

Nationwide House Energy Rating Scheme* Certificate

Certificate number: 0004335089

Certificate Date: 05 Nov 2019

★ Star rating: 4.7



Assessor details

Accreditation number: **VIC/BDAV/12/1457**
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Declaration of interest: **No potential conflicts of interest to declare**
Software: **AccuRate Sustainability V2.3.3.13 SP4**
AAO: **BDAV**

Overview

Dwelling details

Street: **Unit MAIN, 12B John Street**
Suburb: **Avalon**
State: **NSW** Postcode: **2107**
Type: **New** NCC Class: **1a**
NatHERS climate zone: **56**
Lot/DP number: **Lot 2 DP 1237357** Exposure: **Suburban**

Key construction and insulation materials

(see following pages for details)

Construction: **Fibre-cement wall**
Metal roof/Plasterboard
Timber
Insulation: **R2.5 wall insulation**
Ceiling (uninsulated)
R2.0 floor insulation
Glazing: **Aluminium B DG Air Fill Low Solar**
Gain low-E

Net floor area (m²)

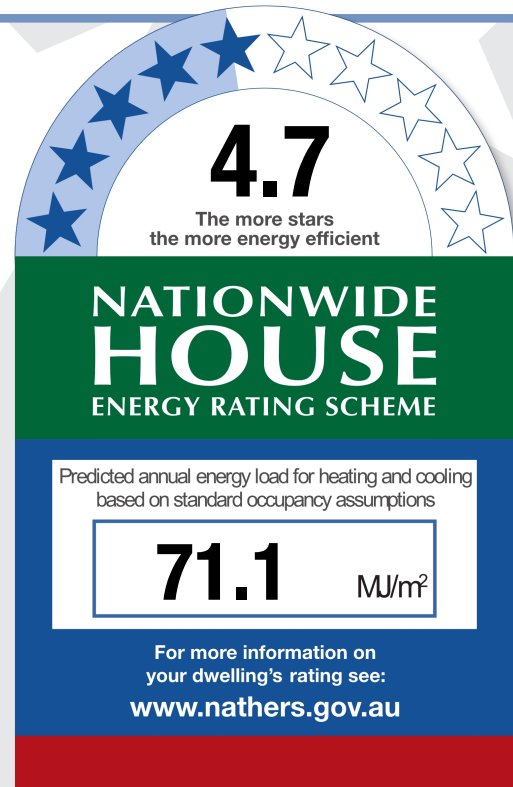
Conditioned: **207.3**
Unconditioned: **16.7**
Garage:
TOTAL: **224.0**

Annual thermal performance loads (MJ/m²)

Heating: **45.7**
Cooling: **25.4**
TOTAL: **71.1**

Plan documents

Plan ref/date: **142/19.9.19**
Prepared by: **THW Architects**



Ceiling penetrations

(see following pages for details)

Sealed: **61**
Unsealed: **0**
TOTAL:** **61**

NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. **If this number is exceeded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

Principle downlight type: **Light-emitting diode (LED)**

Window selection - default windows only

Note on allowable window values: With a 10% tolerance to the nominated SHGC window values shown on page 2, the following ratings are achieved:

-10% SHGC **4.7**

+10% SHGC **4.7**

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If the rating listed above falls below 6.0 stars or the required rating, then the window with this tolerance can NOT be selected.

Scan to access this certificate online and confirm this is valid.



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Building features

Window type and performance value

Window ID	Window type	U-value	SHGC
ALM-002-01 A	DEFAULTS: Aluminium B SG Clear	6.7	0.70
ALM-004-04 A	DEFAULTS: Aluminium B DG Air Fill Low Solar Gain low-E -Clear	4.9	0.33

Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Kitchen/Living	ALM-004-04 A	D5	2700	4625	NW	Miniature louvres
Kitchen/Living	ALM-004-04 A	D4	2700	4625	NW	Miniature louvres
Kitchen/Living	ALM-004-04 A	D3	2700	5500	NE	Miniature louvres
Kitchen/Living	ALM-004-04 A	W5	700	1700	SE	None
Kitchen/Living	ALM-004-04 A	W6	700	3700	SE	None
Bed 3	ALM-002-01 A	W3	1200	2400	SE	None
Bath	ALM-002-01 A	W9	2700	600	NW	None
Bed 2	ALM-002-01 A	W2	1200	2400	SE	None
Bed 2	ALM-002-01 A	W1	800	2000	SW	None
Bed 4	ALM-002-01 A	W4	1200	2400	SE	None
Entry/Stairwell	ALM-004-04 A	W8	2700	2200	NW	Miniature louvres
Bed 1	ALM-004-04 A	W12	1200	2400	SE	None
Bed 1	ALM-004-04 A	W11	800	2000	SW	None
Bath (Upper)	ALM-002-01 A	W18	2700	600	NW	None
Master Bed	ALM-004-04 A	D6	2700	4600	NE	None
Ens (Master Bed)	ALM-004-04 A	W14	2700	600	SE	None
Ens (Master Bed)	ALM-004-04 A	W15	1200	2000	NE	None
Ens (Master Bed)	ALM-004-04 A	W16	2700	600	NW	None
Upper Landing	ALM-004-04 A	W10	800	1500	SW	None
WIR	ALM-004-04 A	W13	2700	600	SE	None
Lounge	ALM-004-04 A	W7	2700	2915	NE	Miniature louvres

Roof window and skylight type and performance value

ID	Window type	U-value	SHGC
None Present			

Roof window and skylight schedule

Location	ID	Roof window/skylight no.	Area (m²)	Orientation	Outdoor shade	Indoor shade/diffuser
None Present						

External wall type

ID	Wall type	Insulation	Wall wrap or foil
EW-001	Fibre-cement sheet/Plasterboard	Glass fibre batt: R2.5	Yes
EW-002	Fibre-cement sheet		No

External wall schedule

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Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Kitchen/Living	EW-001	8400	2700	NW	Yes	600
Kitchen/Living	EW-001	4626	2700	NW	Yes	600
Kitchen/Living	EW-001	5500	2700	NE	Yes	600
Kitchen/Living	EW-001	13000	2700	SE	No	
Bed 3	EW-001	3000	2700	SE	No	
Bath	EW-001	1800	2700	NW	No	
Bath	EW-001	3000	2700	SW	No	
Bed 2	EW-001	3000	2700	SE	No	
Bed 2	EW-001	3900	2700	SW	No	
Bed 4	EW-001	3000	2700	SE	No	
Entry/Stairwell	EW-001	1500	2700	SW	No	
Entry/Stairwell	EW-001	2201	2700	NW	No	
Bed 1	EW-001	4100	2700	SE	No	
Bed 1	EW-001	3900	2700	SW	Yes	500
Bath (Upper)	EW-001	3000	2700	SW	Yes	500
Bath (Upper)	EW-001	1800	2700	NW	No	
Master Bed	EW-001	4020	2700	NW	No	
Master Bed	EW-001	4600	2700	NE	Yes	1700
Ens (Master Bed)	EW-001	2680	2700	SE	No	
Ens (Master Bed)	EW-001	3900	2700	NE	Yes	650
Ens (Master Bed)	EW-001	800	2700	NW	Yes	4600
Upper Landing	EW-001	1501	2700	SW	Yes	500
Laundry	EW-001	1600	2700	SE	No	
Sub-floor	EW-002	9145	600	NW	No	
Sub-floor	EW-002	2900	600	NE	No	
Sub-floor	EW-002	14600	600	NW	No	
Sub-floor	EW-002	5500	600	NE	No	
Sub-floor	EW-002	13000	600	SE	No	
Sub-floor	EW-002	8600	600	SW	No	
WIR	EW-001	2200	2700	SE	No	
Lounge	EW-001	5100	2700	NW	No	
Lounge	EW-001	2916	2700	NE	Yes	8300

Internal wall type

ID	Wall type	Area (m²)	Insulation	Wall wrap or foil
IW-001	Plasterboard	169.5	Glass fibre batt: R1.5	No

Floors

Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Kitchen/Living/Sub-floor	Timber (hardwood): bare/R2.0	54.0		R2.0	
Kitchen/Living/Sub-floor	Timber (hardwood): ceramic	20.0		R2.0	Ceramic tile

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floor	tile/R2.0			
Bed 3/Sub-floor	Timber (hardwood): carpet/R2.0	11.5	R2.0	Carpet 10 + rubber underlay 8
Bath/Sub-floor	Timber (hardwood): ceramic tile/R2.0	5.2	R2.0	Ceramic tile
Bed 2/Sub-floor	Timber (hardwood): carpet/R2.0	11.5	R2.0	Carpet 10 + rubber underlay 8
Bed 4/Sub-floor	Timber (hardwood): bare/R2.0	11.5	R2.0	
Entry/Stairwell/Sub-floor	Timber (hardwood): bare/R2.0	12.7	R2.0	
Bed 1/Bed 2	Timber (hardwood): carpet/air gap/plasterboard	11.5		Carpet 10 + rubber underlay 8
Bed 1/Bed 3	Timber (hardwood): carpet/air gap/plasterboard	3.5		Carpet 10 + rubber underlay 8
Bath (Upper)/Bath	Timber (hardwood): ceramic tile/air gap/plasterboard	5.3		Ceramic tile
Master Bed/Lounge	Timber (hardwood): carpet/air gap/plasterboard	18.0		Carpet 10 + rubber underlay 8
Ens (Master Bed)/Bed 4	Timber (hardwood): ceramic tile/air gap/plasterboard	10.4		Ceramic tile
Upper Landing/Entry/Stair well	Timber (hardwood): bare/air gap/plasterboard	13.5		
Laundry/Sub-floor	Timber (hardwood): ceramic tile/R2.0	6.2	R2.0	Ceramic tile
Sub-floor/Ground	Bare ground	160.0	Enclosed	
WIR/Bed 3	Timber (hardwood): carpet/air gap/plasterboard	7.3		Carpet 10 + rubber underlay 8
WIR/Bed 4	Timber (hardwood): carpet/air gap/plasterboard	1.4		Carpet 10 + rubber underlay 8
Lounge/Sub-floor	Timber (hardwood): bare/R2.0	23.5	R2.0	

Ceiling type

Location	Construction	Added insulation	Roof space above
Bed 1/Bed 3	Timber (hardwood): carpet/air gap/plasterboard		No
WIR/Bed 3	Timber (hardwood): carpet/air gap/plasterboard		No
Bath (Upper)/Bath	Timber (hardwood): ceramic tile/air gap/plasterboard		No
Bed 1/Bed 2	Timber (hardwood): carpet/air gap/plasterboard		No
Ens (Master Bed)/Bed 4	Timber (hardwood): ceramic tile/air gap/plasterboard		No
WIR/Bed 4	Timber (hardwood): carpet/air gap/plasterboard		No
Upper Landing/Entry/Stair well	Timber (hardwood): bare/air gap/plasterboard		No
Kitchen/Living/Sub-floor	Timber (hardwood): bare/R2.0	R2.0	No
Bed 3/Sub-floor	Timber (hardwood): carpet/R2.0	R2.0	No
Bed 2/Sub-floor	Timber (hardwood): carpet/R2.0	R2.0	No
Bath/Sub-floor	Timber (hardwood): ceramic tile/R2.0	R2.0	No
Bed 4/Sub-floor	Timber (hardwood): bare/R2.0	R2.0	No
	Timber (hardwood): bare/R2.0	R2.0	No

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Entry/Stairwell/Sub-floor

Laundry/Sub-floor	Timber (hardwood): ceramic tile/R2.0	R2.0	No
Lounge/Sub-floor	Timber (hardwood): bare/R2.0	R2.0	No
Kitchen/Living/Sub-floor	Timber (hardwood): ceramic tile/R2.0	R2.0	No
Master Bed/Lounge	Timber (hardwood): carpet/air gap/plasterboard		No

Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
Kitchen/Living	29	Downlight		Sealed
Kitchen/Living	1	Ceiling exhaust fan	160	Sealed
Bed 3	4	Downlight		Sealed
Bath	2	Downlight		Sealed
Bath	1	Ceiling exhaust fan	160	Sealed
Bed 2	4	Downlight		Sealed
Bed 4	5	Downlight		Sealed
Entry/Stairwell	5	Downlight		Sealed
Bed 1	6	Downlight		Sealed
Bath (Upper)	2	Downlight		Sealed
Bath (Upper)	1	Ceiling exhaust fan	160	Sealed
Master Bed	7	Downlight		Sealed
Ens (Master Bed)	4	Downlight		Sealed
Ens (Master Bed)	1	Ceiling exhaust fan	160	Sealed
Upper Landing	5	Downlight		Sealed
Laundry	2	Downlight		Sealed
WIR	3	Downlight		Sealed
Lounge	6	Downlight		Sealed

Ceiling fans

Location	Number	Diameter (mm)
None Present		

Roof type

Construction	Added insulation	Roof colour
Metal deck roof: AG foil (sarking): air gap: R4.0: 10mm plasterboard	R4.0	Medium
Timber Deck above - 2.0 insul.	R2.0	Medium

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Additional information

Explanatory notes

About this report

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

General Information

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in the report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using the underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance.

The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

Accredited Assessors

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

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 on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

Disclaimer

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

Contact

For more information on the Nationwide House Energy Rating Scheme (NatHERS), visit www.nathers.gov.au

For more information on energy efficient design and insulation visit www.yourhome.gov.au