Nationwide House Energy Rating Scheme
NatHERS Certificate No. 0004248225-01

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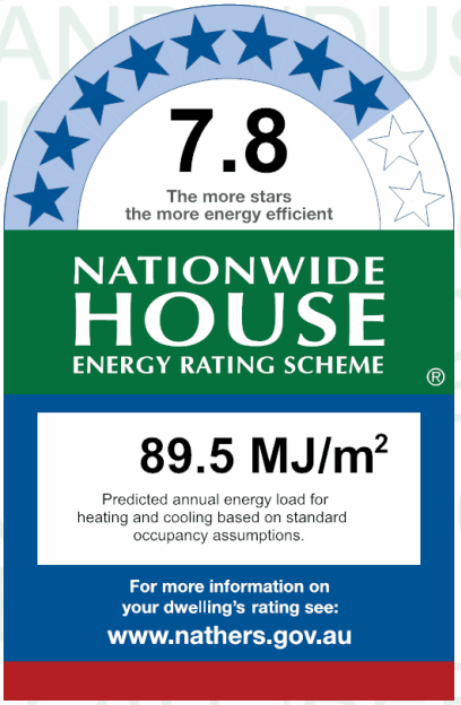

Property

Address	Unit C, 999 Industry Avenue , Canberra , ACT , 2999
Lot/DP	NatHERS
NCC Class*	1A
Type	New Dwelling

Plans

Main Plan	SAP release V1
Prepared by	NatHERS Administrator

Construction and environment

Assessed floor area (m^2)*		**Exposure Type**
Conditioned*	205.0	Suburban
Unconditioned*	73.0	**NatHERS climate zone**
Total	278.0	24
Garage	35.0	

Thermal performance

Heating	Cooling
73.5	**16.0**
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.

Accredited assessor

Name	NatHERS Assessor
Business name	Assessor Company
Email	assessor@assessorco.com.au
Phone	9999 999 999
Accreditation No.	TEST1234
Assessor Accrediting Organisation	
HERA	
Declaration of interest	Declaration not completed

Verification

To verify this certificate, scan the QR code or visit hstar-dev.azurewebsites.net/QR/Generate?p=uRYDIXWfN.
When using either link, ensure you are visiting hstar-dev.azurewebsites.net

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
TIM-005-01 W	TIM-005-01 W Timber A DG Argon Fill Clear-Clear	2.6	0.50	0.48	0.53
TIM-006-01 W	TIM-006-01 W Timber B DG Argon Fill Clear-Clear	2.6	0.53	0.50	0.56

Custom* windows

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

* Refer to glossary.

Window and glazed door *schedule*

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orientation	Window shading device*
Entry	TIM-005-01 W	n/a	514	905	n/a	90	E	No
Entry	TIM-005-01 W	n/a	514	905	n/a	90	E	No
Entry	TIM-006-01 W	n/a	514	905	n/a	00	E	No
Entry	TIM-006-01 W	n/a	514	905	n/a	00	E	No
Garage	TIM-005-01 W	n/a	514	1355	n/a	90	S	No
Garage	TIM-006-01 W	n/a	514	1355	n/a	00	S	No
Laundry	TIM-006-01 W	n/a	2100	1450	n/a	45	S	No
Kitchen/Family	TIM-006-01 W	n/a	1200	905	n/a	00	S	No
Kitchen/Family	TIM-006-01 W	n/a	600	1810	n/a	00	S	No
Kitchen/Family	TIM-005-01 W	n/a	1200	905	n/a	90	S	No
Kitchen/Family	TIM-006-01 W	n/a	2100	2410	n/a	45	W	No
Kitchen/Family	TIM-006-01 W	n/a	2100	2410	n/a	45	S	No
Kitchen/Family	TIM-006-01 W	n/a	600	1810	n/a	00	W	No
Kitchen/Family	TIM-006-01 W	n/a	1200	905	n/a	00	W	No
Kitchen/Family	TIM-005-01 W	n/a	1200	905	n/a	90	W	No
Kitchen/Family	TIM-006-01 W	n/a	600	1810	n/a	00	N	No
Kitchen/Family	TIM-006-01 W	n/a	1200	905	n/a	00	N	No
Kitchen/Family	TIM-005-01 W	n/a	1200	905	n/a	90	N	No
Pantry	TIM-006-01 W	n/a	600	1210	n/a	00	N	No
Pantry	TIM-006-01 W	n/a	1200	605	n/a	00	N	No
Pantry	TIM-005-01 W	n/a	1200	605	n/a	90	N	No
Living	TIM-006-01 W	n/a	2100	2410	n/a	45	N	No
Living	TIM-005-01 W	n/a	514	1355	n/a	90	E	No
Living	TIM-005-01 W	n/a	514	1355	n/a	90	E	No
Living	TIM-006-01 W	n/a	514	1355	n/a	00	E	No
Living	TIM-006-01 W	n/a	514	1355	n/a	00	E	No
Bed 1	TIM-005-01 W	n/a	1200	905	n/a	90	S	No
Bed 1	TIM-006-01 W	n/a	1200	905	n/a	00	S	No
WIR 1	TIM-005-01 W	n/a	1200	905	n/a	90	S	No
WIR 1	TIM-006-01 W	n/a	1200	905	n/a	00	S	No
Ensuite	TIM-005-01 W	n/a	900	610	n/a	90	W	No
Bed 2	TIM-005-01 W	n/a	1200	905	n/a	90	W	No
Bed 2	TIM-006-01 W	n/a	1200	905	n/a	00	W	No
Bed 3	TIM-005-01 W	n/a	1200	905	n/a	90	W	No
Bed 3	TIM-006-01 W	n/a	1200	905	n/a	00	W	No
Bath	TIM-005-01 W	n/a	1200	905	n/a	90	N	No
Bath	TIM-006-01 W	n/a	1200	905	n/a	00	N	No

* Refer to glossary.

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orientation	Window shading device*
Bed 4	TIM-005-01 W	n/a	1200	905	n/a	90	N	No
Bed 4	TIM-006-01 W	n/a	1200	905	n/a	00	N	No
Retreat	TIM-005-01 W	n/a	1200	905	n/a	90	N	No
Retreat	TIM-006-01 W	n/a	1200	905	n/a	00	N	No
Retreat	TIM-005-01 W	n/a	514	1355	n/a	90	S	No
Retreat	TIM-006-01 W	n/a	514	1355	n/a	00	S	No
Living Void	TIM-005-01 W	n/a	1200	905	n/a	90	N	No
Living Void	TIM-006-01 W	n/a	1200	905	n/a	00	N	No
Living Void	TIM-006-01 W	n/a	514	1355	n/a	00	E	No
Living Void	TIM-006-01 W	n/a	514	1355	n/a	00	E	No
Living Void	TIM-005-01 W	n/a	514	1355	n/a	90	E	No
Living Void	TIM-005-01 W	n/a	514	1355	n/a	90	E	No
Living Void	TIM-006-01 W	n/a	514	905	n/a	00	E	No
Living Void	TIM-006-01 W	n/a	514	905	n/a	00	E	No
Living Void	TIM-005-01 W	n/a	514	905	n/a	90	E	No
Living Void	TIM-005-01 W	n/a	514	905	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
DG-Generic-02 A	Glass	0.7	0.75	0.71	0.79

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
Hall 2	DG-Generic-02 A	n/a	0	780	550	W	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
Entry	2040	920	90	N
Garage	2100	4800	90	E
Garage	2040	820	90	W

External wall *type*

Wall ID	Wall type	Solar absorptance	Wall shade (colour)	Bulk insulation (R-value)	Reflective wall wrap*
EW-1	Brick Veneer	0.50	Medium	Bulk Insulation R8	No
EW-2	EPS Cavity Panel Direct Fix	0.30	Light	Bulk Insulation R6	No
EW-3	EPS Cavity Panel Direct Fix	0.50	Medium	Bulk Insulation R6	No
EW-4	EPS Cavity Panel Direct Fix	0.50	Medium	Bulk Insulation R6	No

External wall *schedule*

Location	Wall ID	Height (mm)	Width (mm)	Orientation	Horizontal shading feature* maximum projection (mm)	Vertical shading feature (yes/no)
Entry	EW-1	2430	1945	N	3400	YES
Entry	EW-1	2430	2500	E	0	NO
Entry	EW-1	2430	1945	S	0	NO
Garage	EW-1	2430	5795	E	0	YES
Garage	EW-1	2430	6100	S	0	NO
Garage	EW-1	2430	1700	W	0	YES
Laundry	EW-1	2430	2590	S	0	YES
Kitchen/Family	EW-1	2430	3995	S	0	NO
Kitchen/Family	EW-1	2430	4000	W	3000	YES
Kitchen/Family	EW-1	2430	3000	S	4000	YES
Kitchen/Family	EW-1	2430	6000	W	0	NO
Kitchen/Family	EW-1	2430	6995	N	0	NO
Pantry	EW-1	2430	2590	N	0	NO
Living	EW-1	2430	3895	N	0	NO
Living	EW-1	2430	3000	N	500	NO
Living	EW-1	2430	3400	E	2000	YES
Living	EW-1	2430	745	S	0	YES

* Refer to glossary.

Location	Wall ID	Height (mm)	Width (mm)	Orientation	Horizontal shading feature* maximum projection (mm)	Vertical shading feature (yes/no)
Bed 1	EW-1	2430	4095	E	550	YES
Bed 1	EW-1	614	3595	S	0	NO
Bed 1	EW-3	1816	3595	S	550	NO
WIR 1	EW-1	614	2995	S	0	NO
WIR 1	EW-3	1816	2995	S	550	NO
WIR 1	EW-1	314	1795	W	0	NO
WIR 1	EW-3	2116	1795	W	550	NO
Ensuite	EW-1	884	1190	W	0	YES
Ensuite	EW-3	1546	1190	W	550	YES
Bed 2	EW-1	551	3000	S	0	YES
Bed 2	EW-3	1879	3000	S	550	YES
Bed 2	EW-1	2430	3295	W	550	NO
Bed 3	EW-1	2430	3695	W	550	NO
Bed 3	EW-1	614	3595	N	0	NO
Bed 3	EW-3	1816	3595	N	550	NO
Bath	EW-1	614	2990	N	0	NO
Bath	EW-3	1816	2990	N	550	NO
Bed 4	EW-1	614	2990	N	0	NO
Bed 4	EW-3	1816	2990	N	550	NO
Retreat	EW-1	614	3790	N	0	NO
Retreat	EW-3	1816	3790	N	550	NO
Retreat	EW-1	2430	3790	S	550	YES
Living Void	EW-1	614	3095	N	0	NO
Living Void	EW-3	1816	3095	N	550	NO
Living Void	EW-1	614	5900	E	0	NO
Living Void	EW-3	1816	5900	E	550	NO
Living Void	EW-1	614	3095	S	0	NO
Living Void	EW-3	1816	3095	S	550	NO

Internal wall *type*

Wall ID	Wall type	Area (m^2)	Bulk insulation
IW-1 - Brick Veneer		6.00	Foil, Anti-glare one side, Reflective other
IW-2 - Cavity wall, direct fix plasterboard, single gap		25.00	Bulk Insulation, No Air Gap R2
IW-3 - Cavity wall, direct fix plasterboard, single gap		193.00	No insulation

* Refer to glossary.

Floor *type*

Location	Construction	Area (m^2)	Sub-floor ventilation	Added insulation (R-value)	Covering
Entry	Waffle pod slab 375 mm 110mm	4.70	None	Waffle Pod 375mm	Cork Tiles or Parquetry 8mm
Garage	Waffle pod slab 375 mm 110mm	34.90	None	Waffle Pod 375mm	Bare
Laundry	Waffle pod slab 375 mm 110mm	10.20	None	Waffle Pod 375mm	Ceramic Tiles 8mm
Kitchen/Family	Waffle pod slab 375 mm 110mm	57.60	None	Waffle Pod 375mm	Cork Tiles or Parquetry 8mm
Pantry	Waffle pod slab 375 mm 110mm	6.40	None	Waffle Pod 375mm	Cork Tiles or Parquetry 8mm
Living	Waffle pod slab 375 mm 110mm	39.90	None	Waffle Pod 375mm	Cork Tiles or Parquetry 8mm
Hall 1	Waffle pod slab 375 mm 110mm	2.80	None	Waffle Pod 375mm	Cork Tiles or Parquetry 8mm
Powder	Waffle pod slab 375 mm 110mm	3.00	None	Waffle Pod 375mm	Ceramic Tiles 8mm
WC 1	Waffle pod slab 375 mm 110mm	1.80	None	Waffle Pod 375mm	Ceramic Tiles 8mm
Bed 1/Laundry	Timber Above Plasterboard 100mm	10.40		Bulk Insulation R2	Carpet+Rubber Underlay 18mm
Bed 1/Kitchen/Family	Timber Above Plasterboard 100mm	4.00		Bulk Insulation R4	Carpet+Rubber Underlay 18mm
WIR 1/Kitchen/Family	Timber Above Plasterboard 100mm	5.20		Bulk Insulation R4	Carpet+Rubber Underlay 18mm
Ensuite/Kitchen/Family	Timber Above Plasterboard 100mm	5.80		Bulk Insulation R4	Ceramic Tiles 8mm
Bed 2/Kitchen/Family	Timber Above Plasterboard 19mm	8.60		Bulk Insulation R4	Carpet+Rubber Underlay 18mm
Bed 2	Suspended Timber Floor 19mm	2.90	Totally Open	Bulk Insulation in Contact with Floor R2	Carpet+Rubber Underlay 18mm
Bed 3/Kitchen/Family	Timber Above Plasterboard 100mm	13.00		Bulk Insulation R4	Carpet+Rubber Underlay 18mm
Bath/Kitchen/Family	Timber Above Plasterboard 100mm	8.00		Bulk Insulation R4	Ceramic Tiles 8mm
Bed 4/Kitchen/Family	Timber Above Plasterboard 100mm	1.20		Bulk Insulation R4	Carpet+Rubber Underlay 18mm
Bed 4/Pantry	Timber Above Plasterboard 100mm	6.40		Bulk Insulation R4	Carpet+Rubber Underlay 18mm
Bed 4/Powder	Timber Above Plasterboard 100mm	1.20		Bulk Insulation R4	Carpet+Rubber Underlay 18mm
Bed 4/WC 1	Timber Above Plasterboard 100mm	2.00		Bulk Insulation R4	Carpet+Rubber Underlay 18mm
Retreat/Living	Timber Above Plasterboard 100mm	21.90		Bulk Insulation R4	Carpet+Rubber Underlay 18mm
Hall 2/Kitchen/Family	Timber Above Plasterboard 100mm	6.20		Bulk Insulation R4	Carpet+Rubber Underlay 18mm
Hall 2/Hall 1	Timber Above Plasterboard 100mm	2.90		Bulk Insulation R4	Carpet+Rubber Underlay 18mm
WC 2/Kitchen/Family	Timber Above Plasterboard 100mm	2.70		Bulk Insulation R4	Ceramic Tiles 8mm
WIR 4/Kitchen/Family	Timber Above Plasterboard 100mm	0.50		Bulk Insulation R4	Carpet+Rubber Underlay 18mm
WIR 4/Powder	Timber Above Plasterboard 100mm	1.90		Bulk Insulation R4	Carpet+Rubber Underlay 18mm
Living Void/Living	Timber Above Plasterboard 100mm	18.00		Bulk Insulation R4	Carpet+Rubber Underlay 18mm

Ceiling *type*

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap*
Entry	Plasterboard	Bulk Insulation R10	No
Garage	Plasterboard	Bulk Insulation R10	No
Laundry	Timber Above Plasterboard	Bulk Insulation R2	No
Kitchen/Family	Timber Above Plasterboard	Bulk Insulation R4	No
Pantry	Timber Above Plasterboard	Bulk Insulation R4	No
Living	Timber Above Plasterboard	Bulk Insulation R4	No
Hall 1	Timber Above Plasterboard	Bulk Insulation R4	No
Powder	Timber Above Plasterboard	Bulk Insulation R4	No
WC 1	Timber Above Plasterboard	Bulk Insulation R4	No
Bed 1	Plasterboard	Bulk Insulation R10	No
WIR 1	Plasterboard	Bulk Insulation R10	No
Ensuite	Plasterboard	Bulk Insulation R10	No
Bed 2	Plasterboard	Bulk Insulation R10	No
Bed 3	Plasterboard	Bulk Insulation R10	No
Bath	Plasterboard	Bulk Insulation R10	No
Bed 4	Plasterboard	Bulk Insulation R10	No
Retreat	Plasterboard	Bulk Insulation R10	No
Hall 2	Plasterboard	Bulk Insulation R10	No
WC 2	Plasterboard	Bulk Insulation R10	No
WIR 4	Plasterboard	Bulk Insulation R10	No
Living Void	Plasterboard	Bulk Insulation R10	No

Ceiling *penetrations**

Location	Quantity	Type	Diameter (mm^2)	Sealed/unsealed
Entry	1	Downlights - LED	190	Sealed
Laundry	1	Downlights - LED	190	Sealed
Kitchen/Family	8	Downlights - LED	190	Sealed
Kitchen/Family	1	Exhaust Fans	160	Sealed
Pantry	2	Downlights - LED	190	Sealed
Living	2	Downlights - LED	190	Sealed
Hall 1	1	Downlights - LED	190	Sealed
Powder	1	Downlights - LED	190	Sealed
WC 1	1	Downlights - LED	190	Sealed
WC 1	1	Exhaust Fans	350	Sealed
Bed 1	2	Downlights - LED	190	Sealed
WIR 1	1	Downlights - LED	190	Sealed

* Refer to glossary.

Location	Quantity	Type	Diameter (mm)	Sealed/unsealed
Ensuite	1	Downlights - LED	190	Sealed
Ensuite	1	Exhaust Fans	420	Sealed
Bed 2	2	Downlights - LED	190	Sealed
Bed 3	2	Downlights - LED	190	Sealed
Bath	1	Downlights - LED	190	Sealed
Bath	1	Exhaust Fans	420	Sealed
Bed 4	2	Downlights - LED	190	Sealed
Retreat	3	Downlights - LED	190	Sealed
WC 2	1	Downlights - LED	190	Sealed
WC 2	1	Exhaust Fans	350	Sealed
WIR 4	1	Downlights - LED	190	Sealed
Living Void	2	Downlights - LED	190	Sealed

Ceiling *fans*

Location	Quantity	Diameter (mm)
No Data Available		

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
Roof Tiles	No Insulation, Only an 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).