

Nationwide House Energy Rating Scheme

NatHERS Certificate No. 0008168353

Generated on 31 Oct 2022 using BERS Pro v4.4.1.5 (3.21)

Property

Address 22 Parkview Avenue , Picnic Point , NSW , 2213
Lot/DP 30/28103
NCC Class* 1A
Type New Dwelling

Plans

Main Plan Catling 21 026
Prepared by Logico

Construction and environment

Assessed floor area (m ² *)	Exposure Type
Conditioned*	277.0
Unconditioned*	67.0
Total	343.0
Garage	52.0

NatHERS climate zone 56



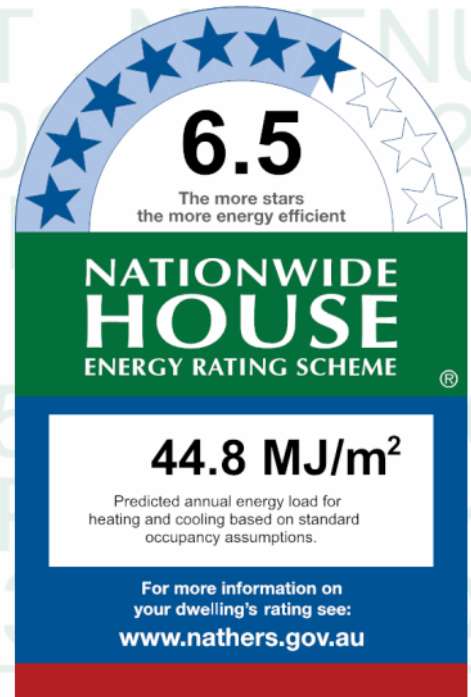
Accredited assessor

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Accreditation No. DMN/12/1441

Assessor Accrediting Organisation

Design Matters National

Declaration of interest Declaration completed: no conflicts



Thermal performance

Heating	Cooling
18.7 MJ/m ²	26.0 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=GKCbBOWjt.

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

Where not noted on plans, default selections to floor coverings and external colours have

been used in this assessment, as noted in the NatHERS Technical Notes. Alternative

selections past this point can be made to floor coverings and external colours, without

requiring an amended certificate

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
TIM-001-01 W	TIM-001-01 W Timber A SG Clear	5.4	0.56	0.53	0.59

Custom* windows

Window ID	Window Description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
TND-071-01 A	TND-071-01 A Windsor Sliding Door SG 6Clr	6.1	0.65	0.62	0.68
TND-001-12 A	TND-001-12 A Trend AI Sliding Window DG 4/10/4	4.3	0.58	0.55	0.61
TND-002-12 A	TND-002-12 A Trend AI Awning Window DG 4/10/4	4.2	0.57	0.54	0.60

Custom* windows

Window ID	Window Description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
TND-001-21 A	TND-001-21 A Trend AI Sliding Window DG LightBridge_ClrS0_4-10-4	3.2	0.46	0.44	0.48
TND-017-09 A	TND-017-09 A Trend AI Sliding Door DG 4/10Ar/4	3.7	0.62	0.59	0.65
TND-017-15 A	TND-017-15 A Trend AI Sliding Door DG LB_ClrSI_638-8-4	3.0	0.45	0.43	0.47
TND-031-05 A	TND-031-05 A Trend AI Internal offset glazed window DG LightBridge_ClrS0_4-10-4	2.3	0.52	0.49	0.55
TND-031-01 A	TND-031-01 A Trend AI Internal offset glazed window DG 4/10/4	3.5	0.66	0.63	0.69

Window and glazed door *schedule*

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orientation	Window shading device*
Garage/Workshop	TND-071-01 A	n/a	2400	1020	n/a	90	SE	No
Garage/Workshop	TND-001-12 A	n/a	1030	2410	n/a	40	SE	No
Entry/Foyer	TND-001-01 W	n/a	2340	1200	n/a	90	SW	No
Guest Bed	TND-002-12 A	n/a	2060	2650	n/a	30	SW	No
Ensuite Guest	TND-002-12 A	n/a	600	1210	n/a	90	NW	No
Home Theatre	TND-001-21 A	n/a	1200	2650	n/a	40	NW	No
Laundry	TND-017-09 A	n/a	2400	1570	n/a	45	NW	No
Kitchen/Living	TND-001-21 A	n/a	2060	2650	n/a	30	NW	No
Kitchen/Living	TND-017-15 A	n/a	2400	4810	n/a	68	NE	No
Kitchen/Living	TND-001-21 A	n/a	2060	1810	n/a	30	NE	No
Kitchen/Living	TND-001-21 A	n/a	2060	1810	n/a	30	NE	No
Kitchen/Living	TND-031-05 A	n/a	1200	3970	n/a	00	NE	No
Kitchen/Living	TND-031-01 A	n/a	700	3130	n/a	00	SE	No
Kitchen/Living	TND-031-01 A	n/a	600	3130	n/a	00	SE	No Shading
Kitchen/Living	TND-031-01 A	n/a	600	3130	n/a	00	SE	No Shading
Butlers	TND-031-01 A	n/a	700	1570	n/a	00	SE	No
Bed 2	TND-017-15 A	n/a	2140	3010	n/a	60	SW	No
Bed 3	TND-001-12 A	n/a	1030	1810	n/a	10	NW	No
Bed 4	TND-001-12 A	n/a	1030	1810	n/a	10	NW	No
Bath	TND-002-12 A	n/a	600	2650	n/a	60	NE	No
Master Suite	TND-001-12 A	n/a	600	2410	n/a	10	NE	No
Ensuite Master	TND-002-12 A	n/a	1030	730	n/a	90	SE	No
Upper Lounge	TND-017-15 A	n/a	2140	4210	n/a	68	SW	No
Upper Lounge	TND-031-01 A	n/a	945	4210	n/a	00	SW	No
Void	TND-031-01 A	n/a	2740	1210	n/a	00	SW	No

Roof window type and performance

Default* roof windows

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

Custom* roof windows

Window ID	Window Description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
VEL-010-01 W	Glass	2.5	0.21	0.20	0.22

Roof window schedule

Location	Window ID	Window no.	Opening %	Height (mm)	Width (mm)	Orientation	Outdoor shade	Indoor shade
Bath	VEL-010-01 W	n/a	0	1400	780	SE	No	No
Ensuite Master	VEL-010-01 W	n/a	0	1400	780	SE	No	No
Void	VEL-010-01 W	n/a	0	1400	780	SE	No	No
Void	VEL-010-01 W	n/a	0	1400	780	SE	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
GarageWorkshop	2340	4810	90	SW

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	No insulation	No
EW-2	Single Skin Brick	0.50	Medium	No insulation	No
EW-3	Brick Veneer	0.50	Medium	Bulk Insulation R2.5	No
EW-4	Brick Veneer	0.50	Medium	Bulk Insulation R2.5	No

Wall ID	Wall type	Solar absorptance	Wall shade (colour)	Bulk insulation (R-value)	Reflective wall wrap*
EW-5	Fibro Cavity Panel Direct Fix	0.50	Medium	Bulk Insulation R2.5	No

External wall schedule

Location	Wall ID	Height (mm)	Width (mm)	Orientation	Horizontal shading feature* maximum projection (mm)	Vertical shading feature (yes/no)
Garage/Workshop	EW-1	3080	1100	NW	6000	YES
Garage/Workshop	EW-1	3080	900	NE	100	YES
Garage/Workshop	EW-1	3080	10800	SE	100	NO
Garage/Workshop	EW-2	3080	5900	SW	1200	NO
Entry/Foyer	EW-3	2740	2290	SW	3700	YES
Guest Bed	EW-3	2740	2200	SE	8300	YES
Guest Bed	EW-3	2740	3600	SW	1500	NO
Guest Bed	EW-3	2740	4200	NW	100	NO
Guest Bed	EW-3	2740	500	NE	19900	YES
Ensuite Guest	EW-3	2740	2990	NW	600	YES
Home Theatre	EW-3	2740	500	SW	8700	YES
Home Theatre	EW-3	2740	4895	NW	100	NO
Laundry	EW-3	2740	2590	NW	100	NO
Kitchen/Living	EW-3	2740	195	NW	100	NO
Kitchen/Living	EW-3	2741	4200	NW	600	NO
Kitchen/Living	EW-3	2740	5900	NE	5000	YES
Kitchen/Living	EW-3	3690	4400	NW	6500	YES
Kitchen/Living	EW-3	4030	5000	NE	600	NO
Kitchen/Living	EW-3	2741	8600	SE	600	NO
Kitchen/Living	EW-3	2740	195	SE	100	NO
Butlers	EW-3	2740	2790	SE	100	YES
Bed 2	EW-4	2590	3495	NW	600	NO
Bed 2	EW-4	2590	2200	SE	600	YES
Bed 2	EW-4	2590	3600	SW	1800	NO
WIR Bed 2	EW-4	2590	695	NW	600	NO
WIR Bed 2	EW-5	2590	995	NW	600	NO
WIR Bed 3	EW-5	2590	1790	NW	600	NO
Bed 3	EW-4	2590	3490	NW	600	NO
Bed 4	EW-4	2590	4195	NW	600	NO
Bed 4	EW-5	2590	2695	NE	700	NO
Bath	EW-5	2590	3090	NE	700	NO
Master Suite	EW-5	2590	3590	NE	700	NO
WIR Master	EW-5	2590	1495	NE	700	NO
WIR Master	EW-4	2590	2800	SE	600	NO

Location	Wall ID	Height (mm)	Width (mm)	Orientation	Horizontal shading feature* maximum projection (mm)	Vertical shading feature (yes/no)
WIR Master	EW-5	2590	1295	SE	600	NO
Ensuite Master	EW-5	2590	2890	SE	600	NO
Upper Lounge	EW-5	2590	595	SE	600	NO
Upper Lounge	EW-5	3100	4900	SE	600	NO
Upper Lounge	EW-5	3470	4995	SW	2700	NO
Void	EW-4	3986	595	SW	2700	NO
Void	EW-4	3985	1695	SW	400	YES

Internal wall type

Wall ID	Wall type	Area (m ²)	Bulk insulation
IW-1 - Cavity wall, direct fix plasterboard, single gap		170.00	Bulk Insulation, No Air Gap R2
IW-2 - Cavity wall, direct fix plasterboard, single gap		186.00	No insulation

Floor type

Location	Construction	Area (m ²)	Sub-floor ventilation	Added insulation (R-value)	Covering
Garage/Workshop	Waffle pod slab 225 mm 100mm	51.50	None	Waffle Pod 225mm	Bare
Entry/Foyer	Waffle pod slab 300 mm 100mm	36.00	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Guest Bed	Waffle pod slab 300 mm 100mm	14.90	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Ensuite Guest	Waffle pod slab 300 mm 100mm	4.50	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Home Theatre	Waffle pod slab 300 mm 100mm	19.60	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Laundry	Waffle pod slab 300 mm 100mm	6.70	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Kitchen/Living	Waffle pod slab 300 mm 100mm	71.40	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Butlers	Waffle pod slab 300 mm 100mm	4.80	None	Waffle Pod 300mm	Ceramic Tiles 8mm
WIP	Waffle pod slab 300 mm 100mm	3.40	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Powder	Waffle pod slab 300 mm 100mm	3.20	None	Waffle Pod 300mm	Ceramic Tiles 8mm
WIL	Waffle pod slab 300 mm 100mm	2.00	None	Waffle Pod 300mm	Ceramic Tiles 8mm
WIR Guest	Waffle pod slab 300 mm 100mm	4.10	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Bed 2/Guest Bed	Timber Above Plasterboard 19mm	12.40		Bulk Insulation R2.5	Carpet+Rubber Underlay 18mm
WIR Bed 2/Guest Bed	Timber Above Plasterboard 19mm	1.30		Bulk Insulation R2.5	Carpet+Rubber Underlay 18mm
WIR Bed 2/Ensuite Guest	Timber Above Plasterboard 19mm	1.40		Bulk Insulation R2.5	Carpet+Rubber Underlay 18mm
WIR Bed 2	Suspended Timber Floor 19mm	0.50	Totally Open	No Insulation	Carpet+Rubber Underlay 18mm
WIR Bed 3/Ensuite Guest	Timber Above Plasterboard 19mm	2.50		Bulk Insulation R2.5	Carpet+Rubber Underlay 18mm

Location	Construction	Area (m ²)	Sub-floor ventilation	Added insulation (R-value)	Covering
WIR Bed 3	Suspended Timber Floor 19mm	0.80	Totally Open	No Insulation	Carpet+Rubber Underlay 18mm
Bed 3/Home Theatre	Timber Above Plasterboard 19mm	11.40		Bulk Insulation R2.5	Carpet+Rubber Underlay 18mm
Bed 4/Home Theatre	Timber Above Plasterboard 19mm	4.20		Bulk Insulation R2.5	Carpet+Rubber Underlay 18mm
Bed 4/Laundry	Timber Above Plasterboard 19mm	6.80		Bulk Insulation R2.5	Carpet+Rubber Underlay 18mm
Bath/Entry/Foyer	Timber Above Plasterboard 19mm	6.20		Bulk Insulation R2.5	Ceramic Tiles 8mm
Bath/WIL	Timber Above Plasterboard 19mm	2.10		Bulk Insulation R2.5	Ceramic Tiles 8mm
Master Suite/GarageWorkshop	Timber Above Plasterboard 19mm	1.40		Bulk Insulation R2.5	Carpet+Rubber Underlay 18mm
Master Suite/Entry/Foyer	Timber Above Plasterboard 19mm	3.10		Bulk Insulation R2.5	Carpet+Rubber Underlay 18mm
Master Suite/Kitchen/Living	Timber Above Plasterboard 19mm	1.90		Bulk Insulation R2.5	Carpet+Rubber Underlay 18mm
Master Suite/Butlers	Timber Above Plasterboard 19mm	0.80		Bulk Insulation R2.5	Carpet+Rubber Underlay 18mm
Master Suite/WIP	Timber Above Plasterboard 19mm	3.60		Bulk Insulation R2.5	Carpet+Rubber Underlay 18mm
Master Suite/Powder	Timber Above Plasterboard 19mm	3.40		Bulk Insulation R2.5	Carpet+Rubber Underlay 18mm
WIR Master/GarageWorkshop	Timber Above Plasterboard 19mm	1.90		Bulk Insulation R2.5	Carpet+Rubber Underlay 18mm
WIR Master/Butlers	Timber Above Plasterboard 19mm	4.00		Bulk Insulation R2.5	Carpet+Rubber Underlay 18mm
Ensuite Master/GarageWorkshop	Timber Above Plasterboard 19mm	7.20		Bulk Insulation R2.5	Ceramic Tiles 8mm
Upper Lounge/GarageWorkshop	Timber Above Plasterboard 19mm	25.20		Bulk Insulation R2.5	Carpet+Rubber Underlay 18mm
Upper Lounge/Entry/Foyer	Timber Above Plasterboard 19mm	17.10		Bulk Insulation R2.5	Carpet+Rubber Underlay 18mm
Upper Lounge/Guest Bed	Timber Above Plasterboard 19mm	1.10		Bulk Insulation R2.5	Carpet+Rubber Underlay 18mm
Upper Lounge/Home Theatre	Timber Above Plasterboard 19mm	1.90		Bulk Insulation R2.5	Carpet+Rubber Underlay 18mm
Upper Lounge/WIR Guest	Timber Above Plasterboard 19mm	4.10		Bulk Insulation R2.5	Carpet+Rubber Underlay 18mm
Void/Entry/Foyer	Timber Above Plasterboard 19mm	7.80		Bulk Insulation R2.5	Ceramic Tiles 8mm
Linen/Entry/Foyer	Timber Above Plasterboard 19mm	0.50		Bulk Insulation R2.5	Carpet+Rubber Underlay 18mm
WC/Entry/Foyer	Timber Above Plasterboard 19mm	1.10		Bulk Insulation R2.5	Ceramic Tiles 8mm
WC/Home Theatre	Timber Above Plasterboard 19mm	1.30		Bulk Insulation R2.5	Ceramic Tiles 8mm

Ceiling type

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap*
GarageWorkshop	Plasterboard	No insulation	No
GarageWorkshop	Timber Above Plasterboard	Bulk Insulation R2.5	No
Entry/Foyer	Timber Above Plasterboard	Bulk Insulation R2.5	No
Guest Bed	Timber Above Plasterboard	Bulk Insulation R2.5	No

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap*
Ensuite Guest	Timber Above Plasterboard	Bulk Insulation R2.5	No
Home Theatre	Timber Above Plasterboard	Bulk Insulation R2.5	No
Laundry	Timber Above Plasterboard	Bulk Insulation R2.5	No
Kitchen/Living	Plasterboard	Bulk Insulation R5	No
Kitchen/Living	Timber Above Plasterboard	Bulk Insulation R2.5	No
Butlers	Timber Above Plasterboard	Bulk Insulation R2.5	No
WIP	Timber Above Plasterboard	Bulk Insulation R2.5	No
Powder	Timber Above Plasterboard	Bulk Insulation R2.5	No
WIL	Timber Above Plasterboard	Bulk Insulation R2.5	No
WIR Guest	Timber Above Plasterboard	Bulk Insulation R2.5	No
Bed 2	Plasterboard	Bulk Insulation R5	No
WIR Bed 2	Plasterboard	Bulk Insulation R5	No
WIR Bed 3	Plasterboard	Bulk Insulation R5	No
Bed 3	Plasterboard	Bulk Insulation R5	No
Bed 4	Plasterboard	Bulk Insulation R5	No
Bath	Plasterboard	Bulk Insulation R5	No
Master Suite	Plasterboard	Bulk Insulation R5	No
WIR Master	Plasterboard	Bulk Insulation R5	No
Ensuite Master	Plasterboard	Bulk Insulation R5	No
Upper Lounge	Plasterboard	Bulk Insulation R5	No
Void	Plasterboard	Bulk Insulation R5	No
Linen	Plasterboard	Bulk Insulation R5	No
WC	Plasterboard	Bulk Insulation R5	No

Ceiling penetrations*

Location	Quantity	Type	Diameter (mm ²)	Sealed/unsealed
Ensuite Guest	1	Exhaust Fans	0	Sealed
Powder	1	Exhaust Fans	0	Sealed
Bath	1	Exhaust Fans	300	Sealed
Ensuite Master	1	Exhaust Fans	300	Sealed
WC	1	Exhaust Fans	300	Sealed

Ceiling fans

Location	Quantity	Diameter (mm)
Kitchen/Living	1	1200

Roof type

Construction	Added insulation (R-value)	Solar absorptance	Roof shade
Corrugated Iron	Bulk, Reflective Side Down, No Air Gap Above R1.3	0.85	Dark
Corrugated Iron	Bulk, Reflective Side Down, No Air Gap Above R1.3	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).