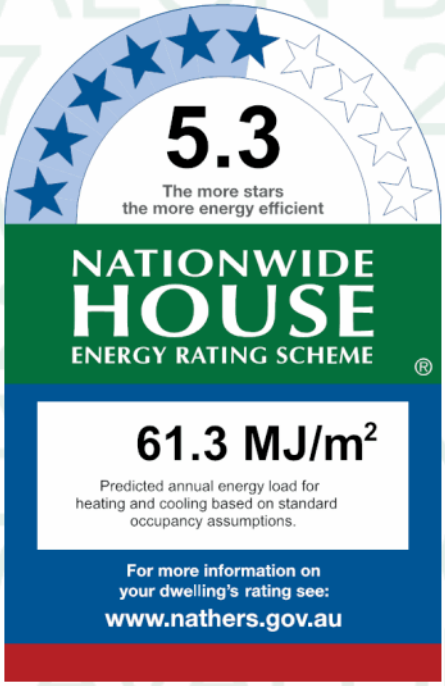
Nationwide House Energy Rating Scheme
NatHERS Certificate No. 0009760042-01

Generated on 27 Aug 2025 using BERS Pro v4.4.1.5 (3.21)



Property

Address	31 Marine Parade, Avalon Beach , NSW , 2107
Lot/DP	1/1263133
NCC Class*	1A
Type	New Dwelling

Plans

Main plan	Job For Timbrell Parker, Revision H, Dated 20/8/2025, Sheets 1-13
Prepared by	rama

Construction and environment

Assessed floor area (m^2)*

Conditioned*	198.0
Unconditioned*	15.0
Total	213.0
Garage	0.0

Exposure type

Exposed

NatHERS climate zone

56

Thermal performance

Heating	Cooling
43.0	18.3
MJ/m^2	MJ/m^2

About the rating

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

Accredited assessor

Name	Scott Douglass
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Accreditation No.	13/1547

Assessor Accrediting Organisation

Design Matters National

Declaration of interest None

Verification

To verify this certificate, scan the QR code or visit hstar.com.au/QR/Generate?p=enIpGQYEz.
When using either link, ensure you are visiting hstar.com.au

National Construction Code (NCC) requirements

The NCC's requirements for NatHERS-rated houses are detailed in 3.12.0(a)(i) and 3.12.5 of the NCC Volume Two. For apartments the requirements are detailed in J0.2 and J5 to J8 of the NCC Volume One.

In NCC 2019, these requirements include minimum star ratings and separate heating and cooling load limits that need to be met by buildings and apartments through the NatHERS assessment. Requirements additional to the NatHERS assessment that must also be satisfied include, but are not limited to: insulation installation methods, thermal breaks, building sealing, water heating and pumping, and artificial lighting requirements. The NCC and NatHERS Heating and Cooling Load Limits (Australian Building Codes Board Standard) are available at www.abcb.gov.au.

State and territory variations and additions to the NCC may also apply.

* Refer to glossary

Certificate check

Ensure the dwelling is designed and then built as per the NatHERS Certificate. While you need to check the accuracy of the whole Certificate, the following spot check covers some important items impacting the dwelling's rating.

Genuine certificate

Does this Certificate match the one available at the web address or QR code in the verification box on the front page? Does the set of NatHERS-stamped plans for the dwelling have a Certificate number on the stamp that matches this Certificate?

Ceiling penetrations*

Does the 'number' and 'type' of ceiling penetrations (e.g. downlights, exhaust fans, etc) shown on the stamped plans or installed, match what is shown in this Certificate?

Windows

Does the installed window meet the substitution tolerances (SHGC and U-value) and window type, of the window shown on this Certificate? Substituted values must be based on the Australian Fenestration Rating Council (AFRC) protocol.

Apartment entrance doors

Does the 'External Door Schedule' show apartment entrance doors? Please note that an "external door" between the modelled dwelling and a shared space, such as an enclosed corridor or foyer, should not be included in the assessment (because it overstates the possible ventilation) and would invalidate the Certificate.

Exposure*

Has the appropriate exposure level (terrain) been applied? For example, it is unlikely that a ground-floor apartment is "exposed" or a top floor high-rise apartment is "protected".

Provisional* values

Have provisional values been used in the assessment and, if so, noted in "additional notes" below?

Additional notes

I have modeled the shading in accordance with NatHERS principles

Window and glazed door *type and performance*

Default* windows

Window ID	Window Description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
TIM-002-01 W	TIM-002-01 W Timber B SG Clear	5.4	0.63	0.60	0.66
TIM-001-01 W	TIM-001-01 W Timber A SG Clear	5.4	0.56	0.53	0.59

Custom* windows

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

Window and glazed door *schedule*

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orientation	Window shading device*
Kitchen/Living	TIM-002-01 W	n/a	800	1500	n/a	00	E	No
Kitchen/Living	TIM-001-01 W	n/a	800	2200	n/a	60	E	No
Kitchen/Living	TIM-001-01 W	n/a	800	2200	n/a	60	E	No
Kitchen/Living	TIM-001-01 W	n/a	2150	7300	n/a	90	S	Yes
Kitchen/Living	TIM-001-01 W	n/a	800	3600	n/a	90	W	No
Kitchen/Living	TIM-001-01 W	n/a	800	3600	n/a	90	W	No
Pantry	TIM-001-01 W	n/a	1200	600	n/a	90	W	No
Hall/stairs	TIM-001-01 W	n/a	1200	1200	n/a	90	E	No
Hall/stairs	TIM-001-01 W	n/a	1200	1500	n/a	60	S	No
Hall/stairs	TIM-002-01 W	n/a	1200	300	n/a	00	N	No
Hall/stairs	TIM-001-01 W	n/a	2100	820	n/a	90	N	No
Master	TIM-001-01 W	n/a	1200	1500	n/a	50	S	No
Master	TIM-001-01 W	n/a	1200	1500	n/a	60	W	No
Master	TIM-001-01 W	n/a	1200	1500	n/a	60	W	No
Wir	TIM-001-01 W	n/a	1200	1200	n/a	90	W	No
Ens	TIM-001-01 W	n/a	1200	2400	n/a	60	W	No
Lounge	TIM-001-01 W	n/a	1200	3200	n/a	90	N	No
Bed 2	TIM-001-01 W	n/a	1200	2900	n/a	90	N	No
Bathroom	TIM-001-01 W	n/a	1200	2100	n/a	60	E	No
Laundry	TIM-001-01 W	n/a	2100	820	n/a	90	E	No
Bed 3	TIM-001-01 W	n/a	1200	1800	n/a	60	E	No

Roof window *type and performance*

Default* roof windows

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

Custom* roof windows

Window ID	Window Description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
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
GEN-04-008a	Double-glazed clear, Timber and Aluminium Frame

Skylight *schedule*

Location	Skylight ID	Skylight No.	Skylight shaft length (mm)	Area (m^2)	Orientation	Outdoor shade	Diffuser	Skylight shaft reflectance
Kitchen/Living	GEN-04-008a	n/a	300	1.80	W	None	No	0.50
Kitchen/Living	GEN-04-008a	n/a	300	1.80	W	None	No	0.50
Kitchen/Living	GEN-04-008a	n/a	300	1.80	W	None	No	0.50
Kitchen/Living	GEN-04-008a	n/a	300	3.60	S	None	No	0.50
Kitchen/Living	GEN-04-008a	n/a	300	3.60	S	None	No	0.50
Hall/stairs	GEN-04-008a	n/a	1700	3.20	E	None	No	0.50
Hall/stairs	GEN-04-008a	n/a	1700	3.20	W	None	No	0.50
Ens	GEN-04-008a	n/a	650	1.20	W	None	No	0.50
Ens	GEN-04-008a	n/a	650	1.20	W	None	No	0.50
Ens	GEN-04-008a	n/a	650	1.20	W	None	No	0.50
Bathroom	GEN-04-008a	n/a	650	1.20	E	None	No	0.50
Bathroom	GEN-04-008a	n/a	650	1.20	E	None	No	0.50
Bathroom	GEN-04-008a	n/a	650	1.20	E	None	No	0.50

External door *schedule*

Location	Height (mm)	Width (mm)	Opening %	Orientation
No Data Available				

External wall *type*

Wall ID	Wall type	Solar absorptance	Wall shade (colour)	Bulk insulation (R-value)	Reflective wall wrap*
EW-1	Fibro Cavity Panel Direct Fix	0.85	Dark	Bulk Insulation R2.5	No
EW-2	Concrete block, lined	0.50	Medium	Bulk Insulation R2.5	No

External wall *schedule*

Location	Wall ID	Height (mm)	Width (mm)	Orientation	Horizontal shading feature* maximum projection (mm)	Vertical shading feature (yes/no)
Kitchen/Living	EW-1	2500	2800	E	550	NO
Kitchen/Living	EW-1	2800	8200	E	550	NO
Kitchen/Living	EW-1	2800	9200	S	550	NO
Kitchen/Living	EW-1	2800	8200	W	550	NO
Kitchen/Living	EW-1	2500	495	W	550	NO
Kitchen/Living	EW-2	2500	5195	N	0	NO
Pantry	EW-1	2500	2295	W	550	NO
Pantry	EW-2	2500	3995	N	0	NO
Hall/stairs	EW-1	2550	1195	E	550	NO
Hall/stairs	EW-1	2550	5195	S	550	NO
Hall/stairs	EW-1	2550	1190	N	2750	NO
Master	EW-1	2550	3995	S	550	NO
Master	EW-1	2550	4395	W	550	NO
Wir	EW-1	2550	2290	W	550	NO
Ens	EW-1	2550	2490	W	550	NO
Lounge	EW-1	2550	3995	W	550	NO
Lounge	EW-1	2550	3995	N	2750	NO
Bed 2	EW-1	2550	3995	N	2750	NO

* Refer to glossary.
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Location	Wall ID	Height (mm)	Width (mm)	Orientation	Horizontal shading feature* maximum projection (mm)	Vertical shading feature (yes/no)
Bed 2	EW-1	2550	3895	E	550	NO
Bathroom	EW-1	2550	2290	E	550	NO
Laundry	EW-1	2550	1790	E	550	NO
Bed 3	EW-1	2550	3990	E	550	NO

Internal wall *type*

Wall ID	Wall type	Area (m^2)	Bulk insulation
IW-1 - Cavity wall, direct fix plasterboard, single gap		114.00	No insulation
IW-2 - Cavity wall, direct fix plasterboard, single gap		41.00	Bulk Insulation, No Air Gap R2

Floor *type*

Location	Construction	Area (m^2)	Sub-floor ventilation	Added insulation (R-value)	Covering
Kitchen/Living	Concrete Slab on Ground 100mm	91.70	None	Bulk Insulation in Contact with Floor R2	60/40 Carpet 10mm/Ceramic
Pantry	Concrete Slab on Ground 100mm	8.90	None	Bulk Insulation in Contact with Floor R2	Ceramic Tiles 8mm
Hall/stairs/Kitchen/Living	Timber Above Plasterboard 19mm	7.60		Bulk Insulation R5	Carpet+Rubber Underlay 18mm
Hall/stairs	Suspended Timber Floor 19mm	11.70	Enclosed	Bulk Insulation in Contact with Floor R5	Carpet+Rubber Underlay 18mm
Master/Kitchen/Living	Timber Above Plasterboard 19mm	1.90		Bulk Insulation R5	Carpet+Rubber Underlay 18mm
Master/Pantry	Timber Above Plasterboard 19mm	8.90		Bulk Insulation R5	Carpet+Rubber Underlay 18mm
Master	Suspended Timber Floor 19mm	8.40	Enclosed	Bulk Insulation in Contact with Floor R5	Carpet+Rubber Underlay 18mm
Wir	Suspended Timber Floor 19mm	6.50	Enclosed	Bulk Insulation in Contact with Floor R5	Carpet+Rubber Underlay 18mm
Ens	Suspended Timber Floor 19mm	9.50	Enclosed	Bulk Insulation in Contact with Floor R5	Ceramic Tiles 8mm
Lounge	Suspended Timber Floor 19mm	15.60	Enclosed	Bulk Insulation in Contact with Floor R5	Carpet+Rubber Underlay 18mm
Bed 2	Suspended Timber Floor 19mm	15.20	Enclosed	Bulk Insulation in Contact with Floor R5	Carpet+Rubber Underlay 18mm
Bathroom	Suspended Timber Floor 19mm	8.70	Enclosed	Bulk Insulation in Contact with Floor R5	Ceramic Tiles 8mm

Location	Construction	Area (m^2)	Sub-floor ventilation	Added insulation (R-value)	Covering
Laundry	Suspended Timber Floor 19mm	6.80	Enclosed	Bulk Insulation in Contact with Floor R5	Ceramic Tiles 8mm
Bed 3/Kitchen/Living	Timber Above Plasterboard 19mm	6.20		Bulk Insulation R5	Carpet+Rubber Underlay 18mm
Bed 3	Suspended Timber Floor 19mm	9.30	Enclosed	Bulk Insulation in Contact with Floor R5	Carpet+Rubber Underlay 18mm

Ceiling *type*

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap*
Kitchen/Living	Plasterboard	Bulk Insulation R5	No
Kitchen/Living	Timber Above Plasterboard	Bulk Insulation R5	No
Pantry	Plasterboard	Bulk Insulation R5	No
Pantry	Timber Above Plasterboard	Bulk Insulation R5	No
Hall/stairs	Plasterboard	Bulk Insulation R5	No
Master	Plasterboard	Bulk Insulation R5	No
Wir	Plasterboard	Bulk Insulation R5	No
Ens	Plasterboard	Bulk Insulation R5	No
Lounge	Plasterboard	Bulk Insulation R5	No
Bed 2	Plasterboard	Bulk Insulation R5	No
Bathroom	Plasterboard	Bulk Insulation R5	No
Laundry	Plasterboard	Bulk Insulation R5	No
Bed 3	Plasterboard	Bulk Insulation R5	No

Ceiling *penetrations**

Location	Quantity	Type	Diameter (mm)	Sealed/unsealed
Kitchen/Living	37	Downlights - LED	0	Sealed
Kitchen/Living	2	Exhaust Fans	200	Sealed
Pantry	4	Downlights - LED	0	Sealed
Hall/stairs	6	Downlights - LED	0	Sealed
Master	8	Downlights - LED	0	Sealed

Location	Quantity	Type	Diameter (mm)	Sealed/unsealed
Wir	3	Downlights - LED	0	Sealed
Ens	2	Downlights - LED	0	Sealed
Ens	1	Exhaust Fans	300	Sealed
Lounge	6	Downlights - LED	0	Sealed
Bed 2	6	Downlights - LED	0	Sealed
Bathroom	2	Downlights - LED	0	Sealed
Bathroom	1	Exhaust Fans	300	Sealed
Laundry	3	Downlights - LED	0	Sealed
Bed 3	6	Downlights - LED	0	Sealed

Ceiling *fans*

Location	Quantity	Diameter (mm)
No Data Available		

Roof *type*

Construction	Added insulation (R-value)	Solar absorptance	Roof shade
Roof Tiles	Foil, Gap Above, Reflective Side Down, Anti-glare Up	0.85	Dark

Explanatory notes

About this report

A NatHERS rating is a comprehensive, dynamic computer modelling evaluation of a home, using the floorplans, elevations and specifications to estimate an energy load. It addresses the building layout, orientation and fabric (i.e. walls, windows, floors, roofs and ceilings), but does not cover the water or energy use of appliances or energy production of solar panels.

Ratings are based on a unique climate zone where the home is located and are generated using standard assumptions, including occupancy patterns and thermostat settings. The actual energy consumption of a home may vary significantly from the predicted energy load, as the assumptions used in the rating will not match actual usage patterns. For example, the number of occupants and personal heating or cooling preferences will vary.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparing different dwelling designs and to demonstrate that the design meets the energy efficiency requirements in the National Construction Code. Homes that are energy efficient use less energy, are warmer on cool days, cooler on hot days and cost less to run. The higher the star rating the more thermally efficient the dwelling is.

Accredited assessors

To ensure the NatHERS Certificate is of a high quality, always use an accredited or licenced assessor. NatHERS accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

Australian Capital Territory (ACT) licensed assessors may only produce assessments for regulatory purposes using software for which they have a licence endorsement. Licence endorsements can be confirmed on the ACT licensing register

AAOs have specific quality assurance processes in place, and continuing professional development requirements, to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any ongoing training requirements.

Any questions or concerns about this report should be directed to the assessor in the first instance. If the assessor is unable to address these questions or concerns, the AAO specified on the front of this certificate should be contacted.

Disclaimer

The format of the NatHERS Certificate was developed by the NatHERS Administrator. However the content of each individual certificate is entered and created by the assessor to create a NatHERS Certificate. It is the responsibility of the assessor who prepared this certificate to use NatHERS accredited software correctly and follow the NatHERS Technical Notes to produce a NatHERS Certificate.

The predicted annual energy load in this NatHERS Certificate is an estimate based on an assessment of the building by the assessor. It is not a prediction of actual energy use, but may be used to compare how other buildings are likely to perform when used in a similar way.

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

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

Glossary

Annual energy load	the predicted amount of energy required for heating and cooling, based on standard occupancy assumptions.
Assessed floor area	the floor area modelled in the software for the purpose of the NatHERS assessment. Note, this may not be consistent with the floor area in the design documents.
Ceiling penetrations	features that require a penetration to the ceiling, including downlights, vents, exhaust fans, rangehoods, chimneys and flues. Excludes fixtures attached to the ceiling with small holes through the ceiling for wiring, e.g. ceiling fans; pendant lights, and heating and cooling ducts.
Conditioned	a zone within a dwelling that is expected to require heating and cooling based on standard occupancy assumptions. In some circumstances it will include garages.
Custom windows	windows listed in NatHERS software that are available on the market in Australia and have a WERS (Window Energy Rating Scheme) rating.
Default windows	windows that are representative of a specific type of window product and whose properties have been derived by statistical methods.
Entrance door	these signify ventilation benefits in the modelling software and must not be modelled as a door when opening to a minimally ventilated corridor in a Class 2 building.
Exposure category – exposed	terrain with no obstructions e.g. flat grazing land, ocean-frontage, desert, exposed high-rise unit (usually above 10 floors).
Exposure category – open	terrain with few obstructions at a similar height e.g. grasslands with few well scattered obstructions below 10m, farmland with scattered sheds, lightly vegetated bush blocks, elevated units (e.g. above 3 floors).
Exposure category – suburban	terrain with numerous, closely spaced obstructions below 10m e.g. suburban housing, heavily vegetated bushland areas.
Exposure category – protected	terrain with numerous, closely spaced obstructions over 10 m e.g. city and industrial areas.
Horizontal shading feature	provides shading to the building in the horizontal plane, e.g. eaves, verandahs, pergolas, carports, or overhangs or balconies from upper levels.
National Construction Code (NCC) Class	the NCC groups buildings by their function and use, and assigns a classification code. NatHERS software models NCC Class 1, 2 or 4 buildings and attached Class 10a buildings. Definitions can be found at www.abcb.gov.au.
Opening percentage	the openability percentage or operable (moveable) area of doors or windows that is used in ventilation calculations.
Provisional value	an assumed value that does not represent an actual value. For example, if the wall colour is unspecified in the documentation, a provisional value of 'medium' must be modelled. Acceptable provisional values are outlined in the NatHERS Technical Note and can be found at www.nathers.gov.au
Reflective wrap (also known as foil)	can be applied to walls, roofs and ceilings. When combined with an appropriate airgap and emissivity value, it provides insulative properties.
Roof window	for NatHERS this is typically an operable window (i.e. can be opened), will have a plaster or similar light well if there is an attic space, and generally does not have a diffuser.
Shading device	a device fixed to windows that provides shading e.g. window awnings or screens but excludes eaves.
Shading features	includes neighbouring buildings, fences, and wing walls, but excludes eaves.
Solar heat gain coefficient (SHGC)	the fraction of incident solar radiation admitted through a window, both directly transmitted as well as absorbed and subsequently released inward. SHGC is expressed as a number between 0 and 1. The lower a window's SHGC, the less solar heat it transmits.
Skylight (also known as roof lights)	for NatHERS this is typically a moulded unit with flexible reflective tubing (light well) and a diffuser at ceiling level.
U-value	the rate of heat transfer through a window. The lower the U-value, the better the insulating ability.
Unconditioned	a zone within a dwelling that is assumed to not require heating and cooling based on standard occupancy assumptions.
Vertical shading features	provides shading to the building in the vertical plane and can be parallel or perpendicular to the subject wall/window. Includes privacy screens, other walls in the building (wing walls), fences, other buildings, vegetation (protected or listed heritage trees).