Nationwide House Energy Rating Scheme
NatHERS Certificate No. 0007838204

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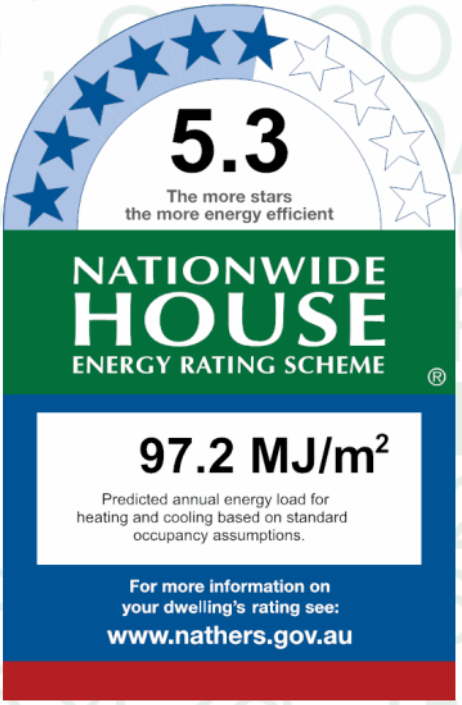

Property

Address	Unit PRIM, 16 Crooked River Road , Gerroa , NSW , 2534
Lot/DP	201/1022563
NCC Class*	1A
Type	New Dwelling

Plans

Main Plan	REV 9
Prepared by	1

Construction and environment

Assessed floor area (m^2)*		**Exposure Type**
Conditioned*	440.0	Exposed
Unconditioned*	94.0	**NatHERS climate zone**
Total	534.0	18
Garage	62.0	

Thermal performance

Heating	**Cooling**
73.1 MJ/m^2	**24.1** MJ/m^2

Accredited assessor

Name	Abbas Chatrfirouzeh
Business name	SYMEC Group Pty. Ltd. T/As SDS Engineering
Email	abbas@sdsengineering.com.au
Phone	(02) 9098 4729
Accreditation No.	101512
Assessor Accrediting Organisation	ABSA
Declaration of interest	Declaration completed: no conflicts

About the rating

NatHERS software models the expected thermal energy loads using information about the design and construction, climate and common patterns of household use. The software does not take into account appliances, apart from the airflow impacts from ceiling fans.

Verification

To verify this certificate, scan the QR code or visit hstar.com.au/QR/Generate?p=JWZTjMQpP.
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

I have modeled the shading in accordance with NatHERS principles

Window and glazed door *type and performance*

Default* windows

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

Custom* windows

Window ID	Window Description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
BRD-043-06 A	BRD-043-06 A SIG Louvre Window (125mm) SG 6EA	4.5	0.52	0.49	0.55
BRD-033-10 A	BRD-033-10 A ESS Sliding Door (80mm) SG 6.38CPClr	4.3	0.60	0.57	0.63
BRD-041-11 A	BRD-041-11 A SIG Fixed Lite Externally Glazed (125mm) SG 638CPClr	4.2	0.60	0.57	0.63
BRD-064-02 A	BRD-064-02 A SIG Fixed Lite (67mm) DG 4ET-6Ar-4	2.9	0.59	0.56	0.62
BRD-035-47 A	BRD-035-47 A SIG Sliding Door (100mm) DG 6mmEnTechGrn_8Ar_4mmClr	3.0	0.37	0.35	0.39

Window and glazed door *schedule*

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orientation	Window shading device*
MASTER SUITE	BRD-043-06 A	n/a	2400	3000	n/a	20	SE	No
MASTER SUITE	BRD-033-10 A	n/a	2400	4800	n/a	45	NE	No
ENS MASTER	BRD-043-06 A	n/a	1200	1910	n/a	31	SE	No
ENS MASTER	BRD-041-11 A	n/a	1200	2400	n/a	00	SW	No
DRESSING ROOM	BRD-041-11 A	n/a	1200	2400	n/a	00	SW	No
OFFICE	BRD-064-02 A	n/a	1500	2400	n/a	00	SW	No
KIT/DIN/LOU	BRD-064-02 A	n/a	2400	1200	n/a	00	SW	No
SITTING	BRD-035-47 A	n/a	2400	3200	n/a	45	NE	No
KIT/DIN/LOU	BRD-064-02 A	n/a	2100	2700	n/a	00	NW	No
KIT/DIN/LOU	BRD-033-10 A	n/a	3000	4800	n/a	45	NE	No
KIT/DIN/LOU	BRD-033-10 A	n/a	2400	4800	n/a	45	SE	No
KIT/DIN/LOU	BRD-043-06 A	n/a	2400	2450	n/a	24	SE	No
KIT/DIN/LOU	BRD-043-06 A	n/a	2400	2450	n/a	24	SE	No
KIT/DIN/LOU	BRD-041-11 A	n/a	450	4800	n/a	00	SE	No
KIT/DIN/LOU	BRD-041-11 A	n/a	450	2450	n/a	00	SE	No
KIT/DIN/LOU	BRD-041-11 A	n/a	450	2450	n/a	00	SE	No
KIT/DIN/LOU	BRD-064-02 A	n/a	1425	4800	n/a	00	NE	No Shading
ENTRY	BRD-064-02 A	n/a	3000	2100	n/a	00	SW	No
ENTRY	BRD-064-02 A	n/a	3000	2100	n/a	00	NE	No
HALL 2	BRD-064-02 A	n/a	2100	2100	n/a	00	SW	No
HALL 2	BRD-064-02 A	n/a	2400	1500	n/a	00	NW	No
BATH	BRD-043-06 A	n/a	2400	2100	n/a	30	NW	No
LAUNDRY	BRD-043-06 A	n/a	2400	900	n/a	90	NW	No
BED 5	BRD-043-06 A	n/a	2400	2100	n/a	30	NW	No
KIDS ACTIVITY	BRD-043-06 A	n/a	2400	2100	n/a	30	NW	No
BED 4	BRD-043-06 A	n/a	2400	600	n/a	90	SE	No
BED 4	BRD-033-10 A	n/a	2400	1780	n/a	90	SE	No
BED 3	BRD-043-06 A	n/a	2400	600	n/a	90	SE	No
BED 3	BRD-033-10 A	n/a	2400	1780	n/a	90	SE	No
BED 2	BRD-043-06 A	n/a	2400	600	n/a	90	SE	No
BED 2	BRD-033-10 A	n/a	2400	1780	n/a	90	SE	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					

* Refer to glossary.

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	2400	2600	90	NW
GARAGE	2400	2600	90	NW
GARAGE	2400	2600	90	NW
ENTRY	3000	3000	90	NW
SPORTS STORE	2400	1800	90	SW

External wall *type*

Wall ID	Wall type	Solar absorptance	Wall shade (colour)	Bulk insulation (R-value)	Reflective wall wrap*
EW-1	Fibro Cavity Panel Direct Fix	0.33	Light	Foil reflective both sides of the Bulk Insulation R2.7	Yes
EW-2	Fibro Cavity Panel Direct Fix	0.33	Light	Bulk Insulation R1.5	No

External wall *schedule*

Location	Wall ID	Height (mm)	Width (mm)	Orientation	Horizontal shading feature* maximum projection (mm)	Vertical shading feature (yes/no)
MASTER SUITE	EW-1	2750	5595	SE	600	NO
MASTER SUITE	EW-1	2750	700	NW	11600	YES
MASTER SUITE	EW-1	2750	6400	NE	600	NO

* Refer to glossary.

Location	Wall ID	Height (mm)	Width (mm)	Orientation	Horizontal shading feature* maximum projection (mm)	Vertical shading feature (yes/no)
ENS MASTER	EW-1	2750	6095	SE	600	NO
ENS MASTER	EW-1	2750	2395	SW	600	NO
DRESSING ROOM	EW-1	2750	3995	SW	600	NO
DRESSING ROOM	EW-1	2750	4000	NW	600	YES
OFFICE	EW-1	2750	4090	SW	600	YES
KIT/DIN/LOU	EW-1	2750	600	SE	11100	YES
KIT/DIN/LOU	EW-1	2750	1895	SW	600	NO
SITTING	EW-1	2750	4090	NE	600	YES
MUD ROOM	EW-1	2750	5695	SW	600	NO
MUD ROOM	EW-1	2751	1500	SW	0	NO
MUD ROOM	EW-1	2750	595	SW	4000	YES
MUD ROOM	EW-1	2750	595	NE	4900	YES
MUD ROOM	EW-1	2751	1600	NE	6100	NO
MUD ROOM	EW-1	2750	895	NE	0	YES
GARAGE	EW-2	2750	4300	SE	600	YES
GARAGE	EW-2	2750	3400	SE	600	YES
GARAGE	EW-2	2750	6100	SW	600	NO
GARAGE	EW-2	2750	10100	NW	600	NO
GARAGE	EW-2	2750	6100	NE	600	NO
PANTRY	EW-1	2750	1595	NW	900	YES
KIT/DIN/LOU	EW-1	2750	4795	NW	900	YES
KIT/DIN/LOU	EW-1	2750	6700	NW	900	YES
KIT/DIN/LOU	EW-1	3000	6595	NE	7100	NO
KIT/DIN/LOU	EW-1	3000	13500	SE	900	YES
ENTRY	EW-1	3000	3595	SW	300	YES
ENTRY	EW-1	3000	4100	NW	1850	NO
ENTRY	EW-1	3000	3595	NE	300	YES
HALL 2	EW-1	2750	2895	SW	6400	YES
HALL 2	EW-1	2750	1490	NW	600	NO
HALL 2	EW-1	2751	1900	NE	0	YES
HALL 2	EW-1	2750	995	NE	7100	NO
MEDIA	EW-1	2750	4595	SE	600	YES
MEDIA	EW-1	2750	6595	SW	600	NO
SPORTS STORE	EW-1	2750	2795	SW	600	NO
SPORTS STORE	EW-1	2750	4595	NW	600	NO
BATH	EW-1	2750	3790	NW	600	NO
LAUNDRY	EW-1	2750	1890	NW	600	NO
BED 5	EW-1	2750	4690	NW	600	NO
KIDS ACTIVITY	EW-1	2750	6495	NW	600	NO

* Refer to glossary.

Location	Wall ID	Height (mm)	Width (mm)	Orientation	Horizontal shading feature* maximum projection (mm)	Vertical shading feature (yes/no)
KIDS ACTIVITY	EW-1	2750	5395	NE	600	NO
WIR BED 4	EW-1	2750	1490	NE	600	NO
ENS BED 4	EW-1	2750	1595	SE	500	NO
ENS BED 4	EW-1	2750	2495	NE	600	NO
BED 4	EW-1	2750	3990	SE	500	NO
ENS BED 3	EW-1	2750	1690	SE	500	NO
BED 3	EW-1	2750	3890	SE	500	NO
ENS BED 2	EW-1	2750	1690	SE	500	NO
BED 2	EW-1	2750	3990	SE	500	YES

Internal wall *type*

Wall ID	Wall type	Area (m^2)	Bulk insulation
IW-1 - Cavity wall, direct fix plasterboard, single gap		338.00	No insulation
IW-2 - Cavity wall, direct fix plasterboard, single gap		65.00	Bulk Insulation, No Air Gap R2

Floor *type*

Location	Construction	Area (m^2)	Sub-floor ventilation	Added insulation (R-value)	Covering
MASTER SUITE	Waffle pod slab 300 mm 100mm	36.40	None	Waffle Pod 300mm	Cork Tiles or Parquetry 8mm
ENS MASTER	Waffle pod slab 300 mm 100mm	14.30	None	Waffle Pod 300mm	Ceramic Tiles 8mm
DRESSING ROOM	Waffle pod slab 300 mm 100mm	23.90	None	Waffle Pod 300mm	Cork Tiles or Parquetry 8mm
OFFICE	Waffle pod slab 300 mm 100mm	8.20	None	Waffle Pod 300mm	Cork Tiles or Parquetry 8mm
KIT/DIN/LOU	Waffle pod slab 300 mm 100mm	11.10	None	Waffle Pod 300mm	Cork Tiles or Parquetry 8mm
SITTING	Waffle pod slab 300 mm 100mm	14.30	None	Waffle Pod 300mm	Cork Tiles or Parquetry 8mm
MUD ROOM	Waffle pod slab 300 mm 100mm	15.50	None	Waffle Pod 300mm	Cork Tiles or Parquetry 8mm
GARAGE	Waffle pod slab 300 mm 100mm	61.50	None	Waffle Pod 300mm	Ceramic Tiles 8mm
PANTRY	Waffle pod slab 300 mm 100mm	9.80	None	Waffle Pod 300mm	Ceramic Tiles 8mm
KIT/DIN/LOU	Waffle pod slab 300 mm 100mm	112.10	None	Waffle Pod 300mm	40/60 Ceramic/Cork
ENTRY	Waffle pod slab 300 mm 100mm	14.60	None	Waffle Pod 300mm	Cork Tiles or Parquetry 8mm
HALL 2	Waffle pod slab 300 mm 100mm	17.50	None	Waffle Pod 300mm	Cork Tiles or Parquetry 8mm
MEDIA	Waffle pod slab 300 mm 100mm	29.90	None	Waffle Pod 300mm	Cork Tiles or Parquetry 8mm
SPORTS STORE	Waffle pod slab 300 mm 100mm	12.50	None	Waffle Pod 300mm	Cork Tiles or Parquetry 8mm
BATH	Waffle pod slab 300 mm 100mm	12.80	None	Waffle Pod 300mm	Ceramic Tiles 8mm
LAUNDRY	Waffle pod slab 300 mm 100mm	7.30	None	Waffle Pod 300mm	Ceramic Tiles 8mm
BED 5	Waffle pod slab 300 mm 100mm	18.70	None	Waffle Pod 300mm	Cork Tiles or Parquetry 8mm
KIDS ACTIVITY	Waffle pod slab 300 mm 100mm	34.60	None	Waffle Pod 300mm	Cork Tiles or Parquetry 8mm
WIR BED 4	Waffle pod slab 300 mm 100mm	2.20	None	Waffle Pod 300mm	Cork Tiles or Parquetry 8mm
ENS BED 4	Waffle pod slab 300 mm 100mm	3.80	None	Waffle Pod 300mm	Ceramic Tiles 8mm

* Refer to glossary.

Location	Construction	Area (m)	Sub-floor ventilation	Added insulation (R-value)	Covering
BED 4	Waffle pod slab 300 mm 100mm	15.50	None	Waffle Pod 300mm	Cork Tiles or Parquetry 8mm
ENS BED 3	Waffle pod slab 300 mm 100mm	3.90	None	Waffle Pod 300mm	Ceramic Tiles 8mm
WIR BED 3	Waffle pod slab 300 mm 100mm	2.30	None	Waffle Pod 300mm	Cork Tiles or Parquetry 8mm
BED 3	Waffle pod slab 300 mm 100mm	15.10	None	Waffle Pod 300mm	Cork Tiles or Parquetry 8mm
ENS BED 2	Waffle pod slab 300 mm 100mm	3.90	None	Waffle Pod 300mm	Ceramic Tiles 8mm
WIR BED 2	Waffle pod slab 300 mm 100mm	2.30	None	Waffle Pod 300mm	Cork Tiles or Parquetry 8mm
BED 2	Waffle pod slab 300 mm 100mm	15.50	None	Waffle Pod 300mm	Cork Tiles or Parquetry 8mm
KIDS ACTIVITY	Waffle pod slab 300 mm 100mm	14.70	None	Waffle Pod 300mm	Cork Tiles or Parquetry 8mm

Ceiling *type*

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap*
MASTER SUITE	Plasterboard	Foil reflective both sides of the Bulk Insulation R5	Yes
ENS MASTER	Plasterboard	Foil reflective both sides of the Bulk Insulation R5	Yes
DRESSING ROOM	Plasterboard	Foil reflective both sides of the Bulk Insulation R5	Yes
OFFICE	Plasterboard	Foil reflective both sides of the Bulk Insulation R5	Yes
KIT/DIN/LOU	Plasterboard	Foil reflective both sides of the Bulk Insulation R5	Yes
SITTING	Plasterboard	Foil reflective both sides of the Bulk Insulation R5	Yes
MUD ROOM	Plasterboard	Foil reflective both sides of the Bulk Insulation R5	Yes
GARAGE	Plasterboard	No insulation	No
PANTRY	Plasterboard	Foil reflective both sides of the Bulk Insulation R5	Yes
KIT/DIN/LOU	Plasterboard	Foil reflective both sides of the Bulk Insulation R5	Yes
ENTRY	Plasterboard	Foil reflective both sides of the Bulk Insulation R5	Yes
HALL 2	Plasterboard	Foil reflective both sides of the Bulk Insulation R5	Yes
MEDIA	Plasterboard	Foil reflective both sides of the Bulk Insulation R5	Yes
SPORTS STORE	Plasterboard	Foil reflective both sides of the Bulk Insulation R5	Yes
BATH	Plasterboard	Foil reflective both sides of the Bulk Insulation R5	Yes
LAUNDRY	Plasterboard	Foil reflective both sides of the Bulk Insulation R5	Yes
BED 5	Plasterboard	Foil reflective both sides of the Bulk Insulation R5	Yes
KIDS ACTIVITY	Plasterboard	Foil reflective both sides of the Bulk Insulation R5	Yes
WIR BED 4	Plasterboard	Foil reflective both sides of the Bulk Insulation R5	Yes
ENS BED 4	Plasterboard	Foil reflective both sides of the Bulk Insulation R5	Yes
BED 4	Plasterboard	Foil reflective both sides of the Bulk Insulation R5	Yes
ENS BED 3	Plasterboard	Foil reflective both sides of the Bulk Insulation R5	Yes
WIR BED 3	Plasterboard	Foil reflective both sides of the Bulk Insulation R5	Yes
BED 3	Plasterboard	Foil reflective both sides of the Bulk Insulation R5	Yes
ENS BED 2	Plasterboard	Foil reflective both sides of the Bulk Insulation R5	Yes
WIR BED 2	Plasterboard	Foil reflective both sides of the Bulk Insulation R5	Yes
BED 2	Plasterboard	Foil reflective both sides of the Bulk Insulation R5	Yes

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap*
KIDS ACTIVITY	Plasterboard	Foil reflective both sides of the Bulk Insulation R5	Yes

Ceiling *penetrations**

Location	Quantity	Type	Diameter (mm^2)	Sealed/unsealed
KIT/DIN/LOU	1	Exhaust Fans	300	Sealed
ENS BED 4	1	Exhaust Fans	300	Sealed
ENS BED 3	1	Exhaust Fans	300	Sealed
ENS BED 2	1	Exhaust Fans	300	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	0.41	Medium

* Refer to glossary.

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).