

Nationwide House Energy Rating Scheme®

NatHERS® Certificate No. 0009704057

Generated on 22 Aug 2024 using BERS Pro v5.2.2 (3.23)

Property

Address 1294 Summer Hill Road,
Summer Hill , NSW , 2421

Lot/DP Lot 5 DP 727263

NCC class* 1a

Floor/all Floors G of 1 floors

Type New Home

Plans

Main plan 24056 Valley Ref 24027

Prepared by Valley Homes

Construction and environment

Assessed floor area [m2]*	Exposure type
Conditioned* 279.4	Open
Unconditioned* 36.2	NatHERS climate zone
Total 386.8	28 Richmond
Garage 71.2	



Accredited assessor

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Business name EcoRate Australia

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Phone 0249334522

Accreditation No. DMN/17/1819

Assessor Accrediting Organisation

Design Matters National

Declaration of interest Declaration completed: no conflicts

NCC Requirements

NCC provisions Volume Two

State/Territory variation Yes

National Construction Code (NCC) requirements

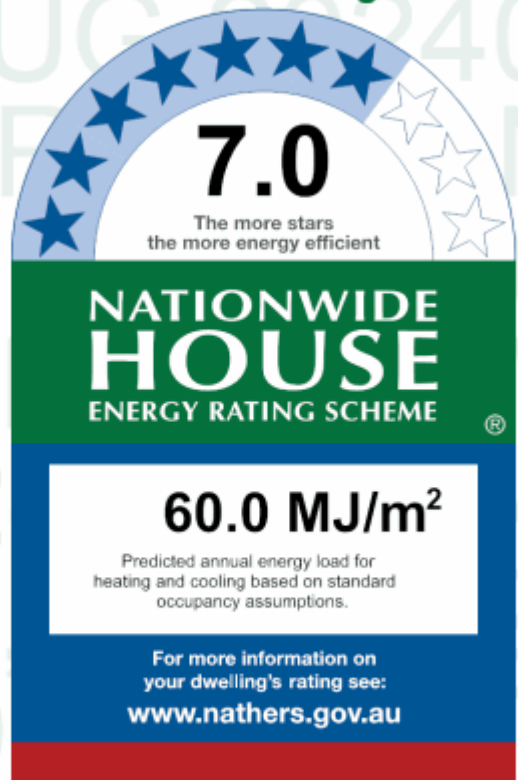
The NCC allows the use of NatHERS accredited software to comply with the energy efficiency requirements for houses (Class 1 buildings) and apartments (Class 2 sole-occupancy units and Class 4 parts of buildings). The applicable requirements for houses are detailed in Specification 42 of NCC Volume Two. 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	52.0	8.0
Load limits	N/A	N/A
Features determining load limits		
Floor Type (lowest conditioned area)		CSOG
NCC climate zone 1 or 2		No
Outdoor living area		No
Outdoor living area ceiling fan		No

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
[hstar.com.au/QR/Generate?](http://hstar.com.au/QR/Generate?p=WJdBrkHj)
[p=WJdBrkHj](http://hstar.com.au/QR/Generate?p=WJdBrkHj) .
When using either link,
ensure you are visiting
hstar.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 *ABC Standard 2022: NatHERS heating and cooling load limits* for details or contact the relevant local building regulating authority, noting that State and Territory variations may also apply.

Setting Options:

Floor Type:

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

NCC Climate Zone 1 or 2:

Yes
No
NA – Not Applicable

Outdoor Living Area:

Yes
No
NA – Not Applicable

Outdoor Living Area Ceiling Fan:

Yes
No
NA – Not Applicable



Predicted onsite renewable energy impact

No Whole of Home performance assessment conducted for this certificate.

Predicted Whole of Home annual impact by appliance

Energy use

No Whole of Home performance assessment conducted for this certificate

Greenhouse gas emissions

No Whole of Home performance assessment conducted for this certificate

Cost

No Whole of Home performance assessment conducted for this certificate



Certificate check

The checklist covers important items impacting the dwelling's ratings. It is recommended that the accuracy of the whole certificate is checked.

Note: The boxes indicate when and by whom each item should be checked. It is not mandatory to complete this checklist.

	Approval Stage		Construction Stage		Occupancy/Other
	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 what is shown	☐	☐	☐	☐	☐



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

Med default selected for external walls as no colour selected.



Room schedule

Room	Zone Type	Area [m ²]
Entry/ Hall	Daytime	16.53
Theatre	Living	28.02
Bed 2	Bedroom	15.24
WIR	Nighttime	3.96
Bed 3	Bedroom	15.12
Bed 3 WIR	Bedroom	3.82
Mud Room	Unconditioned	9.33
Garage	Garage	71.25
Mud Room Ens	Unconditioned	5.81
WC	Unconditioned	2.72
Laundry	Unconditioned	6.89
Bath	Unconditioned	9.01
WIL	Daytime	5.16
Powder	Unconditioned	2.39
Bed 4	Bedroom	13.27
WIR	Nighttime	5.39
Hall	Daytime	17.24
Kitchen/ Living	Kitchen/Living	80.77
Larder	Daytime	6.09
WIP	Daytime	5.95
WIR 1 Master	Nighttime	6.21
Ensuite master	Nighttime	12.53
WIR 2 master	Nighttime	8.6
Master	Bedroom	27.06
Study	Bedroom	13.86

Window and glazed door type and performance

Default windows*

Window ID	Window Description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
ALM-003-03 A	Aluminium A DG Air Fill High Solar Gain low-E -	4.3	0.47	0.45	0.49

* Refer to glossary.



Default windows*

Window ID	Window Description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
ALM-004-03 A	Aluminium B DG Air Fill High Solar Gain low-E -	4.3	0.53	0.50	0.56
ALM-001-03 A	Aluminium A SG High Solar Gain Low-E	5.4	0.49	0.47	0.51
ALM-002-03 A	Aluminium B SG High Solar Gain Low-E	5.4	0.58	0.55	0.61

Custom windows*

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

Window and glazed door schedule

Location	Window ID	Window no.	Height [mm]	Width [mm]	Window type	Opening %	Orientation	Window shading device*
Entry/ Hall	ALM-003-03 A	W26	2400	1200	Casement	90	NW	No
Theatre	ALM-003-03 A	W6	2000	1800	Awning	60	NW	No
Theatre	ALM-003-03 A	W8	2000	1800	Awning	60	NW	No
Bed 2	ALM-003-03 A	W4	1800	900	Awning	60	NW	No
Bed 2	ALM-003-03 A	W5	1800	900	Awning	60	NW	No
Bed 3	ALM-003-03 A	W2	1800	900	Awning	60	NW	No
Bed 3	ALM-003-03 A	W3	1800	900	Awning	60	NW	No
Mud Room Ens	ALM-004-03 A	W25	1200	900	Sliding	45	SE	No
WC	ALM-001-03 A	W24	1200	600	Sliding	45	SE	No
Laundry	ALM-004-03 A	W22	1200	1500	Sliding	45	SE	No
Bath	ALM-004-03 A	W21	1200	2100	Sliding	45	SE	No
Powder	ALM-004-03 A	W23	1200	900	Sliding	45	SE	No
Bed 4	ALM-004-03 A	W20	1200	2100	Sliding	45	SE	No
Kitchen/ Living	ALM-002-03 A	W19	2100	900	Louvre	90	NE	No
Kitchen/ Living	ALM-004-03 A	W18	2400	4300	Sliding	60	SE	No
Kitchen/ Living	ALM-004-03 A	W27	2400	2700	Sliding	60	SW	No
Kitchen/ Living	ALM-004-03 A	W16	2400	3600	Sliding	60	SE	No
Larder	ALM-004-03 A	W15	2100	900	Fixed	00	SE	No

* Refer to glossary.



Location	Window ID	Window no.	Height [mm]	Width [mm]	Window type	Opening %	Orientation	Window shading device*
Ensuite master	ALM-004-03 A	W14	900	2200	Sliding	45	SW	No
Master	ALM-002-03 A	W13	2100	900	Louvre	90	SW	No
Master	ALM-003-03 A	W11	1800	900	Awning	60	NW	No
Master	ALM-003-03 A	W12	1800	900	Awning	60	NW	No
Study	ALM-003-03 A	W9	1800	900	Awning	60	NW	No
Study	ALM-003-03 A	W10	1800	900	Awning	60	NW	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 %	Height [mm]	Width [mm]	Orientation	Outdoor shade	Indoor shade
No Data Available								

Skylight* type and performance

Skylight ID	Skylight description	Skylight shaft reflectance
GEN-04-004a	Double-glazed opal, Steel Frame	0.5

Skylight* schedule

Location	Skylight ID	Skylight No.	Skylight shaft length [mm]	Area [m²]	Orientation	Outdoor shade	Diffuser
Mud Room	GEN-04-004a	S6	500	0.39	NW	None	No
Kitchen/ Living	GEN-04-009a	S1	1500	0.84	NE	None	No
Kitchen/ Living	GEN-04-009a	S2	1500	0.84	NE	None	No
WIR 1 Master	GEN-04-009a	S5	50	0.36	SE	None	No



Location	Skylight ID	Skylight No.	Skylight shaft length [mm]	Area [m ²]	Orientation	Outdoor shade	Diffuser
WIR 2 master	GEN-04-009a	S4	50	0.36	SW	None	No

External door schedule

Location	Height [mm]	Width [mm]	Opening %	Orientation
Garage	2400	5860	90	NW
Garage	2400	820	90	SW
Mud Room Ens	2400	820	90	SE
Laundry	2400	820	90	NE

External wall type

Wall ID	Wall type	Solar absorptance	Wall shade [colour]	Bulk insulation [R-value]	Reflective wall wrap*
EW-1	Fibro Timber Stud Frame Panel on Battens	0.50		Foil, Anti-glare one side + Bulk Insulation R2.7	No
EW-2	Timber Stud Frame Brick Veneer	0.50		Anti-glare foil with bulk no gap R2.7	No
EW-3	Single Skin Brick	0.50		No insulation	No
EW-4	Timber Stud Frame Brick Veneer	0.50		No insulation	No

External wall schedule

Location	Wall ID	Height [mm]	Width [mm]	Orientation	Horizontal shading feature* maximum projection [mm]	Vertical shading feature [yes/no]
Entry/ Hall	EW-1	3000	2490	NW	8500	No
Theatre	EW-1	3000	1000	SW	11200	No
Theatre	EW-1	3000	3300	NW	7500	No
Theatre	EW-1	3001	2750	NW	1650	No
Theatre	EW-1	3000	700	NE	10350	No
Bed 2	EW-2	3000	3890	NW	1800	No
Bed 3	EW-2	3000	3845	NW	1800	Yes
Bed 3	EW-2	3000	3350	NE	550	No
Bed 3 WIR	EW-2	3000	2040	NW	1800	No
Mud Room	EW-1	3000	3690	NW	550	No



Location	Wall ID	Height [mm]	Width [mm]	Orientation	Horizontal shading feature* maximum projection [mm]	Vertical shading feature [yes/no]
Garage	EW-3	3000	8000	NW	550	No
Garage	EW-4	3000	8950	NE	550	No
Garage	EW-4	3000	8000	SE	550	No
Garage	EW-4	3000	1950	SW	0	No
Garage	EW-4	3000	1900	SW	550	No
Mud Room Ens	EW-1	3000	2490	SE	2500	Yes
WC	EW-1	3000	1190	SE	2500	Yes
Laundry	EW-2	3000	1950	NE	12250	No
Laundry	EW-2	3000	2045	SE	550	Yes
Bath	EW-2	3000	2690	SE	550	Yes
Powder	EW-2	3000	1240	SE	550	Yes
Bed 4	EW-2	3000	3790	SE	550	No
Kitchen/ Living	EW-1	3000	3300	NE	550	No
Kitchen/ Living	EW-1	3000	6000	SE	4750	No
Kitchen/ Living	EW-1	3000	3300	SW	5050	No
Kitchen/ Living	EW-1	3000	4545	SE	8050	No
Larder	EW-1	3000	2445	SE	550	Yes
Larder	EW-1	3000	2100	SW	550	No
WIR 1 Master	EW-1	3000	2140	SE	550	No
Ensuite master	EW-1	3000	4245	SE	550	No
Ensuite master	EW-1	3000	2995	SW	600	No
WIR 2 master	EW-1	3000	3245	SW	600	No
WIR 2 master	EW-1	3000	2695	NW	550	No
Master	EW-1	3000	1190	SW	600	No
Master	EW-2	3000	850	SW	3300	No
Master	EW-2	3000	4595	NW	1800	Yes
Study	EW-2	3000	3545	NW	1800	Yes
Study	EW-2	3000	300	NE	18900	No

Internal wall type

Wall ID	Wall type	Area [m ²]	Bulk insulation
IW-001	Timber Stud Frame, Direct Fix Plasterboard	340.80	No insulation
IW-002	Timber Stud Frame, Direct Fix Plasterboard	52.50	Bulk Insulation, No Air Gap R2.7

Floor type

Location	Construction	Area [m ²]	Sub-floor ventilation	Added insulation [R-value]	Covering
Entry/ Hall	Waffle pod slab 300 mm 85mm	16.53	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Theatre	Waffle pod slab 300 mm 85mm	28.02	None	Waffle Pod 300mm	Carpet 10mm
Bed 2	Waffle pod slab 300 mm 85mm	15.24	None	Waffle Pod 300mm	Carpet 10mm
WIR	Waffle pod slab 300 mm 85mm	3.96	None	Waffle Pod 300mm	Carpet 10mm
Bed 3	Waffle pod slab 300 mm 85mm	15.12	None	Waffle Pod 300mm	Carpet 10mm
Bed 3 WIR	Waffle pod slab 300 mm 85mm	3.82	None	Waffle Pod 300mm	Carpet 10mm
Mud Room	Waffle pod slab 300 mm 85mm	9.33	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Garage	Waffle pod slab 300 mm 85mm	71.25	None	Waffle Pod 300mm	Bare
Mud Room Ens	Waffle pod slab 300 mm 85mm	5.81	None	Waffle Pod 300mm	Ceramic Tiles 8mm
WC	Waffle pod slab 300 mm 85mm	2.72	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Laundry	Waffle pod slab 300 mm 85mm	6.89	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Bath	Waffle pod slab 300 mm 85mm	9.01	None	Waffle Pod 300mm	Ceramic Tiles 8mm
WIL	Waffle pod slab 300 mm 85mm	5.16	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Powder	Waffle pod slab 300 mm 85mm	2.39	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Bed 4	Waffle pod slab 300 mm 85mm	13.27	None	Waffle Pod 300mm	Carpet 10mm
WIR	Waffle pod slab 300 mm 85mm	5.39	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Hall	Waffle pod slab 300 mm 85mm	17.24	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Kitchen/ Living	Waffle pod slab 300 mm 85mm	80.77	None	Waffle Pod 300mm	Ceramic Tiles 8mm



Location	Construction	Area [m ²]	Sub-floor ventilation	Added insulation [R-value]	Covering
Larder	Waffle pod slab 300 mm 85mm	6.09	None	Waffle Pod 300mm	Ceramic Tiles 8mm
WIP	Waffle pod slab 300 mm 85mm	5.95	None	Waffle Pod 300mm	Ceramic Tiles 8mm
WIR 1 Master	Waffle pod slab 300 mm 85mm	6.21	None	Waffle Pod 300mm	Carpet 10mm
Ensuite master	Waffle pod slab 300 mm 85mm	12.53	None	Waffle Pod 300mm	Ceramic Tiles 8mm
WIR 2 master	Waffle pod slab 300 mm 85mm	8.60	None	Waffle Pod 300mm	Carpet 10mm
Master	Waffle pod slab 300 mm 85mm	27.06	None	Waffle Pod 300mm	Carpet 10mm
Study	Waffle pod slab 300 mm 85mm	13.86	None	Waffle Pod 300mm	Carpet 10mm

Ceiling type

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap* [yes/no]
Entry/ Hall	Plasterboard on Timber	Bulk Insulation R5	
Theatre	Plasterboard on Timber	Bulk Insulation R5	
Theatre	Plasterboard on Timber	Bulk Insulation R2	
Bed 2	Plasterboard on Timber	Bulk Insulation R5	
Bed 2	Plasterboard on Timber	Bulk Insulation R2	
WIR	Plasterboard on Timber	Bulk Insulation R5	
Bed 3	Plasterboard on Timber	Bulk Insulation R5	
Bed 3	Plasterboard on Timber	Bulk Insulation R2	
Bed 3 WIR	Plasterboard on Timber	Bulk Insulation R5	
Bed 3 WIR	Plasterboard on Timber	Bulk Insulation R2	
Mud Room	Plasterboard on Timber	Bulk Insulation R5	
Mud Room	Plasterboard on Timber	Bulk Insulation R2	
Garage	Plasterboard on Timber	No insulation	
Garage	Plasterboard on Timber	No insulation	
Mud Room Ens	Plasterboard on Timber	Bulk Insulation R5	
WC	Plasterboard on Timber	Bulk Insulation R5	
Laundry	Plasterboard on Timber	Bulk Insulation R5	
Laundry	Plasterboard on Timber	Bulk Insulation R2	



Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap* [yes/no]
Bath	Plasterboard on Timber	Bulk Insulation R5	
Bath	Plasterboard on Timber	Bulk Insulation R2	
WIL	Plasterboard on Timber	Bulk Insulation R5	
Powder	Plasterboard on Timber	Bulk Insulation R5	
Powder	Plasterboard on Timber	Bulk Insulation R2	
Bed 4	Plasterboard on Timber	Bulk Insulation R5	
Bed 4	Plasterboard on Timber	Bulk Insulation R2	
WIR	Plasterboard on Timber	Bulk Insulation R5	
Hall	Plasterboard on Timber	Bulk Insulation R5	
Kitchen/ Living	Plasterboard on Timber	Bulk Insulation R5	
Kitchen/ Living	Plasterboard on Timber	Bulk Insulation R2	
Larder	Plasterboard on Timber	Bulk Insulation R5	
Larder	Plasterboard on Timber	Bulk Insulation R2	
WIP	Plasterboard on Timber	Bulk Insulation R5	
WIR 1 Master	Plasterboard on Timber	Bulk Insulation R5	
WIR 1 Master	Plasterboard on Timber	Bulk Insulation R2	
Ensuite master	Plasterboard on Timber	Bulk Insulation R5	
Ensuite master	Plasterboard on Timber	Bulk Insulation R2	
WIR 2 master	Plasterboard on Timber	Bulk Insulation R5	
WIR 2 master	Plasterboard on Timber	Bulk Insulation R2	
Master	Plasterboard on Timber	Bulk Insulation R5	
Master	Plasterboard on Timber	Bulk Insulation R2	
Master	Plasterboard on Timber	Bulk Insulation R2	
Study	Plasterboard on Timber	Bulk Insulation R5	
Study	Plasterboard on Timber	Bulk Insulation R2	

Ceiling penetrations*

Location	Quantity	Type	Diameter [mm]	Sealed/unsealed
Entry/ Hall	2	Downlights - LED	0	Sealed
Theatre	4	Downlights - LED	0	Sealed
WIR	1	Downlights - LED	0	Sealed
Bed 3 WIR	1	Downlights - LED	0	Sealed



Location	Quantity	Type	Diameter [mm]	Sealed/unsealed
Mud Room	1	Downlights - LED	0	Sealed
Mud Room Ens	1	Downlights - LED	0	Sealed
Mud Room Ens	1	Exhaust Fans	300	Sealed
WC	1	Downlights - LED	0	Unsealed
Laundry	1	Downlights - LED	0	Sealed
Laundry	1	Exhaust Fans	300	Sealed
Bath	1	Downlights - LED	0	Sealed
Bath	1	Exhaust Fans	300	Sealed
WIL	1	Downlights - LED	0	Sealed
Powder	1	Downlights - LED	0	Sealed
WIR	1	Downlights - LED	0	Sealed
Hall	4	Downlights - LED	0	Sealed
Kitchen/ Living	10	Downlights - LED	0	Sealed
Larder	1	Downlights - LED	0	Sealed
WIP	1	Downlights - LED	0	Sealed
WIR 1 Master	1	Downlights - LED	0	Sealed
Ensuite master	2	Downlights - LED	0	Sealed
Ensuite master	1	Exhaust Fans	300	Sealed
WIR 2 master	1	Downlights - LED	0	Sealed

Ceiling fans

Location	Quantity	Diameter [mm]
Bed 2	1	900
Bed 3	1	900
Bed 4	1	900
Kitchen/ Living	1	1200
Master	1	1200
Study	1	900

Roof type

Construction	Added insulation [R-value]	Solar absorptance	Roof shade [colour]
Corrugated Iron Timber Frame	Bulk, Reflective Side Down, No Air Gap Above R1.3	0.67	Dark



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 Data Available				

Heating system

Appliance/ system type	Location	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Data Available				

Hot water system

Appliance/ system type	Fuel type	Hot Water CER Zone	Minimum efficiency /STC	Zone 3 STC	Zone 3 Substitution tolerance ranges		Assessed daily load [litres]
					lower limit	upper limit	
No Data Available							

Pool/spa equipment

Appliance/ system type	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Data Available			

Onsite Renewable Energy *Schedule*

System Type	Orientation	System Size Or Generation Capacity
No Data Available		



Battery Schedule

System Type	Size [Battery Storage Capacity]
No Data Available	



Explanatory notes

About this report

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

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

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

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

Accredited assessors

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

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

are not quality assured.

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

Disclaimer

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

The predicted annual energy load, cost and greenhouse gas emissions in this NatHERS Certificate are an estimate based on an assessment of the dwelling's design by the assessor. It is not a prediction of actual energy use, cost or emissions. The information and ratings may be used to compare how other dwellings are likely to perform when used in a similar way.

Information presented in this report relies on a range of standard assumptions (both embedded in NatHERS accredited software and made by the assessor who prepared this report), including assumptions about occupancy, behaviour, appliance performance, indoor air temperature and local climate.

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

Glossary

AFRC	Australian Fenestration Rating Council
Annual energy load	the predicted amount of energy required for heating and cooling, based on standard occupancy assumptions.
Assessed floor area	the floor area modelled in the software for the purpose of the NatHERS assessment. Note, this may not be consistent with the floor area in the design documents.
Ceiling penetrations	features that require a penetration to the ceiling, including downlights, vents, exhaust fans, 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.
COP	Coefficient of performance
Conditioned	a zone within a dwelling that is expected to require heating and cooling based on standard occupancy assumptions. In some circumstances it will include garages.
Custom windows	windows listed in NatHERS software that are available on the market in Australia and have a WERS (Window Energy Rating Scheme) rating.
Default windows	windows that are representative of a specific type of window product and whose properties have been derived by statistical methods.
EER	Energy Efficiency Ratio, measure of how much cooling can be achieved by an air conditioner for a single kWh of electricity input
Energy use	This is your home's rating without solar or batteries.
Energy value	The net cost to society including, but not limited to, costs to the building user, the environment and energy networks (as defined in the ABCB Housing Provisions Standard).
Entrance door	these signify ventilation benefits in the modelling software and must not be modelled as a door when opening to a minimally ventilated corridor in a Class 2 building.
Exposure	see exposure categories below.
Exposure category – exposed	terrain with no obstructions e.g. flat grazing land, ocean-frontage, desert, exposed high-rise unit (usually above 10 floors).
Exposure category – open	terrain with few obstructions at a similar height e.g. grasslands with few well scattered obstructions below 10m, farmland with scattered sheds, lightly vegetated bush blocks, elevated units (e.g. above 3 floors).
Exposure category – protected	terrain with numerous, closely spaced obstructions below 10m e.g. suburban housing, heavily vegetated bushland areas.
Exposure category – suburban	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 operability percentage or operable (moveable) area of doors or windows that is used in ventilation calculations.
Provisional value	an assumed value that does not represent an actual value. For example, if the wall colour is unspecified in the documentation, a provisional value of 'medium' must be modelled. Acceptable provisional values are outlined in the NatHERS Technical Note and can be found at www.nathers.gov.au
Recommended capacity	this is the capacity or size of equipment that is recommended by NatHERS to achieve the desired comfort conditions in the zone or zones serviced. This is a recommendation and the final selection sizing should be confirmed by a suitably qualified person.
Reflective wrap (also known as foil)	can be applied to walls, roofs and ceilings. When combined with an appropriate airgap and emissivity value, it provides insulative properties.
Roof window	for NatHERS this is typically an operable window (i.e. can be opened), will have a plaster or similar light well if there is an attic space, and generally does not have a diffuser.
Shading features	includes neighbouring buildings, fences, and wing walls, but excludes eaves.
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.
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.
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 Regulator (CER)
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 or continuous thermal breaks such as polystyrene insulation sheathing or plastic strips
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	device fixed to windows that provides shading e.g. window awnings or screens but excludes horizontal* or vertical shading features* (eg eaves and balconies)

* Refer to glossary.