

Nationwide House Energy Rating Scheme

NatHERS Certificate No. 0005849047

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Property

Address 14 Mount Vernon Road , Mount Vernon ,
NSW , 2178

Lot/DP 1/1221535

NCC Class* 1A

Type New Dwelling

Plans

Main Plan Project No 2025, Issue A dated 21.01.21

Prepared by ATJ Architects, Drawn BL

Construction and environment

Assessed floor area (m ²)*	Exposure Type
Conditioned* 320.0	Open
Unconditioned* 147.0	NatHERS climate zone
Total 467.0	28
Garage 124.0	



Accredited assessor

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Accreditation No. DMN/12/1469

Assessor Accrediting Organisation
Design Matters National

Declaration of interest Declaration completed: no conflicts

National Construction Code (NCC) requirements

The NCC's requirements for NatHERS-rated houses are detailed in 3.12.0(a)(i) and 3.12.5 of the NCC Volume Two. For apartments the requirements are detailed in J0.2 and J5 to J8 of the NCC Volume One.

In NCC 2019, these requirements include minimum star ratings and separate heating and cooling load limits that need to be met by buildings and apartments through the NatHERS assessment. Requirements additional to the NatHERS assessment that must also be satisfied include, but are not limited to: insulation installation methods, thermal breaks, building sealing, water heating and pumping, and artificial lighting requirements. The NCC and NatHERS Heating and Cooling Load Limits (Australian Building Codes Board Standard) are available at www.abcb.gov.au.

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

4.8
The more stars
the more energy efficient

**NATIONWIDE
HOUSE**
ENERGY RATING SCHEME

119.5 MJ/m²
Predicted annual energy load for
heating and cooling based on standard
occupancy assumptions.

For more information on
your dwelling's rating see:
www.nathers.gov.au

Thermal performance

Heating	Cooling
57.8 MJ/m ²	61.8 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=DDpneeRYF.

When using either link, ensure you are visiting hstar.com.au



* 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?

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

Windows 15 in Pantry are showing louvre blades as shading device. Louvre blades are to represent the breezeblock at the front of this wall

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	ALM-004-01 A Aluminium B DG Air Fill Clear-Clear	4.8	0.59	0.59	0.59

Custom* windows

Window ID	Window Description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
AWS-003-11 A	AWS-003-11 A 502/504 AI Sliding Window DG 638CPClr/8/4	3.8	0.48	0.46	0.50
AWS-067-11 A	AWS-067-11 A RES SERIES 516 FIXED WINDOW DG 3_LightBridge_ClrSI_638-10-4	2.2	0.49	0.47	0.51
VAN-004-03 A	VAN-004-03 A SERIES 525 LOUVRE WINDOW SG 6EVanClr	4.7	0.49	0.47	0.51
AWS-013-09 A	AWS-013-09 A 541/542 AI Sliding Door DG 6.38CPClr/8/4	3.6	0.50	0.48	0.53

Custom* windows

Window ID	Window Description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
AWS-031-33 A	AWS-031-33 A 463 Al Double Hung Window DG 638CPClr/8/4	4.2	0.43	0.41	0.45

Window and glazed door *schedule*

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orientation	Window shading device*
Shed	AWS-003-11 A	n/a	1500	2400	n/a	45	N	No
Kitchen/Living	AWS-067-11 A	n/a	3000	3000	n/a	00	N	Yes
Kitchen/Living	VAN-004-03 A	n/a	3000	1000	n/a	90	N	Yes
Kitchen/Living	VAN-004-03 A	n/a	3000	1000	n/a	90	N	Yes
Kitchen/Living	AWS-013-09 A	n/a	3000	2700	n/a	45	E	No
Kitchen/Living	AWS-031-33 A	n/a	2100	1000	n/a	45	S	Yes
Kitchen/Living	AWS-031-33 A	n/a	2100	1000	n/a	45	S	Yes
Kitchen/Living	AWS-031-33 A	n/a	3000	1000	n/a	45	W	Yes
Kitchen/Living	AWS-031-33 A	n/a	3000	1000	n/a	45	W	Yes
Kitchen/Living	AWS-003-11 A	n/a	900	3600	n/a	30	W	No
Stairs GF	AWS-031-33 A	n/a	3000	900	n/a	45	S	No
Powder	AWS-031-33 A	n/a	3000	900	n/a	45	S	No
Entry Hall	AWS-067-11 A	n/a	3000	1820	n/a	00	S	No
Entry Hall	VAN-004-03 A	n/a	3000	1000	n/a	90	S	No
Entry Hall	AWS-067-11 A	n/a	3000	5000	n/a	00	S	No
Entry Hall	AWS-067-11 A	n/a	3000	600	n/a	00	S	No
Entry Hall	AWS-067-11 A	n/a	3000	600	n/a	00	S	No
Entry Hall	AWS-067-11 A	n/a	3000	2500	n/a	00	N	No
Entry Hall	AWS-067-11 A	n/a	3000	2500	n/a	00	N	No
Entry Hall	AWS-067-11 A	n/a	3000	2500	n/a	00	N	No
Entry Hall	AWS-013-09 A	n/a	3000	5200	n/a	50	N	No
Laundry	ALM-004-01 A	n/a	3000	1000	n/a	90	W	No
Music Room	AWS-031-33 A	n/a	3000	1200	n/a	45	E	No
Music Room	AWS-067-11 A	n/a	3000	2500	n/a	00	S	No
Music Room	VAN-004-03 A	n/a	3000	1200	n/a	90	W	No
Music Room	AWS-067-11 A	n/a	3000	1300	n/a	00	W	No
Bed 4	VAN-004-03 A	n/a	3000	900	n/a	90	N	No
Bed 4	AWS-067-11 A	n/a	3000	900	n/a	00	N	No
Ensuite	AWS-031-33 A	n/a	3000	900	n/a	45	E	No
Bed 3	AWS-031-33 A	n/a	3000	900	n/a	45	W	Yes
Bed 3	AWS-031-33 A	n/a	3000	900	n/a	45	W	Yes
Bed 1 WIR	AWS-031-33 A	n/a	3000	900	n/a	45	W	Yes

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orientation	Window shading device*
Ensuite	AWS-003-11 A	n/a	900	3600	n/a	30	W	No
Ensuite	VAN-004-03 A	n/a	3000	1000	n/a	90	N	No
Ensuite	AWS-067-11 A	n/a	3000	1700	n/a	00	N	No
Bed 1	VAN-004-03 A	n/a	3000	1000	n/a	90	N	No
Bed 1	AWS-067-11 A	n/a	3000	1700	n/a	00	N	No
Bed 1	VAN-004-03 A	n/a	3000	1000	n/a	90	S	No
Bed 1	AWS-067-11 A	n/a	3000	1700	n/a	00	S	No
Bed 1	ALM-004-01 A	n/a	3000	1000	n/a	90	E	No
Bed 2	VAN-004-03 A	n/a	3000	1000	n/a	90	E	No
Bed 2	AWS-067-11 A	n/a	3000	1700	n/a	00	E	No
Bath	AWS-031-33 A	n/a	3000	900	n/a	45	E	No
Bath	AWS-031-33 A	n/a	3000	900	n/a	45	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
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
Garage 1	2400	5400	90	S
Garage 1	2400	3000	90	W
Entry Hall	3000	1200	90	S

External wall type

Wall ID	Wall type	Solar absorptance	Wall shade (colour)	Bulk insulation (R-value)	Reflective wall wrap*
EW-1	Cavity Brick	0.50	Medium	No insulation	No
EW-2	Weatherboard Cavity Panel Direct Fix	0.50	Medium	Foil, Reflective both sides + Bulk Insulation R2.7	Yes
EW-3	Brick Veneer	0.50	Medium	Foil, Reflective both sides + Bulk Insulation R2.7	Yes
EW-4	Brick Veneer	0.50	Medium	Foil, Reflective both sides + Bulk Insulation R2.7	Yes

External wall schedule

Location	Wall ID	Height (mm)	Width (mm)	Orientation	Horizontal shading feature* maximum projection (mm)	Vertical shading feature (yes/no)
Garage 1	EW-1	3000	545	S	0	YES
Garage 1	EW-1	3000	6600	E	0	YES
Garage 1	EW-1	3000	5900	S	0	NO
Garage 1	EW-1	3000	10045	W	0	NO
Shed	EW-1	3000	6500	N	0	NO
Shed	EW-1	3000	4345	W	0	NO
Store	EW-1	3000	2700	S	0	NO
Store	EW-1	3000	2100	W	0	YES
Store	EW-1	3000	1845	S	0	YES
Stairs LGF	EW-1	3000	2200	S	0	NO
Kitchen/Living	EW-2	3000	7000	N	1100	NO
Kitchen/Living	EW-2	3000	3900	E	0	YES
Kitchen/Living	EW-2	3000	6600	E	700	YES
Kitchen/Living	EW-2	3000	7000	S	1600	NO
Kitchen/Living	EW-2	3000	15000	W	700	NO
Stairs GF	EW-3	3000	2190	S	200	YES
Powder	EW-3	3000	1890	S	3800	NO
Entry Hall	EW-3	3000	2995	S	200	YES
Entry Hall	EW-2	3000	3500	E	700	YES
Entry Hall	EW-2	3000	5800	S	1200	NO
Entry Hall	EW-2	3000	2600	W	3800	YES
Entry Hall	EW-2	3000	200	S	3800	YES

Location	Wall ID	Height (mm)	Width (mm)	Orientation	Horizontal shading feature* maximum projection (mm)	Vertical shading feature (yes/no)
Entry Hall	EW-3	3000	2495	S	3800	NO
Entry Hall	EW-4	3000	15590	N	5400	YES
Laundry	EW-2	3000	2690	W	0	YES
Music Room	EW-2	3000	2195	E	600	YES
Music Room	EW-2	3000	5095	S	1200	NO
Music Room	EW-2	3000	5000	W	600	YES
Bed 4	EW-2	3000	3495	N	700	YES
Bed 4	EW-2	3000	2895	E	700	NO
Ensuite	EW-2	3000	1995	E	700	NO
Ensuite	EW-2	3000	1895	S	1200	NO
Bed 4 WIR	EW-2	3000	1590	S	1200	NO
Bed 3	EW-2	3000	4590	W	600	NO
Bed 1 WIR	EW-2	3000	2490	W	600	NO
Ensuite	EW-2	3000	3595	W	600	NO
Ensuite	EW-2	3000	3595	N	1100	NO
Bed 1	EW-2	3000	4995	N	1100	NO
Bed 1	EW-2	3000	3600	E	700	NO
Bed 1	EW-2	3000	3500	S	600	YES
Bed 1	EW-2	3000	2495	E	700	YES
Bed 2	EW-2	3000	3495	N	700	YES
Bed 2	EW-2	3000	4495	E	700	NO
Bath	EW-2	3000	2795	E	700	NO
Bath	EW-2	3000	3495	S	600	YES
Hallway	EW-2	3000	795	E	4200	YES
Hallway	EW-2	3000	695	E	4200	YES

Internal wall type

Wall ID	Wall type	Area (m ²)	Bulk insulation
IW-1	Single Skin Brick	47.00	No insulation
IW-2	Cavity brick, plasterboard	50.00	No Insulation
IW-3	Cavity wall, direct fix plasterboard, single gap	74.00	No insulation
IW-4	Cavity wall, direct fix plasterboard, single gap	150.00	Bulk Insulation, No Air Gap R2

Floor type

Location	Construction	Area (m ²)	Sub-floor ventilation (R-value)	Added insulation	Covering
Garage 1	Concrete Slab on Ground 100mm	61.10	None	No Insulation	Bare
Shed	Concrete Slab on Ground 100mm	28.20	None	No Insulation	Bare

Location	Construction	Area (m ²)	Sub-floor ventilation	Added insulation (R-value)	Covering
Store	Concrete Slab on Ground 100mm	25.20	None	No Insulation	Bare
Stairs LGF	Concrete Slab on Ground 100mm	9.40	None	No Insulation	Bare
Kitchen/Living /Garage 1	Concrete Above Plasterboard 150mm	61.60		Bulk Insulation R2	Cork Tiles or Parquetry 8mm
Kitchen/Living /Shed	Concrete Above Plasterboard 150mm	28.50		Bulk Insulation R2	Cork Tiles or Parquetry 8mm
Kitchen/Living	Suspended Concrete Slab 150mm	14.70	Totally Open	No Insulation	Cork Tiles or Parquetry 8mm
Stairs GF/Stairs LGF	Concrete Above Plasterboard 150mm	5.40		No Insulation	Bare
Powder/Store	Concrete Above Plasterboard 150mm	4.60		Bulk Insulation R2	Ceramic Tiles 8mm
Entry Hall/Store	Concrete Above Plasterboard 150mm	14.80		Bulk Insulation R2	Cork Tiles or Parquetry 8mm
Entry Hall/Stairs LGF	Concrete Above Plasterboard 150mm	4.10		No Insulation	Cork Tiles or Parquetry 8mm
Entry Hall	Suspended Concrete Slab 150mm	52.50	Enclosed	Bulk Insulation in Contact with Floor R2	Cork Tiles or Parquetry 8mm
Linen	Suspended Concrete Slab 150mm	4.90	Enclosed	Bulk Insulation in Contact with Floor R2	Cork Tiles or Parquetry 8mm
Laundry	Suspended Concrete Slab 150mm	9.30	Enclosed	Bulk Insulation in Contact with Floor R2	Ceramic Tiles 8mm
Music Room	Suspended Concrete Slab 150mm	35.70	Enclosed	Bulk Insulation in Contact with Floor R2	Cork Tiles or Parquetry 8mm
Bed 4	Suspended Concrete Slab 150mm	9.90	Enclosed	Bulk Insulation in Contact with Floor R2	Cork Tiles or Parquetry 8mm
Ensuite	Suspended Concrete Slab 150mm	3.60	Enclosed	Bulk Insulation in Contact with Floor R2	Ceramic Tiles 8mm
Bed 4 WIR	Suspended Concrete Slab 150mm	2.90	Enclosed	Bulk Insulation in Contact with Floor R2	Cork Tiles or Parquetry 8mm
Bed 3	Suspended Concrete Slab 150mm	16.00	Enclosed	Bulk Insulation in Contact with Floor R2	Cork Tiles or Parquetry 8mm
Bed 1 WIR	Suspended Concrete Slab 150mm	8.60	Enclosed	Bulk Insulation in Contact with Floor R2	Cork Tiles or Parquetry 8mm
Ensuite	Suspended Concrete Slab 150mm	12.60	Enclosed	Bulk Insulation in Contact with Floor R2	Ceramic Tiles 8mm
Bed 1	Suspended Concrete Slab 150mm	21.40	Enclosed	Bulk Insulation in Contact with Floor R2	Cork Tiles or Parquetry 8mm
Bed 2	Suspended Concrete Slab 150mm	15.40	Enclosed	Bulk Insulation in Contact with Floor R2	Cork Tiles or Parquetry 8mm
Bath	Suspended Concrete Slab 150mm	9.50	Enclosed	Bulk Insulation in Contact with Floor R2	Ceramic Tiles 8mm
Hallway	Suspended Concrete Slab 150mm	12.30	Enclosed	Bulk Insulation in Contact with Floor R2	Cork Tiles or Parquetry 8mm

Ceiling type

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap*
Garage 1	Plasterboard	No insulation	No
Garage 1	Concrete Above Plasterboard	Bulk Insulation R2	No
Shed	Plasterboard	No insulation	No
Shed	Concrete Above Plasterboard	Bulk Insulation R2	No
Store	Concrete, Plasterboard	Bulk Insulation R2	No
Store	Concrete Above Plasterboard	Bulk Insulation R2	No

* Refer to glossary.

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap*
Stairs LGF	Plasterboard	No insulation	No
Stairs LGF	Concrete Above Plasterboard	No Insulation	No
Kitchen/Living	Plasterboard	Bulk Insulation R4	No
Stairs GF	Plasterboard	Bulk Insulation R4	No
Powder	Plasterboard	Bulk Insulation R4	No
Entry Hall	Plasterboard	Bulk Insulation R4	No
Linen	Plasterboard	Bulk Insulation R4	No
Laundry	Plasterboard	Bulk Insulation R4	No
Music Room	Plasterboard	Bulk Insulation R4	No
Bed 4	Plasterboard	Bulk Insulation R4	No
Ensuite	Plasterboard	Bulk Insulation R4	No
Bed 4 WIR	Plasterboard	Bulk Insulation R4	No
Bed 3	Plasterboard	Bulk Insulation R4	No
Bed 1 WIR	Plasterboard	Bulk Insulation R4	No
Ensuite	Plasterboard	Bulk Insulation R4	No
Bed 1	Plasterboard	Bulk Insulation R4	No
Bed 2	Plasterboard	Bulk Insulation R4	No
Bath	Plasterboard	Bulk Insulation R4	No
Hallway	Plasterboard	Bulk Insulation R4	No

Ceiling penetrations*

Location	Quantity	Type	Diameter (mm ²)	Sealed/unsealed
Kitchen/Living	14	Downlights - LED	450	Sealed
Kitchen/Living	1	Exhaust Fans	300	Sealed
Kitchen/Living	1	Chimneys	250	Sealed
Stairs GF	1	Downlights - LED	150	Sealed
Powder	1	Downlights - LED	150	Sealed
Powder	1	Exhaust Fans	300	Sealed
Entry Hall	6	Downlights - LED	150	Sealed
Linen	1	Downlights - LED	150	Sealed
Laundry	2	Downlights - LED	150	Sealed
Music Room	6	Downlights - LED	150	Sealed
Bed 4	2	Downlights - LED	150	Sealed
Ensuite	1	Downlights - LED	150	Sealed
Ensuite	1	Exhaust Fans	300	Sealed
Bed 4 WIR	1	Downlights - LED	150	Sealed
Bed 3	2	Downlights - LED	450	Sealed
Bed 1 WIR	2	Downlights - LED	150	Sealed

* Refer to glossary.

Location	Quantity	Type	Diameter (mm)	Sealed/unsealed
Ensuite	3	Downlights - LED	150	Sealed
Ensuite	1	Exhaust Fans	300	Sealed
Bed 1	5	Downlights - LED	150	Sealed
Bed 2	2	Downlights - LED	150	Sealed
Bath	3	Downlights - LED	150	Sealed
Bath	1	Exhaust Fans	300	Sealed
Hallway	2	Downlights - LED	150	Sealed

Ceiling fans

Location	Quantity	Diameter (mm)
Kitchen/Living	2	1200
Entry Hall	1	1200
Music Room	1	1200
Bed 4	1	1200
Bed 3	1	1200
Bed 1	1	1200
Bed 2	1	1200

Roof type

Construction	Added insulation (R-value)	Solar absorptance	Roof shade
Concrete	No Added Insulation, No air Gap	0.50	Medium
Corrugated Iron	Bulk, Reflective Side Down, No Air Gap Above R1.8	0.85	Dark
Corrugated Iron	Bulk, Reflective Side Down, No Air Gap Above R1.8	0.85	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 10m e.g. city and industrial areas.
Horizontal shading feature	provides shading to the building in the horizontal plane, e.g. eaves, verandahs, pergolas, carports, or overhangs or balconies from upper levels.
National Construction Code (NCC) Class	the NCC groups buildings by their function and use, and assigns a classification code. NatHERS software models NCC Class 1, 2 or 4 buildings and attached Class 10a buildings. Definitions can be found at www.abcb.gov.au .
Opening percentage	the openability percentage or operable (moveable) area of doors or windows that is used in ventilation calculations.
Provisional value	an assumed value that does not represent an actual value. For example, if the wall colour is unspecified in the documentation, a provisional value of 'medium' must be modelled. Acceptable provisional values are outlined in the NatHERS Technical Note and can be found at www.nathers.gov.au
Reflective wrap (also known as foil)	can be applied to walls, roofs and ceilings. When combined with an appropriate airgap and emissivity value, it provides insulative properties.
Roof window	for NatHERS this is typically an operable window (i.e. can be opened), will have a plaster or similar light well if there is an attic space, and generally does not have a diffuser.
Shading device	a device fixed to windows that provides shading e.g. window awnings or screens but excludes eaves.
Shading features	includes neighbouring buildings, fences, and wing walls, but excludes eaves.
Solar heat gain coefficient (SHGC)	the fraction of incident solar radiation admitted through a window, both directly transmitted as well as absorbed and subsequently released inward. SHGC is expressed as a number between 0 and 1. The lower a window's SHGC, the less solar heat it transmits.
Skylight (also known as roof lights)	for NatHERS this is typically a moulded unit with flexible reflective tubing (light well) and a diffuser at ceiling level.
U-value	the rate of heat transfer through a window. The lower the U-value, the better the insulating ability.
Unconditioned	a zone within a dwelling that is assumed to not require heating and cooling based on standard occupancy assumptions.
Vertical shading features	provides shading to the building in the vertical plane and can be parallel or perpendicular to the subject wall/window. Includes privacy screens, other walls in the building (wing walls), fences, other buildings, vegetation (protected or listed heritage trees).