

Nationwide House Energy Rating Scheme®

NatHERS® Certificate No. #HR-XVSGZL-01

Thermal performance
star rating

Generated on 14 Jun 2026 using Hero 4.1 (Chenath v3.23)

Property

Address 14A, 14 Beach Street, Ettalong Beach,
NSW, 2257

Lot/DP LOT141/DP10057

NCC Class* 1a

Floor/all Floors 1 of 2 floors

Type New

Plans

Main Plan BEE014_DA SET_REV D

Prepared by NININ Studio

Construction and environment

Assessed floor area (m²)*	Exposure Type
Conditioned* 211.3	Suburban
Unconditioned* 4.7	NatHERS climate zone
Total 254.8	15 - Williamtown AMO
Garage 38.8	



Accredited assessor

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Accreditation No. 101590

Assessor Accrediting Organisation ABSA

Declaration of interest No Conflict of Interest

NCC Requirements

BCA provisions Volume 2

State/Territory variation Yes

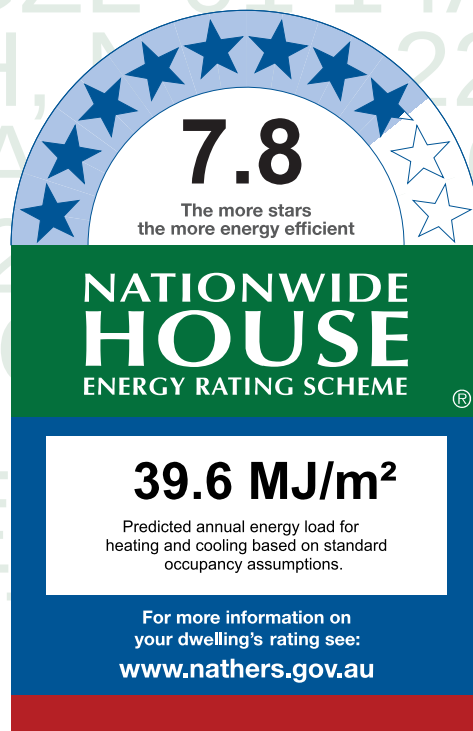
National Construction Code (NCC) requirements

The NCC allows the use of NatHERS accredited software to comply with the energy efficiency requirements for houses (Class 1 buildings) and apartments (Class 2 sole-occupancy units and Class 4 parts of buildings). The applicable requirements for houses are detailed in Specification 42 of NCC Volume Two. For apartments the requirements are detailed in clauses J2D2(2)(a) and (3) of NCC Volume One.

NCC 2022 includes enhanced thermal performance requirements for houses and apartments. It also includes a new whole-of-home annual energy use budget which applies to the major equipment in the home.

The NCC, and associated ABCB Standards and support material, can be accessed at www.abcb.gov.au.

Note, variations and additions to the NCC energy efficiency requirements may apply in some states and territories.



Thermal performance (MJ/m²)

Limits taken from ABCB Standard 2022

	Heating	Cooling
Modelled	18.3	21.3
Load limits	47	30

Features determining load limits

Floor type	
(lowest conditioned area)	CSOG
NCC climate zone 1 or 2	N
Outdoor living area	N
Outdoor living area ceiling fan N	

Whole of Home performance rating

No Whole of Home
performance rating
generated for this
certificate.

Verification

To verify this certificate, scan
the QR code or visit

<http://www.hero-software.com.au/pdf/HR-XVSGZL-01>.

When using either link,
ensure you are visiting
<http://www.hero-software.com.au>



* Refer to glossary.

About the ratings

Thermal performance rating

NatHERS thermal software models the expected heating and cooling energy loads using information about the design, construction, climate and common patterns of household use. The thermal performance rating (shown as a star rating on this Certificate) does not take into account appliances, apart from the airflow impacts from ceiling fans.

Whole of Home performance rating

NatHERS Whole of Home software uses the heating and cooling energy loads combined with the energy performance of the home's appliances (heating, cooling, hot water, lighting, pool/spa pump and onsite renewable energy generation and storage) and models the expected energy value* of the whole home. The Whole of Home performance rating is shown as a score out of 100 on this Certificate.

Heating and Cooling Load Limits

Additional information

In some locations under the NCC NatHERS pathway, separate heating and cooling load limits may apply. Minimum required star ratings in northern parts of Australia may also be affected by the presence or absence of an outdoor living area and/or an outdoor living area ceiling fan. Refer to the *ABCB Standard: NatHERS heating and cooling load limits* for details or contact the relevant local building regulating authority, noting that State and Territory variations may also apply.

Setting options:

Floor type:

- CSOG - Concrete Slab on Ground
- SF - Suspended Floor (or a mixture of CSOG and SF)
- NA - Not Applicable

NCC climate Zone 1 or 2:

- Yes
- No
- NA - Not Applicable

Outdoor living area:

- Yes
- No
- NA - Not Applicable

Outdoor living area ceiling fan:

- Yes
- No
- NA - Not Applicable



Predicted onsite renewable energy impact

No Whole of Home performance assessment conducted for this certificate.

Predicted Whole of Home annual impact by appliance

Shows the contribution each appliance has on the home's annual energy use, greenhouse gas emissions and cost without solar.

Energy use:

No Whole of Home performance assessment conducted for this certificate.

Greenhouse gas emissions:

No Whole of Home performance assessment conducted for this certificate.

Cost:

No Whole of Home performance assessment conducted for this certificate.

Certificate check

The checklist covers important items impacting the dwelling's ratings.

It is recommended that the accuracy of the whole certificate is checked.

Note: The boxes indicate when and who should check each item.

It is not mandatory to complete this checklist.

Approval stage		Construction stage		
Assessor checked	Consent authority/ surveyor checked	Builder checked	Consent authority/ surveyor checked	Occupancy/other

Genuine certificate check

Does this Certificate match the one available at the web address or QR code verification link on the front page?

☐☐☐☐

Does the NatHERS certificate number on the NatHERS-stamped plans match the number on this Certificate?

☐☐☐☐

Thermal performance check

Windows and glazed doors

Does the window size, opening type and location shown on the NatHERS-stamped plans or as installed match what is shown in 'Window and glazed door schedule' and 'Roof window schedule' tables on this Certificate?

☐☐☐☐☐

Does the installed windows meet the substitution tolerances (AFRC* based SHGC* and U-values*) as shown in the 'Window and glazed door type and performance' and 'Roof window type and performance' tables on this Certificate?

☐☐☐

External walls

Does the external wall bulk insulation (R-value) shown on the NatHERS-stamped plans or as installed match what is shown in the 'External wall type table' on this Certificate?

☐☐☐☐☐

Does the external wall shade (colour) match what is shown in the 'External wall type' table on this Certificate?

☐☐☐☐☐

Floor

Does the floor insulation (R-value) shown on the NatHERS-stamped plans or as installed match what is shown in the 'Floor type' table on this certificate?

☐☐☐☐☐

Ceiling penetrations*

Does the 'quantity' and 'type' of ceiling penetrations* (e.g. downlights, exhaust fans, etc) shown on the NatHERS-stamped plans or as installed match what is shown in the 'Ceiling penetrations' table on this Certificate?

☐☐☐☐☐

Ceiling

Does the ceiling insulation (R-value) shown on the NatHERS-stamped plans or as installed match what is shown in the 'Ceiling type' table on this Certificate?

☐☐☐☐☐

Roof

Does the external roof shade (colour) on the NatHERS stamped plans or as installed match what is shown in the 'Roof type' table on this Certificate?

☐☐☐☐☐

Apartment entrance doors (NCC Class 2 assessments only)

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 type (terrain) (shown on page 1) been applied? For example, it is unlikely that a ground-floor apartment is "exposed" or a top floor high-rise apartment is "protected".

☐☐☐☐

Heating and cooling load limits*

Do the load limits settings (shown on page 1) match what is shown on the NatHERS-stamped plans?

☐☐☐☐☐

* Refer to glossary.

Certificate check

Continued

Approval stage		Construction stage		
Assessor checked	Consent authority/ surveyor checked	Builder checked	Consent authority/ surveyor checked	Occupancy/other

Additional NCC requirements for thermal performance (not included in the NatHERS assessment)

Thermal bridging

Does the dwelling meet the NCC requirement for thermal bridging?		☐	☐	☐	☐
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Insulation installation method

Has the insulation been installed according to the NCC requirements?			☐	☐	☐
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Building sealing

Does the dwelling meet the NCC requirements for Building Sealing?		☐	☐	☐	☐
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Whole of Home performance check (not applicable if a Whole of Home assessment is not conducted)

Appliances

Does the cooling appliance/s type, location and efficiency/performance shown on the NatHERS-stamped plans or as installed match the location and minimum efficiency/performance requirements shown in the 'Appliance schedule' on this Certificate?	☐	☐	☐	☐	☐
Does the heating appliance/s type, location and efficiency/performance shown on the NatHERS-stamped plans or as installed, match the location and minimum efficiency/performance requirements shown in the 'Appliance schedule' on this Certificate?	☐	☐	☐	☐	☐
Does the hot water system type and efficiency/performance shown on the NatHERS-stamped plans or as installed match the location and minimum efficiency/performance requirements shown in the 'Appliance schedule' on this Certificate?	☐	☐	☐	☐	☐
Does the pool pump efficiency/performance shown on the NatHERS-stamped plans or as installed match the minimum efficiency/performance requirements shown in the 'Appliance schedule' on this Certificate?	☐	☐	☐	☐	☐
Does the onsite renewable energy system type, orientation and system size or generation capacity shown on the NatHERS stamped plans or installed match the 'Onsite Renewable Energy schedule' on this Certificate?	☐	☐	☐	☐	☐

Additional NCC Requirements for Services (not included in the NatHERS assessment)

Does the lighting meet the artificial lighting requirements specified in the NCC?		☐	☐	☐	☐
Does the hot water system meet the additional requirements specified in the NCC?		☐	☐	☐	☐

Provisional values* check

Have provisional values* been used in the assessment and, if so, are they noted in 'Additional notes' table below?	☐	☐			
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Other NCC requirements

Note: This Certificate only covers the energy efficiency requirements in the NCC. Additional requirements that must also be satisfied include, but are not limited to: condensation, structural and fire safety requirements and any state or territory variations to the NCC energy efficiency requirements.

Additional Notes

1. No Conflict of Interest: The assessor declares no conflict of interest with any party involved in this project.
2. General: Where information was not available on drawings or not fully developed by the architect, NatHERS defaults have been applied in accordance with the NatHERS Technical Note and the Assessor Handbook.

Room schedule

Room	Zone Type	Area (m ²)
GAR	Garage	38.76
ENS	Night Time	3.90
ENTRY	Day Time	9.71
BTH	Day Time	3.18
PAN/LDY	Day Time	5.67
STUDY	Day Time	7.92
HALL [STAIRS]	Day Time	6.08
WIR	Night Time	1.78
BED 4	Bedroom	13.99
BED 3	Bedroom	16.01
BTH	Unconditioned	4.68
BED 2	Bedroom	16.30
BED 1A	Bedroom	7.36
WIR [L]	Night Time	4.33
ENS	Night Time	7.94
WIR [R]	Night Time	4.46
BED 1	Bedroom	22.71
HALL [GAR]	Day Time	4.14
KIT/LIV/DIN	Kitchen/Living	49.24
HALL [STAIRS]	Day Time	14.30
HALL [BEDROOMS]	Day Time	12.85
VOID	Day Time	12.02

Window and glazed door *type and performance*

Default* windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
PVC-005-01 W	uPVC A DG Argon Fill Clear-Clear	2.6	0.50	0.47	0.53
PVC-006-01 W	uPVC B DG Argon Fill Clear-Clear	2.6	0.53	0.50	0.56

Custom* windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
None					

Window and glazed door *schedule*

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orient-ation	Shading device*
BED 1	PVC-006-01 W	W1-15	1500	3792	Sliding	45	S	None
BED 1A	PVC-005-01 W	W1-10	1500	1000	Tilt & Turn	90	E	OP-80%
BED 2	PVC-006-01 W	W1-06C-2	1500	1000	Fixed	0	E	OP-80%
BED 2	PVC-005-01 W	W1-06C-1	1500	1000	Tilt & Turn	90	E	OP-80%
BED 3	PVC-005-01 W	W1-07	1500	1180	Tilt & Turn	90	N	None
BED 3	PVC-006-01 W	W1-06B-1	1500	1000	Fixed	0	E	OP-80%
BED 3	PVC-005-01 W	W1-06B-2	1500	1000	Tilt & Turn	90	E	OP-80%
BED 4	PVC-005-01 W	W02	2775	800	Hinged Door	100	N	None
BED 4	PVC-006-01 W	W01	1875	1765	Fixed	0	N	None
BTH	PVC-006-01 W	W1-09-1	600	865	Fixed	0	E	OP-80%
BTH	PVC-005-01 W	W1-09-2	600	865	Tilt & Turn	90	E	OP-80%
ENS	PVC-005-01 W	W03	600	600	Tilt & Turn	90	W	None
HALL [STAIRS]	PVC-005-01 W	W1-11A-2	600	1512	Awning	90	W	OP-80%
HALL [STAIRS]	PVC-005-01 W	W1-11A-1	600	1512	Awning	90	W	OP-80%
KIT/LIV/DIN	PVC-005-01 W	W0-01A	1950	1180	Tilt & Turn	90	N	None
KIT/LIV/DIN	PVC-005-01 W	W0-01B	1950	1180	Tilt & Turn	90	N	None

* Refer to glossary.

Window and glazed door *schedule*

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orient-ation	Shading device*
KIT/LIV/DIN	PVC-005-01 W	W0-04	1500	800	Tilt & Turn	90	E	OP-80%
KIT/LIV/DIN	PVC-006-01 W	D0-02	2400	5315	Sliding Door	45	E	OP-80%
STUDY	PVC-005-01 W	D0-04	2400	1050	Hinged Door	100	E	None
VOID	PVC-006-01 W	W1-08	1500	2350	Fixed	0	N	None

Roof window *type and performance value*

Default* roof windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
None					

Custom* roof windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
VEL-010-01 W	VS - Ventilating Skylight DG 3mm LoE 366 / 8.5mm Argon Gap / 5.36mm Clear La	2.5	0.21	0.20	0.22

Roof window *schedule*

Location	Window ID	Window no.	Opening %	Height (mm)	Width (mm)	Orient-ation	Outdoor shade	Indoor shade
ENS	VEL-010-01 W	SKYRW 01	90	563	1319	W	None	None

Skylight *type and performance*

Skylight ID	Skylight description
None	

Skylight *schedule*

Location	Skylight ID	Skylight No.	Skylight shaft length (mm)	Area (m ²)	Orient-ation	Outdoor shade	Diffuser	Shaft Reflectance
None								

External door *schedule*

Location	Height (mm)	Width (mm)	Opening %	Orientation
ENTRY	2775	1180	100	N
GAR	2400	5000	100	S

External wall type

Wall ID	Wall Type	Solar absorptance	Wall Colour	Bulk insulation (R-value)	Reflective wall wrap*
FC-CARBONLITE	Fibre-Cement on Panelite System	0.50	Medium	4.00	No
WB-CARBONLITE	Weatherboard on Panelite System	0.50	Medium	4.00	No

External wall schedule

Location	Wall ID	Height (mm)	Width (mm)	Orientation	Horizontal shading feature* projection (mm)	Vertical shading feature
BED 1	WB-CARBONLITE	2700	3792	S	200	Yes
BED 1	WB-CARBONLITE	2700	5601	E	200	Yes
BED 1A	WB-CARBONLITE	2700	2842	E	200	Yes
BED 2	WB-CARBONLITE	2700	4298	E	200	Yes
BED 3	WB-CARBONLITE	2700	3792	N	200	Yes
BED 3	WB-CARBONLITE	2700	650	E	200	Yes
BED 3	WB-CARBONLITE	2700	3572	E	200	Yes
BED 4	FC-CARBONLITE	2980	3546	N	200	Yes
BED 4	FC-CARBONLITE	2090	3753	S		Yes
BED 4	FC-CARBONLITE	2980	207	N	0	Yes
BTH	WB-CARBONLITE	2700	1731	E	200	Yes
ENS	FC-CARBONLITE	2525	2477	W		Yes
ENS	FC-CARBONLITE	2090	1573	S		Yes
ENTRY	FC-CARBONLITE	3375	1360	N	760	Yes
ENTRY	FC-CARBONLITE	3375	430	W		Yes
ENTRY	FC-CARBONLITE	3375	270	N	0	Yes
ENTRY	FC-CARBONLITE	3375	709	N	200	Yes
ENTRY	FC-CARBONLITE	525	3728	W		Yes
GAR	FC-CARBONLITE	2700	5715	E		Yes
GAR	FC-CARBONLITE	2700	6783	S		Yes
HALL [BEDROOMS]	WB-CARBONLITE	2700	1480	W	200	Yes

* Refer to glossary.

External wall *schedule*

Location	Wall ID	Height (mm)	Width (mm)	Orientation	Horizontal shading feature* projection (mm)	Vertical shading feature
HALL [STAIRS]	FC-CARBONLITE	2700	4632	W		Yes
HALL [STAIRS]	WB-CARBONLITE	2700	4422	W	200	Yes
KIT/LIV/DIN	FC-CARBONLITE	2700	4309	N	200	Yes
KIT/LIV/DIN	FC-CARBONLITE	2700	3202	E	200	Yes
KIT/LIV/DIN	FC-CARBONLITE	2700	7107	E	200	Yes
PAN/LDY	FC-CARBONLITE	2700	1339	W		Yes
STUDY	FC-CARBONLITE	2700	2782	E	200	Yes
VOID	WB-CARBONLITE	2700	3502	W	200	Yes
VOID	WB-CARBONLITE	2700	2847	N	200	Yes
VOID	WB-CARBONLITE	2700	720	W	200	Yes
WIR	FC-CARBONLITE	2980	1131	W		Yes
WIR	FC-CARBONLITE	2980	1573	N	200	Yes
WIR [L]	WB-CARBONLITE	2700	2847	S	200	Yes

Internal wall *type*

Wall ID	Wall Type	Area (m ²)	Bulk insulation
CARBONLITE NEIGHB	Neighbour Panelite System	44.9	4.00
INT-PB	Internal Plasterboard Stud Wall	16.1	4.00
INT-PB	Internal Plasterboard Stud Wall	193.0	0.00
INT-PB-EXP1	Internal Plasterboard Stud Wall (exposed 1 side)	3.3	0.00

Floor *type*

Location	Construction	Area (m ²)	Sub-floor ventilation	Added insulation (R-value)	Covering
BED 1	TIMB-001: Suspended Timber Floor	21.4	N/A	4.00	Carpet
BED 1	TIMB-001: Suspended Timber Floor	1.3	N/A	0.15	Carpet
BED 1A	TIMB-001: Suspended Timber Floor	7.3	N/A	0.15	Carpet

Floor type

Location	Construction	Area (m ²)	Sub-floor ventilation	Added insulation (R-value)	Covering
BED 2	TIMB-001: Suspended Timber Floor	16.3	N/A	0.15	Carpet
BED 3	TIMB-001: Suspended Timber Floor	16.0	N/A	0.15	Carpet
BED 4	WAFFLE-85: Concrete Waffle Pod Slab on Ground (85mm)	14.0	N/A	0.56	Carpet
BTH	WAFFLE-85: Concrete Waffle Pod Slab on Ground (85mm)	3.2	N/A	0.56	Tile (8mm)
BTH	TIMB-001: Suspended Timber Floor	4.7	N/A	0.15	Tile (8mm)
ENS	WAFFLE-85: Concrete Waffle Pod Slab on Ground (85mm)	3.9	N/A	0.56	Tile (8mm)
ENS	TIMB-001: Suspended Timber Floor	7.9	N/A	4.00	Tile (8mm)
ENTRY	WAFFLE-85: Concrete Waffle Pod Slab on Ground (85mm)	9.7	N/A	0.56	Tile (8mm)
GAR	WAFFLE-85: Concrete Waffle Pod Slab on Ground (85mm)	38.8	N/A	0.56	Stone
HALL [BEDROOMS]	TIMB-001: Suspended Timber Floor	12.9	N/A	0.15	Timber (12mm)
HALL [GAR]	WAFFLE-85: Concrete Waffle Pod Slab on Ground (85mm)	4.1	N/A	0.56	Timber (12mm)
HALL [STAIRS]	WAFFLE-85: Concrete Waffle Pod Slab on Ground (85mm)	6.1	N/A	0.56	Timber (12mm)
HALL [STAIRS]	TIMB-001: Suspended Timber Floor	11.2	N/A	0.15	Timber (12mm)
HALL [STAIRS]	TIMB-001: Suspended Timber Floor	3.2	N/A	0.00	Timber (12mm)
KIT/LIV/DIN	WAFFLE-85: Concrete Waffle Pod Slab on Ground (85mm)	36.3	N/A	0.56	Timber (12mm)
KIT/LIV/DIN	WAFFLE-85: Concrete Waffle Pod Slab on Ground (85mm)	12.9	N/A	0.56	Tile (8mm)
PAN/LDY	WAFFLE-85: Concrete Waffle Pod Slab on Ground (85mm)	5.7	N/A	0.56	Timber (12mm)
STUDY	WAFFLE-85: Concrete Waffle Pod Slab on Ground (85mm)	7.9	N/A	0.56	Timber (12mm)
VOID	TIMB-001: Suspended Timber Floor	9.7	N/A	0.00	Timber (12mm)
VOID	TIMB-001: Suspended Timber Floor	2.3	N/A	0.15	Timber (12mm)
WIR	WAFFLE-85: Concrete Waffle Pod Slab on Ground (85mm)	1.8	N/A	0.56	Carpet
WIR [L]	TIMB-001: Suspended Timber Floor	4.3	N/A	4.00	Carpet
WIR [R]	TIMB-001: Suspended Timber Floor	3.2	N/A	4.00	Carpet
WIR [R]	TIMB-001: Suspended Timber Floor	1.2	N/A	0.15	Carpet

Ceiling type

Location	Construction	Bulk insulation (R-value)	Reflective wrap*
BED 1	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	4.55	No
BED 1A	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	4.55	No
BED 2	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	4.55	No
BED 3	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	4.55	No
BED 4	FLAT-02: Flat Framed / Skillion Metal Roof & Cathedral PB Ceiling (11°-33°)	4.55	No
BTH	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	4.55	No
ENS	FLAT-02: Flat Framed / Skillion Metal Roof & Cathedral PB Ceiling (11°-33°)	4.55	No
ENS	FLAT-02: Flat Framed / Skillion Metal Roof & Cathedral PB Ceiling (11°-33°)	0.00	No
ENS	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	2.50	No
ENS	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	4.55	No
HALL [BEDROOMS]	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	4.55	No
HALL [STAIRS]	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	2.50	No
HALL [STAIRS]	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	4.55	No
VOID	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	4.55	No
WIR	FLAT-02: Flat Framed / Skillion Metal Roof & Cathedral PB Ceiling (11°-33°)	4.55	No
WIR [L]	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	2.50	No
WIR [L]	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	4.55	No
WIR [R]	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	2.50	No
WIR [R]	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	4.55	No

Ceiling penetrations*

Location	Quantity	Type	Diameter (mm)	Sealed /unsealed
BED 1	5	Downlight	190	Sealed
BED 1A	2	Downlight	190	Sealed
BED 2	4	Downlight	190	Sealed

* Refer to glossary.

Ceiling penetrations*

Location	Quantity	Type	Diameter (mm)	Sealed /unsealed
BED 3	4	Downlight	190	Sealed
BED 4	3	Downlight	190	Sealed
BTH	2	Downlight	190	Sealed
BTH	1	Exhaust Fan	250	Sealed
ENS	3	Downlight	190	Sealed
ENS	1	Exhaust Fan	250	Sealed
ENTRY	2	Downlight	190	Sealed
GAR	8	Downlight	190	Sealed
HALL [BEDROOMS]	3	Downlight	190	Sealed
HALL [GAR]	1	Downlight	190	Sealed
HALL [STAIRS]	5	Downlight	190	Sealed
KIT/LIV/DIN	1	Exhaust Fan	350	Sealed
KIT/LIV/DIN	10	Downlight	190	Sealed
PAN/LDY	2	Downlight	190	Sealed
PAN/LDY	1	Exhaust Fan	250	Sealed
STUDY	2	Downlight	190	Sealed
VOID	3	Downlight	200	Sealed
WIR	1	Downlight	190	Sealed
WIR [L]	1	Downlight	190	Sealed
WIR [R]	1	Downlight	190	Sealed

Ceiling fans

Location	Quantity	Diameter (mm)
BED 1	1	1200
KIT/LIV/DIN	2	1200

Roof type

Construction	Added insulation (R-value)	Solar absorptance	Roof Colour
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* Refer to glossary.



Roof type

Construction	Added insulation (R-value)	Solar absorptance	Roof Colour
ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	0.00	0.50	Medium
FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	0.00	0.50	Medium
FLAT-02: Flat Framed / Skillion Metal Roof & Cathedral PB Ceiling (11°-33°)	0.00	0.50	Medium

Thermal bridging *schedule for steel frame elements*

Building element	Steel section dimensions (height x width, mm)	Frame spacing (mm)	Steel thickness (BMT mm)	Thermal Break (R-value)
None				

Appliance *schedule*

(not applicable if a Whole of Home performance assessment is not conducted for this certificate)

Cooling system

Type	Location	Fuel Type	Minimum efficiency / performance	Recommended capacity
No Whole of Home Data				

Heating system

Type	Location	Fuel Type	Minimum efficiency / performance	Recommended capacity
No Whole of Home Data				

Hot water system

Type	Fuel type	Hot Water CER Zone	Minimum efficiency / STC	Assessed daily load [litres]
No Whole of Home Data				

Pool / spa equipment

Type	Fuel type	Minimum efficiency / performance	Recommended capacity
No Whole of Home Data			

Onsite Renewable Energy *schedule*

Type	Orientatation	Generation Capacity [kW]
No Whole of Home Data		

Battery *schedule*

Type	Storage Capacity [kWh]
No Whole of Home Data	

Explanatory Notes

About this report

NatHERS ratings are a reliable guide for comparing different dwelling designs and to demonstrate that designs meet the energy efficiency requirements in the National Construction Code.

NatHERS ratings use computer modelling to evaluate a home's energy efficiency and performance. They use localised climate data and standard assumptions on how people use their home to predict the heating and cooling energy loads and energy value* of the whole home. The thermal performance star rating uses the home's building specifications, layout, orientation and fabric (i.e. walls, windows, floors, roofs and ceilings) to predict the heating and cooling energy loads. The Whole of Home performance rating uses information about the home's appliances and onsite energy generation and storage to estimate the home's energy value*.

The actual energy loads, cost and greenhouse gas emissions of a home may vary from that predicted. This is because the assumptions will not always match the actual occupant usage patterns. For example, the number of occupants and how people use their appliances will vary.

Energy efficient homes use less energy, are warmer on cool days, cooler on hot days and cost less to run.

Accredited assessors

For quality assured NatHERS Certificates, always use an accredited or licenced assessor registered with an Assessor Accrediting Organisation (AAO). AAOs have strict quality assurance processes, and professional development requirements ensuring consistently high standards for assessments.

Non-accredited assessors (Raters) have no ongoing training requirements and

are not quality assured.

Any queries about this report should be directed to the assessor. If the assessor is unable to address questions or concerns, contact the AAO specified on the front of this certificate.

Disclaimer

The NatHERS Certificate format is developed by the NatHERS Administrator. However, the content in the certificate is entered by the assessor. It is the assessor's responsibility to use NatHERS accredited software correctly and follow the NatHERS Technical Note to produce a NatHERS Certificate.

The predicted annual energy load, cost and greenhouse gas emissions in this NatHERS Certificate are an estimate based on an assessment of the dwelling's design by the assessor. It is not a prediction of actual energy use, cost or emissions. The information and ratings may be used to compare how other dwellings 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, behaviour, appliance performance, indoor air temperature and local climate.

Not all assumptions made by the assessor using the NatHERS accredited software tool are presented in this report and further details or data files may be obtained from the assessor.

Glossary

Annual energy load	the predicted amount of energy required for heating and cooling, based on standard occupancy assumptions.
AFRC	Australian Fenestration Rating Council
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, range hoods, 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.
COP	Coefficient of performance
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.
EER	Energy Efficiency Ratio, measure of how much cooling can be achieved by an air conditioner for a single kWh of electricity input
Energy use	This is your home's rating without solar or batteries.
Energy value	The net cost to society including, but not limited to, costs to the building user, the environment and energy networks (as defined in the ABCB Housing Provisions Standard).
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	see exposure categories below
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 .
Net zero home	a home that achieves a net zero energy value*.
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
Recommended capacity	this is the capacity or size of equipment that is recommended by NatHERS to achieve the desired comfort conditions in the zone or zones serviced. This is a recommendation and the final selection sizing should be confirmed by a suitably qualified person.
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 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.
STCs	Small-scale Technology Certificates, certificates created by the REC registry for renewable energy technologies that may be bought and sold as part of the Small-scale Renewable Energy Scheme operated by the Clean Energy Regulatory
Thermal breaks	are materials with an R-value greater than or equal to 0.2 that must separate the metal frame from the cladding. This includes, but is not limited to, materials such as timber battens greater than or equal to 20mm thick, continuous thermal breaks such as polystyrene insulation sheeting, plastic strips or furring channels.
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).
Window shading device	a device fixed to windows that provides shading e.g. window awnings or screens but excludes horizontal* or vertical shading features* (eg eaves and balconies)

* Refer to glossary.