

Energy Rating Summary Report

Job number: 2509037
Date: 28 October 2025
Address: 103/-/DP709505, 67 Elimatta Road & 19A Rowan Street, Mona Vale, NSW 2103
Job description: NatHERS energy rating assessment of the proposed new dwelling

NatHERS ASSESSMENT

Climate Zone: 56, Mascot AMO
Lowest Conditioned Floor: Concrete slab on ground (CSOG)

	Star Rating	Energy Usage (MJ/m ²)		
		Heating Load	Cooling Load	Total
Limit	7.0	25	18	-
R1	7.0	18.4	11.2	29.6
R2	7.0	19.0	10.9	29.9
R3	7.0	21.1	8.9	30.0
R4	7.0	20.9	9.1	30.0
R5	7.0	21.6	8.3	29.9
R6	7.0	20.5	9.6	30.0
R7	7.0	19.5	10.4	29.9
R8	7.0	19.5	10.5	30.0
R9	7.0	18.4	11.6	29.9
R10	7.0	18.6	11.4	30.0

- The planning permit requires a 7-star average NatHERS rating and Whole of Home compliance. A BASIX assessment will be conducted separately.
- Any alteration or variations to the proposed design could alter the star rating and further reassessment may need to be conducted.
- This project has been assessed using FirstRate5 energy rating software, to determine whether the thermal performance requirement (H6P1) and energy usage performance requirement of the proposed building(s) (H6P2) are satisfied.
- Where applicable, and in accordance with S42C4 the following NCC 2022 Deem-to Satisfy provisions must also be satisfied:

(1) To comply with H6P1, in addition to S42C2, a building must comply with Section 13 of the ABCB Housing Provisions clauses—

- 13.2.2, for building fabric thermal insulation; and
- 13.2.3(7) and 13.2.5(5), for thermal breaks; and
- 13.2.3(5), for compensating for a loss of ceiling insulation, other than where the house energy rating software has compensated for a loss of ceiling insulation; and
- 13.2.6(4), 13.2.6(5) and 13.2.6(6) for floor edge insulation; and
- Part 13.4, for building sealing.

(2) To comply with H6P2, in addition to S42C3, a building must comply with Part 13.7 of the ABCB Housing Provisions.

Additional Information

- All lighting devices must NOT penetrate ceiling insulation

- In accordance with NCC clause D2.24 and where applicable, openable windows 2m or more above the surface beneath have been modelled with a 10% opening safety restriction.
- Window ID selections may be replaced with those with the same or lower U-Value and SHGC value +/-5%.
- Any type of insulation can be replaced with one that has the same R-value.

R1			
ROOF and CEILING: Pitched and flat metal roof			
- R5.0 bulk ceiling insulation with reflective foil under the roof. - R3.0 bulk ceiling insulation with reflective foil to the first 450mm from the external wall of the pitched roof. - No insulation is required for the roof space of the Garage.			
FLOORS: Concrete slab on ground and timber first and second floor, and suspended concrete slab under Garage			
- No bulk insulation under the concrete slab on ground. - R2.5 bulk insulation to the timber first floor. - R2.5 bulk insulation is required under the suspended concrete slab of the Garage.			
WALLS			
- R2.5 bulk insulation to all external walls, except for the Garage. - R2.5 bulk insulation to the internal plasterboard stud walls of the Garage and first floor Powder. - No insulation required for the partiwalls.			
GLAZING (Custom aluminium window specifications)			
Description	Type	Glazing	Specification
Powder	Awning	Clear single glazing	U-value: 5.78, SHGC: 0.58
All other	Awning	Clear double glazing	U-value: 3.69, SHGC: 0.51
All	Sliding Door	Clear Lightbridge double glazing	U-value: 2.97, SHGC: 0.49
Skylight	Fixed Velux	Clear Low E double glazing	U-value: 2.66, SHGC: 0.24

R2

ROOF and CEILING: Pitched and flat metal roof

- **R5.0** bulk ceiling insulation with reflective foil under the roof.
- **R3.0** bulk ceiling insulation with reflective foil to the first 450mm from the external wall of the pitched roof.
- No insulation is required for the roof space of the Garage.

FLOORS: Concrete slab on ground and timber first and second floor, and suspended concrete slab under Garage

- **No** bulk insulation under the concrete slab on ground.
- **R2.5** bulk insulation to the timber first floor.
- **R2.5** bulk insulation is required under the suspended concrete slab of the Garage.

WALLS

- **R2.5** bulk insulation to all external walls, except for the Garage.
- **R2.5** bulk insulation to the internal plasterboard stud walls of the Garage and first floor Powder.
- No insulation required for the partiwalls.

GLAZING (Custom aluminium window specifications)

Description	Type	Glazing	Specification
All other	Awning	Clear single glazing	U-value: 5.78, SHGC: 0.58
Living, Lounge, Study	Awning	Clear double glazing	U-value: 3.69, SHGC: 0.51
All	Sliding Door	Clear double glazing	U-value: 3.82, SHGC: 0.61
Skylight	Fixed Velux	Clear Low E double glazing	U-value: 2.66, SHGC: 0.24

R3			
ROOF and CEILING: Pitched and flat metal roof			
- R6.0 bulk ceiling insulation with R1.8 anticon blanket with reflective foil under the roof. - R3.0 bulk ceiling insulation with R1.8 anticon blanket with reflective foil to the first 450mm from the external wall of the pitched roof. - No insulation is required for the roof space of the Garage.			
FLOORS: Concrete slab on ground and timber first and second floor.			
- No bulk insulation under the concrete slab on ground. - R2.5 bulk insulation to the timber first floor.			
WALLS			
- R2.7 bulk insulation to all external walls, except for the Garage. - R2.5 bulk insulation to the internal plasterboard stud walls of the Garage, Laundry, WC, and Bathroom. - No insulation required for the partiwalls.			
GLAZING (Custom aluminium window specifications)			
Description	Type	Glazing	Specification
WC, Laundry, Bathroom	Awning	Clear single glazing	U-value: 5.78, SHGC: 0.58
All other	Awning	Clear Lightbridge double glazing	U-value: 3.00, SHGC: 0.41
All	Sliding Door	Clear Lightbridge double glazing	U-value: 2.97, SHGC: 0.49

R4			
ROOF and CEILING: Pitched and flat metal roof			
- R6.0 bulk ceiling insulation with reflective foil under the roof. - R3.0 bulk ceiling insulation with reflective foil to the first 450mm from the external wall of the pitched roof. - No insulation is required for the roof space of the Garage.			
FLOORS: Concrete slab on ground and timber first and second floor.			
- No bulk insulation under the concrete slab on ground. - R2.5 bulk insulation to the timber first floor.			
WALLS			
- R2.5 bulk insulation to all external walls, except for the Garage. - R2.5 bulk insulation to the internal plasterboard stud walls of the Garage, Laundry, WC, and Bathroom. - No insulation required for the partiwalls.			
GLAZING (Custom aluminium window specifications)			
Description	Type	Glazing	Specification
WC, Laundry, Bathroom	Awning	Clear single glazing	U-value: 5.78, SHGC: 0.58
Kitchen, Dining, Foyer, Bedroom 2	Awning	Clear Lightbridge double glazing	U-value: 3.69, SHGC: 0.51
All other	Awning	Clear double glazing	U-value: 3.00, SHGC: 0.41
All	Sliding Door	Clear Lightbridge double glazing	U-value: 2.97, SHGC: 0.49

R5			
ROOF and CEILING: Pitched and flat metal roof			
- R6.0 bulk ceiling insulation with R1.8 anticon blanket with reflective foil under the roof. - R3.0 bulk ceiling insulation with R1.8 anticon blanket with reflective foil to the first 450mm from the external wall of the pitched roof. - No insulation is required for the roof space of the Garage.			
FLOORS: Concrete slab on ground and timber first and second floor.			
- No bulk insulation under the concrete slab on ground. - R2.5 bulk insulation to the timber first floor.			
WALLS			
- R2.7 bulk insulation to all external walls, except for the Garage. - R2.5 bulk insulation to the internal plasterboard stud walls of the Garage, Laundry, WC, and Bathroom. - No insulation required for the partiwalls.			
GLAZING (Custom aluminium window specifications)			
Description	Type	Glazing	Specification
WC, Laundry, Bathroom	Awning	Clear single glazing	U-value: 5.78, SHGC: 0.58
All other	Awning	Clear Lightbridge double glazing	U-value: 3.00, SHGC: 0.41
All	Sliding Door	Clear Lightbridge double glazing	U-value: 2.97, SHGC: 0.49

R6			
ROOF and CEILING: Pitched and flat metal roof			
- R6.0 bulk ceiling with reflective foil under the roof. - R3.0 bulk ceiling insulation with reflective foil to the first 450mm from the external wall of the pitched roof. - No insulation is required for the roof space of the Garage.			
FLOORS: Concrete slab on ground and timber first and second floor.			
- No bulk insulation under the concrete slab on ground. - R2.5 bulk insulation to the timber first floor.			
WALLS			
- R2.5 bulk insulation to all external walls, except for the Garage. - R2.5 bulk insulation to the internal plasterboard stud walls of the Garage, Laundry, WC, and Bathroom. - No insulation required for the partiwalls.			
GLAZING (Custom aluminium window specifications)			
Description	Type	Glazing	Specification
WC, Laundry, Bathroom	Awning	Clear single glazing	U-value: 5.78, SHGC: 0.58
All	Awning	Clear Lightbridge double glazing	U-value: 3.69, SHGC: 0.51
All	Sliding Door	Clear Lightbridge double glazing	U-value: 2.97, SHGC: 0.49

R7			
ROOF and CEILING: Pitched and flat metal roof			
- R6.0 bulk ceiling insulation with reflective foil under the roof. - R3.0 bulk ceiling insulation with reflective foil to the first 450mm from the external wall of the pitched roof. - No insulation is required for the roof space of the Garage.			
FLOORS: Concrete slab on ground and timber first and second floor.			
- No bulk insulation under the concrete slab on ground. - R2.5 bulk insulation to the timber first floor.			
WALLS			
- R2.5 bulk insulation with to all external walls, except for the Garage. - R2.5 bulk insulation to the internal plasterboard stud walls of the Garage, Laundry, WC, and Bathroom. - No insulation required for the partiwalls.			
GLAZING (Custom aluminium window specifications)			
Description	Type	Glazing	Specification
WC, Laundry, Bathroom	Awning	Clear single glazing	U-value: 5.78, SHGC: 0.58
All other	Awning	Clear Lightbridge double glazing	U-value: 3.00, SHGC: 0.41
All	Sliding Door	Clear Lightbridge double glazing	U-value: 2.97, SHGC: 0.49

R8			
ROOF and CEILING: Pitched and flat metal roof			
- R6.0 bulk ceiling insulation with reflective foil under the roof. - R3.0 bulk ceiling insulation with reflective foil to the first 450mm from the external wall of the pitched roof. - No insulation is required for the roof space of the Garage.			
FLOORS: Concrete slab on ground and timber first and second floor.			
- No bulk insulation under the concrete slab on ground. - R2.5 bulk insulation to the timber first floor.			
WALLS			
- R2.5 bulk insulation to all external walls, except for the Garage. - R2.5 bulk insulation to the internal plasterboard stud walls of the Garage, Laundry and WC. - No insulation required for the partiwalls.			
GLAZING (Custom aluminium window specifications)			
Description	Type	Glazing	Specification
WC, Laundry, SHR, WIR	Awning	Clear single glazing	U-value: 5.78, SHGC: 0.58
All other	Awning	Clear Lightbridge double glazing	U-value: 3.00, SHGC: 0.41
All	Sliding Door	Clear Lightbridge double glazing	U-value: 2.97, SHGC: 0.49

R9			
ROOF and CEILING: Pitched and flat metal roof			
- R6.0 bulk ceiling insulation with reflective foil under the roof. - R3.0 bulk ceiling insulation with reflective foil to the first 450mm from the external wall of the pitched roof. - No insulation is required for the roof space of the Garage.			
FLOORS: Concrete slab on ground and timber first and second floor.			
- No bulk insulation under the concrete slab on ground. - R2.5 bulk insulation to the timber first floor.			
WALLS			
- R2.5 bulk insulation to all external walls, except for the Garage. - R2.5 bulk insulation to the internal plasterboard stud walls of the Garage, Laundry and WC. - No insulation required for the partiwalls.			
GLAZING (Custom aluminium window specifications)			
Description	Type	Glazing	Specification
WC, Laundry	Awning	Clear single glazing	U-value: 5.78, SHGC: 0.58
All other	Awning	Clear double glazing	U-value: 3.69, SHGC: 0.51
All	Sliding Door	Clear double glazing	U-value: 3.82, SHGC: 0.61

R10			
ROOF and CEILING: Pitched and flat metal roof			
- R6.0 bulk ceiling insulation with reflective foil under the roof. - R3.0 bulk ceiling insulation with reflective foil to the first 450mm from the external wall of the pitched roof. - No insulation is required for the roof space of the Garage.			
FLOORS: Concrete slab on ground and timber first and second floor.			
- No bulk insulation under the concrete slab on ground. - R2.5 bulk insulation to the timber first floor.			
WALLS			
- R2.5 bulk insulation to all external walls, except for the Garage. - R2.5 bulk insulation to the internal plasterboard stud walls of the Garage, Laundry and WC. - No insulation required for the partiwalls.			
GLAZING (Custom aluminium window specifications)			
Description	Type	Glazing	Specification
WC, Laundry	Awning	Clear single glazing	U-value: 5.78, SHGC: 0.58
All other	Awning	Clear Lightbridge double glazing	U-value: 3.00, SHGC: 0.41
All	Sliding Door	Clear Lightbridge double glazing	U-value: 2.97, SHGC: 0.49

Nationwide House Energy Rating Scheme® NatHERS® Certificate No. UNZ2T9VGTH

Generated on 28 Oct 2025 using FirstRate5: 5.5.5a (3.22)

Property

Address R1, 67 Elimatta Road & 19A Rowan Street,
Mona Vale, NSW, 2103
Lot/DP 103/-/DP709505
NCC Class* Class 1a
Floor/all Floors
Type New Home

Plans

Main plan Rev C 27/10/2025
Prepared by JKMarchitects

Construction and environment

Assessed floor area [m²]*	Exposure type
Conditioned* 162	suburban
Unconditioned* 22	NatHERS climate zone
Total 184	56 Mascot AMO
Garage 18.1	



Accredited assessor

Name STEPHEN BURGUM
V-Star Energy in association with Ecoplus
Consultants
Business name
Email stephen@vstarenergy.com.au
Phone 0421810026
Accreditation No. HERA10245
Assessor Accrediting Organisation
-
Declaration of interest No

NCC Requirements

NCC provisions Volume 2
State/Territory variation Yes

National Construction Code (NCC) requirements

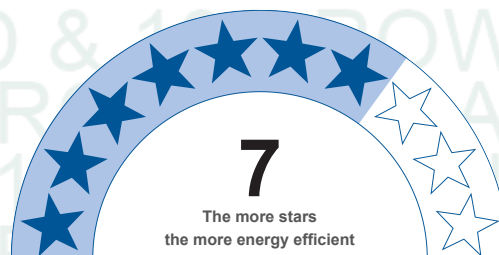
The NCC allows the use of NatHERS accredited software to comply with the energy efficiency requirements for houses (Class 1 buildings) and apartments (Class 2 sole-occupancy units and Class 4 parts of buildings). The applicable requirements for houses are detailed in Specification 42 of NCC Volume Two. For apartments the requirements are detailed in clauses J3D3 and J3D15 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 star rating



**NATIONWIDE
HOUSE**
ENERGY RATING SCHEME®

29.6 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 [MJ/m²]

Limits taken from ABCB Standard 2022

	Heating	Cooling
Modelled	18.4	11.2
Load limits	N/A	N/A
Features determining load limits		
Floor type (lowest conditioned area)		N/A
NCC climate zone 1 or 2		N/A
Outdoor living area		N/A
Outdoor living area ceiling fan		N/A

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 <https://www.fr5.com.au/QRCodeLandIng?PublicId=UNZ2T9VGTH>
When using either link,
ensure you are visiting
www.fr5.com.au.





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 & 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 NatHERS heating and cooling load limits Standard 2022 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 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.

Graph key:



Predicted onsite renewable energy impact

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 the values in the ABCB Standard 2022: NatHERS heating and cooling load limits for the appropriate climate zone?	☐	☐	☐	☐	☐

*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?		☐	☐	☐	☐
Insulation installation method					
Has the insulation been installed according to the NCC requirements?			☐	☐	☐
Building sealing					
Does the dwelling meet the NCC requirements for Building Sealing?		☐	☐	☐	☐
Whole of Home performance check (not applicable if a Whole of Home performance 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 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?	☐	☐			
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

All lighting devices must NOT penetrate ceiling insulation

Window ID selections may be replaced with those with the same or lower U-Value and SHGC value +/-5%.

Any type of insulation can be replaced with one that have the same R-value.

Colour selections as shown on the plans.

Refer to the V-Star Energy Rating Summary Report for further information.



Room *schedule*

Room	Zone Type	Area [m²]
Powder	dayTime	5.9
Laundry	dayTime	3.5
Pantry	dayTime	5.6
Kitchen/Living/Dining	kitchen	40.2
Hallway	dayTime	3.4
Stairs	dayTime	7
Garage	garage	18.1
Bedroom 1	bedroom	12.1
Lounge	living	20.4
Study	dayTime	12
Powder	unconditioned	3.9
Bedroom 3	bedroom	10.9
Bedroom 2	bedroom	12.1
M Bedroom	bedroom	16.1
Foyer	dayTime	8.1
Night Hallway	nightTime	2.8
Ensuite	nightTime	6.4
Bath	dayTime	4.3
Bed void	doubleHeightVoid	5.2

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
RYL-362-640 A	AA Series Sliding Door DG LightBridge_ClrS0_4-12-4	2.97	0.49	0.47	0.51
RYL-312-101 A	AA Series Awning Window DG 4-12Ar-4	3.69	0.51	0.48	0.54
RYL-611-707 A	SG Series Awning Window SG 5Clr	5.78	0.58	0.55	0.61

Window and glazed door *schedule*

*Refer to glossary.



Location	Window ID	Window no.	Height [mm]	Width [mm]	Window type	Opening %	Orientation	Window shading device*
Kitchen/Living/-Dining	RYL-362-640 A	W01.01	2400	2400	sliding	45.0	N	No
Kitchen/Living/-Dining	RYL-312-101 A	W01.02	2140	945	awning	45.0	E	No
Kitchen/Living/-Dining	RYL-362-640 A	W01.03	2400	2400	sliding	45.0	N	No
Bedroom 1	RYL-312-101 A	W01.05	2140	930	awning	45.0	N	No
Bedroom 1	RYL-312-101 A	W01.06	2140	930	awning	45.0	N	No
Lounge	RYL-362-640 A	W01.06	2400	2400	sliding	45.0	N	No
Lounge	RYL-312-101 A	W01.08	2140	930	awning	45.0	W	No
Lounge	RYL-312-101 A	W01.07	2140	930	awning	45.0	W	No
Study	RYL-312-101 A	W01.10	1200	800	awning	90.0	W	No
Study	RYL-312-101 A	W01.09	1200	800	awning	90.0	W	No
Powder	RYL-611-707 A	W01.11	1200	700	awning	90.0	S	No
Powder	RYL-611-707 A	W01.12	1200	700	awning	90.0	S	No
Bedroom 3	RYL-312-101 A	W01.18	1200	945	awning	24.0	S	No
Bedroom 3	RYL-312-101 A	W01.19	1200	945	awning	24.0	S	No
Bedroom 2	RYL-312-101 A	W01.15	1200	945	awning	24.0	W	No
Bedroom 2	RYL-312-101 A	W01.16	1200	700	awning	28.0	S	No
Bedroom 2	RYL-312-101 A	W01.17	1200	700	awning	28.0	S	No
M Bedroom	RYL-312-101 A	W01.14	1200	800	awning	26.0	N	No
M Bedroom	RYL-312-101 A	W01.13	1200	800	awning	26.0	N	No
Bed void	RYL-312-101 A	W01.	700	500	awning	90.0	S	No
Bed void	RYL-312-101 A	W01.	700	500	awning	90.0	S	No

Roof window* type and performance value

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
Velux:VEL-011-02 W	VELUX FS - Fixed Skylight DG 3mm LoE 366 / 10.5mm Argon Gap / 3mm Clear	2.66	0.24	0.23	0.25

Roof window* schedule

*Refer to glossary.



Location	Window ID	Window no.	Opening %	Area [m²]	Width [mm]	Orientation	Outdoor shade	Indoor shade
Foyer	Velux:VEL-011-02 W	Element 1	0.0	1.2	0	W	None	None
Night Hallway	Velux:VEL-011-02 W	Element 2	0.0	1.2	0	W	None	None
Ensuite	Velux:VEL-011-02 W	Element 3	0.0	1.2	0	N	None	None

Skylight* *type and performance*

Skylight ID	Skylight description	Skylight shaft reflectance
No Data Available		

Skylight* *schedule*

Location	Skylight ID	Skylight No.	Skylight shaft length [mm]	Area [m²]	Orient-ation	Outdoor shade	Diffuser
No Data Available							

External door *schedule*

Location	Height [mm]	Width [mm]	Opening %	Orientation
Garage	2100	2700	100.0	S
Study	2100	920	100.0	S

External wall *type*

Wall ID	Wall type	Solar absorptance	Wall shade [colour]	Bulk insulation [R-value]	Reflective wall wrap*
1	Steve - Block Retaining Wall 190	0.5	Medium	Glass fibre batt: R2.5 (R2.5)	No
2	Steve - ConBlock190	0.5	Medium	Glass fibre batt: R2.5 (R2.5)	No
3	Steve - Brick Cavity	0.5	Medium		No
4	Steve - Fibre Cement 2.5	0.5	Medium	Glass fibre batt: R2.5 (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)
Powder	1	2400	1188	E	0	No
Powder	1	2400	2219	S	0	No
Powder	1	1150	2821	W	0	No
Powder	2	1250	2821	W	0	No
Laundry	1	1150	1764	W	0	No
Laundry	2	1250	1764	W	0	No



Pantry	3	2400	1637	E	0	No
Pantry	1	2400	3447	S	0	No
Kitchen/Living/Dining	3	2400	4819	E	0	No
Kitchen/Living/Dining	4	3000	1869	E	3131	Yes
Kitchen/Living/Dining	4	3000	3266	N	1553	Yes
Kitchen/Living/Dining	4	3000	1515	E	3140	Yes
Kitchen/Living/Dining	4	3000	3767	N	0	Yes
Kitchen/Living/Dining	1	2000	4496	W	0	No
Kitchen/Living/Dining	2	1000	4496	W	0	No
Hallway	1	2400	1270	S	0	No
Stairs	1	1150	1851	W	0	No
Stairs	2	1250	1851	W	0	No
Garage	3	2650	6003	E	0	No
Garage	4	2650	3021	S	0	Yes
Bedroom 1	3	2700	2141	E	0	No
Bedroom 1	4	2700	1862	E	0	Yes
Bedroom 1	4	2940	3028	N	624	Yes
Bedroom 1	4	2700	1186	W	4428	Yes
Lounge	4	2940	3905	N	1810	Yes
Lounge	4	2940	3375	W	434	Yes
Lounge	4	2510	1847	W	0	Yes
Study	4	2510	2634	W	369	No
Study	4	2510	1677	S	1342	Yes
Powder	4	2510	922	E	1655	Yes
Powder	4	2510	1838	W	375	No
Powder	4	2510	2222	S	354	No
Bedroom 3	3	3180	3023	E	0	No
Bedroom 3	4	2430	3612	S	374	Yes
Bedroom 2	4	3180	3618	W	383	No
Bedroom 2	4	2600	514	SW	616	No
Bedroom 2	4	2600	1887	S	0	No
Bedroom 2	4	2600	508	S	3244	Yes
Bedroom 2	4	2600	593	S	432	No
M Bedroom	3	3125	2537	E	0	No
M Bedroom	4	3125	1855	E	0	Yes
M Bedroom	4	2200	987	N	0	Yes
M Bedroom	4	2200	660	E	315	Yes
M Bedroom	4	2450	2021	N	243	Yes
M Bedroom	4	2200	661	W	251	Yes



M Bedroom	4	2200	596	N	0	Yes
Foyer	4	3550	859	N	0	Yes
Foyer	4	2550	1773	W	374	Yes
Night Hallway	4	2200	932	W	0	Yes
Ensuite	4	2200	2454	N	0	Yes
Ensuite	4	2200	2596	W	0	Yes
Bath	3	3550	1566	E	0	No
Bed void	4	1200	2377	E	129	No
Bed void	4	1500	2172	N	0	No
Bed void	4	1200	2377	W	214	No
Bed void	4	1500	2172	S	153	No

Internal wall type

Wall ID	Wall type	Area [m²]	Bulk insulation
1	FR5 - Internal Plasterboard Stud Wall	153.3	
2	Steve - R2.5 Internal Wall	30.9	Glass fibre batt: R2.5 (R2.5)

Floor type

Location	Construction	Area [m²]	Sub-floor ventilation	Added insulation [R-value]	Covering
Powder	COSG - CSOG: Slab on Ground	5.9	Enclosed	R0.0	Tiles
Laundry	COSG - CSOG: Slab on Ground	3.5	Enclosed	R0.0	Tiles
Pantry	COSG - CSOG: Slab on Ground	0.7	Enclosed	R0.0	Timber
Pantry	COSG - CSOG: Slab on Ground	4.9	Enclosed	R0.0	Timber
Kitchen/Living/D-ining	COSG - CSOG: Slab on Ground	4	Enclosed	R0.0	Timber
Kitchen/Living/D-ining	COSG - CSOG: Slab on Ground	12.3	Enclosed	R0.0	Timber
Kitchen/Living/D-ining	COSG - CSOG: Slab on Ground	23.9	Enclosed	R0.0	Timber
Hallway	COSG - CSOG: Slab on Ground	3.4	Enclosed	R0.0	Timber
Stairs	COSG - CSOG: Slab on Ground	7	Enclosed	R0.0	Timber
Garage	FR5 - 250mm concrete slab Lined	18.1	Enclosed	R2.5	none
Bedroom 1	InFloor - Intermediate Floor R2.5	0.9	Elevated	R2.5	Timber
Bedroom 1	InFloor - Intermediate Floor R2.5	3.3	Elevated	R2.5	Timber



Bedroom 1	InFloor - Intermediate Floor R2.5	7.8	Enclosed	R2.5	Timber
Lounge	InFloor - Intermediate Floor R2.5	2.3	Enclosed	R2.5	Timber
Lounge	InFloor - Intermediate Floor R2.5	18	Enclosed	R2.5	Timber
Study	InFloor - Intermediate Floor R2.5	12	Enclosed	R2.5	Timber
Powder	InFloor - Intermediate Floor R2.5	2.7	Enclosed	R2.5	Tiles
Powder	InFloor - Intermediate Floor R2.5	1.2	Enclosed	R2.5	Tiles
Bedroom 3	InFloor - Intermediate Floor R2.5	6	Enclosed	R2.5	Timber
Bedroom 3	InFloor - Intermediate Floor R2.5	4.9	Enclosed	R2.5	Timber
Bedroom 2	InFloor - Intermediate Floor R2.5	12.1	Enclosed	R2.5	Timber
M Bedroom	InFloor - Intermediate Floor R2.5	0.1	Elevated	R2.5	Timber
M Bedroom	InFloor - Intermediate Floor R2.5	16	Enclosed	R2.5	Timber
Foyer	InFloor - Intermediate Floor R2.5	8.1	Enclosed	R2.5	Timber
Night Hallway	InFloor - Intermediate Floor R2.5	2.8	Enclosed	R2.5	Timber
Ensuite	InFloor - Intermediate Floor R2.5	0.4	Elevated	R2.5	Tiles
Ensuite	InFloor - Intermediate Floor R2.5	5.9	Enclosed	R2.5	Tiles
Bath	InFloor - Intermediate Floor R2.5	4.3	Enclosed	R2.5	Tiles
Bed void	No Floor	5.2	Enclosed	R2.5	No Floor

Ceiling type

Location	Construction material/type	Bulk insulation R-value [may include edge batt values]	Reflective wrap*
Powder	InFloor - Intermediate Floor R2.5	R2.5	No
Laundry	InFloor - Intermediate Floor R2.5	R2.5	No
Pantry	InFloor - Intermediate Floor R2.5	R2.5	No
Pantry	FR5 - 250mm concrete slab Lined	R2.5	No
Kitchen/Living/D-ining	Plasterboard	R5.0	No

*Refer to glossary.



Kitchen/Living/D-ining	FR5 - 250mm concrete slab Lined	R2.5	No
Kitchen/Living/D-ining	FR5 - 250mm concrete slab Lined	R2.5	No
Kitchen/Living/D-ining	InFloor - Intermediate Floor R2.5	R2.5	No
Hallway	InFloor - Intermediate Floor R2.5	R2.5	No
Stairs	InFloor - Intermediate Floor R2.5	R2.5	No
Garage	InFloor - Intermediate Floor R2.5	R2.5	No
Bedroom 1	Plasterboard	R3.0	Yes
Bedroom 1	InFloor - Intermediate Floor R2.5	R2.5	No
Bedroom 1	InFloor - Intermediate Floor R2.5	R2.5	No
Lounge	Plasterboard	R3.0	Yes
Lounge	InFloor - Intermediate Floor R2.5	R2.5	No
Study	InFloor - Intermediate Floor R2.5	R2.5	No
Powder	InFloor - Intermediate Floor R2.5	R2.5	No
Powder	Plasterboard	R3.0	Yes
Bedroom 3	InFloor - Intermediate Floor R2.5	R2.5	No
Bedroom 3	Plasterboard	R5.0	No
Bedroom 2	Plasterboard	R5.0	No
M Bedroom	Plasterboard	R5.0	No
Foyer	Plasterboard	R5.0	No
Night Hallway	Plasterboard	R5.0	No
Ensuite	Plasterboard	R5.0	No
Bath	Plasterboard	R5.0	No
Bed void	Plasterboard	R5.0	No

Ceiling penetrations*

Location	Quantity	Type	Height [mm]	Width [mm]	Sealed/unsealed
Powder	1	Exhaust Fans	250	250	Sealed
Laundry	1	Exhaust Fans	250	250	Sealed
Kitchen/Living/Dining	1	Exhaust Fans	250	250	Sealed
Powder	1	Exhaust Fans	250	250	Sealed
Ensuite	1	Exhaust Fans	250	250	Sealed

*Refer to glossary.



Bath	1	Exhaust Fans	250	250	Sealed
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Ceiling fans

Location	Quantity	Diameter [mm]
No Data Available		

Roof type

Construction	Added insulation [R-value]	Solar absorptance	Roof shade [colour]
Framed:Flat - Flat Framed (Metal Deck)	0.0	0.44	Medium
Cont:Attic-Continuous	0.0	0.44	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]
No Data Available				

Appliance *schedule*

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

Note: A flat assumption of 5W/m2 is used for lighting, therefore lighting is not included in the appliance schedule.

Cooling system

Appliance/ system type	Location	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Whole of Home performance assessment conducted for this certificate.				

Heating system

Appliance/ system type	Location	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Whole of Home performance assessment conducted for this certificate.				

Hot water system

Appliance/ system type	Fuel type	Minimum efficiency/ performance	Hot Water CER Zone	Zone 3 STC	Assessed daily load
No Whole of Home performance assessment conducted for this certificate.					

Pool/spa equipment

Appliance/ system type	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Whole of Home performance assessment conducted for this certificate.			

Onsite renewable energy *schedule*

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



System type	Orientation	System size or generation capacity
No Whole of Home performance assessment conducted for this certificate.		

Battery *schedule*

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

System type	Size [battery storage capacity]
No Whole of Home performance assessment conducted for this certificate.	



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 homes 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 homes 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 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 openness 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 air gap 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.

*Refer to glossary.



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)

Nationwide House Energy Rating Scheme®

NatHERS® Certificate No. J1H0OPAA5D

Generated on 28 Oct 2025 using FirstRate5: 5.5.5a (3.22)

Property

Address R2, 67 Elimatta Road & 19A Rowan Street,
Mona Vale, NSW, 2103
Lot/DP 103/-/DP709505
NCC Class* Class 1a
Floor/all Floors
Type New Home

Plans

Main plan Rev C 27/10/2025
Prepared by JKMarchitects

Construction and environment

Assessed floor area [m²]*	Exposure type
Conditioned* 162.2	suburban
Unconditioned* 22	NatHERS climate zone
Total 184.2	56 Mascot AMO
Garage 18.1	



Accredited assessor

Name STEPHEN BURGUM
V-Star Energy in association with Ecoplus
Consultants
Business name
Email stephen@vstarenergy.com.au
Phone 0421810026
Accreditation No. HERA10245
Assessor Accrediting Organisation
-
Declaration of interest No

NCC Requirements

NCC provisions Volume 2
State/Territory variation Yes

National Construction Code (NCC) requirements

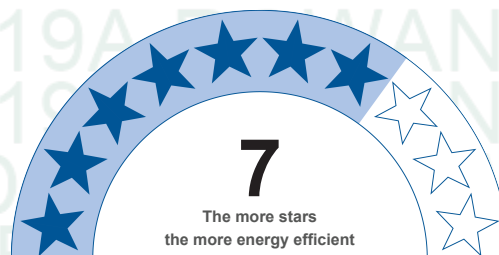
The NCC allows the use of NatHERS accredited software to comply with the energy efficiency requirements for houses (Class 1 buildings) and apartments (Class 2 sole-occupancy units and Class 4 parts of buildings). The applicable requirements for houses are detailed in Specification 42 of NCC Volume Two. For apartments the requirements are detailed in clauses J3D3 and J3D15 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 star rating



**NATIONWIDE
HOUSE**
ENERGY RATING SCHEME®

29.9 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 [MJ/m²]

Limits taken from ABCB Standard 2022

	Heating	Cooling
Modelled	19	10.9
Load limits	N/A	N/A
Features determining load limits		
Floor type (lowest conditioned area)		N/A
NCC climate zone 1 or 2		N/A
Outdoor living area		N/A
Outdoor living area ceiling fan		N/A

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 <https://www.fr5.com.au/QRCodeLandIng?PublicId=J1H0OPAA5D>. When using either link, ensure you are visiting www.fr5.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 & 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 NatHERS heating and cooling load limits Standard 2022 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 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:



Greenhouse gas emissions:



Cost:



Graph key:



Predicted onsite renewable energy impact

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 the values in the ABCB Standard 2022: NatHERS heating and cooling load limits for the appropriate climate zone?	☐	☐	☐	☐	☐

*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?		☐	☐	☐	☐
Insulation installation method					
Has the insulation been installed according to the NCC requirements?			☐	☐	☐
Building sealing					
Does the dwelling meet the NCC requirements for Building Sealing?		☐	☐	☐	☐
Whole of Home performance check (not applicable if a Whole of Home performance 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 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?	☐	☐			

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

All lighting devices must NOT penetrate ceiling insulation

Window ID selections may be replaced with those with the same or lower U-Value and SHGC value +/-5%.

Any type of insulation can be replaced with one that have the same R-value.

Colour selections as shown on the plans.

Refer to the V-Star Energy Rating Summary Report for further information.



Room *schedule*

Room	Zone Type	Area [m²]
Powder	dayTime	5.9
Laundry	dayTime	3.5
Pantry	dayTime	5.6
Kitchen/Living/Dining	kitchen	40.2
Hallway	dayTime	3.4
Stairs	dayTime	7
Garage	garage	18.1
Bedroom 1	bedroom	12.1
Lounge	living	20.4
Study	dayTime	12
Powder	unconditioned	3.9
Bedroom 3	bedroom	11
Bedroom 2	bedroom	12.1
M Bedroom	bedroom	16.2
Foyer	dayTime	8.1
Night Hallway	nightTime	2.8
Ensuite	nightTime	6.4
Bath	dayTime	4.4
Bed void	doubleHeightVoid	5.2

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
RYL-362-601 A	AA Series Sliding Door DG 4-12Ar-4	3.82	0.61	0.58	0.64
RYL-312-101 A	AA Series Awning Window DG 4-12Ar-4	3.69	0.51	0.48	0.54
RYL-611-707 A	SG Series Awning Window SG 5Clr	5.78	0.58	0.55	0.61

Window and glazed door *schedule*



Location	Window ID	Window no.	Height [mm]	Width [mm]	Window type	Opening %	Orientation	Window shading device*
Kitchen/Living/-Dining	RYL-362-601 A	W02.03	2400	2400	sliding	45.0	N	No
Kitchen/Living/-Dining	RYL-312-101 A	W02.02	2140	945	awning	45.0	W	No
Kitchen/Living/-Dining	RYL-362-601 A	W02.01	2400	2400	sliding	45.0	N	No
Bedroom 1	RYL-611-707 A	W02.04	2140	930	awning	45.0	N	No
Bedroom 1	RYL-611-707 A	W02.05	2140	930	awning	45.0	N	No
Lounge	RYL-312-101 A	W02.08	2140	930	awning	45.0	E	No
Lounge	RYL-312-101 A	W02.07	2140	930	awning	45.0	E	No
Lounge	RYL-362-601 A	W02.06	2400	2400	sliding	45.0	N	No
Study	RYL-312-101 A	W02.10	1200	800	awning	90.0	E	No
Study	RYL-312-101 A	W02.09	1200	800	awning	90.0	E	No
Powder	RYL-611-707 A	W02.11	1200	700	awning	90.0	S	No
Powder	RYL-611-707 A	W02.12	1200	700	awning	90.0	S	No
Bedroom 3	RYL-611-707 A	W02.18	1200	945	awning	24.0	S	No
Bedroom 3	RYL-611-707 A	W02.19	1200	945	awning	24.0	S	No
Bedroom 2	RYL-611-707 A	W02.16	1200	700	awning	28.0	S	No
Bedroom 2	RYL-611-707 A	W02.17	1200	700	awning	28.0	S	No
Bedroom 2	RYL-611-707 A	W02.15	1200	945	awning	24.0	E	No
M Bedroom	RYL-611-707 A	W02.14	1200	800	awning	26.0	N	No
M Bedroom	RYL-611-707 A	W02.13	1200	800	awning	26.0	N	No
Bed void	RYL-611-707 A	W01.	700	500	awning	90.0	S	No
Bed void	RYL-611-707 A	W01.	700	500	awning	90.0	S	No

Roof window* type and performance value

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
Velux:VEL-011-02 W	VELUX FS - Fixed Skylight DG 3mm LoE 366 / 10.5mm Argon Gap / 3mm Clear	2.66	0.24	0.23	0.25

Roof window* schedule

*Refer to glossary.



Location	Window ID	Window no.	Opening %	Area [m²]	Width [mm]	Orientation	Outdoor shade	Indoor shade
Foyer	Velux:VEL-011-02 W	Element 1	0.0	1.2	0	E	None	None
Night Hallway	Velux:VEL-011-02 W	Element 2	0.0	1.2	0	E	None	None
Ensuite	Velux:VEL-011-02 W	Element 3	0.0	1.2	0	N	None	None

Skylight* type and performance

Skylight ID	Skylight description	Skylight shaft reflectance
No Data Available		

Skylight* schedule

Location	Skylight ID	Skylight No.	Skylight shaft length [mm]	Area [m²]	Orient-ation	Outdoor shade	Diffuser
No Data Available							

External door schedule

Location	Height [mm]	Width [mm]	Opening %	Orientation
Garage	2100	2700	100.0	S
Study	2100	920	100.0	S

External wall type

Wall ID	Wall type	Solar absorptance	Wall shade [colour]	Bulk insulation [R-value]	Reflective wall wrap*
1	Steve - Block Retaining Wall 190	0.5	Medium	Glass fibre batt: R2.5 (R2.5)	No
2	Steve - ConBlock190	0.5	Medium	Glass fibre batt: R2.5 (R2.5)	No
3	Steve - Fibre Cement 2.5	0.5	Medium	Glass fibre batt: R2.5 (R2.5)	No
4	Steve - Brick Cavity	0.5	Medium		No
5	Steve - Fibre Cement 0.0	0.5	Medium		No

External wall schedule

Location	Wall ID	Height [mm]	Width [mm]	Orientation	Horizontal shading feature* maximum projection [mm]	Vertical shading feature* (yes/no)
Powder	1	2400	2219	S	0	No
Powder	1	2400	1188	W	0	No
Powder	1	1150	2821	E	0	No
Powder	2	1250	2821	E	0	No
Laundry	1	1150	1764	E	0	No



Laundry	2	1250	1764	E	0	No
Pantry	1	2400	3447	S	0	No
Pantry	1	2400	1637	W	0	No
Kitchen/Living/Dining	3	3000	3767	N	0	Yes
Kitchen/Living/Dining	3	3000	1515	W	3140	Yes
Kitchen/Living/Dining	3	3000	3266	N	1553	Yes
Kitchen/Living/Dining	4	3000	6600	W	0	No
Kitchen/Living/Dining	1	2000	4496	E	0	No
Kitchen/Living/Dining	2	1000	4496	E	0	No
Hallway	1	2400	1270	S	0	No
Stairs	1	1150	1851	SE	0	No
Stairs	2	1250	1851	SE	0	No
Garage	5	2650	3021	S	0	No
Garage	4	2650	4133	W	0	No
Garage	5	2650	1870	W	0	Yes
Bedroom 1	3	2700	1186	E	4428	Yes
Bedroom 1	3	2940	3028	N	624	Yes
Bedroom 1	4	2700	4003	W	0	No
Lounge	3	2510	1847	E	0	Yes
Lounge	3	2940	3375	E	434	Yes
Lounge	3	2700	3905	N	1810	Yes
Study	3	2510	1677	S	1342	Yes
Study	3	2510	2634	E	369	No
Powder	3	2510	2222	S	354	No
Powder	3	2510	1838	E	375	No
Powder	3	2510	922	W	1655	Yes
Bedroom 3	3	2430	3631	S	374	No
Bedroom 3	4	2430	1151	W	0	No
Bedroom 3	3	2430	1872	W	0	Yes
Bedroom 2	3	2600	593	SW	436	No
Bedroom 2	3	2600	508	SW	3422	Yes
Bedroom 2	3	2600	1887	S	0	No
Bedroom 2	3	2600	514	SE	770	No
Bedroom 2	3	2600	3618	E	607	No
M Bedroom	3	2200	596	N	0	Yes
M Bedroom	3	2200	661	E	251	Yes
M Bedroom	3	2450	2021	N	243	No
M Bedroom	3	2200	660	W	315	Yes
M Bedroom	3	2200	1011	N	0	Yes



M Bedroom	4	3125	4392	W	0	No
Foyer	3	2430	1773	E	599	No
Foyer	3	3550	859	N	0	Yes
Night Hallway	3	3125	932	E	0	Yes
Ensuite	3	3125	2596	E	0	Yes
Ensuite	3	2200	2454	N	0	Yes
Bath	4	3550	1566	W	0	No
Bed void	3	1500	2172	S	139	No
Bed void	3	1200	2377	E	214	No
Bed void	3	1500	2172	N	0	No
Bed void	3	1200	2377	W	129	No

Internal wall type

Wall ID	Wall type	Area [m²]	Bulk insulation
1	FR5 - Internal Plasterboard Stud Wall	153.8	
2	Steve - R2.5 Internal Wall	31	Glass fibre batt: R2.5 (R2.5)

Floor type

Location	Construction	Area [m²]	Sub-floor ventilation	Added insulation [R-value]	Covering
Powder	COSG - CSOG: Slab on Ground	5.9	Enclosed	R0.0	Tiles
Laundry	COSG - CSOG: Slab on Ground	3.5	Enclosed	R0.0	Tiles
Pantry	COSG - CSOG: Slab on Ground	0.7	Enclosed	R0.0	Timber
Pantry	COSG - CSOG: Slab on Ground	4.9	Enclosed	R0.0	Timber
Kitchen/Living/D-ining	COSG - CSOG: Slab on Ground	4	Enclosed	R0.0	Timber
Kitchen/Living/D-ining	COSG - CSOG: Slab on Ground	12.3	Enclosed	R0.0	Timber
Kitchen/Living/D-ining	COSG - CSOG: Slab on Ground	23.9	Enclosed	R0.0	Timber
Hallway	COSG - CSOG: Slab on Ground	3.4	Enclosed	R0.0	Timber
Stairs	COSG - CSOG: Slab on Ground	7	Enclosed	R0.0	Timber
Garage	FR5 - 250mm concrete slab Lined	18.1	Enclosed	R2.5	none
Bedroom 1	InFloor - Intermediate Floor R2.5	0.9	Elevated	R2.5	Timber
Bedroom 1	InFloor - Intermediate Floor R2.5	3.3	Elevated	R2.5	Timber



Bedroom 1	InFloor - Intermediate Floor R2.5	7.8	Enclosed	R2.5	Timber
Lounge	InFloor - Intermediate Floor R2.5	2.3	Enclosed	R2.5	Timber
Lounge	InFloor - Intermediate Floor R2.5	18	Enclosed	R2.5	Timber
Study	InFloor - Intermediate Floor R2.5	12	Enclosed	R2.5	Timber
Powder	InFloor - Intermediate Floor R2.5	2.7	Enclosed	R2.5	Tiles
Powder	InFloor - Intermediate Floor R2.5	1.2	Enclosed	R2.5	Tiles
Bedroom 3	InFloor - Intermediate Floor R2.5	6	Enclosed	R2.5	Timber
Bedroom 3	InFloor - Intermediate Floor R2.5	5	Enclosed	R2.5	Timber
Bedroom 2	InFloor - Intermediate Floor R2.5	12.1	Enclosed	R2.5	Timber
M Bedroom	InFloor - Intermediate Floor R2.5	0.1	Elevated	R2.5	Timber
M Bedroom	InFloor - Intermediate Floor R2.5	16.1	Enclosed	R2.5	Timber
Foyer	InFloor - Intermediate Floor R2.5	8.1	Enclosed	R2.5	Timber
Night Hallway	InFloor - Intermediate Floor R2.5	2.8	Enclosed	R2.5	Timber
Ensuite	InFloor - Intermediate Floor R2.5	0.4	Elevated	R2.5	Tiles
Ensuite	InFloor - Intermediate Floor R2.5	5.9	Enclosed	R2.5	Tiles
Bath	InFloor - Intermediate Floor R2.5	4.4	Enclosed	R2.5	Tiles
Bed void	No Floor	5.2	Enclosed	R2.5	No Floor

Ceiling type

Location	Construction material/type	Bulk insulation R-value [may include edge batt values]	Reflective wrap*
Powder	InFloor - Intermediate Floor R2.5	R2.5	No
Laundry	InFloor - Intermediate Floor R2.5	R2.5	No
Pantry	InFloor - Intermediate Floor R2.5	R2.5	No
Pantry	FR5 - 250mm concrete slab Lined	R2.5	No
Kitchen/Living/D-ining	Plasterboard	R5.0	No

*Refer to glossary.



Kitchen/Living/D-ining	FR5 - 250mm concrete slab Lined	R2.5	No
Kitchen/Living/D-ining	FR5 - 250mm concrete slab Lined	R2.5	No
Kitchen/Living/D-ining	InFloor - Intermediate Floor R2.5	R2.5	No
Hallway	InFloor - Intermediate Floor R2.5	R2.5	No
Stairs	InFloor - Intermediate Floor R2.5	R2.5	No
Garage	InFloor - Intermediate Floor R2.5	R2.5	No
Bedroom 1	Plasterboard	R3.0	Yes
Bedroom 1	InFloor - Intermediate Floor R2.5	R2.5	No
Bedroom 1	InFloor - Intermediate Floor R2.5	R2.5	No
Lounge	Plasterboard	R3.0	Yes
Lounge	InFloor - Intermediate Floor R2.5	R2.5	No
Study	InFloor - Intermediate Floor R2.5	R2.5	No
Powder	InFloor - Intermediate Floor R2.5	R2.5	No
Powder	Plasterboard	R3.0	Yes
Bedroom 3	InFloor - Intermediate Floor R2.5	R2.5	No
Bedroom 3	Plasterboard	R5.0	No
Bedroom 2	Plasterboard	R5.0	No
M Bedroom	Plasterboard	R5.0	No
Foyer	Plasterboard	R5.0	No
Night Hallway	Plasterboard	R5.0	No
Ensuite	Plasterboard	R5.0	No
Bath	Plasterboard	R5.0	No
Bed void	Plasterboard	R5.0	No

Ceiling penetrations*

Location	Quantity	Type	Height [mm]	Width [mm]	Sealed/unsealed
Powder	1	Exhaust Fans	250	250	Sealed
Laundry	1	Exhaust Fans	250	250	Sealed
Kitchen/Living/Dining	1	Exhaust Fans	250	250	Sealed
Powder	1	Exhaust Fans	250	250	Sealed
Ensuite	1	Exhaust Fans	250	250	Sealed

*Refer to glossary.



Bath	1	Exhaust Fans	250	250	Sealed
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Ceiling fans

Location	Quantity	Diameter [mm]
No Data Available		

Roof type

Construction	Added insulation [R-value]	Solar absorptance	Roof shade [colour]
Framed:Flat - Flat Framed (Metal Deck)	0.0	0.44	Medium
Cont:Attic-Continuous	0.0	0.44	Medium

Thermal bridging schedule for steel frame elements

Building element	Steel section dimensions		Steel thickness [BMT,mm]	Thermal break [R-value]
	[height x width, mm]	Frame spacing [mm]		
No Data Available				

Appliance schedule

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

Note: A flat assumption of 5W/m2 is used for lighting, therefore lighting is not included in the appliance schedule.

Cooling system

Appliance/ system type	Location	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Whole of Home performance assessment conducted for this certificate.				

Heating system

Appliance/ system type	Location	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Whole of Home performance assessment conducted for this certificate.				

Hot water system

Appliance/ system type	Fuel type	Minimum efficiency/ performance	Hot Water CER		Assessed daily load
			Zone	Zone 3 STC	
No Whole of Home performance assessment conducted for this certificate.					

Pool/spa equipment

Appliance/ system type	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Whole of Home performance assessment conducted for this certificate.			

Onsite renewable energy schedule

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



System type	Orientation	System size or generation capacity
No Whole of Home performance assessment conducted for this certificate.		

Battery *schedule*

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

System type	Size [battery storage capacity]
No Whole of Home performance assessment conducted for this certificate.	



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 homes 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 homes 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 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 air gap 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.

*Refer to glossary.



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)

Nationwide House Energy Rating Scheme®

NatHERS® Certificate No. 0GE0GI2KK2

Generated on 28 Oct 2025 using FirstRate5: 5.5.5a (3.22)

Property

Address R3, 67 Elimatta Road & 19A Rowan Street,
Mona Vale, NSW, 2103
Lot/DP 103/-DP709505
NCC Class* Class 1a
Floor/all Floors
Type New Home

Plans

Main plan Rev C 27/10/2025
Prepared by JKMarchitects

Construction and environment

Assessed floor area [m²]*	Exposure type
Conditioned* 126	suburban
Unconditioned* 29.9	NatHERS climate zone
Total 155.9	56 Mascot AMO
Garage 18.3	



Accredited assessor

Name STEPHEN BURGUM
V-Star Energy in association with Ecoplus
Consultants
Business name
Email stephen@vstarenergy.com.au
Phone 0421810026
Accreditation No. HERA10245
Assessor Accrediting Organisation
-
Declaration of interest No

NCC Requirements

NCC provisions Volume 2
State/Territory variation Yes

National Construction Code (NCC) requirements

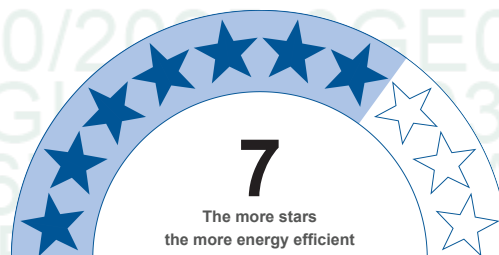
The NCC allows the use of NatHERS accredited software to comply with the energy efficiency requirements for houses (Class 1 buildings) and apartments (Class 2 sole-occupancy units and Class 4 parts of buildings). The applicable requirements for houses are detailed in Specification 42 of NCC Volume Two. For apartments the requirements are detailed in clauses J3D3 and J3D15 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 star rating



**NATIONWIDE
HOUSE**
ENERGY RATING SCHEME®

30 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 [MJ/m²]

Limits taken from ABCB Standard 2022

	Heating	Cooling
Modelled	21.1	8.9
Load limits	N/A	N/A
Features determining load limits		
Floor type (lowest conditioned area)		N/A
NCC climate zone 1 or 2		N/A
Outdoor living area		N/A
Outdoor living area ceiling fan		N/A

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 <https://www.fr5.com.au/QRCodeLanding?PublicId=0GE0GI2KK2>. When using either link, ensure you are visiting www.fr5.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 & 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 NatHERS heating and cooling load limits Standard 2022 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 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.

Graph key:



Predicted onsite renewable energy impact

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	
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 the values in the ABCB Standard 2022: NatHERS heating and cooling load limits for the appropriate climate zone?	☐	☐	☐	☐	☐

*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?		☐	☐	☐	☐
Insulation installation method					
Has the insulation been installed according to the NCC requirements?			☐	☐	☐
Building sealing					
Does the dwelling meet the NCC requirements for Building Sealing?		☐	☐	☐	☐
Whole of Home performance check (not applicable if a Whole of Home performance 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 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?	☐	☐			

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

All lighting devices must NOT penetrate ceiling insulation

Window ID selections may be replaced with those with the same or lower U-Value and SHGC value +/-5%.

Any type of insulation can be replaced with one that have the same R-value.

Colour selections as shown on the plans.

Refer to the V-Star Energy Rating Summary Report for further information.



Room *schedule*

Room	Zone Type	Area [m²]
Garage	garage	18.3
Laundry	unconditioned	4
WC	unconditioned	3.2
Entry	dayTime	6.6
Kitchen/Living/Dining	kitchen	40.9
Bedroom 2	bedroom	12.5
Bedroom 1	bedroom	13
Foyer	dayTime	8.2
M Bedroom	bedroom	10.2
WIR	nightTime	6.1
Bath	unconditioned	4.5
WC	nightTime	1.2
Ensuite	nightTime	2.6
SHR	nightTime	2.3
Bedroom 3	bedroom	16.3
Rumpus	living	13.3

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
RYL-611-707 A	SG Series Awning Window SG 5Clr	5.78	0.58	0.55	0.61
RYL-312-140 A	AA Series Awning Window DG LightBridge_ClrS0_4-12-4	3	0.41	0.39	0.43
RYL-362-640 A	AA Series Sliding Door DG LightBridge_ClrS0_4-12-4	2.97	0.49	0.47	0.51

Window and glazed door *schedule*

Location	Window ID	Window no.	Height [mm]	Width [mm]	Window type	Opening %	Orientation	Window shading device*
Laundry	RYL-611-707 A	W03.08	1200	800	awning	90.0	E	No



Laundry	RYL-611-707 A	W03.06	1200	800	awning	90.0	S	No
Laundry	RYL-611-707 A	W03.07	1200	800	awning	90.0	S	No
WC	RYL-611-707 A	W03.09	1200	800	awning	90.0	E	No
Entry	RYL-312-140 A	W03.10	2000	440	awning	45.0	E	No
Kitchen/Living/-Dining	RYL-362-640 A	W03.01	2400	2400	sliding	45.0	W	No
Kitchen/Living/-Dining	RYL-362-640 A	W03.02	2400	2400	sliding	45.0	W	No
Kitchen/Living/-Dining	RYL-312-140 A	W03.03	2140	945	awning	45.0	S	No
Kitchen/Living/-Dining	RYL-312-140 A	W03.04	2140	945	awning	45.0	S	No
Kitchen/Living/-Dining	RYL-312-140 A	W03.05	600	1500	awning	90.0	S	No
Bedroom 2	RYL-312-140 A	W03.18	1200	700	awning	28.0	E	No
Bedroom 2	RYL-312-140 A	W03.19	1200	700	awning	28.0	E	No
Bedroom 2	RYL-312-140 A	W03.20	2140	945	awning	45.0	N	No
Bedroom 2	RYL-312-140 A	W03.17	2140	945	awning	14.0	S	No
Bedroom 1	RYL-312-140 A	W03.14	1360	900	awning	90.0	W	No
Bedroom 1	RYL-312-140 A	W03.15	1360	900	awning	90.0	W	No
Bedroom 1	RYL-312-140 A	W03.16	2140	945	awning	14.0	S	No
Foyer	RYL-312-140 A	W03.21	2140	945	awning	45.0	E	No
M Bedroom	RYL-362-640 A	W03.22	2140	2400	sliding	45.0	E	No
WIR	RYL-312-140 A	W03.12	1360	800	awning	90.0	W	No
Bath	RYL-611-707 A	W03.13	1360	900	awning	90.0	W	No
SHR	RYL-312-140 A	W03.11	1360	900	awning	90.0	W	No
Bedroom 3	RYL-312-140 A	W03.	900	800	awning	29.0	E	No
Bedroom 3	RYL-312-140 A	W03.	900	800	awning	29.0	E	No
Rumpus	RYL-312-140 A	W03.23	700	600	awning	90.0	S	No
Rumpus	RYL-312-140 A	W03.24	700	600	awning	90.0	S	No

Roof window* type and performance value

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 %	Area [m²]	Width [mm]	Orientation	Outdoor shade	Indoor shade
No Data Available								

Skylight* *type and performance*

Skylight ID	Skylight description	Skylight shaft reflectance
No Data Available		

Skylight* *schedule*

Location	Skylight ID	Skylight No.	Skylight shaft length [mm]	Area [m²]	Orient-ation	Outdoor shade	Diffuser
No Data Available							

External door *schedule*

Location	Height [mm]	Width [mm]	Opening %	Orientation
Garage	2100	2700	100.0	E
Entry	2100	920	100.0	E

External wall *type*

Wall ID	Wall type	Solar absorptance	Wall shade [colour]	Bulk insulation [R-value]	Reflective wall wrap*
1	Steve - Fibre Cement 0.0	0.5	Medium		No
2	Steve - Brick Cavity	0.5	Medium		No
3	Steve - Fibre Cement 2.7	0.5	Medium	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R2.7)	No

External wall *schedule*

Location	Wall ID	Height [mm]	Width [mm]	Orientation	Horizontal shading feature* maximum projection [mm]	Vertical shading feature* (yes/no)
Garage	1	2950	3037	E	0	Yes
Garage	2	2950	6018	N	0	No
Laundry	3	2700	1545	E	354	No
Laundry	3	2700	2583	S	323	No
WC	3	2700	1317	E	365	No
WC	3	2700	830	N	2044	Yes
Entry	3	2700	1992	E	1302	Yes
Kitchen/Living/Dining	2	2700	3537	N	0	No
Kitchen/Living/Dining	3	2700	4048	W	328	Yes
Kitchen/Living/Dining	3	2700	1512	S	4417	Yes

*Refer to glossary.



Kitchen/Living/Dining	3	2700	4078	W	1840	Yes
Kitchen/Living/Dining	3	2700	6442	S	331	No
Bedroom 2	3	2400	248	E	355	No
Bedroom 2	3	2400	420	S	834	No
Bedroom 2	3	2400	1964	E	0	No
Bedroom 2	3	2400	427	E	3939	No
Bedroom 2	3	2400	209	E	350	No
Bedroom 2	3	2400	1446	N	5074	Yes
Bedroom 2	3	2400	4001	S	479	No
Bedroom 1	3	2460	3021	W	624	Yes
Bedroom 1	3	2400	4422	S	487	No
Foyer	3	2400	1811	E	1797	Yes
M Bedroom	3	2400	3088	E	1789	Yes
M Bedroom	2	2400	3294	N	0	No
WIR	3	2460	2137	W	412	Yes
Bath	3	2460	1039	W	408	Yes
Bath	3	2400	219	S	3779	Yes
Bath	3	2400	164	W	619	No
WC	2	2400	810	N	0	No
Ensuite	2	2400	1352	N	0	No
SHR	3	2460	1458	W	409	Yes
SHR	2	2400	1563	N	0	No
Bedroom 3	3	2725	2049	E	398	No
Bedroom 3	3	2200	586	N	378	Yes
Bedroom 3	2	2300	4039	N	0	No
Bedroom 3	3	2200	587	S	377	Yes
Rumpus	3	2200	314	E	0	Yes
Rumpus	3	2200	301	W	0	Yes
Rumpus	3	2725	2058	S	229	No

Internal wall type

Wall ID	Wall type	Area [m²]	Bulk insulation
1	Steve - R2.5 Internal Wall	62.3	Glass fibre batt: R2.5 (R2.5)
2	FR5 - Internal Plasterboard Stud Wall	75.7	
3	Steve - Fibre Cement 2.7	30.1	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R2.7)

Floor type

Location	Construction	Area [m²]	Sub-floor ventilation	Added insulation [R-value]	Covering
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*Refer to glossary.



Garage	COSG - CSOG: Slab on Ground	14.5	Enclosed	R0.0	none
Garage	COSG - CSOG: Slab on Ground	3.8	Enclosed	R0.0	none
Laundry	COSG - CSOG: Slab on Ground	3.2	Enclosed	R0.0	Tiles
Laundry	COSG - CSOG: Slab on Ground	0.8	Enclosed	R0.0	Tiles
WC	COSG - CSOG: Slab on Ground	0.7	Enclosed	R0.0	Tiles
WC	COSG - CSOG: Slab on Ground	2.5	Enclosed	R0.0	Tiles
Entry	COSG - CSOG: Slab on Ground	2.2	Enclosed	R0.0	Timber
Entry	COSG - CSOG: Slab on Ground	4.4	Enclosed	R0.0	Timber
Kitchen/Living/D-ining	COSG - CSOG: Slab on Ground	1.8	Enclosed	R0.0	Timber
Kitchen/Living/D-ining	COSG - CSOG: Slab on Ground	1.7	Enclosed	R0.0	Timber
Kitchen/Living/D-ining	COSG - CSOG: Slab on Ground	37.4	Enclosed	R0.0	Timber
Bedroom 2	InFloor - Intermediate Floor R2.5	2	Enclosed	R2.5	Timber
Bedroom 2	InFloor - Intermediate Floor R2.5	10.5	Enclosed	R2.5	Timber
Bedroom 1	InFloor - Intermediate Floor R2.5	0.4	Elevated	R2.5	Timber
Bedroom 1	InFloor - Intermediate Floor R2.5	4	Enclosed	R2.5	Timber
Bedroom 1	InFloor - Intermediate Floor R2.5	8.6	Enclosed	R2.5	Timber
Foyer	InFloor - Intermediate Floor R2.5	6.1	Enclosed	R2.5	Timber
Foyer	InFloor - Intermediate Floor R2.5	2.1	Enclosed	R2.5	Timber
M Bedroom	InFloor - Intermediate Floor R2.5	0.7	Enclosed	R2.5	Timber
M Bedroom	InFloor - Intermediate Floor R2.5	9.4	Enclosed	R2.5	Timber
WIR	InFloor - Intermediate Floor R2.5	3.8	Enclosed	R2.5	Timber
WIR	InFloor - Intermediate Floor R2.5	2.3	Enclosed	R2.5	Timber
Bath	InFloor - Intermediate Floor R2.5	0.3	Elevated	R2.5	Tiles



Bath	InFloor - Intermediate Floor R2.5	1.9	Enclosed	R2.5	Tiles
Bath	InFloor - Intermediate Floor R2.5	2.3	Enclosed	R2.5	Tiles
WC	InFloor - Intermediate Floor R2.5	1.2	Enclosed	R2.5	Tiles
Ensuite	InFloor - Intermediate Floor R2.5	0.9	Enclosed	R2.5	Tiles
Ensuite	InFloor - Intermediate Floor R2.5	1.7	Enclosed	R2.5	Tiles
SHR	InFloor - Intermediate Floor R2.5	2.3	Enclosed	R2.5	Tiles
Bedroom 3	InFloor - Intermediate Floor R2.5	14.9	Enclosed	R2.5	Timber
Bedroom 3	InFloor - Intermediate Floor R2.5	1.4	Elevated	R2.5	Timber
Rumpus	InFloor - Intermediate Floor R2.5	13.3	Enclosed	R2.5	Timber

Ceiling type

Location	Construction material/type	Bulk insulation R-value [may include edge batt values]	Reflective wrap*
Garage	InFloor - Intermediate Floor R2.5	R2.5	No
Garage	Plasterboard	R0.0	No
Laundry	InFloor - Intermediate Floor R2.5	R2.5	No
Laundry	Plasterboard	R3.0	Yes
WC	Plasterboard	R3.0	Yes
WC	InFloor - Intermediate Floor R2.5	R2.5	No
Entry	Plasterboard	R7.8	No
Entry	InFloor - Intermediate Floor R2.5	R2.5	No
Kitchen/Living/D-ining	Plasterboard	R3.0	Yes
Kitchen/Living/D-ining	Plasterboard	R6.0	Yes
Kitchen/Living/D-ining	InFloor - Intermediate Floor R2.5	R2.5	No
Bedroom 2	InFloor - Intermediate Floor R2.5	R2.5	No
Bedroom 2	Plasterboard	R6.0	Yes
Bedroom 1	InFloor - Intermediate Floor R2.5	R2.5	No
Bedroom 1	Plasterboard	R6.0	Yes

*Refer to glossary.



Foyer	InFloor - Intermediate Floor R2.5	R2.5	No
Foyer	Plasterboard	R6.0	Yes
M Bedroom	Plasterboard	R6.0	Yes
M Bedroom	InFloor - Intermediate Floor R2.5	R2.5	No
WIR	Plasterboard	R6.0	Yes
WIR	InFloor - Intermediate Floor R2.5	R2.5	No
Bath	InFloor - Intermediate Floor R2.5	R2.5	No
Bath	Plasterboard	R6.0	Yes
WC	InFloor - Intermediate Floor R2.5	R2.5	No
Ensuite	Plasterboard	R6.0	Yes
Ensuite	InFloor - Intermediate Floor R2.5	R2.5	No
SHR	Plasterboard	R6.0	Yes
Bedroom 3	Plasterboard	R7.8	No
Bedroom 3	Plasterboard	R7.8	No
Rumpus	Plasterboard	R7.8	No

Ceiling penetrations*

Location	Quantity	Type	Height [mm]	Width [mm]	Sealed/unsealed
Laundry	1	Exhaust Fans	250	250	Sealed
WC	1	Exhaust Fans	250	250	Sealed
Kitchen/Living/Dining	1	Exhaust Fans	250	250	Sealed
Bath	1	Exhaust Fans	250	250	Sealed
WC	1	Exhaust Fans	250	250	Sealed
Ensuite	1	Exhaust Fans	250	250	Sealed
SHR	1	Exhaust Fans	250	250	Sealed

Ceiling fans

Location	Quantity	Diameter [mm]
No Data Available		

Roof type

Construction	Added insulation [R-value]	Solar absorptance	Roof shade [colour]
Framed:Flat - Flat Framed (Metal Deck)	0.0	0.44	Medium
Cont:Attic-Continuous	1.8	0.44	Medium



Thermal bridging *schedule for steel frame elements*

Building element	Steel section dimensions		Steel thickness	Thermal break
	[height x width, mm]	Frame spacing [mm]	[BMT,mm]	[R-value]
No Data				
Available				

Appliance *schedule*

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

Note: A flat assumption of 5W/m2 is used for lighting, therefore lighting is not included in the appliance schedule.

Cooling system

Appliance/ system type	Location	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Whole of Home performance assessment conducted for this certificate.				

Heating system

Appliance/ system type	Location	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Whole of Home performance assessment conducted for this certificate.				

Hot water system

Appliance/ system type	Fuel type	Minimum efficiency/ performance	Hot Water CER		Assessed daily load
			Zone	Zone 3 STC	
No Whole of Home performance assessment conducted for this certificate.					

Pool/spa equipment

Appliance/ system type	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Whole of Home performance assessment conducted for this certificate.			

Onsite renewable energy *schedule*

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

System type	Orientation	System size or generation capacity
No Whole of Home performance assessment conducted for this certificate.		

Battery *schedule*

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

System type	Size [battery storage capacity]
No Whole of Home performance assessment conducted for this certificate.	



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 homes 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 homes 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 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 air gap 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.

*Refer to glossary.



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)

Nationwide House Energy Rating Scheme®

NatHERS® Certificate No. S9DY1ANZQJ

Generated on 28 Oct 2025 using FirstRate5: 5.5.5a (3.22)

Property

Address R4, 67 Elimatta Road & 19A Rowan Street,
Mona Vale, NSW, 2103
Lot/DP 103/-DP709505
NCC Class* Class 1a
Floor/all Floors
Type New Home

Plans

Main plan Rev C 27/10/2025
Prepared by JKM Architects

Construction and environment

Assessed floor area [m²]*	Exposure type
Conditioned* 126.1	suburban
Unconditioned* 29.9	NatHERS climate zone
Total 156	56 Mascot AMO
Garage 18.3	



Accredited assessor

Name STEPHEN BURGUM
V-Star Energy in association with Ecoplus
Business name Consultants
Email stephen@vstarenergy.com.au
Phone 0421810026
Accreditation No. HERA10245
Assessor Accrediting Organisation
-
Declaration of interest No

NCC Requirements

NCC provisions Volume 2
State/Territory variation Yes

National Construction Code (NCC) requirements

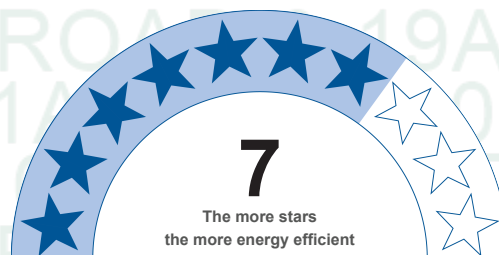
The NCC allows the use of NatHERS accredited software to comply with the energy efficiency requirements for houses (Class 1 buildings) and apartments (Class 2 sole-occupancy units and Class 4 parts of buildings). The applicable requirements for houses are detailed in Specification 42 of NCC Volume Two. For apartments the requirements are detailed in clauses J3D3 and J3D15 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 star rating



**NATIONWIDE
HOUSE**
ENERGY RATING SCHEME®

30 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 [MJ/m²]

Limits taken from ABCB Standard 2022

	Heating	Cooling
Modelled	20.9	9.1
Load limits	N/A	N/A
Features determining load limits		
Floor type (lowest conditioned area)		N/A
NCC climate zone 1 or 2		N/A
Outdoor living area		N/A
Outdoor living area ceiling fan		N/A

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 <https://www.fr5.com.au/QRCodeLandIng?PublicId=S9DY1ANZQJ>. When using either link, ensure you are visiting www.fr5.com.au.





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 & 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 NatHERS heating and cooling load limits Standard 2022 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 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.

Graph key:



Predicted onsite renewable energy impact

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 the values in the ABCB Standard 2022: NatHERS heating and cooling load limits for the appropriate climate zone?	☐	☐	☐	☐	☐

*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?		☐	☐	☐	☐
Insulation installation method					
Has the insulation been installed according to the NCC requirements?			☐	☐	☐
Building sealing					
Does the dwelling meet the NCC requirements for Building Sealing?		☐	☐	☐	☐
Whole of Home performance check (not applicable if a Whole of Home performance 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 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?	☐	☐			

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

All lighting devices must NOT penetrate ceiling insulation

Window ID selections may be replaced with those with the same or lower U-Value and SHGC value +/-5%.

Any type of insulation can be replaced with one that have the same R-value.

Colour selections as shown on the plans.

Refer to the V-Star Energy Rating Summary Report for further information.



Room *schedule*

Room	Zone Type	Area [m²]
Garage	garage	18.3
Laundry	unconditioned	4
WC	unconditioned	3.2
Entry	dayTime	6.6
Kitchen/Living/Dining	kitchen	40.9
Bedroom 2	bedroom	12.5
Bedroom 1	bedroom	13
Foyer	dayTime	8.3
M Bedroom	bedroom	10.2
WIR	nightTime	6.1
Bath	unconditioned	4.5
WC	nightTime	1.2
Ensuite	nightTime	2.6
SHR	nightTime	2.3
Bedroom 3	bedroom	16.3
Rumpus	living	13.3

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
RYL-611-707 A	SG Series Awning Window SG 5Clr	5.78	0.58	0.55	0.61
RYL-312-101 A	AA Series Awning Window DG 4-12Ar-4	3.69	0.51	0.48	0.54
RYL-312-140 A	AA Series Awning Window DG LightBridge_ClrS0_4-12-4	3	0.41	0.39	0.43
RYL-362-640 A	AA Series Sliding Door DG LightBridge_ClrS0_4-12-4	2.97	0.49	0.47	0.51

Window and glazed door *schedule*

Location	Window ID	Window no.	Height [mm]	Width [mm]	Window type	Opening %	Orientation	Window shading device*
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Laundry	RYL-611-707 A	W04.06	1200	800	awning	90.0	N	No
Laundry	RYL-611-707 A	W04.07	1200	800	awning	90.0	N	No
Laundry	RYL-611-707 A	W04.08	1200	800	awning	90.0	E	No
WC	RYL-611-707 A	W04.09	1200	800	awning	90.0	E	No
Entry	RYL-312-101 A	W04.10	2000	440	awning	45.0	E	No
Kitchen/Living/-Dining	RYL-312-140 A	W04.03	2140	945	awning	45.0	N	No
Kitchen/Living/-Dining	RYL-312-140 A	W04.04	2140	945	awning	45.0	N	No
Kitchen/Living/-Dining	RYL-312-140 A	W04.05	600	1500	awning	90.0	N	No
Kitchen/Living/-Dining	RYL-362-640 A	W04.02	2400	2400	sliding	45.0	W	No
Kitchen/Living/-Dining	RYL-362-640 A	W04.01	2400	2400	sliding	45.0	W	No
Bedroom 2	RYL-312-140 A	W04.17	2140	945	awning	14.0	N	No
Bedroom 2	RYL-312-140 A	W04.20	2140	945	awning	45.0	S	No
Bedroom 2	RYL-312-140 A	W04.18	1200	700	awning	28.0	E	No
Bedroom 2	RYL-312-140 A	W04.19	1200	700	awning	28.0	E	No
Bedroom 1	RYL-312-101 A	W04.16	2140	945	awning	14.0	N	No
Bedroom 1	RYL-312-101 A	W04.14	1360	900	awning	90.0	W	No
Bedroom 1	RYL-312-101 A	W04.15	1360	900	awning	90.0	W	No
Foyer	RYL-312-140 A	W04.21	2140	945	awning	45.0	E	No
M Bedroom	RYL-362-640 A	W04.22	2140	2400	sliding	45.0	E	No
WIR	RYL-312-101 A	W04.12	1360	800	awning	90.0	W	No
Bath	RYL-611-707 A	W04.13	1360	900	awning	90.0	W	No
SHR	RYL-312-101 A	W04.11	1360	900	awning	90.0	W	No
Bedroom 3	RYL-312-101 A	W04.25	900	800	awning	29.0	E	No
Bedroom 3	RYL-312-101 A	W04.26	900	800	awning	29.0	E	No
Rumpus	RYL-312-101 A	W04.23	700	600	awning	90.0	N	No
Rumpus	RYL-312-101 A	W04.24	700	600	awning	90.0	N	No

Roof window* type and performance value

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 %	Area [m²]	Width [mm]	Orientation	Outdoor shade	Indoor shade
No Data Available								

Skylight* *type and performance*

Skylight ID	Skylight description	Skylight shaft reflectance
No Data Available		

Skylight* *schedule*

Location	Skylight ID	Skylight No.	Skylight shaft length [mm]	Area [m²]	Orient-ation	Outdoor shade	Diffuser
No Data Available							

External door *schedule*

Location	Height [mm]	Width [mm]	Opening %	Orientation
Garage	2100	2700	100.0	E
Entry	2100	920	100.0	E

External wall *type*

Wall ID	Wall type	Solar absorptance	Wall shade [colour]	Bulk insulation [R-value]	Reflective wall wrap*
1	Steve - Brick Cavity	0.5	Medium		No
2	Steve - Fibre Cement 0.0	0.5	Medium		No
3	Steve - Fibre Cement 2.5	0.5	Medium	Glass fibre batt: R2.5 (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	1	2950	6018	S	0	No
Garage	2	2950	3037	E	0	No
Laundry	3	2700	2583	N	332	Yes
Laundry	3	2700	1545	E	363	No
WC	3	2700	830	S	2053	Yes
WC	3	2700	1317	E	374	No
Entry	3	2700	1992	E	1311	Yes
Kitchen/Living/Dining	3	2700	6442	N	340	Yes
Kitchen/Living/Dining	3	2700	4078	W	1849	Yes
Kitchen/Living/Dining	3	2700	1512	N	4426	Yes

*Refer to glossary.



Kitchen/Living/Dining	3	2700	4048	W	337	Yes
Kitchen/Living/Dining	1	2700	3537	S	0	No
Bedroom 2	3	2400	4001	N	488	Yes
Bedroom 2	3	2400	1446	S	5083	Yes
Bedroom 2	3	2400	209	E	359	No
Bedroom 2	3	2400	427	SE	3948	No
Bedroom 2	3	2400	1964	E	0	No
Bedroom 2	3	2400	420	NE	843	No
Bedroom 2	3	2400	248	E	364	No
Bedroom 1	3	2400	4422	N	496	Yes
Bedroom 1	3	2460	3021	W	633	Yes
Foyer	3	2400	1834	E	1806	Yes
M Bedroom	1	2400	3294	S	0	No
M Bedroom	3	2400	3088	E	1798	Yes
WIR	3	2460	2137	W	421	Yes
Bath	3	2400	164	W	628	No
Bath	3	2400	219	N	3788	Yes
Bath	3	2460	1039	W	417	Yes
WC	1	2400	810	S	0	No
Ensuite	1	2400	1352	S	0	No
SHR	1	2400	1563	S	0	No
SHR	3	2460	1458	W	418	Yes
Bedroom 3	3	2200	587	N	386	Yes
Bedroom 3	1	2525	4039	S	0	No
Bedroom 3	3	2200	586	S	387	Yes
Bedroom 3	3	2725	2049	E	407	No
Rumpus	3	2725	2058	N	238	Yes
Rumpus	3	2200	301	W	0	Yes
Rumpus	3	2200	314	E	0	Yes

Internal wall type

Wall ID	Wall type	Area [m²]	Bulk insulation
1	Steve - R2.5 Internal Wall	62.3	Glass fibre batt: R2.5 (R2.5)
2	FR5 - Internal Plasterboard Stud Wall	76.6	
3	Steve - Fibre Cement 2.5	30.1	Glass fibre batt: R2.5 (R2.5)

Floor type

Location	Construction	Area [m²]	Sub-floor ventilation	Added insulation [R-value]	Covering
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*Refer to glossary.



Garage	COSG - CSOG: Slab on Ground	14.5	Enclosed	R0.0	none
Garage	COSG - CSOG: Slab on Ground	3.8	Enclosed	R0.0	none
Laundry	COSG - CSOG: Slab on Ground	3.2	Enclosed	R0.0	Tiles
Laundry	COSG - CSOG: Slab on Ground	0.8	Enclosed	R0.0	Tiles
WC	COSG - CSOG: Slab on Ground	0.7	Enclosed	R0.0	Tiles
WC	COSG - CSOG: Slab on Ground	2.5	Enclosed	R0.0	Tiles
Entry	COSG - CSOG: Slab on Ground	2.2	Enclosed	R0.0	Timber
Entry	COSG - CSOG: Slab on Ground	4.4	Enclosed	R0.0	Timber
Kitchen/Living/D-ining	COSG - CSOG: Slab on Ground	1.8	Enclosed	R0.0	Timber
Kitchen/Living/D-ining	COSG - CSOG: Slab on Ground	1.7	Enclosed	R0.0	Timber
Kitchen/Living/D-ining	COSG - CSOG: Slab on Ground	37.4	Enclosed	R0.0	Timber
Bedroom 2	InFloor - Intermediate Floor R2.5	2	Enclosed	R2.5	Timber
Bedroom 2	InFloor - Intermediate Floor R2.5	10.5	Enclosed	R2.5	Timber
Bedroom 1	InFloor - Intermediate Floor R2.5	0.4	Elevated	R2.5	Timber
Bedroom 1	InFloor - Intermediate Floor R2.5	4	Enclosed	R2.5	Timber
Bedroom 1	InFloor - Intermediate Floor R2.5	8.6	Enclosed	R2.5	Timber
Foyer	InFloor - Intermediate Floor R2.5	6.1	Enclosed	R2.5	Timber
Foyer	InFloor - Intermediate Floor R2.5	2.2	Enclosed	R2.5	Timber
M Bedroom	InFloor - Intermediate Floor R2.5	0.7	Enclosed	R2.5	Timber
M Bedroom	InFloor - Intermediate Floor R2.5	9.4	Enclosed	R2.5	Timber
WIR	InFloor - Intermediate Floor R2.5	3.8	Enclosed	R2.5	Timber
WIR	InFloor - Intermediate Floor R2.5	2.3	Enclosed	R2.5	Timber
Bath	InFloor - Intermediate Floor R2.5	0.3	Elevated	R2.5	Tiles



Bath	InFloor - Intermediate Floor R2.5	1.9	Enclosed	R2.5	Tiles
Bath	InFloor - Intermediate Floor R2.5	2.3	Enclosed	R2.5	Tiles
WC	InFloor - Intermediate Floor R2.5	1.2	Enclosed	R2.5	Tiles
Ensuite	InFloor - Intermediate Floor R2.5	0.9	Enclosed	R2.5	Tiles
Ensuite	InFloor - Intermediate Floor R2.5	1.7	Enclosed	R2.5	Tiles
SHR	InFloor - Intermediate Floor R2.5	2.3	Enclosed	R2.5	Tiles
Bedroom 3	InFloor - Intermediate Floor R2.5	14.9	Enclosed	R2.5	Timber
Bedroom 3	InFloor - Intermediate Floor R2.5	1.4	Elevated	R2.5	Timber
Rumpus	InFloor - Intermediate Floor R2.5	13.3	Enclosed	R2.5	Timber

Ceiling type

Location	Construction material/type	Bulk insulation R-value [may include edge batt values]	Reflective wrap*
Garage	InFloor - Intermediate Floor R2.5	R2.5	No
Garage	Plasterboard	R0.0	No
Laundry	InFloor - Intermediate Floor R2.5	R2.5	No
Laundry	Plasterboard	R3.0	Yes
WC	Plasterboard	R3.0	Yes
WC	InFloor - Intermediate Floor R2.5	R2.5	No
Entry	Plasterboard	R6.0	No
Entry	InFloor - Intermediate Floor R2.5	R2.5	No
Kitchen/Living/D-ining	Plasterboard	R3.0	Yes
Kitchen/Living/D-ining	Plasterboard	R6.0	Yes
Kitchen/Living/D-ining	InFloor - Intermediate Floor R2.5	R2.5	No
Bedroom 2	InFloor - Intermediate Floor R2.5	R2.5	No
Bedroom 2	Plasterboard	R6.0	Yes
Bedroom 1	InFloor - Intermediate Floor R2.5	R2.5	No
Bedroom 1	Plasterboard	R6.0	Yes

*Refer to glossary.



Foyer	InFloor - Intermediate Floor R2.5	R2.5	No
Foyer	Plasterboard	R6.0	Yes
M Bedroom	Plasterboard	R6.0	Yes
M Bedroom	InFloor - Intermediate Floor R2.5	R2.5	No
WIR	Plasterboard	R6.0	Yes
WIR	InFloor - Intermediate Floor R2.5	R2.5	No
Bath	InFloor - Intermediate Floor R2.5	R2.5	No
Bath	Plasterboard	R6.0	Yes
WC	InFloor - Intermediate Floor R2.5	R2.5	No
Ensuite	Plasterboard	R6.0	Yes
Ensuite	InFloor - Intermediate Floor R2.5	R2.5	No
SHR	Plasterboard	R6.0	Yes
Bedroom 3	Plasterboard	R6.0	No
Bedroom 3	Plasterboard	R6.0	No
Rumpus	Plasterboard	R6.0	No

Ceiling penetrations*

Location	Quantity	Type	Height [mm]	Width [mm]	Sealed/unsealed
Laundry	1	Exhaust Fans	250	250	Sealed
WC	1	Exhaust Fans	250	250	Sealed
Kitchen/Living/Dining	1	Exhaust Fans	250	250	Sealed
Bath	1	Exhaust Fans	250	250	Sealed
WC	1	Exhaust Fans	250	250	Sealed
Ensuite	1	Exhaust Fans	250	250	Sealed
SHR	1	Exhaust Fans	250	250	Sealed

Ceiling fans

Location	Quantity	Diameter [mm]
No Data Available		

Roof type

Construction	Added insulation [R-value]	Solar absorptance	Roof shade [colour]
Framed:Flat - Flat Framed (Metal Deck)	0.0	0.44	Medium
Cont:Attic-Continuous	0.0	0.44	Medium

*Refer to glossary.



Thermal bridging *schedule for steel frame elements*

Building element	Steel section dimensions		Steel thickness	Thermal break
	[height x width, mm]	Frame spacing [mm]	[BMT,mm]	[R-value]
No Data Available				

Appliance *schedule*

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

Note: A flat assumption of 5W/m2 is used for lighting, therefore lighting is not included in the appliance schedule.

Cooling system

Appliance/ system type	Location	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Whole of Home performance assessment conducted for this certificate.				

Heating system

Appliance/ system type	Location	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Whole of Home performance assessment conducted for this certificate.				

Hot water system

Appliance/ system type	Fuel type	Minimum efficiency/ performance	Hot Water CER		Assessed daily load
			Zone	Zone 3 STC	
No Whole of Home performance assessment conducted for this certificate.					

Pool/spa equipment

Appliance/ system type	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Whole of Home performance assessment conducted for this certificate.			

Onsite renewable energy *schedule*

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

System type	Orientation	System size or generation capacity
No Whole of Home performance assessment conducted for this certificate.		

Battery *schedule*

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

System type	Size [battery storage capacity]
No Whole of Home performance assessment conducted for this certificate.	



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 homes 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 homes 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 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 air gap 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.

*Refer to glossary.



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)

Nationwide House Energy Rating Scheme®

NatHERS® Certificate No. U0ESQ1T9BA

Generated on 28 Oct 2025 using FirstRate5: 5.5.5a (3.22)

Property

Address R5, 67 Elimatta Road & 19A Rowan Street,
Mona Vale, NSW, 2103
Lot/DP 103/-DP709505
NCC Class* Class 1a
Floor/all Floors
Type New Home

Plans

Main plan Rev C 27/10/2025
Prepared by JKMarchitects

Construction and environment

Assessed floor area [m²]*	Exposure type
Conditioned* 126	suburban
Unconditioned* 30	NatHERS climate zone
Total 156	56 Mascot AMO
Garage 18.3	



Accredited assessor

Name STEPHEN BURGUM
V-Star Energy in association with Ecoplus
Consultants
Business name
Email stephen@vstarenergy.com.au
Phone 0421810026
Accreditation No. HERA10245
Assessor Accrediting Organisation
-
Declaration of interest No

NCC Requirements

NCC provisions Volume 2
State/Territory variation Yes

National Construction Code (NCC) requirements

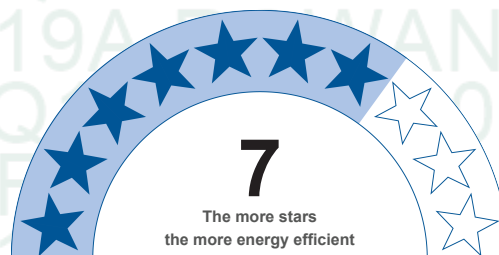
The NCC allows the use of NatHERS accredited software to comply with the energy efficiency requirements for houses (Class 1 buildings) and apartments (Class 2 sole-occupancy units and Class 4 parts of buildings). The applicable requirements for houses are detailed in Specification 42 of NCC Volume Two. For apartments the requirements are detailed in clauses J3D3 and J3D15 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 star rating



**NATIONWIDE
HOUSE**
ENERGY RATING SCHEME®

29.9 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 [MJ/m²]

Limits taken from ABCB Standard 2022

	Heating	Cooling
Modelled	21.6	8.3
Load limits	N/A	N/A
Features determining load limits		
Floor type (lowest conditioned area)		N/A
NCC climate zone 1 or 2		N/A
Outdoor living area		N/A
Outdoor living area ceiling fan		N/A

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 <https://www.fr5.com.au/QRCodeLandIng?PublicId=U0ESQ1T9BA>. When using either link, ensure you are visiting www.fr5.com.au.





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 & 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 NatHERS heating and cooling load limits Standard 2022 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 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.

Graph key:



Predicted onsite renewable energy impact

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 the values in the ABCB Standard 2022: NatHERS heating and cooling load limits for the appropriate climate zone?	☐	☐	☐	☐	☐

*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?		☐	☐	☐	☐
Insulation installation method					
Has the insulation been installed according to the NCC requirements?			☐	☐	☐
Building sealing					
Does the dwelling meet the NCC requirements for Building Sealing?		☐	☐	☐	☐
Whole of Home performance check (not applicable if a Whole of Home performance 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 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?	☐	☐			
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

All lighting devices must NOT penetrate ceiling insulation

Window ID selections may be replaced with those with the same or lower U-Value and SHGC value +/-5%.

Any type of insulation can be replaced with one that have the same R-value.

Colour selections as shown on the plans.

Refer to the V-Star Energy Rating Summary Report for further information.



Room *schedule*

Room	Zone Type	Area [m²]
Garage	garage	18.3
Laundry	unconditioned	4
WC	unconditioned	3.2
Entry	dayTime	6.6
Kitchen/Living/Dining	kitchen	40.9
Bedroom 2	bedroom	12.5
Bedroom 1	bedroom	13
Foyer	dayTime	8.2
M Bedroom	bedroom	10.2
WIR	nightTime	6.1
Bath	unconditioned	4.5
WC	nightTime	1.2
Ensuite	nightTime	2.6
SHR	nightTime	2.3
Bedroom 3	bedroom	16.3
Rumpus	living	13.3

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
RYL-611-707 A	SG Series Awning Window SG 5Clr	5.78	0.58	0.55	0.61
RYL-312-140 A	AA Series Awning Window DG LightBridge_ClrS0_4-12-4	3	0.41	0.39	0.43
RYL-362-640 A	AA Series Sliding Door DG LightBridge_ClrS0_4-12-4	2.97	0.49	0.47	0.51

Window and glazed door *schedule*

Location	Window ID	Window no.	Height [mm]	Width [mm]	Window type	Opening %	Orientation	Window shading device*
Laundry	RYL-611-707 A	W05.08	1200	800	awning	90.0	E	No

*Refer to glossary.



Laundry	RYL-611-707 A	W05.06	1200	800	awning	90.0	S	No
Laundry	RYL-611-707 A	W05.07	1200	800	awning	90.0	S	No
WC	RYL-611-707 A	W05.09	1200	800	awning	90.0	E	No
Entry	RYL-312-140 A	W05.10	2000	440	awning	45.0	E	No
Kitchen/Living/-Dining	RYL-362-640 A	W05.01	2400	2400	sliding	45.0	W	No
Kitchen/Living/-Dining	RYL-362-640 A	W05.02	2400	2400	sliding	45.0	W	No
Kitchen/Living/-Dining	RYL-312-140 A	W05.03	2140	945	awning	45.0	S	No
Kitchen/Living/-Dining	RYL-312-140 A	W05.04	2140	945	awning	45.0	S	No
Kitchen/Living/-Dining	RYL-312-140 A	W05.05	600	1500	awning	90.0	S	No
Bedroom 2	RYL-312-140 A	W05.18	1200	700	awning	28.0	E	No
Bedroom 2	RYL-312-140 A	W05.19	1200	700	awning	28.0	E	No
Bedroom 2	RYL-312-140 A	W05.20	2140	945	awning	45.0	N	No
Bedroom 2	RYL-312-140 A	W05.17	2140	945	awning	14.0	S	No
Bedroom 1	RYL-312-140 A	W05.14	1360	900	awning	90.0	W	No
Bedroom 1	RYL-312-140 A	W05.15	1360	900	awning	90.0	W	No
Bedroom 1	RYL-312-140 A	W05.16	2140	945	awning	14.0	S	No
Foyer	RYL-312-140 A	W05.21	2140	945	awning	45.0	E	No
M Bedroom	RYL-362-640 A	W05.22	2140	2400	sliding	45.0	E	No
WIR	RYL-312-140 A	W05.12	1360	800	awning	90.0	W	No
Bath	RYL-611-707 A	W05.13	1360	900	awning	90.0	W	No
SHR	RYL-312-140 A	W05.11	1360	900	awning	90.0	W	No
Bedroom 3	RYL-312-140 A	W05.25	900	800	awning	29.0	E	No
Bedroom 3	RYL-312-140 A	W05.26	900	800	awning	29.0	E	No
Rumpus	RYL-312-140 A	W05.23	700	600	awning	90.0	S	No
Rumpus	RYL-312-140 A	W05.24	700	600	awning	90.0	S	No

Roof window* type and performance value

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 %	Area [m²]	Width [mm]	Orientation	Outdoor shade	Indoor shade
No Data Available								

Skylight* *type and performance*

Skylight ID	Skylight description	Skylight shaft reflectance
No Data Available		

Skylight* *schedule*

Location	Skylight ID	Skylight No.	Skylight shaft length [mm]	Area [m²]	Orient-ation	Outdoor shade	Diffuser
No Data Available							

External door *schedule*

Location	Height [mm]	Width [mm]	Opening %	Orientation
Garage	2100	2700	100.0	E
Entry	2100	920	100.0	E

External wall *type*

Wall ID	Wall type	Solar absorptance	Wall shade [colour]	Bulk insulation [R-value]	Reflective wall wrap*
1	Steve - Fibre Cement 0.0	0.5	Medium		No
2	Steve - Brick Cavity	0.5	Medium		No
3	Steve - Fibre Cement 2.7	0.5	Medium	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R2.7)	No

External wall *schedule*

Location	Wall ID	Height [mm]	Width [mm]	Orientation	Horizontal shading feature* maximum projection [mm]	Vertical shading feature* (yes/no)
Garage	1	3200	3037	E	0	Yes
Garage	2	3200	6018	N	0	No
Laundry	3	2700	1545	E	344	No
Laundry	3	2700	2593	S	323	No
WC	3	2700	1317	E	343	No
WC	3	2700	852	N	2044	Yes
Entry	3	2700	1992	E	1302	Yes
Kitchen/Living/Dining	2	2700	3537	N	0	No
Kitchen/Living/Dining	3	2700	4048	W	328	Yes
Kitchen/Living/Dining	3	2700	1512	S	4417	Yes

*Refer to glossary.



Kitchen/Living/Dining	3	2700	4078	W	1840	Yes
Kitchen/Living/Dining	3	2700	6442	S	331	No
Bedroom 2	3	2450	248	E	355	No
Bedroom 2	3	2450	420	S	834	No
Bedroom 2	3	2450	1964	E	0	No
Bedroom 2	3	2450	427	E	3939	No
Bedroom 2	3	2450	209	E	350	No
Bedroom 2	3	2450	1446	N	5074	Yes
Bedroom 2	3	2450	4001	S	479	No
Bedroom 1	3	2460	3021	W	624	Yes
Bedroom 1	3	2450	4422	S	487	No
Foyer	3	2450	1811	E	1797	Yes
M Bedroom	3	2450	3088	E	1789	Yes
M Bedroom	2	2450	3294	N	0	No
WIR	3	2460	2137	W	412	Yes
Bath	3	2460	1039	W	408	Yes
Bath	3	2450	219	S	3779	Yes
Bath	3	2450	164	W	619	No
WC	2	2450	810	N	0	No
Ensuite	2	2450	1352	N	0	No
SHR	3	2460	1458	W	409	Yes
SHR	2	2450	1563	N	0	No
Bedroom 3	3	2725	2049	E	398	No
Bedroom 3	3	2200	586	N	378	Yes
Bedroom 3	2	2500	4039	N	0	No
Bedroom 3	3	2200	587	S	377	Yes
Rumpus	3	2200	314	E	0	Yes
Rumpus	3	2200	301	W	0	Yes
Rumpus	3	2725	2058	S	229	No

Internal wall type

Wall ID	Wall type	Area [m²]	Bulk insulation
1	Steve - R2.5 Internal Wall	62.8	Glass fibre batt: R2.5 (R2.5)
2	FR5 - Internal Plasterboard Stud Wall	77.8	
3	Steve - Fibre Cement 2.7	30.1	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R2.7)

Floor type

Location	Construction	Area [m²]	Sub-floor ventilation	Added insulation [R-value]	Covering
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Garage	COSG - CSOG: Slab on Ground	14.5	Enclosed	R0.0	none
Garage	COSG - CSOG: Slab on Ground	3.8	Enclosed	R0.0	none
Laundry	COSG - CSOG: Slab on Ground	3.2	Enclosed	R0.0	Tiles
Laundry	COSG - CSOG: Slab on Ground	0.8	Enclosed	R0.0	Tiles
WC	COSG - CSOG: Slab on Ground	0.7	Enclosed	R0.0	Tiles
WC	COSG - CSOG: Slab on Ground	2.5	Enclosed	R0.0	Tiles
Entry	COSG - CSOG: Slab on Ground	2.2	Enclosed	R0.0	Timber
Entry	COSG - CSOG: Slab on Ground	4.4	Enclosed	R0.0	Timber
Kitchen/Living/D-ining	COSG - CSOG: Slab on Ground	1.8	Enclosed	R0.0	Timber
Kitchen/Living/D-ining	COSG - CSOG: Slab on Ground	1.7	Enclosed	R0.0	Timber
Kitchen/Living/D-ining	COSG - CSOG: Slab on Ground	37.4	Enclosed	R0.0	Timber
Bedroom 2	InFloor - Intermediate Floor R2.5	2	Enclosed	R2.5	Timber
Bedroom 2	InFloor - Intermediate Floor R2.5	10.5	Enclosed	R2.5	Timber
Bedroom 1	InFloor - Intermediate Floor R2.5	0.4	Elevated	R2.5	Timber
Bedroom 1	InFloor - Intermediate Floor R2.5	4	Enclosed	R2.5	Timber
Bedroom 1	InFloor - Intermediate Floor R2.5	8.6	Enclosed	R2.5	Timber
Foyer	InFloor - Intermediate Floor R2.5	6.1	Enclosed	R2.5	Timber
Foyer	InFloor - Intermediate Floor R2.5	2.1	Enclosed	R2.5	Timber
M Bedroom	InFloor - Intermediate Floor R2.5	0.7	Enclosed	R2.5	Timber
M Bedroom	InFloor - Intermediate Floor R2.5	9.4	Enclosed	R2.5	Timber
WIR	InFloor - Intermediate Floor R2.5	3.8	Enclosed	R2.5	Timber
WIR	InFloor - Intermediate Floor R2.5	2.3	Enclosed	R2.5	Timber
Bath	InFloor - Intermediate Floor R2.5	0.3	Elevated	R2.5	Tiles



Bath	InFloor - Intermediate Floor R2.5	1.9	Enclosed	R2.5	Tiles
Bath	InFloor - Intermediate Floor R2.5	2.3	Enclosed	R2.5	Tiles
WC	InFloor - Intermediate Floor R2.5	1.2	Enclosed	R2.5	Tiles
Ensuite	InFloor - Intermediate Floor R2.5	0.9	Enclosed	R2.5	Tiles
Ensuite	InFloor - Intermediate Floor R2.5	1.7	Enclosed	R2.5	Tiles
SHR	InFloor - Intermediate Floor R2.5	2.3	Enclosed	R2.5	Tiles
Bedroom 3	InFloor - Intermediate Floor R2.5	14.9	Enclosed	R2.5	Timber
Bedroom 3	InFloor - Intermediate Floor R2.5	1.4	Elevated	R2.5	Timber
Rumpus	InFloor - Intermediate Floor R2.5	13.3	Enclosed	R2.5	Timber

Ceiling type

Location	Construction material/type	Bulk insulation R-value [may include edge batt values]	Reflective wrap*
Garage	InFloor - Intermediate Floor R2.5	R2.5	No
Garage	Plasterboard	R0.0	No
Laundry	InFloor - Intermediate Floor R2.5	R2.5	No
Laundry	Plasterboard	R3.0	Yes
WC	Plasterboard	R3.0	Yes
WC	InFloor - Intermediate Floor R2.5	R2.5	No
Entry	Plasterboard	R7.8	No
Entry	InFloor - Intermediate Floor R2.5	R2.5	No
Kitchen/Living/D-ining	Plasterboard	R3.0	Yes
Kitchen/Living/D-ining	Plasterboard	R6.0	Yes
Kitchen/Living/D-ining	InFloor - Intermediate Floor R2.5	R2.5	No
Bedroom 2	InFloor - Intermediate Floor R2.5	R2.5	No
Bedroom 2	Plasterboard	R6.0	Yes
Bedroom 1	InFloor - Intermediate Floor R2.5	R2.5	No
Bedroom 1	Plasterboard	R6.0	Yes

*Refer to glossary.



Foyer	InFloor - Intermediate Floor R2.5	R2.5	No
Foyer	Plasterboard	R6.0	Yes
M Bedroom	Plasterboard	R6.0	Yes
M Bedroom	InFloor - Intermediate Floor R2.5	R2.5	No
WIR	Plasterboard	R6.0	Yes
WIR	InFloor - Intermediate Floor R2.5	R2.5	No
Bath	InFloor - Intermediate Floor R2.5	R2.5	No
Bath	Plasterboard	R6.0	Yes
WC	InFloor - Intermediate Floor R2.5	R2.5	No
Ensuite	Plasterboard	R6.0	Yes
Ensuite	InFloor - Intermediate Floor R2.5	R2.5	No
SHR	Plasterboard	R6.0	Yes
Bedroom 3	Plasterboard	R7.8	No
Bedroom 3	Plasterboard	R7.8	No
Rumpus	Plasterboard	R7.8	No

Ceiling penetrations*

Location	Quantity	Type	Height [mm]	Width [mm]	Sealed/unsealed
Laundry	1	Exhaust Fans	250	250	Sealed
WC	1	Exhaust Fans	250	250	Sealed
Kitchen/Living/Dining	1	Exhaust Fans	250	250	Sealed
Bath	1	Exhaust Fans	250	250	Sealed
WC	1	Exhaust Fans	250	250	Sealed
Ensuite	1	Exhaust Fans	250	250	Sealed
SHR	1	Exhaust Fans	250	250	Sealed

Ceiling fans

Location	Quantity	Diameter [mm]
No Data Available		

Roof type

Construction	Added insulation [R-value]	Solar absorptance	Roof shade [colour]
Framed:Flat - Flat Framed (Metal Deck)	0.0	0.44	Medium
Cont:Attic-Continuous	1.8	0.44	Medium

*Refer to glossary.



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]
No Data				
Available				

Appliance *schedule*

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

Note: A flat assumption of 5W/m2 is used for lighting, therefore lighting is not included in the appliance schedule.

Cooling system

Appliance/ system type	Location	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Whole of Home performance assessment conducted for this certificate.				

Heating system

Appliance/ system type	Location	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Whole of Home performance assessment conducted for this certificate.				

Hot water system

Appliance/ system type	Fuel type	Minimum efficiency/ performance	Hot Water CER Zone	Zone 3 STC	Assessed daily load
No Whole of Home performance assessment conducted for this certificate.					

Pool/spa equipment

Appliance/ system type	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Whole of Home performance assessment conducted for this certificate.			

Onsite renewable energy *schedule*

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

System type	Orientation	System size or generation capacity
No Whole of Home performance assessment conducted for this certificate.		

Battery *schedule*

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

System type	Size [battery storage capacity]
No Whole of Home performance assessment conducted for this certificate.	



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 homes 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 homes 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 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 air gap 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.

*Refer to glossary.



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)

Nationwide House Energy Rating Scheme®

NatHERS® Certificate No. X54PLNJ9WL

Generated on 28 Oct 2025 using FirstRate5: 5.5.5a (3.22)

Property

Address R6, 67 Elimatta Road & 19A Rowan Street,
Mona Vale, NSW, 2103

Lot/DP 103/-DP709505

NCC Class* Class 1a

Floor/all Floors

Type New Home

Plans

Main plan Rev C 27/10/2025

Prepared by JKMarchitects

Construction and environment

Assessed floor area [m²]*	Exposure type
Conditioned* 125.9	suburban
Unconditioned* 29	NatHERS climate zone
Total 154.9	56 Mascot AMO
Garage 18.3	



Accredited assessor

Name STEPHEN BURGUM

V-Star Energy in association with Ecoplus Consultants

Business name

Email stephen@vstarenergy.com.au

Phone 0421810026

Accreditation No. HERA10245

Assessor Accrediting Organisation

-

Declaration of interest No

NCC Requirements

NCC provisions Volume 2

State/Territory variation Yes

National Construction Code (NCC) requirements

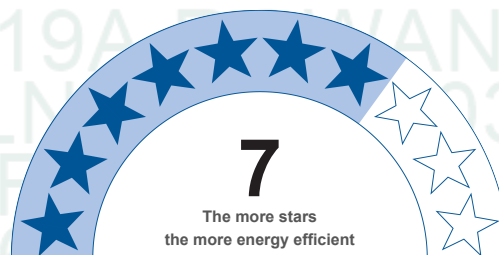
The NCC allows the use of NatHERS accredited software to comply with the energy efficiency requirements for houses (Class 1 buildings) and apartments (Class 2 sole-occupancy units and Class 4 parts of buildings). The applicable requirements for houses are detailed in Specification 42 of NCC Volume Two. For apartments the requirements are detailed in clauses J3D3 and J3D15 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 star rating



**NATIONWIDE
HOUSE**
ENERGY RATING SCHEME®

30 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 [MJ/m²]

Limits taken from ABCB Standard 2022

	Heating	Cooling
Modelled	20.5	9.6
Load limits	N/A	N/A
Features determining load limits		
Floor type		N/A
(lowest conditioned area)		
NCC climate zone 1 or 2		N/A
Outdoor living area		N/A
Outdoor living area ceiling fan		N/A

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 <https://www.fr5.com.au/QRCodeLanding?PublicId=X54PLNJ9WL>. When using either link, ensure you are visiting www.fr5.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 & 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 NatHERS heating and cooling load limits Standard 2022 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 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:



Greenhouse gas emissions:



Cost:



Graph key:



Predicted onsite renewable energy impact

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 the values in the ABCB Standard 2022: NatHERS heating and cooling load limits for the appropriate climate zone?	☐	☐	☐	☐	☐

*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?		☐	☐	☐	☐
Insulation installation method					
Has the insulation been installed according to the NCC requirements?			☐	☐	☐
Building sealing					
Does the dwelling meet the NCC requirements for Building Sealing?		☐	☐	☐	☐
Whole of Home performance check (not applicable if a Whole of Home performance 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 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?	☐	☐			

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

All lighting devices must NOT penetrate ceiling insulation

Window ID selections may be replaced with those with the same or lower U-Value and SHGC value +/-5%.

Any type of insulation can be replaced with one that have the same R-value.

Colour selections as shown on the plans.

Refer to the V-Star Energy Rating Summary Report for further information.



Room *schedule*

Room	Zone Type	Area [m²]
Garage	garage	18.3
Entry	dayTime	6.5
Kitchen/Living/Dining	kitchen	40
Hallway	dayTime	1.4
Laundry	unconditioned	3.9
WC	unconditioned	2.5
Bedroom 2	bedroom	13.3
Bedroom 1	bedroom	12.2
Foyer	dayTime	8
M Bedroom	bedroom	10.2
WIR	nightTime	6.1
Bath	unconditioned	4.3
WC	nightTime	1.2
Ensuite	nightTime	2.6
SHR	nightTime	2.3
Bedroom 3	bedroom	16.3
Rumpus	living	13.3

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
RYL-312-140 A	AA Series Awning Window DG LightBridge_ClrS0_4-12-4	3	0.41	0.39	0.43
RYL-362-640 A	AA Series Sliding Door DG LightBridge_ClrS0_4-12-4	2.97	0.49	0.47	0.51
RYL-611-707 A	SG Series Awning Window SG 5Clr	5.78	0.58	0.55	0.61
RYL-312-101 A	AA Series Awning Window DG 4-12Ar-4	3.69	0.51	0.48	0.54

Window and glazed door *schedule*



Location	Window ID	Window no.	Height [mm]	Width [mm]	Window type	Opening %	Orientation	Window shading device*
Entry	RYL-312-140 A	W06.10	2000	440	awning	45.0	E	No
Kitchen/Living/-Dining	RYL-312-140 A	W06.03	2140	945	awning	45.0	N	No
Kitchen/Living/-Dining	RYL-312-140 A	W06.04	2140	945	awning	45.0	N	No
Kitchen/Living/-Dining	RYL-312-140 A	W06.05	2140	945	awning	45.0	N	No
Kitchen/Living/-Dining	RYL-312-140 A	W06.06	2140	945	awning	45.0	N	No
Kitchen/Living/-Dining	RYL-362-640 A	W06.02	2400	2400	sliding	45.0	W	No
Kitchen/Living/-Dining	RYL-362-640 A	W06.01	2400	2400	sliding	45.0	W	No
Laundry	RYL-611-707 A	W06.08	1200	800	awning	90.0	E	No
Laundry	RYL-611-707 A	W06.07	2140	945	awning	45.0	N	No
WC	RYL-611-707 A	W06.09	1200	800	awning	90.0	E	No
Bedroom 2	RYL-312-140 A	W06.17	2140	945	awning	14.0	N	No
Bedroom 2	RYL-312-140 A	W06.20	2140	945	awning	45.0	S	No
Bedroom 2	RYL-312-140 A	W06.18	1200	700	awning	28.0	E	No
Bedroom 2	RYL-312-140 A	W06.19	1200	700	awning	28.0	E	No
Bedroom 1	RYL-312-140 A	W06.16	2140	945	awning	14.0	N	No
Bedroom 1	RYL-312-140 A	W06.14	1360	900	awning	23.0	W	No
Bedroom 1	RYL-312-140 A	W06.15	1360	900	awning	23.0	W	No
Foyer	RYL-312-140 A	W06.21	2140	945	awning	45.0	E	No
M Bedroom	RYL-362-640 A	W06.22	2400	2400	sliding	45.0	E	No
WIR	RYL-312-140 A	W06.12	1360	800	awning	90.0	W	No
Bath	RYL-611-707 A	W06.13	1360	900	awning	90.0	W	No
SHR	RYL-312-101 A	W06.11	1360	900	awning	90.0	W	No
Bedroom 3	RYL-312-140 A	W06.25	900	800	awning	29.0	E	No
Bedroom 3	RYL-312-140 A	W06.26	900	800	awning	29.0	E	No
Rumpus	RYL-312-140 A	W06.23	800	600	awning	90.0	N	No
Rumpus	RYL-312-140 A	W06.24	800	600	awning	90.0	N	No

Roof window* type and performance value

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 %	Area [m²]	Width [mm]	Orientation	Outdoor shade	Indoor shade
No Data Available								

Skylight* type and performance

Skylight ID	Skylight description	Skylight shaft reflectance
No Data Available		

Skylight* schedule

Location	Skylight ID	Skylight No.	Skylight shaft length [mm]	Area [m²]	Orientation	Outdoor shade	Diffuser
No Data Available							

External door schedule

Location	Height [mm]	Width [mm]	Opening %	Orientation
Garage	2100	2700	100.0	E
Entry	2100	920	100.0	E

External wall type

Wall ID	Wall type	Solar absorptance	Wall shade [colour]	Bulk insulation [R-value]	Reflective wall wrap*
1	Steve - Brick Cavity	0.5	Medium		No
2	Steve - Fibre Cement 0.0	0.5	Medium		No
3	Steve - Fibre Cement 2.5	0.5	Medium	Glass fibre batt: R2.5 (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	1	3200	6018	S	0	No
Garage	2	3200	3037	E	0	No
Entry	3	2700	1927	E	1280	Yes
Kitchen/Living/Dining	3	2700	6465	N	508	Yes
Kitchen/Living/Dining	3	2700	3662	W	1849	Yes
Kitchen/Living/Dining	3	2700	1512	N	4972	Yes

*Refer to glossary.



Kitchen/Living/Dining	3	2700	4048	W	337	No
Kitchen/Living/Dining	1	2700	3537	S	0	No
Laundry	3	2700	1648	E	326	No
Laundry	3	2700	2588	N	0	Yes
WC	3	2700	1651	E	320	No
WC	3	2700	852	S	1989	Yes
Bedroom 2	3	2400	4018	N	438	Yes
Bedroom 2	3	2400	1446	S	5009	Yes
Bedroom 2	3	2400	472	E	359	No
Bedroom 2	3	2400	419	SE	4141	No
Bedroom 2	3	2400	1964	E	0	No
Bedroom 2	3	2400	433	E	925	No
Bedroom 2	3	2400	382	E	363	No
Bedroom 1	3	2400	4438	N	481	Yes
Bedroom 1	3	2460	2677	W	633	No
Foyer	3	2400	1743	E	1806	Yes
M Bedroom	1	2400	3294	S	0	No
M Bedroom	3	2400	3088	E	1798	Yes
WIR	3	2460	2137	W	421	No
Bath	3	2400	219	N	4105	Yes
Bath	3	2460	1039	W	417	No
WC	1	2400	810	S	0	No
Ensuite	1	2400	1352	S	0	No
SHR	1	2400	1563	S	0	No
SHR	3	2460	1458	W	418	No
Bedroom 3	3	2200	587	N	347	Yes
Bedroom 3	1	2525	4039	S	0	No
Bedroom 3	3	2200	586	S	387	Yes
Bedroom 3	3	2725	2088	E	407	No
Rumpus	3	2725	2058	N	238	Yes
Rumpus	3	2200	301	W	0	Yes
Rumpus	3	2200	314	E	0	Yes

Internal wall type

Wall ID	Wall type	Area [m²]	Bulk insulation
1	Steve - R2.5 Internal Wall	59.8	Glass fibre batt: R2.5 (R2.5)
2	FR5 - Internal Plasterboard Stud Wall	82.6	
3	Steve - Fibre Cement 2.5	29.9	Glass fibre batt: R2.5 (R2.5)

Floor type



Location	Construction	Area [m²]	Sub-floor ventilation	Added insulation [R-value]	Covering
Garage	COSG - CSOG: Slab on Ground	14.5	Enclosed	R0.0	none
Garage	COSG - CSOG: Slab on Ground	3.8	Enclosed	R0.0	none
Entry	COSG - CSOG: Slab on Ground	2.2	Enclosed	R0.0	Timber
Entry	COSG - CSOG: Slab on Ground	4.3	Enclosed	R0.0	Timber
Kitchen/Living/D-ining	COSG - CSOG: Slab on Ground	1.8	Enclosed	R0.0	Timber
Kitchen/Living/D-ining	COSG - CSOG: Slab on Ground	1.7	Enclosed	R0.0	Timber
Kitchen/Living/D-ining	COSG - CSOG: Slab on Ground	36.5	Enclosed	R0.0	Timber
Hallway	COSG - CSOG: Slab on Ground	1.4	Enclosed	R0.0	Timber
Laundry	COSG - CSOG: Slab on Ground	3.9	Enclosed	R0.0	Tiles
WC	COSG - CSOG: Slab on Ground	2.5	Enclosed	R0.0	Tiles
Bedroom 2	InFloor - Intermediate Floor R2.5	2.1	Enclosed	R2.5	Timber
Bedroom 2	InFloor - Intermediate Floor R2.5	11.2	Enclosed	R2.5	Timber
Bedroom 1	InFloor - Intermediate Floor R2.5	0.4	Elevated	R2.5	Timber
Bedroom 1	InFloor - Intermediate Floor R2.5	4.1	Enclosed	R2.5	Timber
Bedroom 1	InFloor - Intermediate Floor R2.5	7.7	Enclosed	R2.5	Timber
Foyer	InFloor - Intermediate Floor R2.5	6	Enclosed	R2.5	Timber
Foyer	InFloor - Intermediate Floor R2.5	2	Enclosed	R2.5	Timber
M Bedroom	InFloor - Intermediate Floor R2.5	0.7	Enclosed	R2.5	Timber
M Bedroom	InFloor - Intermediate Floor R2.5	9.4	Enclosed	R2.5	Timber
WIR	InFloor - Intermediate Floor R2.5	3.8	Enclosed	R2.5	Timber
WIR	InFloor - Intermediate Floor R2.5	2.3	Enclosed	R2.5	Timber
Bath	InFloor - Intermediate Floor R2.5	0.3	Elevated	R2.5	Tiles



Bath	InFloor - Intermediate Floor R2.5	1.8	Enclosed	R2.5	Tiles
Bath	InFloor - Intermediate Floor R2.5	2.2	Enclosed	R2.5	Tiles
WC	InFloor - Intermediate Floor R2.5	1.2	Enclosed	R2.5	Tiles
Ensuite	InFloor - Intermediate Floor R2.5	0.9	Enclosed	R2.5	Tiles
Ensuite	InFloor - Intermediate Floor R2.5	1.7	Enclosed	R2.5	Tiles
SHR	InFloor - Intermediate Floor R2.5	2.3	Enclosed	R2.5	Tiles
Bedroom 3	InFloor - Intermediate Floor R2.5	14.9	Enclosed	R2.5	Timber
Bedroom 3	InFloor - Intermediate Floor R2.5	1.4	Elevated	R2.5	Timber
Rumpus	InFloor - Intermediate Floor R2.5	13.3	Enclosed	R2.5	Timber

Ceiling type

Location	Construction material/type	Bulk insulation R-value [may include edge batt values]	Reflective wrap*
Garage	InFloor - Intermediate Floor R2.5	R2.5	No
Garage	Plasterboard	R0.0	No
Entry	InFloor - Intermediate Floor R2.5	R2.5	No
Entry	Plasterboard	R6.0	No
Entry	InFloor - Intermediate Floor R2.5	R2.5	No
Kitchen/Living/D-ining	Plasterboard	R3.0	Yes
Kitchen/Living/D-ining	Plasterboard	R6.0	Yes
Kitchen/Living/D-ining	InFloor - Intermediate Floor R2.5	R2.5	No
Hallway	InFloor - Intermediate Floor R2.5	R2.5	No
Laundry	InFloor - Intermediate Floor R2.5	R2.5	No
Laundry	Plasterboard	R0.0	No
WC	InFloor - Intermediate Floor R2.5	R2.5	No
WC	Plasterboard	R0.0	No
Bedroom 2	InFloor - Intermediate Floor R2.5	R2.5	No
Bedroom 2	Plasterboard	R6.0	Yes

*Refer to glossary.



Bedroom 1	InFloor - Intermediate Floor R2.5	R2.5	No
Bedroom 1	Plasterboard	R6.0	Yes
Foyer	InFloor - Intermediate Floor R2.5	R2.5	No
Foyer	Plasterboard	R6.0	Yes
M Bedroom	Plasterboard	R6.0	Yes
M Bedroom	InFloor - Intermediate Floor R2.5	R2.5	No
WIR	Plasterboard	R6.0	Yes
WIR	InFloor - Intermediate Floor R2.5	R2.5	No
Bath	InFloor - Intermediate Floor R2.5	R2.5	No
Bath	Plasterboard	R6.0	Yes
WC	InFloor - Intermediate Floor R2.5	R2.5	No
Ensuite	Plasterboard	R6.0	Yes
Ensuite	InFloor - Intermediate Floor R2.5	R2.5	No
SHR	Plasterboard	R6.0	Yes
Bedroom 3	Plasterboard	R6.0	No
Bedroom 3	Plasterboard	R6.0	No
Rumpus	Plasterboard	R6.0	No

Ceiling penetrations*

Location	Quantity	Type	Height [mm]	Width [mm]	Sealed/unsealed
Kitchen/Living/Dining	1	Exhaust Fans	250	250	Sealed
Laundry	1	Exhaust Fans	250	250	Sealed
WC	1	Exhaust Fans	250	250	Sealed
Bath	1	Exhaust Fans	250	250	Sealed
WC	1	Exhaust Fans	250	250	Sealed
Ensuite	1	Exhaust Fans	250	250	Sealed
SHR	1	Exhaust Fans	250	250	Sealed

Ceiling fans

Location	Quantity	Diameter [mm]
No Data Available		

Roof type

Construction	Added insulation [R-value]	Solar absorptance	Roof shade [colour]
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Framed:Flat - Flat Framed (Metal Deck)	0.0	0.44	Medium
Cont:Attic-Continuous	0.0	0.44	Medium
Ceil: Ceiling	0.0	0.5	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]
No Data Available				

Appliance *schedule*

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

Note: A flat assumption of 5W/m2 is used for lighting, therefore lighting is not included in the appliance schedule.

Cooling system

Appliance/ system type	Location	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Whole of Home performance assessment conducted for this certificate.				

Heating system

Appliance/ system type	Location	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Whole of Home performance assessment conducted for this certificate.				

Hot water system

Appliance/ system type	Fuel type	Minimum efficiency/ performance	Hot Water CER Zone	Zone 3 STC	Assessed daily load
No Whole of Home performance assessment conducted for this certificate.					

Pool/spa equipment

Appliance/ system type	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Whole of Home performance assessment conducted for this certificate.			

Onsite renewable energy *schedule*

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

System type	Orientation	System size or generation capacity
No Whole of Home performance assessment conducted for this certificate.		

Battery *schedule*

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

System type	Size [battery storage capacity]
No Whole of Home performance assessment conducted for this certificate.	



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 homes 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 homes 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 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 air gap 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.

*Refer to glossary.



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)

Nationwide House Energy Rating Scheme®

NatHERS® Certificate No. GK51YKYS90

Generated on 28 Oct 2025 using FirstRate5: 5.5.5a (3.22)

Property

Address R7, 67 Elimatta Road & 19A Rowan Street,
Mona Vale, NSW, 2103

Lot/DP 103/-/DP709505

NCC Class* Class 1a

Floor/all Floors

Type New Home

Plans

Main plan Rev C 27/10/2025

Prepared by JKM Architects

Construction and environment

Assessed floor area [m²]*	Exposure type
Conditioned* 122.2	suburban
Unconditioned* 29.9	NatHERS climate zone
Total 152.1	56 Mascot AMO
Garage 18.4	



Accredited assessor

Name STEPHEN BURGUM

Business name V-Star Energy in association with Ecoplus Consultants

Email stephen@vstarenergy.com.au

Phone 0421810026

Accreditation No. HERA10245

Assessor Accrediting Organisation

Declaration of interest No

NCC Requirements

NCC provisions Volume 2

State/Territory variation Yes

National Construction Code (NCC) requirements

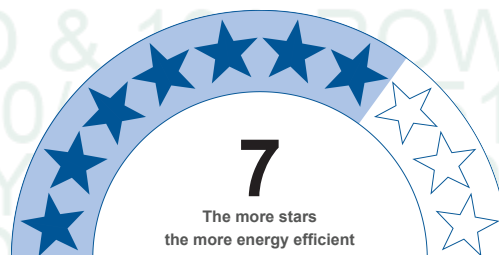
The NCC allows the use of NatHERS accredited software to comply with the energy efficiency requirements for houses (Class 1 buildings) and apartments (Class 2 sole-occupancy units and Class 4 parts of buildings). The applicable requirements for houses are detailed in Specification 42 of NCC Volume Two. For apartments the requirements are detailed in clauses J3D3 and J3D15 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 star rating



**NATIONWIDE
HOUSE**
ENERGY RATING SCHEME®

29.9 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 [MJ/m²]

Limits taken from ABCB Standard 2022

	Heating	Cooling
Modelled	19.5	10.4
Load limits	N/A	N/A
Features determining load limits		
Floor type (lowest conditioned area)		N/A
NCC climate zone 1 or 2		N/A
Outdoor living area		N/A
Outdoor living area ceiling fan		N/A

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 <https://www.fr5.com.au/QRCodeLandIng?PublicId=GK51YKYS90>. When using either link, ensure you are visiting www.fr5.com.au.





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 & 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 NatHERS heating and cooling load limits Standard 2022 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 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.

Graph key:



Predicted onsite renewable energy impact

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 the values in the ABCB Standard 2022: NatHERS heating and cooling load limits for the appropriate climate zone?	☐	☐	☐	☐	☐

*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?		☐	☐	☐	☐
Insulation installation method					
Has the insulation been installed according to the NCC requirements?			☐	☐	☐
Building sealing					
Does the dwelling meet the NCC requirements for Building Sealing?		☐	☐	☐	☐
Whole of Home performance check (not applicable if a Whole of Home performance 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 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?	☐	☐			

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

All lighting devices must NOT penetrate ceiling insulation

Window ID selections may be replaced with those with the same or lower U-Value and SHGC value +/-5%.

Any type of insulation can be replaced with one that have the same R-value.

Colour selections as shown on the plans.

Refer to the V-Star Energy Rating Summary Report for further information.



Room *schedule*

Room	Zone Type	Area [m²]
Garage	garage	18.4
Entry	dayTime	6.6
Kitchen/Living/Dining	kitchen	37.7
Hallway	dayTime	1.4
Laundry	unconditioned	4.5
WC	unconditioned	2.5
Bedroom 2	bedroom	13.5
Foyer	dayTime	7.1
M Bedroom	bedroom	9.8
WIR	nightTime	6
WC	nightTime	1.2
Ensuite	nightTime	2.6
SHR	nightTime	2.3
Bath	unconditioned	4.6
Bedroom 3	bedroom	11.9
Bedroom 3	bedroom	15.8
Rumpus	living	13.4

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
RYL-312-140 A	AA Series Awning Window DG LightBridge_ClrS0_4-12-4	3	0.41	0.39	0.43
RYL-362-640 A	AA Series Sliding Door DG LightBridge_ClrS0_4-12-4	2.97	0.49	0.47	0.51
RYL-611-707 A	SG Series Awning Window SG 5Clr	5.78	0.58	0.55	0.61

Window and glazed door *schedule*

Location	Window ID	Window no.	Height [mm]	Width [mm]	Window type	Opening %	Orientation	Window shading device*
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Entry	RYL-312-140 A	W07.05	2000	440	awning	45.0	E	No
Kitchen/Living/-Dining	RYL-362-640 A	W07.01	2400	2400	sliding	45.0	W	No
Kitchen/Living/-Dining	RYL-362-640 A	W07.02	2400	2400	sliding	45.0	W	No
Laundry	RYL-611-707 A	W07.03	1200	800	awning	90.0	E	No
WC	RYL-611-707 A	W07.04	1200	800	awning	90.0	E	No
Bedroom 2	RYL-312-140 A	W07.11	1200	800	awning	26.0	E	No
Bedroom 2	RYL-312-140 A	W07.12	1200	800	awning	26.0	E	No
Bedroom 2	RYL-312-140 A	W07.13	2140	945	awning	45.0	N	No
Foyer	RYL-312-140 A	W07.14	2140	945	awning	45.0	E	No
M Bedroom	RYL-362-640 A	W07.15	2400	2400	sliding	45.0	E	No
WIR	RYL-312-140 A	W07.07	1360	800	awning	90.0	W	No
SHR	RYL-312-140 A	W07.06	1360	900	awning	90.0	W	No
Bath	RYL-611-707 A	W07.10	1360	900	awning	90.0	S	No
Bedroom 3	RYL-312-140 A	W07.08	1360	900	awning	23.0	W	No
Bedroom 3	RYL-312-140 A	W07.09	1360	900	awning	23.0	W	No
Bedroom 3	RYL-312-140 A	W07.18	900	900	awning	28.0	E	No
Rumpus	RYL-312-140 A	W07.16	800	600	awning	90.0	S	No
Rumpus	RYL-312-140 A	W07.17	800	600	awning	90.0	S	No

Roof window* type and performance value

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 %	Area [m²]	Width [mm]	Orientation	Outdoor shade	Indoor shade
No Data Available								

Skylight* type and performance

Skylight ID	Skylight description	Skylight shaft reflectance
No Data Available		



Skylight* *schedule*

Location	Skylight ID	Skylight No.	Skylight shaft length [mm]	Area [m²]	Orient-ation	Outdoor shade	Diffuser
No Data Available							

External door *schedule*

Location	Height [mm]	Width [mm]	Opening %	Orientation
Garage	2100	2700	100.0	E
Entry	2100	920	100.0	E

External wall *type*

Wall ID	Wall type	Solar absorptance	Wall shade [colour]	Bulk insulation [R-value]	Reflective wall wrap*
1	Steve - Fibre Cement 0.0	0.5	Medium		No
2	Steve - Brick Cavity	0.5	Medium		No
3	Steve - Fibre Cement 2.5	0.5	Medium	Glass fibre batt: R2.5 (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	1	3000	3037	E	0	Yes
Garage	2	3000	6044	N	0	No
Entry	3	2700	1903	E	1248	Yes
Kitchen/Living/Dining	2	2700	3537	N	0	No
Kitchen/Living/Dining	3	2700	4082	W	337	No
Kitchen/Living/Dining	3	2700	1512	S	4741	Yes
Kitchen/Living/Dining	3	2700	3088	W	1849	Yes
Kitchen/Living/Dining	3	2700	6348	S	449	No
Laundry	3	2700	2871	S	438	No
Laundry	3	2700	1798	E	284	Yes
WC	3	2700	878	N	1949	Yes
WC	3	2700	1525	E	293	Yes
Bedroom 2	3	2450	501	E	292	Yes
Bedroom 2	3	2450	441	SE	876	Yes
Bedroom 2	3	2450	2174	E	0	Yes
Bedroom 2	3	2450	458	NE	3798	Yes
Bedroom 2	3	2450	502	E	332	Yes
Bedroom 2	3	2450	1508	N	4535	Yes



Bedroom 2	3	2450	3952	S	503	No
Foyer	3	2450	1351	E	1924	Yes
M Bedroom	2	2450	3173	N	0	No
M Bedroom	3	2450	3088	E	1926	Yes
WIR	3	2450	2137	W	403	No
WC	2	2450	810	N	0	No
Ensuite	2	2450	1352	N	0	No
SHR	3	2450	1458	W	415	No
SHR	2	2450	1589	N	0	No
Bath	3	2450	1747	S	465	No
Bedroom 3	3	2450	3342	W	389	No
Bedroom 3	3	2450	3059	S	472	No
Bedroom 3	3	2225	2064	E	550	No
Bedroom 3	3	1800	667	N	387	Yes
Bedroom 3	2	2225	3820	N	0	No
Bedroom 3	3	1800	677	S	369	Yes
Rumpus	3	1800	388	E	0	Yes
Rumpus	3	1800	294	W	0	Yes
Rumpus	3	2225	2184	S	291	No

Internal wall type

Wall ID	Wall type	Area [m²]	Bulk insulation
1	Steve - R2.5 Internal Wall	58.8	Glass fibre batt: R2.5 (R2.5)
2	FR5 - Internal Plasterboard Stud Wall	83.2	
3	Steve - Fibre Cement 2.5	27.7	Glass fibre batt: R2.5 (R2.5)

Floor type

Location	Construction	Area [m²]	Sub-floor ventilation	Added insulation [R-value]	Covering
Garage	COSG - CSOG: Slab on Ground	14.1	Enclosed	R0.0	none
Garage	COSG - CSOG: Slab on Ground	4.3	Enclosed	R0.0	none
Entry	COSG - CSOG: Slab on Ground	1.8	Enclosed	R0.0	Timber
Entry	COSG - CSOG: Slab on Ground	4.8	Enclosed	R0.0	Timber
Kitchen/Living/D-ining	COSG - CSOG: Slab on Ground	1.8	Enclosed	R0.0	Timber
Kitchen/Living/D-ining	COSG - CSOG: Slab on Ground	1.7	Enclosed	R0.0	Timber



Kitchen/Living/D-ining	COSG - CSOG: Slab on Ground	34.1	Enclosed	R0.0	Timber
Hallway	COSG - CSOG: Slab on Ground	1.4	Enclosed	R0.0	Timber
Laundry	COSG - CSOG: Slab on Ground	1	Enclosed	R0.0	Tiles
Laundry	COSG - CSOG: Slab on Ground	3.5	Enclosed	R0.0	Tiles
WC	COSG - CSOG: Slab on Ground	1.7	Enclosed	R0.0	Tiles
WC	COSG - CSOG: Slab on Ground	0.7	Enclosed	R0.0	Tiles
Bedroom 2	InFloor - Intermediate Floor R2.5	2.2	Enclosed	R2.5	Timber
Bedroom 2	InFloor - Intermediate Floor R2.5	11.3	Enclosed	R2.5	Timber
Foyer	InFloor - Intermediate Floor R2.5	5.3	Enclosed	R2.5	Timber
Foyer	InFloor - Intermediate Floor R2.5	1.8	Enclosed	R2.5	Timber
M Bedroom	InFloor - Intermediate Floor R2.5	0.6	Enclosed	R2.5	Timber
M Bedroom	InFloor - Intermediate Floor R2.5	9.2	Enclosed	R2.5	Timber
WIR	InFloor - Intermediate Floor R2.5	3.7	Enclosed	R2.5	Timber
WIR	InFloor - Intermediate Floor R2.5	2.3	Enclosed	R2.5	Timber
WC	InFloor - Intermediate Floor R2.5	1.2	Enclosed	R2.5	Tiles
Ensuite	InFloor - Intermediate Floor R2.5	1	Enclosed	R2.5	Tiles
Ensuite	InFloor - Intermediate Floor R2.5	1.6	Enclosed	R2.5	Tiles
SHR	InFloor - Intermediate Floor R2.5	2.3	Enclosed	R2.5	Tiles
Bath	InFloor - Intermediate Floor R2.5	3.6	Enclosed	R2.5	Timber (Mountain ash)
Bath	InFloor - Intermediate Floor R2.5	1	Enclosed	R2.5	Timber (Mountain ash)
Bedroom 3	InFloor - Intermediate Floor R2.5	2.9	Enclosed	R2.5	Timber
Bedroom 3	InFloor - Intermediate Floor R2.5	1.2	Elevated	R2.5	Timber
Bedroom 3	InFloor - Intermediate Floor R2.5	7.8	Enclosed	R2.5	Timber



Bedroom 3	InFloor - Intermediate Floor R2.5	14.4	Enclosed	R2.5	Timber
Bedroom 3	InFloor - Intermediate Floor R2.5	1.4	Elevated	R2.5	Timber
Rumpus	InFloor - Intermediate Floor R2.5	13.4	Enclosed	R2.5	Timber

Ceiling type

Location	Construction material/type	Bulk insulation R-value [may include edge batt values]	Reflective wrap*
Garage	InFloor - Intermediate Floor R2.5	R2.5	No
Garage	Plasterboard	R0.0	No
Entry	Plasterboard	R6.0	No
Entry	InFloor - Intermediate Floor R2.5	R2.5	No
Kitchen/Living/D-ining	Plasterboard	R3.0	Yes
Kitchen/Living/D-ining	Plasterboard	R6.0	Yes
Kitchen/Living/D-ining	InFloor - Intermediate Floor R2.5	R2.5	No
Hallway	InFloor - Intermediate Floor R2.5	R2.5	No
Laundry	Plasterboard	R3.0	Yes
Laundry	InFloor - Intermediate Floor R2.5	R2.5	No
WC	InFloor - Intermediate Floor R2.5	R2.5	No
WC	Plasterboard	R3.0	Yes
Bedroom 2	InFloor - Intermediate Floor R2.5	R2.5	No
Bedroom 2	Plasterboard	R6.0	Yes
Foyer	InFloor - Intermediate Floor R2.5	R2.5	No
Foyer	Plasterboard	R6.0	Yes
M Bedroom	Plasterboard	R6.0	Yes
M Bedroom	InFloor - Intermediate Floor R2.5	R2.5	No
WIR	Plasterboard	R6.0	Yes
WIR	InFloor - Intermediate Floor R2.5	R2.5	No
WC	InFloor - Intermediate Floor R2.5	R2.5	No
Ensuite	Plasterboard	R6.0	Yes
Ensuite	InFloor - Intermediate Floor R2.5	R2.5	No

*Refer to glossary.



SHR	Plasterboard	R6.0	Yes
Bath	InFloor - Intermediate Floor R2.5	R2.5	No
Bath	Plasterboard	R6.0	Yes
Bedroom 3	InFloor - Intermediate Floor R2.5	R2.5	No
Bedroom 3	Plasterboard	R6.0	Yes
Bedroom 3	Plasterboard	R6.0	Yes
Bedroom 3	Plasterboard	R6.0	No
Bedroom 3	Plasterboard	R6.0	No
Rumpus	Plasterboard	R6.0	No

Ceiling penetrations*

Location	Quantity	Type	Height [mm]	Width [mm]	Sealed/unsealed
Kitchen/Living/Dining	1	Exhaust Fans	250	250	Sealed
Laundry	1	Exhaust Fans	250	250	Sealed
WC	1	Exhaust Fans	250	250	Sealed
WC	1	Exhaust Fans	250	250	Sealed
SHR	1	Exhaust Fans	250	250	Sealed
Bath	1	Exhaust Fans	250	250	Sealed

Ceiling fans

Location	Quantity	Diameter [mm]
No Data Available		

Roof type

Construction	Added insulation [R-value]	Solar absorptance	Roof shade [colour]
Framed:Flat - Flat Framed (Metal Deck)	0.0	0.44	Medium
Cont:Attic-Continuous	0.0	0.44	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]
No Data Available				

Appliance schedule

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

Note: A flat assumption of 5W/m2 is used for lighting, therefore lighting is not included in the appliance schedule.

Cooling system



Appliance/ system type	Location	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Whole of Home performance assessment conducted for this certificate.				

Heating system

Appliance/ system type	Location	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Whole of Home performance assessment conducted for this certificate.				

Hot water system

Appliance/ system type	Fuel type	Minimum efficiency/ performance	Hot Water CER Zone	Zone 3 STC	Assessed daily load
No Whole of Home performance assessment conducted for this certificate.					

Pool/spa equipment

Appliance/ system type	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Whole of Home performance assessment conducted for this certificate.			

Onsite renewable energy *schedule*

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

System type	Orientation	System size or generation capacity
No Whole of Home performance assessment conducted for this certificate.		

Battery *schedule*

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

System type	Size [battery storage capacity]
No Whole of Home performance assessment conducted for this certificate.	



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 homes 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 homes 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 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 air gap 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.

*Refer to glossary.



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)

Nationwide House Energy Rating Scheme®

NatHERS® Certificate No. CKUWSACVJO

Generated on 28 Oct 2025 using FirstRate5: 5.5.5a (3.22)

Property

Address R8, 67 Elimatta Road & 19A Rowan Street,
Mona Vale, NSW, 2103

Lot/DP 103/-/DP709505

NCC Class* Class 1a

Floor/all Floors

Type New Home

Plans

Main plan Rev C 27/10/2025

Prepared by JKM Architects

Construction and environment

Assessed floor area [m²]*		Exposure type
Conditioned*	125.7	suburban
Unconditioned*	23.7	NatHERS climate zone
Total	149.4	56 Mascot AMO
Garage	18.3	



Accredited assessor

Name STEPHEN BURGUM
V-Star Energy in association with Ecoplus
Consultants

Business name

Email stephen@vstarenergy.com.au

Phone 0421810026

Accreditation No. HERA10245

Assessor Accrediting Organisation

Declaration of interest No

NCC Requirements

NCC provisions Volume 2

State/Territory variation Yes

National Construction Code (NCC) requirements

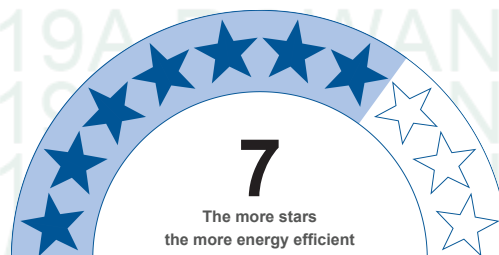
The NCC allows the use of NatHERS accredited software to comply with the energy efficiency requirements for houses (Class 1 buildings) and apartments (Class 2 sole-occupancy units and Class 4 parts of buildings). The applicable requirements for houses are detailed in Specification 42 of NCC Volume Two. For apartments the requirements are detailed in clauses J3D3 and J3D15 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 star rating



**NATIONWIDE
HOUSE**
ENERGY RATING SCHEME®

30 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 [MJ/m²]

Limits taken from ABCB Standard 2022

	Heating	Cooling
Modelled	19.5	10.5
Load limits	N/A	N/A
Features determining load limits		
Floor type (lowest conditioned area)		N/A
NCC climate zone 1 or 2		N/A
Outdoor living area		N/A
Outdoor living area ceiling fan		N/A

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 <https://www.fr5.com.au/QRCodeLanding?PublicId=CKUWSACVJO> When using either link, ensure you are visiting www.fr5.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 & 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 NatHERS heating and cooling load limits Standard 2022 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 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.

Graph key:



Predicted onsite renewable energy impact

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	
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 the values in the ABCB Standard 2022: NatHERS heating and cooling load limits for the appropriate climate zone?	☐	☐	☐	☐	☐

*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?		☐	☐	☐	☐
Insulation installation method					
Has the insulation been installed according to the NCC requirements?			☐	☐	☐
Building sealing					
Does the dwelling meet the NCC requirements for Building Sealing?		☐	☐	☐	☐
Whole of Home performance check (not applicable if a Whole of Home performance 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 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?	☐	☐			
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

All lighting devices must NOT penetrate ceiling insulation

Window ID selections may be replaced with those with the same or lower U-Value and SHGC value +/-5%.

Any type of insulation can be replaced with one that have the same R-value.

Colour selections as shown on the plans.

Refer to the V-Star Energy Rating Summary Report for further information.

Room *schedule*

Room	Zone Type	Area [m²]
Garage	garage	18.3
Laundry	unconditioned	3.3
WC	unconditioned	2.1
Entry	dayTime	6.4
Kitchen/Living/Dining	kitchen	37.9
Hallway	dayTime	1.2
Bedroom 2	bedroom	12.5
Foyer	dayTime	7.3
M Bedroom	bedroom	9.8
WIR	nightTime	5.9
WC	nightTime	1.2
Ensuite	nightTime	2.6
SHR	nightTime	2.3
Bedroom 2	bedroom	13
Bath	dayTime	4.2
Bedroom 3	bedroom	15.2
Rumpus	living	13.4

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
RYL-611-707 A	SG Series Awning Window SG 5Clr	5.78	0.58	0.55	0.61
RYL-312-140 A	AA Series Awning Window DG LightBridge_ClrS0_4-12-4	3	0.41	0.39	0.43
RYL-362-640 A	AA Series Sliding Door DG LightBridge_ClrS0_4-12-4	2.97	0.49	0.47	0.51

Window and glazed door *schedule*

Location	Window ID	Window no.	Height [mm]	Width [mm]	Window type	Opening %	Orientation	Window shading device*
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Laundry	RYL-611-707 A	W08.04	1200	800	awning	90.0	E	No
WC	RYL-611-707 A	W08.05	1200	800	awning	90.0	E	No
Entry	RYL-312-140 A	W08.06	2000	440	awning	45.0	E	No
Kitchen/Living/- Dining	RYL-362-640 A	W08.03	2400	2400	sliding	45.0	N	No
Kitchen/Living/- Dining	RYL-362-640 A	W08.02	2400	2400	sliding	45.0	W	No
Kitchen/Living/- Dining	RYL-362-640 A	W08.01	2400	2400	sliding	45.0	W	No
Bedroom 2	RYL-312-140 A	W08.13	2140	945	awning	45.0	S	No
Bedroom 2	RYL-312-140 A	W08.11	1200	700	awning	28.0	E	No
Bedroom 2	RYL-312-140 A	W08.12	1200	700	awning	28.0	E	No
Foyer	RYL-312-140 A	W08.14	2140	945	awning	45.0	E	No
M Bedroom	RYL-362-640 A	W08.15	2400	2400	sliding	45.0	E	No
WIR	RYL-611-707 A	W08.08	1360	800	awning	90.0	W	No
SHR	RYL-611-707 A	W08.07	1360	900	awning	90.0	W	No
Bedroom 2	RYL-312-140 A	W08.09	1360	900	awning	23.0	W	No
Bedroom 2	RYL-312-140 A	W08.10	1360	900	awning	23.0	W	No
Bedroom 3	RYL-312-140 A	W08.18	900	900	awning	28.0	E	No
Rumpus	RYL-312-140 A	W08.16	800	600	awning	90.0	N	No
Rumpus	RYL-312-140 A	W08.17	800	600	awning	90.0	N	No

Roof window* *type and performance value*

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 %	Area [m ²]	Width [mm]	Orientation	Outdoor shade	Indoor shade
No Data Available								

Skylight* *type and performance*

Skylight ID	Skylight description	Skylight shaft reflectance
No Data Available		

*Refer to glossary.



Skylight* *schedule*

Location	Skylight ID	Skylight No.	Skylight shaft length [mm]	Area [m²]	Orient-ation	Outdoor shade	Diffuser
No Data Available							

External door *schedule*

Location	Height [mm]	Width [mm]	Opening %	Orientation
Garage	2100	2700	100.0	E
Entry	2100	920	100.0	E

External wall *type*

Wall ID	Wall type	Solar absorptance	Wall shade [colour]	Bulk insulation [R-value]	Reflective wall wrap*
1	Steve - Brick Cavity	0.5	Medium		No
2	Steve - Fibre Cement 0.0	0.5	Medium		No
3	Steve - Fibre Cement 2.5	0.5	Medium	Glass fibre batt: R2.5 (R2.5)	No
4	Steve - R2.5 Internal Wall	0.5	Medium	Glass fibre batt: R2.5 (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	1	3000	6018	S	0	No
Garage	2	3000	3037	E	0	Yes
Laundry	3	2700	2804	N	476	Yes
Laundry	3	2700	1167	E	363	Yes
WC	3	2700	106	S	0	Yes
WC	4	2700	128	W	0	Yes
WC	3	2700	830	S	2053	Yes
WC	3	2700	1317	E	374	Yes
Entry	3	2700	2022	E	1311	Yes
Kitchen/Living/Dining	3	2700	6114	N	491	Yes
Kitchen/Living/Dining	3	2700	3694	W	2118	Yes
Kitchen/Living/Dining	3	2700	1609	N	4190	Yes
Kitchen/Living/Dining	3	2700	4048	W	499	No
Kitchen/Living/Dining	1	2700	3537	S	0	No
Bedroom 2	3	2500	4001	N	516	Yes
Bedroom 2	3	2500	1485	S	4497	Yes
Bedroom 2	3	2500	216	E	316	Yes



Bedroom 2	3	2500	417	SE	3576	Yes
Bedroom 2	3	2500	2221	E	0	Yes
Bedroom 2	3	2500	420	NE	757	Yes
Bedroom 2	3	2500	248	E	210	Yes
Foyer	3	2500	1263	E	0	Yes
M Bedroom	1	2500	3161	S	0	No
M Bedroom	3	2500	3093	E	1875	Yes
WIR	3	2500	2137	W	421	No
WC	1	2500	810	S	0	No
Ensuite	1	2500	1352	S	0	No
SHR	1	2500	1563	S	0	No
SHR	3	2500	1458	W	418	No
Bedroom 2	3	2500	3008	N	513	No
Bedroom 2	3	2500	4012	W	413	No
Bath	3	2500	1570	N	509	No
Bedroom 3	3	1800	631	N	445	Yes
Bedroom 3	1	2425	3832	S	0	No
Bedroom 3	3	1800	635	S	309	Yes
Bedroom 3	3	2425	1836	E	365	No
Rumpus	3	2425	2077	N	270	Yes
Rumpus	3	1800	290	W	0	Yes
Rumpus	3	1800	225	E	0	Yes

Internal wall type

Wall ID	Wall type	Area [m²]	Bulk insulation
1	Steve - R2.5 Internal Wall	39.8	Glass fibre batt: R2.5 (R2.5)
2	FR5 - Internal Plasterboard Stud Wall	101.2	
3	Steve - Fibre Cement 2.5	28.5	Glass fibre batt: R2.5 (R2.5)

Floor type

Location	Construction	Area [m²]	Sub-floor ventilation	Added insulation [R-value]	Covering
Garage	COSG - CSOG: Slab on Ground	14.1	Enclosed	R0.0	none
Garage	COSG - CSOG: Slab on Ground	4.1	Enclosed	R0.0	none
Laundry	COSG - CSOG: Slab on Ground	2.7	Enclosed	R0.0	Tiles
Laundry	COSG - CSOG: Slab on Ground	0.6	Enclosed	R0.0	Tiles
WC	COSG - CSOG: Slab on Ground	0.7	Enclosed	R0.0	Tiles



WC	COSG - CSOG: Slab on Ground	1.4	Enclosed	R0.0	Tiles
Entry	COSG - CSOG: Slab on Ground	1.6	Enclosed	R0.0	Timber
Entry	COSG - CSOG: Slab on Ground	4.8	Enclosed	R0.0	Timber
Kitchen/Living/D-ining	COSG - CSOG: Slab on Ground	1.8	Enclosed	R0.0	Timber
Kitchen/Living/D-ining	COSG - CSOG: Slab on Ground	1.7	Enclosed	R0.0	Timber
Kitchen/Living/D-ining	COSG - CSOG: Slab on Ground	34.4	Enclosed	R0.0	Timber
Hallway	COSG - CSOG: Slab on Ground	1.2	Enclosed	R0.0	Timber
Bedroom 2	InFloor - Intermediate Floor R2.5	2.4	Enclosed	R2.5	Timber
Bedroom 2	InFloor - Intermediate Floor R2.5	10.1	Enclosed	R2.5	Timber
Foyer	InFloor - Intermediate Floor R2.5	5.5	Enclosed	R2.5	Timber
Foyer	InFloor - Intermediate Floor R2.5	1.8	Enclosed	R2.5	Timber
M Bedroom	InFloor - Intermediate Floor R2.5	0.8	Enclosed	R2.5	Timber
M Bedroom	InFloor - Intermediate Floor R2.5	9	Enclosed	R2.5	Timber
WIR	InFloor - Intermediate Floor R2.5	3.6	Enclosed	R2.5	Timber
WIR	InFloor - Intermediate Floor R2.5	2.3	Enclosed	R2.5	Timber
WC	InFloor - Intermediate Floor R2.5	1.2	Enclosed	R2.5	Tiles
Ensuite	InFloor - Intermediate Floor R2.5	0.9	Enclosed	R2.5	Tiles
Ensuite	InFloor - Intermediate Floor R2.5	1.7	Enclosed	R2.5	Tiles
SHR	InFloor - Intermediate Floor R2.5	2.3	Enclosed	R2.5	Tiles
Bedroom 2	InFloor - Intermediate Floor R2.5	1.7	Elevated	R2.5	Timber
Bedroom 2	InFloor - Intermediate Floor R2.5	8.3	Enclosed	R2.5	Timber
Bedroom 2	InFloor - Intermediate Floor R2.5	3	Enclosed	R2.5	Timber
Bath	InFloor - Intermediate Floor R2.5	1	Enclosed	R2.5	Tiles



Bath	InFloor - Intermediate Floor R2.5	3.2	Enclosed	R2.5	Tiles
Bedroom 3	InFloor - Intermediate Floor R2.5	14.1	Enclosed	R2.5	Timber
Bedroom 3	InFloor - Intermediate Floor R2.5	1.2	Elevated	R2.5	Timber
Rumpus	InFloor - Intermediate Floor R2.5	13.4	Enclosed	R2.5	Timber

Ceiling type

Location	Construction material/type	Bulk insulation R-value [may include edge batt values]	Reflective wrap*
Garage	InFloor - Intermediate Floor R2.5	R2.5	No
Garage	Plasterboard	R0.0	No
Laundry	InFloor - Intermediate Floor R2.5	R2.5	No
Laundry	Plasterboard	R3.0	Yes
WC	InFloor - Intermediate Floor R2.5	R2.5	No
WC	Plasterboard	R3.0	Yes
WC	InFloor - Intermediate Floor R2.5	R2.5	No
Entry	Plasterboard	R6.0	No
Entry	InFloor - Intermediate Floor R2.5	R2.5	No
Kitchen/Living/D-ining	Plasterboard	R3.0	Yes
Kitchen/Living/D-ining	Plasterboard	R6.0	Yes
Kitchen/Living/D-ining	InFloor - Intermediate Floor R2.5	R2.5	No
Hallway	InFloor - Intermediate Floor R2.5	R2.5	No
Bedroom 2	InFloor - Intermediate Floor R2.5	R2.5	No
Bedroom 2	Plasterboard	R6.0	Yes
Foyer	InFloor - Intermediate Floor R2.5	R2.5	No
Foyer	Plasterboard	R6.0	Yes
M Bedroom	Plasterboard	R6.0	Yes
M Bedroom	InFloor - Intermediate Floor R2.5	R2.5	No
WIR	Plasterboard	R6.0	Yes
WIR	InFloor - Intermediate Floor R2.5	R2.5	No

*Refer to glossary.



WC	InFloor - Intermediate Floor R2.5	R2.5	No
Ensuite	Plasterboard	R6.0	Yes
Ensuite	InFloor - Intermediate Floor R2.5	R2.5	No
SHR	Plasterboard	R6.0	Yes
Bedroom 2	Plasterboard	R6.0	Yes
Bedroom 2	Plasterboard	R6.0	Yes
Bedroom 2	InFloor - Intermediate Floor R2.5	R2.5	No
Bath	Plasterboard	R6.0	Yes
Bath	InFloor - Intermediate Floor R2.5	R2.5	No
Bedroom 3	Plasterboard	R6.0	No
Bedroom 3	Plasterboard	R6.0	No
Rumpus	Plasterboard	R6.0	No

Ceiling penetrations*

Location	Quantity	Type	Height [mm]	Width [mm]	Sealed/unsealed
Laundry	1	Exhaust Fans	250	250	Sealed
WC	1	Exhaust Fans	250	250	Sealed
Kitchen/Living/Dining	1	Exhaust Fans	250	250	Sealed
WC	1	Exhaust Fans	250	250	Sealed
SHR	1	Exhaust Fans	250	250	Sealed
Bath	1	Exhaust Fans	250	250	Sealed

Ceiling fans

Location	Quantity	Diameter [mm]
No Data Available		

Roof type

Construction	Added insulation [R-value]	Solar absorptance	Roof shade [colour]
Framed:Flat - Flat Framed (Metal Deck)	0.0	0.44	Medium
Cont:Attic-Continuous	0.0	0.44	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]
No Data Available				



Appliance *schedule*

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

Note: A flat assumption of 5W/m2 is used for lighting, therefore lighting is not included in the appliance schedule.

Cooling system

Appliance/ system type	Location	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Whole of Home performance assessment conducted for this certificate.				

Heating system

Appliance/ system type	Location	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Whole of Home performance assessment conducted for this certificate.				

Hot water system

Appliance/ system type	Fuel type	Minimum efficiency/ performance	Hot Water CER Zone	Zone 3 STC	Assessed daily load
No Whole of Home performance assessment conducted for this certificate.					

Pool/spa equipment

Appliance/ system type	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Whole of Home performance assessment conducted for this certificate.			

Onsite renewable energy *schedule*

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

System type	Orientation	System size or generation capacity
No Whole of Home performance assessment conducted for this certificate.		

Battery *schedule*

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

System type	Size [battery storage capacity]
No Whole of Home performance assessment conducted for this certificate.	

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 homes 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 homes 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 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 air gap 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.

*Refer to glossary.



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)

Nationwide House Energy Rating Scheme®

NatHERS® Certificate No. Y3IKEWEYMN

Generated on 28 Oct 2025 using FirstRate5: 5.5.5a (3.22)

Property

Address R9, 67 Elimatta Road & 19A Rowan Street,
Mona Vale, NSW, 2103

Lot/DP 103/-DP709505

NCC Class* Class 1a

Floor/all Floors

Type New Home

Plans

Main plan Rev C 27/10/2025

Prepared by JKMarchitects

Construction and environment

Assessed floor area [m²]*		Exposure type
Conditioned*	148.1	suburban
Unconditioned*	26	NatHERS climate zone
Total	174.1	56 Mascot AMO
Garage	18.4	



Accredited assessor

Name STEPHEN BURGUM
V-Star Energy in association with Ecoplus Consultants

Business name

Email stephen@vstarenergy.com.au

Phone 0421810026

Accreditation No. HERA10245

Assessor Accrediting Organisation

-

Declaration of interest No

NCC Requirements

NCC provisions Volume 2

State/Territory variation Yes

National Construction Code (NCC) requirements

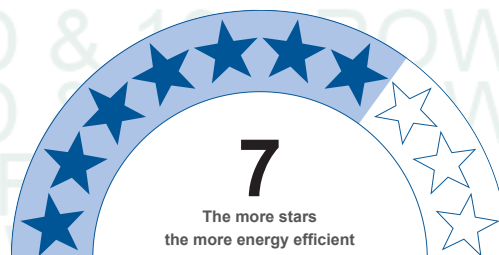
The NCC allows the use of NatHERS accredited software to comply with the energy efficiency requirements for houses (Class 1 buildings) and apartments (Class 2 sole-occupancy units and Class 4 parts of buildings). The applicable requirements for houses are detailed in Specification 42 of NCC Volume Two. For apartments the requirements are detailed in clauses J3D3 and J3D15 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 star rating



**NATIONWIDE
HOUSE**
ENERGY RATING SCHEME®

29.9 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 [MJ/m²]

Limits taken from ABCB Standard 2022

	Heating	Cooling
Modelled	18.4	11.6
Load limits	N/A	N/A
Features determining load limits		
Floor type (lowest conditioned area)		N/A
NCC climate zone 1 or 2		N/A
Outdoor living area		N/A
Outdoor living area ceiling fan		N/A

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 <https://www.fr5.com.au/QRCodeLandIng?PublicId=Y3IKEWEYMN>. When using either link, ensure you are visiting www.fr5.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 & 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 NatHERS heating and cooling load limits Standard 2022 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 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.

Graph key:



Predicted onsite renewable energy impact

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 the values in the ABCB Standard 2022: NatHERS heating and cooling load limits for the appropriate climate zone?	☐	☐	☐	☐	☐

*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?		☐	☐	☐	☐
Insulation installation method					
Has the insulation been installed according to the NCC requirements?			☐	☐	☐
Building sealing					
Does the dwelling meet the NCC requirements for Building Sealing?		☐	☐	☐	☐
Whole of Home performance check (not applicable if a Whole of Home performance 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 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?	☐	☐			
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

All lighting devices must NOT penetrate ceiling insulation

Window ID selections may be replaced with those with the same or lower U-Value and SHGC value +/-5%.

Any type of insulation can be replaced with one that have the same R-value.

Colour selections as shown on the plans.

Refer to the V-Star Energy Rating Summary Report for further information.



Room *schedule*

Room	Zone Type	Area [m ²]
Garage	garage	18.4
WC	unconditioned	3.1
Laundry	unconditioned	4.5
Hallway	dayTime	1.4
Entry	dayTime	4.1
Kitchen/Living/Dining	kitchen	43.1
M Bedroom	bedroom	10.3
WIR	dayTime	4.4
Bedroom 2	bedroom	12.8
Bedroom 1	bedroom	13.2
WIR	nightTime	4.8
Foyer	dayTime	11.1
Ensuite	nightTime	8
Bath	dayTime	5.2
Study	nightTime	6.4
Bedroom 3	bedroom	12.1
WIR 3	nightTime	4.4
Rumpus	living	15.2

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
RYL-611-707 A	SG Series Awning Window SG 5Clr	5.78	0.58	0.55	0.61
RYL-312-101 A	AA Series Awning Window DG 4-12Ar-4	3.69	0.51	0.48	0.54
RYL-362-601 A	AA Series Sliding Door DG 4-12Ar-4	3.82	0.61	0.58	0.64

Window and glazed door *schedule*

Location	Window ID	Window no.	Height [mm]	Width [mm]	Window type	Opening %	Orientation	Window shading device*
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*Refer to glossary.



WC	RYL-611-707 A	W09.02	1200	800	awning	90.0	W	No
Laundry	RYL-611-707 A	W9.03	1200	800	awning	90.0	W	No
Entry	RYL-312-101 A	W09.01	2000	440	awning	45.0	W	No
Kitchen/Living/- Dining	RYL-362-601 A	W09.06	2400	2000	sliding	45.0	E	No
Kitchen/Living/- Dining	RYL-362-601 A	W09.05	2400	2000	sliding	45.0	E	No
Kitchen/Living/- Dining	RYL-312-101 A	W09.04	2000	590	awning	45.0	N	No
M Bedroom	RYL-362-601 A	W09.15	2400	2400	sliding	45.0	E	No
WIR	RYL-312-101 A	W09.14	1360	900	awning	90.0	E	No
Bedroom 2	RYL-312-101 A	W09.12	1360	900	awning	23.0	E	No
Bedroom 2	RYL-312-101 A	W09.13	1360	900	awning	23.0	E	No
Bedroom 1	RYL-312-101 A	W09.10	1200	800	awning	26.0	W	No
Bedroom 1	RYL-312-101 A	W09.11	1200	800	awning	26.0	W	No
Foyer	RYL-362-601 A	W09.09	2400	1700	sliding	45.0	W	No
Ensuite	RYL-312-101 A	W09.07	1200	945	awning	90.0	W	No
Ensuite	RYL-312-101 A	W09.08	1200	945	awning	90.0	W	No
Study	RYL-312-101 A	W09.16	900	900	awning	90.0	W	No
WIR 3	RYL-312-101 A	W09.19	900	900	awning	90.0	E	No
Rumpus	RYL-312-101 A	W09.17	800	600	awning	90.0	N	No
Rumpus	RYL-312-101 A	W09.18	800	600	awning	90.0	N	No

Roof window* type and performance value

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 %	Area [m²]	Width [mm]	Orientation	Outdoor shade	Indoor shade
No Data Available								

Skylight* type and performance

Skylight ID	Skylight description	Skylight shaft reflectance
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*Refer to glossary.



No Data Available

Skylight* *schedule*

Location	Skylight ID	Skylight No.	Skylight shaft length [mm]	Area [m²]	Orient-ation	Outdoor shade	Diffuser
No Data Available							

External door *schedule*

Location	Height [mm]	Width [mm]	Opening %	Orientation
Garage	2100	2700	100.0	W
Entry	2100	920	100.0	W

External wall *type*

Wall ID	Wall type	Solar absorptance	Wall shade [colour]	Bulk insulation [R-value]	Reflective wall wrap*
1	Steve - Fibre Cement 0.0	0.5	Medium		No
2	Steve - Brick Cavity	0.5	Medium		No
3	Steve - Fibre Cement 2.5	0.5	Medium	Glass fibre batt: R2.5 (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	1	2800	3030	W	0	Yes
Garage	2	2800	6054	S	0	No
WC	3	2700	1445	W	349	Yes
WC	3	2700	900	S	2157	Yes
Laundry	3	2700	3124	N	378	Yes
Laundry	3	2700	1449	W	370	Yes
Entry	3	2700	1848	W	1258	Yes
Kitchen/Living/Dining	2	2700	3574	S	0	No
Kitchen/Living/Dining	3	2700	5008	E	1031	Yes
Kitchen/Living/Dining	3	2700	1765	N	3476	Yes
Kitchen/Living/Dining	3	2700	3125	E	2796	Yes
Kitchen/Living/Dining	3	2700	5735	N	351	Yes
M Bedroom	3	2450	3275	E	1618	Yes
M Bedroom	2	2450	3273	S	0	No
WIR	3	2450	1647	E	417	No
WIR	3	2450	1202	S	3268	Yes
Bedroom 2	3	2450	3022	E	439	No

*Refer to glossary.



Bedroom 2	3	2450	4221	N	386	No
Bedroom 1	3	2450	4133	N	375	No
Bedroom 1	3	2450	231	W	351	Yes
Bedroom 1	3	2450	435	NW	720	Yes
Bedroom 1	3	2450	2045	W	0	Yes
Bedroom 1	3	2450	476	SW	3907	Yes
Bedroom 1	3	2450	104	W	326	Yes
Bedroom 1	3	2450	1440	S	5083	Yes
WIR	2	2450	1577	S	0	No
Foyer	3	2450	1820	W	1766	Yes
Ensuite	3	2450	3078	W	1773	Yes
Ensuite	2	2450	2587	S	0	No
Bath	3	2450	1704	N	360	No
Study	3	2525	2731	W	0	No
Study	3	2000	845	S	0	Yes
Study	3	2000	1030	N	0	Yes
Bedroom 3	2	2000	3866	S	0	No
WIR 3	3	2000	386	N	264	Yes
WIR 3	3	2000	362	S	419	Yes
WIR 3	3	2525	2684	E	293	No
Rumpus	3	2000	762	N	0	Yes
Rumpus	3	2000	736	E	0	Yes
Rumpus	3	2525	2375	N	0	No
Rumpus	3	2000	760	W	0	Yes
Rumpus	3	2000	776	N	0	Yes

Internal wall type

Wall ID	Wall type	Area [m²]	Bulk insulation
1	Steve - R2.5 Internal Wall	43.8	Glass fibre batt: R2.5 (R2.5)
2	FR5 - Internal Plasterboard Stud Wall	104	
3	Steve - Fibre Cement 2.5	26.3	Glass fibre batt: R2.5 (R2.5)

Floor type

Location	Construction	Area [m²]	Sub-floor ventilation	Added insulation [R-value]	Covering
Garage	COSG - CSOG: Slab on Ground	3.8	Enclosed	R0.0	none
Garage	COSG - CSOG: Slab on Ground	14.5	Enclosed	R0.0	none
WC	COSG - CSOG: Slab on Ground	0.6	Enclosed	R0.0	Tiles



WC	COSG - CSOG: Slab on Ground	0	Enclosed	R0.0	Tiles
WC	COSG - CSOG: Slab on Ground	2.4	Enclosed	R0.0	Tiles
Laundry	COSG - CSOG: Slab on Ground	3.8	Enclosed	R0.0	Tiles
Laundry	COSG - CSOG: Slab on Ground	0.7	Enclosed	R0.0	Tiles
Hallway	COSG - CSOG: Slab on Ground	1.4	Enclosed	R0.0	Timber
Entry	COSG - CSOG: Slab on Ground	1.6	Enclosed	R0.0	Timber
Entry	COSG - CSOG: Slab on Ground	2.4	Enclosed	R0.0	Timber
Kitchen/Living/D-ining	COSG - CSOG: Slab on Ground	0.5	Enclosed	R0.0	Timber
Kitchen/Living/D-ining	COSG - CSOG: Slab on Ground	2	Enclosed	R0.0	Timber
Kitchen/Living/D-ining	COSG - CSOG: Slab on Ground	40.6	Enclosed	R0.0	Timber
M Bedroom	InFloor - Intermediate Floor R2.5	7.8	Enclosed	R2.5	Timber
M Bedroom	InFloor - Intermediate Floor R2.5	2.5	Enclosed	R2.5	Timber
WIR	InFloor - Intermediate Floor R2.5	1.2	Enclosed	R2.5	Timber
WIR	InFloor - Intermediate Floor R2.5	2.6	Enclosed	R2.5	Timber
WIR	InFloor - Intermediate Floor R2.5	0.6	Elevated	R2.5	Timber
Bedroom 2	InFloor - Intermediate Floor R2.5	2.3	Enclosed	R2.5	Timber
Bedroom 2	InFloor - Intermediate Floor R2.5	2.6	Enclosed	R2.5	Timber
Bedroom 2	InFloor - Intermediate Floor R2.5	1.7	Enclosed	R2.5	Timber
Bedroom 2	InFloor - Intermediate Floor R2.5	5.7	Elevated	R2.5	Timber
Bedroom 2	InFloor - Intermediate Floor R2.5	0.6	Elevated	R2.5	Timber
Bedroom 1	InFloor - Intermediate Floor R2.5	2.3	Enclosed	R2.5	Timber
Bedroom 1	InFloor - Intermediate Floor R2.5	8.9	Enclosed	R2.5	Timber
Bedroom 1	InFloor - Intermediate Floor R2.5	2.1	Enclosed	R2.5	Timber



WIR	InFloor - Intermediate Floor R2.5	4.8	Enclosed	R2.5	Timber
Foyer	InFloor - Intermediate Floor R2.5	0.3	Enclosed	R2.5	Timber
Foyer	InFloor - Intermediate Floor R2.5	9.7	Enclosed	R2.5	Timber
Foyer	InFloor - Intermediate Floor R2.5	1.2	Enclosed	R2.5	Timber
Ensuite	InFloor - Intermediate Floor R2.5	2	Enclosed	R2.5	Tiles
Ensuite	InFloor - Intermediate Floor R2.5	5.9	Enclosed	R2.5	Tiles
Bath	InFloor - Intermediate Floor R2.5	1	Enclosed	R2.5	Tiles
Bath	InFloor - Intermediate Floor R2.5	4.2	Enclosed	R2.5	Tiles
Study	InFloor - Intermediate Floor R2.5	4.7	Enclosed	R2.5	Timber
Study	InFloor - Intermediate Floor R2.5	1.7	Elevated	R2.5	Timber
Bedroom 3	InFloor - Intermediate Floor R2.5	12.1	Enclosed	R2.5	Timber
WIR 3	InFloor - Intermediate Floor R2.5	4.4	Enclosed	R2.5	Timber
Rumpus	InFloor - Intermediate Floor R2.5	15.2	Enclosed	R2.5	Timber

Ceiling type

Location	Construction material/type	Bulk insulation R-value [may include edge batt values]	Reflective wrap*
Garage	Plasterboard	R0.0	No
Garage	InFloor - Intermediate Floor R2.5	R2.5	No
WC	Plasterboard	R3.0	Yes
WC	InFloor - Intermediate Floor R2.5	R2.5	No
Laundry	InFloor - Intermediate Floor R2.5	R2.5	No
Laundry	Plasterboard	R3.0	Yes
Hallway	InFloor - Intermediate Floor R2.5	R2.5	No
Entry	Plasterboard	R6.0	No
Entry	InFloor - Intermediate Floor R2.5	R2.5	No
Entry	Plasterboard	R0.0	No

*Refer to glossary.



Kitchen/Living/D-ining	InFloor - Intermediate Floor R2.5	R2.5	No
Kitchen/Living/D-ining	Plasterboard	R6.0	No
Kitchen/Living/D-ining	InFloor - Intermediate Floor R2.5	R2.5	No
M Bedroom	InFloor - Intermediate Floor R2.5	R2.5	No
M Bedroom	Plasterboard	R6.0	Yes
WIR	InFloor - Intermediate Floor R2.5	R2.5	No
WIR	Plasterboard	R6.0	Yes
WIR	Plasterboard	R6.0	Yes
Bedroom 2	InFloor - Intermediate Floor R2.5	R2.5	No
Bedroom 2	Plasterboard	R6.0	Yes
Bedroom 2	Plasterboard	R6.0	Yes
Bedroom 2	Plasterboard	R6.0	Yes
Bedroom 2	Plasterboard	R6.0	Yes
Bedroom 1	Plasterboard	R6.0	Yes
Bedroom 1	Plasterboard	R6.0	Yes
Bedroom 1	InFloor - Intermediate Floor R2.5	R2.5	No
WIR	InFloor - Intermediate Floor R2.5	R2.5	No
Foyer	InFloor - Intermediate Floor R2.5	R2.5	No
Foyer	Plasterboard	R6.0	Yes
Ensuite	Plasterboard	R6.0	Yes
Ensuite	InFloor - Intermediate Floor R2.5	R2.5	No
Bath	Plasterboard	R6.0	Yes
Bath	InFloor - Intermediate Floor R2.5	R2.5	No
Study	Plasterboard	R6.0	No
Study	Plasterboard	R6.0	No
Bedroom 3	Plasterboard	R6.0	No
WIR 3	Plasterboard	R6.0	No
Rumpus	Plasterboard	R6.0	No

Ceiling penetrations*

Location	Quantity	Type	Height [mm]	Width [mm]	Sealed/unsealed
WC	1	Exhaust Fans	250	250	Sealed

*Refer to glossary.



Laundry	1	Exhaust Fans	250	250	Sealed
Kitchen/Living/Dining	1	Exhaust Fans	250	250	Sealed
Ensuite	1	Exhaust Fans	250	250	Sealed
Bath	1	Exhaust Fans	250	250	Sealed

Ceiling fans

Location	Quantity	Diameter [mm]
No Data Available		

Roof type

Construction	Added insulation [R-value]	Solar absorptance	Roof shade [colour]
Framed:Flat - Flat Framed (Metal Deck)	0.0	0.44	Medium
Cont:Attic-Continuous	0.0	0.44	Medium
Ceil: Ceiling	0.0	0.5	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]
No Data Available				

Appliance schedule

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

Note: A flat assumption of 5W/m2 is used for lighting, therefore lighting is not included in the appliance schedule.

Cooling system

Appliance/ system type	Location	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Whole of Home performance assessment conducted for this certificate.				

Heating system

Appliance/ system type	Location	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Whole of Home performance assessment conducted for this certificate.				

Hot water system

Appliance/ system type	Fuel type	Minimum efficiency/ performance	Hot Water CER Zone	Zone 3 STC	Assessed daily load
No Whole of Home performance assessment conducted for this certificate.					

Pool/spa equipment

Appliance/ system type	Fuel type	Minimum efficiency/ performance	Recommended capacity
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No Whole of Home performance assessment conducted for this certificate.

Onsite renewable energy *schedule*

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

System type	Orientation	System size or generation capacity
No Whole of Home performance assessment conducted for this certificate.		

Battery *schedule*

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

System type	Size [battery storage capacity]
No Whole of Home performance assessment conducted for this certificate.	



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 homes 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 homes 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 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 air gap 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.

*Refer to glossary.



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)

Nationwide House Energy Rating Scheme®

NatHERS® Certificate No. 00DECK4M3G

Generated on 28 Oct 2025 using FirstRate5: 5.5.5a (3.22)

Property

Address R10, 67 Elimatta Road & 19A Rowan Street,
Mona Vale, NSW, 2103

Lot/DP 103/-DP709505

NCC Class* Class 1a

Floor/all Floors

Type New Home

Plans

Main plan Rev C 27/10/2025

Prepared by JKM Architects

Construction and environment

Assessed floor area [m²]*

Conditioned* 150.9

Unconditioned* 24.7

Total 175.6

Garage 18.4

Exposure type

suburban

NatHERS climate zone

56 Mascot AMO



Accredited assessor

Name STEPHEN BURGUM

V-Star Energy in association with Ecoplus Consultants

Business name

Email stephen@vstarenergy.com.au

Phone 0421810026

Accreditation No. HERA10245

Assessor Accrediting Organisation

-

Declaration of interest No

NCC Requirements

NCC provisions Volume 2

State/Territory variation Yes

National Construction Code (NCC) requirements

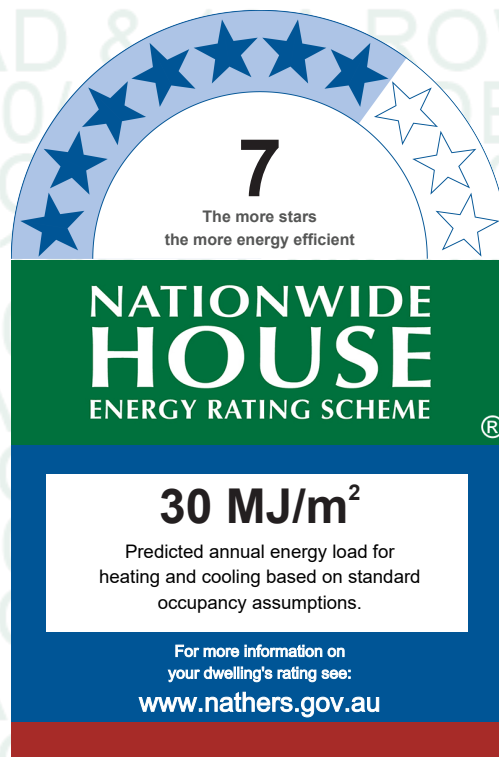
The NCC allows the use of NatHERS accredited software to comply with the energy efficiency requirements for houses (Class 1 buildings) and apartments (Class 2 sole-occupancy units and Class 4 parts of buildings). The applicable requirements for houses are detailed in Specification 42 of NCC Volume Two. For apartments the requirements are detailed in clauses J3D3 and J3D15 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 star rating



Thermal performance [MJ/m²]

Limits taken from ABCB Standard 2022

	Heating	Cooling
Modelled	18.6	11.4
Load limits	N/A	N/A
Features determining load limits		
Floor type (lowest conditioned area)		N/A
NCC climate zone 1 or 2		N/A
Outdoor living area		N/A
Outdoor living area ceiling fan		N/A

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 <https://www.fr5.com.au/QRCodeLandIng?PublicId=00DECK4M3G> When using either link, ensure you are visiting www.fr5.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 & 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 NatHERS heating and cooling load limits Standard 2022 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 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.

Graph key:



Predicted onsite renewable energy impact

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 the values in the ABCB Standard 2022: NatHERS heating and cooling load limits for the appropriate climate zone?	☐	☐	☐	☐	☐

*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?		☐	☐	☐	☐
Insulation installation method					
Has the insulation been installed according to the NCC requirements?			☐	☐	☐
Building sealing					
Does the dwelling meet the NCC requirements for Building Sealing?		☐	☐	☐	☐
Whole of Home performance check (not applicable if a Whole of Home performance 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 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?	☐	☐			
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

All lighting devices must NOT penetrate ceiling insulation

Window ID selections may be replaced with those with the same or lower U-Value and SHGC value +/-5%.

Any type of insulation can be replaced with one that have the same R-value.

Colour selections as shown on the plans.

Refer to the V-Star Energy Rating Summary Report for further information.



Room *schedule*

Room	Zone Type	Area [m²]
Garage	garage	18.4
WC	unconditioned	3
Laundry	unconditioned	3.4
Hallway	dayTime	1.4
Entry	dayTime	4
Kitchen/Living/Dining	kitchen	44.7
Bedroom 2	bedroom	12.9
Bedroom 1	bedroom	11.9
M Bedroom	bedroom	15
WIR	nightTime	7.6
Foyer	dayTime	10.1
Ensuite	nightTime	9.1
Bath	dayTime	5
Study	nightTime	6.3
Bedroom 3	bedroom	12.2
WIR 3	nightTime	4.5
Rumpus	living	15.4

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
RYL-611-707 A	SG Series Awning Window SG 5Clr	5.78	0.58	0.55	0.61
RYL-312-140 A	AA Series Awning Window DG LightBridge_ClrS0_4-12-4	3	0.41	0.39	0.43
RYL-362-640 A	AA Series Sliding Door DG LightBridge_ClrS0_4-12-4	2.97	0.49	0.47	0.51
RYL-312-101 A	AA Series Awning Window DG 4-12Ar-4	3.69	0.51	0.48	0.54

Window and glazed door *schedule*



Location	Window ID	Window no.	Height [mm]	Width [mm]	Window type	Opening %	Orientation	Window shading device*
WC	RYL-611-707 A	W10.02	1200	800	awning	90.0	W	No
Laundry	RYL-611-707 A	W10.03	1200	800	awning	90.0	W	No
Entry	RYL-312-140 A	W010.01	2000	440	awning	45.0	W	No
Kitchen/Living/-Dining	RYL-362-640 A	W10.04	2400	2000	sliding	45.0	E	No
Kitchen/Living/-Dining	RYL-362-640 A	W10.05	2400	2000	sliding	45.0	E	No
Bedroom 2	RYL-312-140 A	W10.12	1360	900	awning	23.0	E	No
Bedroom 2	RYL-312-140 A	W10.13	1360	900	awning	23.0	E	No
Bedroom 2	RYL-312-140 A	W10.14	1360	900	awning	23.0	E	No
Bedroom 1	RYL-362-640 A	W10.06	2400	3000	sliding	45.0	W	No
M Bedroom	RYL-362-640 A	W10.10	2400	3000	sliding	45.0	E	No
M Bedroom	RYL-312-140 A	W10.11	2140	930	awning	45.0	E	No
Foyer	RYL-312-140 A	W10.07	2140	930	awning	45.0	W	No
Ensuite	RYL-312-140 A	W10.09	1200	800	awning	90.0	W	No
Ensuite	RYL-312-140 A	W10.08	1200	800	awning	90.0	W	No
Study	RYL-312-101 A	W10.15	900	900	awning	90.0	W	No
WIR 3	RYL-312-101 A	W10.18	900	900	awning	90.0	E	No
Rumpus	RYL-312-140 A	W10.16	800	600	awning	90.0	S	No
Rumpus	RYL-312-140 A	W10.17	800	600	awning	90.0	S	No

Roof window* type and performance value

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 %	Area [m²]	Width [mm]	Orientation	Outdoor shade	Indoor shade
No Data Available								

Skylight* type and performance

Skylight ID	Skylight description	Skylight shaft reflectance
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No Data Available

Skylight* schedule

Location	Skylight ID	Skylight No.	Skylight shaft length [mm]	Area [m²]	Orient-ation	Outdoor shade	Diffuser
No Data Available							

External door schedule

Location	Height [mm]	Width [mm]	Opening %	Orientation
Garage	2100	2700	100.0	W
Entry	2100	920	100.0	W

External wall type

Wall ID	Wall type	Solar absorptance	Wall shade [colour]	Bulk insulation [R-value]	Reflective wall wrap*
1	Steve - Brick Cavity	0.5	Medium		No
2	Steve - Fibre Cement 0.0	0.5	Medium		No
3	Steve - Fibre Cement 2.5	0.5	Medium	Glass fibre batt: R2.5 (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	1	2900	6054	N	0	No
Garage	2	2900	3030	W	0	Yes
WC	3	2700	893	N	2157	Yes
WC	3	2700	1430	W	387	Yes
Laundry	3	2700	878	W	401	Yes
Laundry	3	2700	3079	S	492	No
Entry	3	2700	1842	W	1302	Yes
Kitchen/Living/Dining	3	2700	5796	S	475	No
Kitchen/Living/Dining	3	2700	3832	E	2935	Yes
Kitchen/Living/Dining	3	2700	1765	S	4743	Yes
Kitchen/Living/Dining	3	2700	5008	E	1170	Yes
Kitchen/Living/Dining	1	2700	3574	N	0	No
Bedroom 2	3	2450	4078	E	427	No
Bedroom 2	3	2450	1043	N	3278	Yes
Bedroom 2	1	2450	2109	N	0	No
Bedroom 2	3	2450	1199	S	5645	Yes
Bedroom 1	1	2450	3852	N	0	No

*Refer to glossary.



Bedroom 1	3	2450	3100	W	1775	Yes
M Bedroom	3	2450	4828	E	1626	Yes
M Bedroom	3	2450	3675	S	470	No
WIR	3	2450	2438	S	482	No
Foyer	3	2450	1329	W	1783	Yes
Ensuite	3	2450	1295	N	4516	Yes
Ensuite	3	2450	260	W	356	Yes
Ensuite	3	2450	403	NW	3749	No
Ensuite	3	2450	2117	W	0	Yes
Ensuite	3	2450	439	SW	753	No
Ensuite	3	2450	192	W	397	Yes
Ensuite	3	2450	2795	S	486	No
Bath	1	2450	1615	N	0	No
Study	3	1800	1030	S	0	Yes
Study	3	1800	845	N	0	Yes
Study	3	2525	2702	W	0	No
Bedroom 3	1	1800	3917	N	0	No
WIR 3	3	2525	2743	E	293	No
WIR 3	3	1800	362	N	306	Yes
WIR 3	3	1800	386	S	306	Yes
Rumpus	3	1800	776	S	0	Yes
Rumpus	3	1800	729	W	0	Yes
Rumpus	3	2525	2401	S	0	No
Rumpus	3	1800	726	E	0	Yes
Rumpus	3	1800	818	S	0	Yes

Internal wall type

Wall ID	Wall type	Area [m²]	Bulk insulation
1	Steve - R2.5 Internal Wall	42.9	Glass fibre batt: R2.5 (R2.5)
2	FR5 - Internal Plasterboard Stud Wall	96.9	
3	Steve - Fibre Cement 2.5	23.7	Glass fibre batt: R2.5 (R2.5)

Floor type

Location	Construction	Area [m²]	Sub-floor ventilation	Added insulation [R-value]	Covering
Garage	COSG - CSOG: Slab on Ground	3.8	Enclosed	R0.0	none
Garage	COSG - CSOG: Slab on Ground	14.5	Enclosed	R0.0	none
WC	COSG - CSOG: Slab on Ground	0.6	Enclosed	R0.0	Tiles

*Refer to glossary.



WC	COSG - CSOG: Slab on Ground	2.4	Enclosed	R0.0	Tiles
Laundry	COSG - CSOG: Slab on Ground	2.9	Enclosed	R0.0	Tiles
Laundry	COSG - CSOG: Slab on Ground	0.5	Enclosed	R0.0	Tiles
Hallway	COSG - CSOG: Slab on Ground	1.4	Enclosed	R0.0	Timber
Entry	COSG - CSOG: Slab on Ground	1.6	Enclosed	R0.0	Timber
Entry	COSG - CSOG: Slab on Ground	2.4	Enclosed	R0.0	Timber
Kitchen/Living/D-ining	COSG - CSOG: Slab on Ground	0.5	Enclosed	R0.0	Timber
Kitchen/Living/D-ining	COSG - CSOG: Slab on Ground	44.2	Enclosed	R0.0	Timber
Bedroom 2	InFloor - Intermediate Floor R2.5	5.5	Enclosed	R2.5	Timber (Mountain ash)
Bedroom 2	InFloor - Intermediate Floor R2.5	6.1	Enclosed	R2.5	Timber (Mountain ash)
Bedroom 2	InFloor - Intermediate Floor R2.5	1.3	Elevated	R2.5	Timber (Mountain ash)
Bedroom 1	InFloor - Intermediate Floor R2.5	2	Enclosed	R2.5	Timber (Mountain ash)
Bedroom 1	InFloor - Intermediate Floor R2.5	9.9	Enclosed	R2.5	Timber (Mountain ash)
M Bedroom	InFloor - Intermediate Floor R2.5	3.9	Enclosed	R2.5	Timber (Mountain ash)
M Bedroom	InFloor - Intermediate Floor R2.5	7.7	Enclosed	R2.5	Timber (Mountain ash)
M Bedroom	InFloor - Intermediate Floor R2.5	3.3	Elevated	R2.5	Timber (Mountain ash)
WIR	InFloor - Intermediate Floor R2.5	4.9	Enclosed	R2.5	Timber (Mountain ash)
WIR	InFloor - Intermediate Floor R2.5	2.7	Enclosed	R2.5	Timber (Mountain ash)
Foyer	InFloor - Intermediate Floor R2.5	8.9	Enclosed	R2.5	Timber (Mountain ash)
Foyer	InFloor - Intermediate Floor R2.5	1.2	Enclosed	R2.5	Timber (Mountain ash)
Ensuite	InFloor - Intermediate Floor R2.5	9.1	Enclosed	R2.5	Tiles
Bath	InFloor - Intermediate Floor R2.5	5	Enclosed	R2.5	Tiles
Study	InFloor - Intermediate Floor R2.5	4.7	Enclosed	R2.5	Timber (Mountain ash)



Study	InFloor - Intermediate Floor R2.5	1.6	Elevated	R2.5	Timber (Mountain ash)
Bedroom 3	InFloor - Intermediate Floor R2.5	12.2	Enclosed	R2.5	Timber (Mountain ash)
WIR 3	InFloor - Intermediate Floor R2.5	4.5	Enclosed	R2.5	Timber (Mountain ash)
Rumpus	InFloor - Intermediate Floor R2.5	15.4	Enclosed	R2.5	Timber (Mountain ash)

Ceiling type

Location	Construction material/type	Bulk insulation R-value [may include edge batt values]	Reflective wrap*
Garage	Plasterboard	R0.0	No
Garage	InFloor - Intermediate Floor R2.5	R2.5	No
WC	Plasterboard	R3.0	Yes
WC	InFloor - Intermediate Floor R2.5	R2.5	No
Laundry	InFloor - Intermediate Floor R2.5	R2.5	No
Hallway	InFloor - Intermediate Floor R2.5	R2.5	No
Entry	Plasterboard	R6.0	No
Entry	InFloor - Intermediate Floor R2.5	R2.5	No
Kitchen/Living/D-ining	InFloor - Intermediate Floor R2.5	R2.5	No
Bedroom 2	InFloor - Intermediate Floor R2.5	R2.5	No
Bedroom 2	InFloor - Intermediate Floor R2.5	R2.5	No
Bedroom 2	Plasterboard	R6.0	Yes
Bedroom 2	Plasterboard	R6.0	Yes
Bedroom 1	Plasterboard	R6.0	Yes
Bedroom 1	InFloor - Intermediate Floor R2.5	R2.5	No
M Bedroom	InFloor - Intermediate Floor R2.5	R2.5	No
M Bedroom	Plasterboard	R6.0	Yes
M Bedroom	Plasterboard	R6.0	Yes
WIR	InFloor - Intermediate Floor R2.5	R2.5	No
WIR	Plasterboard	R6.0	Yes
Foyer	InFloor - Intermediate Floor R2.5	R2.5	No

*Refer to glossary.



Foyer	Plasterboard	R6.0	Yes
Ensuite	Plasterboard	R6.0	Yes
Bath	InFloor - Intermediate Floor R2.5	R2.5	No
Study	Plasterboard	R6.0	No
Study	Plasterboard	R6.0	No
Bedroom 3	Plasterboard	R6.0	No
WIR 3	Plasterboard	R6.0	No
Rumpus	Plasterboard	R6.0	No

Ceiling penetrations*

Location	Quantity	Type	Height [mm]	Width [mm]	Sealed/unsealed
WC	1	Exhaust Fans	250	250	Sealed
Laundry	1	Exhaust Fans	250	250	Sealed
Kitchen/Living/Dining	1	Exhaust Fans	250	250	Sealed
Ensuite	1	Exhaust Fans	250	250	Sealed
Bath	1	Exhaust Fans	250	250	Sealed

Ceiling fans

Location	Quantity	Diameter [mm]
No Data Available		

Roof type

Construction	Added insulation [R-value]	Solar absorptance	Roof shade [colour]
Framed:Flat - Flat Framed (Metal Deck)	0.0	0.44	Medium
Cont:Attic-Continuous	0.0	0.44	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]
No Data Available				

Appliance *schedule*

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

Note: A flat assumption of 5W/m2 is used for lighting, therefore lighting is not included in the appliance schedule.

Cooling system

Appliance/ system type	Location	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Whole of Home performance assessment conducted for this certificate.				

*Refer to glossary.



Heating system

Appliance/ system type	Location	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Whole of Home performance assessment conducted for this certificate.				

Hot water system

Appliance/ system type	Fuel type	Minimum efficiency/ performance	Hot Water CER Zone	Zone 3 STC	Assessed daily load
No Whole of Home performance assessment conducted for this certificate.					

Pool/spa equipment

Appliance/ system type	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Whole of Home performance assessment conducted for this certificate.			

Onsite renewable energy *schedule*

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

System type	Orientation	System size or generation capacity
No Whole of Home performance assessment conducted for this certificate.		

Battery *schedule*

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

System type	Size [battery storage capacity]
No Whole of Home performance assessment conducted for this certificate.	



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 homes 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 homes 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 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 air gap 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.

*Refer to glossary.



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)