No

* Refer to glossary.

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap*
Bedroom 2	Plasterboard	No insulation	No
Bedroom 2	Rendered Concrete	No Insulation	No
Bedroom 3	Plasterboard	No insulation	No
Bedroom 3	Rendered Concrete	No Insulation	No
Bedroom 4	Plasterboard	No insulation	No
Bedroom 4	Rendered Concrete	No Insulation	No
Bed 4 ENS	Plasterboard	No insulation	No
Bed 4 ENS	Rendered Concrete	No Insulation	No
Bath 2	Plasterboard	No insulation	No
Bath 2	Rendered Concrete	No Insulation	No
Bedroom 5	Plasterboard	No insulation	No
Bedroom 5	Rendered Concrete	No Insulation	No
Parents bathroo	Plasterboard	No insulation	No
Parents dressin	Plasterboard	No insulation	No
Parents dressin	Rendered Concrete	No Insulation	No
Studio	Plasterboard	No insulation	No
Studio	Rendered Concrete	No Insulation	No
sculpture galle	Plasterboard	No insulation	No
sculpture galle	Rendered Concrete	No Insulation	No
Garage 1	Plasterboard	No insulation	No
Ldry	Plasterboard	No insulation	No
PDR	Plasterboard	No insulation	No
Kitchen/Living	Plasterboard	No insulation	No
Living	Plasterboard	No insulation	No
Living	Rendered Concrete	No Insulation	No
Study	Plasterboard	No insulation	No
Roof Stairs	Plasterboard	No insulation	No
Equipment store	Plasterboard	No insulation	No
Equipment store	Rendered Concrete	No Insulation	No

Ceiling *penetrations**

Location	Quantity	Type	Diameter (mm^2)	Sealed/unsealed
Cellar	4	Downlights - LED	150	Sealed
PDR	1	Downlights - LED	150	Sealed
Kitchen/Living	2	Downlights - LED	150	Sealed

* Refer to glossary.

Ceiling *fans*

Location	Quantity	Diameter (mm)
No Data Available		

Roof *type*

Construction	Added insulation (R-value)	Solar absorptance	Roof shade
Concrete	Bulk Insulation, No Air Gap Above R3	0.30	Light
Concrete	No Insulation, Only an Air Gap	0.30	Light
Concrete	Bulk Insulation, No Air Gap Above R3	0.30	Light

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).