

Nationwide House Energy Rating Scheme

NatHERS Certificate No. 0008943235-01

Generated on 28 Sep 2023 using AccuRate Sustainability V2.4.3.21 SP1

Property

Address 5 Portions Road,
Lovett Bay , NSW , 2105

Lot/DP Lot 5 DP 590990

NCC Class* 1a

Type New Home

Plans

Main plan 13/09/2023

Prepared by Richard Leplastrier & Karen Lambert

Construction and environment

Assessed floor area (m ²)*	Exposure type
Conditioned* 237.0	Suburban
Unconditioned* 14.6	NatHERS climate zone
Total 251.7	56
Garage	



Accredited assessor

Name Peter Cumming

Business name NatHERS & BASIX Solutions

Email basixsolutions@gmail.com

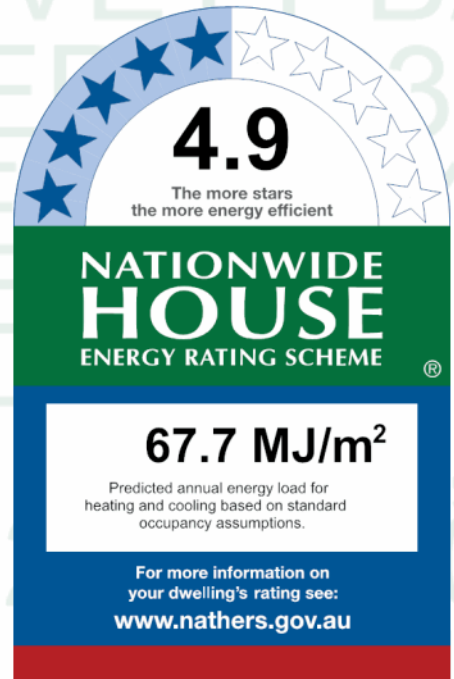
Phone 0299797674

Accreditation No. 20042

Assessor Accrediting Organisation

ABSA

Declaration of interest Declaration not completed



Thermal performance

Heating	Cooling
46.3	21.4
MJ/m ²	MJ/m ²

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=dldwdfDLH. 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? 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-004-01 A	Aluminium B DG Air Fill Clear-Clear	4.8	0.59	0.56	0.62
ALM-003-01 A	Aluminium A DG Air Fill Clear-Clear	4.8	0.51	0.48	0.54
ATB-004-01 B	Al Thermally Broken B DG Air Fill Clear-Clear	3.6	0.54	0.51	0.57
ATB-003-01 B	Al Thermally Broken A DG Air Fill Clear-Clear	3.6	0.47	0.45	0.49

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*
Bed West 2	ALM-004-01 A	Bed 2 West S	1100	1300	Sliding	45	SW	Roller Shutters
Bed West 2	ALM-004-01 A	Bed 2 West W	1100	900	Sliding	45	NW	Roller Shutters
Bed West 2	ALM-003-01 A	Bed 2 West door W	2100	900	Casement	100	NW	Roller Shutters
Bed West 2	ALM-004-01 A	Bed West 2 N	1100	2300	Sliding	45	NE	Roller Shutters
bed West 1	ALM-003-01 A	Bed 1 West W	2100	900	Casement	100	NW	Roller Shutters
bed West 1	ALM-004-01 A	Bed 1 West N	1100	2300	Sliding	45	NE	Roller Shutters
Entry/hall west	ATB-004-01 B	Western Hall	1100	1500	Sliding	45	SW	Roller Shutters
Entry/hall west	ATB-004-01 B	Entry West wing	2100	950	Sliding	90	SW	Roller Shutters
Bath West	ALM-003-01 A	Bath west W	2100	900	Casement	100	NW	Roller Shutters
Bath West	ALM-004-01 A	Bath West N	1100	1500	Sliding	45	NE	Roller Shutters
Living/dining/kitchen	ATB-003-01 B	Kitchen W	2100	1200	Casement	100	NW	Roller Shutters
Living/dining/kitchen	ATB-004-01 B	Kitchen N	1100	3000	Sliding	45	NE	Roller Shutters
Living/dining/kitchen	ATB-003-01 B	Kitchen E	2100	1200	Casement	100	SE	Roller Shutters
Living/dining/kitchen	ATB-004-01 B	Living South	1100	3000	Sliding	45	SW	Roller Shutters
Bed East 2	ALM-004-01 A	Bed 2 East N	1100	2800	Sliding	45	NE	Roller Shutters
Bed East 2	ALM-003-01 A	Bed 2 East E	2100	900	Casement	100	SE	Roller Shutters
Corridor/stair	ATB-004-01 B	Corridor door	2100	950	Sliding	100	SW	Roller Shutters
Corridor/stair	ATB-004-01 B	Corridor East window	1100	1500	Sliding	45	SW	Roller Shutters
Bath East	ALM-004-01 A	Bath East N	1100	1500	Sliding	45	NE	Roller Shutters
Bath East	ALM-003-01 A	Bath East E	2100	750	Casement	100	SE	None
Bed East 1	ALM-004-01 A	Bed 1 East N	1100	1300	Sliding	45	NE	Roller Shutters
Bed East 1	ALM-003-01 A	Bed 1 East door	2100	900	Casement	100	SE	Roller Shutters
Bed East 1	ALM-004-01 A	Bed 1 East window	1100	900	Sliding	45	SE	Roller Shutters
Bed East 1	ALM-004-01 A	Bed 1 East S	1100	1300	Sliding	45	SW	None
Library/study	ATB-004-01 B	Library N	800	800	Sliding	100	NE	Roller Shutters

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orientation	Window shading device*
Stair/landing Mezzanine	ATB-004-01 B	Stair upper	800	800	Sliding	100	SW	Roller Shutters
Family/sunroom	ATB-004-01 B	Family South	2400	3000	Sliding	45	SW	Roller Shutters
Family/sunroom	ATB-004-01 B	Sunroom	2400	3000	Sliding	45	NE	Roller Shutters
Family/sunroom	ATB-004-01 B	Sunroom East	1400	900	Sliding	100	SE	Roller Shutters
Family/sunroom	ATB-004-01 B	Sunroom W	1400	900	Sliding	100	NW	Roller Shutters
Store	ATB-004-01 B	Store N	800	800	Sliding	100	NE	Roller Shutters
Store	ATB-004-01 B	Store S	800	800	Sliding	100	SW	Roller Shutters
Studio GF	ALM-004-01 A	Studio GF N	800	800	Sliding	100	NE	Roller Shutters
Studio GF	ALM-003-01 A	Studio GF N door	2100	1200	Casement	100	NE	Roller Shutters
Studio GF	ALM-004-01 A	Studio GF S	1300	2400	Sliding	45	SW	Roller Shutters
Studio GF	ALM-004-01 A	Studio GF W	1100	1200	Sliding	45	NW	Roller Shutters
Studio WC	ALM-004-01 A	Studio WC	1100	600	Sliding	45	SE	Roller Shutters
Studio MF	ALM-004-01 A	studio MF N	2100	2400	Sliding	45	NE	Roller Shutters
Studio MF	ALM-004-01 A	Studio MF E	1100	1200	Sliding	45	SE	Roller Shutters
Studio MF	ALM-004-01 A	Studio MF S	1000	2400	Sliding	45	SW	Roller Shutters
Studio MF	ALM-004-01 A	Studio MF W	1100	1200	Sliding	45	NW	Roller Shutters
Studio TF	ALM-004-01 A	Studio TF N	2100	2400	Sliding	45	NE	Roller Shutters
Studio TF	ALM-004-01 A	Studio TF E	800	800	Sliding	100	SE	None
Studio TF	ALM-004-01 A	Studio TF S	1200	2400	Sliding	45	SW	Roller Shutters
Studio TF	ALM-004-01 A	Studio TF W	800	800	Sliding	100	NW	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
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
Studio GF	2100	900	100	NW
Studio MF	2100	900	100	NW
Studio TF	2100	900	100	NW

External wall type

Wall ID	Wall type	Solar absorptance	Wall shade (colour)	Bulk insulation (R-value)	Reflective wall wrap*
EW-001	Sandstone	50	Medium		No
EW-002	Fibre-cement sheet/Plasterboard/Plywood	50	Medium	Rockwool batt: R2.5	Yes
EW-003	Plasterboard/Plywood	70	Dark	Rockwool batt: R2.5	Yes

External wall schedule

Location	Wall ID	Height (mm)	Width (mm)	Orientation	Horizontal shading feature* maximum projection (mm)	Vertical shading feature (yes/no)
Subfloor	EW-001	450	25500	SW		No
Subfloor	EW-001	450	2900	NW		No
Subfloor	EW-001	450	3400	NE		No
Subfloor	EW-001	450	1000	NW		No
Subfloor	EW-001	450	4100	NE		No
Subfloor	EW-001	450	1000	NW		No
Subfloor	EW-001	450	2300	NE		No
Subfloor	EW-001	450	2300	NW		No
Subfloor	EW-001	450	5200	NE		No
Subfloor	EW-001	450	2300	SE		No
Subfloor	EW-001	450	4100	NE		No
Subfloor	EW-001	450	1000	SE		No
Subfloor	EW-001	450	2300	NE		No
Subfloor	EW-001	450	750	SE		No
Subfloor	EW-001	450	3400	SE		No
Subfloor	EW-001	450	3400	NE		No
Bed West 2	EW-003	900	3400	SW		No
Bed West 2	EW-002	1700	3400	SW	2150	No
Bed West 2	EW-003	900	1900	NW		No
Bed West 2	EW-002	1500	1900	NW	2150	No
Bed West 2	EW-002	2400	900	NW	2150	No
Bed West 2	EW-003	900	3400	NE		Yes
Bed West 2	EW-002	1700	3400	NE	750	No
bed West 1	EW-002	2800	900	NW	750	Yes
bed West 1	EW-003	900	4100	NE		Yes
bed West 1	EW-002	2600	4100	NE	750	No
Entry/hall west	EW-003	900	4100	SW		No
Entry/hall west	EW-002	2600	4100	SW	2150	No
Entry/hall west	EW-002	2700	2300	SW	2150	No

Location	Wall ID	Height (mm)	Width (mm)	Orientation	Horizontal shading feature* maximum projection (mm)	Vertical shading feature (yes/no)
Bath West	EW-002	2700	900	NW	750	Yes
Bath West	EW-003	900	2300	NE		Yes
Bath West	EW-002	1800	2300	NE	750	No
Living/dining/kitchen	EW-002	2700	2200	NW		Yes
Living/dining/kitchen	EW-003	900	5200	NE		No
Living/dining/kitchen	EW-002	1800	5200	NE		No
Living/dining/kitchen	EW-002	2700	2200	SE		Yes
Living/dining/kitchen	EW-003	900	5300	SW		No
Living/dining/kitchen	EW-002	1800	5300	SW	2150	No
Bed East 2	EW-003	900	4100	NE		Yes
Bed East 2	EW-002	1500	4100	NE	750	No
Bed East 2	EW-002	2400	900	SE	750	Yes
Corridor/stair	EW-002	2400	6500	SW	2150	No
Bath East	EW-003	900	2300	NE		Yes
Bath East	EW-002	1500	2300	NE	750	No
Bath East	EW-002	2400	750	SE	4800	Yes
Bed East 1	EW-003	900	3500	NE		Yes
Bed East 1	EW-002	1500	3500	NE	750	No
Bed East 1	EW-002	2400	3400	SE	2150	No
Bed East 1	EW-003	900	3500	SW		No
Bed East 1	EW-002	1500	3500	SW	2150	No
Library/study	EW-002	1700	4100	NE	750	Yes
Library/study	EW-002	900	1100	SE	750	Yes
Stair/landing Mezzanine	EW-002	1700	4100	SW	750	No
Family/sunroom	EW-002	2750	5500	SW	750	No
Family/sunroom	EW-002	2750	5500	NE	750	No
Family/sunroom	EW-002	2300	2300	SE	750	Yes
Family/sunroom	EW-002	2300	2300	NW	750	Yes
Store	EW-002	1875	2400	NE	750	Yes
Store	EW-002	1875	2400	SW	750	No

Location	Wall ID	Height (mm)	Width (mm)	Orientation	Horizontal shading feature* maximum projection (mm)	Vertical shading feature (yes/no)
Store	EW-002	1450	1100	NW	750	Yes
Studio GF	EW-002	2500	4800	NE		No
Studio GF	EW-002	2500	2200	SE		Yes
Studio GF	EW-002	2500	4800	SW		No
Studio GF	EW-002	2500	4800	NW	2500	No
Studio WC	EW-003	2500	900	NE		No
Studio WC	EW-003	2500	2300	SE	600	No
Studio WC	EW-003	2500	900	SW		Yes
Studio MF	EW-002	2400	4800	NE		No
Studio MF	EW-002	2400	4800	SE		No
Studio MF	EW-002	2400	4800	SW		No
Studio MF	EW-002	2400	4800	NW	2500	No
Studio TF	EW-002	2400	4800	NE	1300	No
Studio TF	EW-002	2500	4800	SE	900	No
Studio TF	EW-002	2600	4800	SW	1300	No
Studio TF	EW-002	2500	4800	NW	900	No
Roofspace East wing	EW-002	450	5800	SW	750	No
Roofspace East wing	EW-002	450	5800	NE	750	No

Internal wall type

Wall ID	Wall type	Area (m ²)	Bulk insulation
IW-001	Plywood	96.07	
IW-002	Plywood/Fibre-cement sheet	39.10	Rockwool batt: R2.5
IW-003	Plywood	3.51	Rockwool batt: R2.5

Floor type

Location	Construction	Area Sub-floor (m ²)	Added insulation (R-value)	Covering
Subfloor/Ground	Bare ground	119.53	Enclosed	

Location	Construction	Area Sub-floor (m ²)	Added insulation (R-value)	Covering
Bed West 2/Subfloor	Timber (hardwood): bare	9.86	R2.5	
bed West 1/Subfloor	Timber (hardwood): bare	12.71	R2.5	
Entry/hall west/Subfloor	Timber (hardwood): bare	9.57	R2.5	
Bath West/Subfloor	Timber (hardwood): ceramic tiles/bare	5.52	R2.5	Ceramic tile
Living/dining/kitchen/Subfloor	Timber (hardwood): bare	39.52	R2.5	
Bed East 2/Subfloor	Timber (hardwood): bare	11.89	R2.5	
Corridor/stair/Subfloor	Timber (hardwood): bare	11.66	R2.5	
Bath East/Subfloor	Timber (hardwood): ceramic tiles/bare	6.90	R2.5	Ceramic tile
Bed East 1/Subfloor	Timber (hardwood): bare	11.90	R2.5	
Library/study/Bed East 2	Timber (hardwood): bare/R2.5/plywood	11.89	R2.5	
Stair/landing Mezzanine/Corridor/stair	Timber (hardwood): bare/R2.5/plywood	9.02	R2.5	
Family/sunroom/Living/dining/kitchen	Timber exposed ceiling to living/kitchen	40.28		
Store/Entry/hall west	Timber (hardwood): bare/R2.5/plywood	7.44	R2.5	
Store/Bath West	Timber (hardwood): bare/R2.5/plywood	5.52	R2.5	
Studio GF/Ground	Concrete Slab 150 mm:	22.09		
Studio WC/Ground	Concrete Slab 150 mm:	2.20		
Studio MF/Studio GF	Timber (hardwood): bare/R2.5/plywood	22.09	R2.5	
Studio TF/Studio MF	Timber (hardwood): bare/R2.5/plywood	22.09	R2.5	
Roofspace East wing/Corridor/stair	Plywood + R2.5 bulk insulation	2.64	R2.5	
Roofspace East wing/Bath East	Plywood + R2.5 bulk insulation	6.90	R2.5	
Roofspace East wing/Bed East 1	Plywood + R2.5 bulk insulation	11.90	R2.5	

Ceiling type

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap*
Bed West 2/Subfloor	Timber (hardwood): bare	R2.5	No
bed West 1/Subfloor	Timber (hardwood): bare	R2.5	No

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap*
Entry/hall west/Subfloor	Timber (hardwood): bare	R2.5	No
Bath West/Subfloor	Timber (hardwood): ceramic tiles/bare	R2.5	No
Living/dining/kitchen/Subfloor	Timber (hardwood): bare	R2.5	No
Bed East 2/Subfloor	Timber (hardwood): bare	R2.5	No
Corridor/stair/Subfloor	Timber (hardwood): bare	R2.5	No
Bath East/Subfloor	Timber (hardwood): ceramic tiles/bare	R2.5	No
Bed East 1/Subfloor	Timber (hardwood): bare	R2.5	No
Store/Entry/hall west	Timber (hardwood): bare/R2.5/plywood	R2.5	No
Store/Bath West	Timber (hardwood): bare/R2.5/plywood	R2.5	No
Family/sunroom/Living/dining/kitchen	Timber exposed ceiling to living/kitchen		No
Library/study/Bed East 2	Timber (hardwood): bare/R2.5/plywood	R2.5	No
Stair/landing Mezzanine/Corridor/stair	Timber (hardwood): bare/R2.5/plywood	R2.5	No
Roofspace East wing/Corridor/stair	Plywood + R2.5 bulk insulation	R2.5	No
Roofspace East wing/Bath East	Plywood + R2.5 bulk insulation	R2.5	No
Roofspace East wing/Bed East 1	Plywood + R2.5 bulk insulation	R2.5	No
Studio MF/Studio GF	Timber (hardwood): bare/R2.5/plywood	R2.5	No
Studio TF/Studio MF	Timber (hardwood): bare/R2.5/plywood	R2.5	No

Ceiling penetrations*

Location	Quantity	Type	Diameter (mm)	Sealed/unsealed
No Data Available				

Ceiling fans

Location	Quantity	Diameter (mm)
No Data Available		

Roof type

Construction	Added insulation (R-value)	Solar absorptance	Roof shade
Metal deck	R1.6	70	Dark
Metal deck raked ceiling	R3.8	70	Dark

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 operability 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).