

Nationwide House Energy Rating Scheme* Certificate

Certificate number: 0004394227-03

Certificate Date: 17 Dec 2019

★ Star rating: 4.8



Assessor details

Accreditation number: **VIC/BDAV/17/1807**
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Declaration of interest: **None**
Software: **BERS Pro v4.4.0.0 (3.21)**
AAO: **BDAV**

Overview

Dwelling details

Street: **106A Wakehurst Parkway**
Suburb: **Elanora Heights**
State: **NSW** Postcode: **2101**
Type: **New Dwelling** NCC Class: **1A**
NatHERS climate zone: **56**
Lot/DP number: **10/1014199** Exposure: **Suburban**

Key construction and insulation materials

(see following pages for details)

Construction: **Fibro Cavity Panel on Battens**
Corrugated Iron
Suspended AAC (75mm)
Insulation: **R2.7 wall insulation**
R6.0 ceiling insulation
R5.0 floor insulation
Glazing: **ALM-005-04 A Aluminium A DG Argon**
Fill Low Solar Gain low-E -Clear

Net floor area (m²)

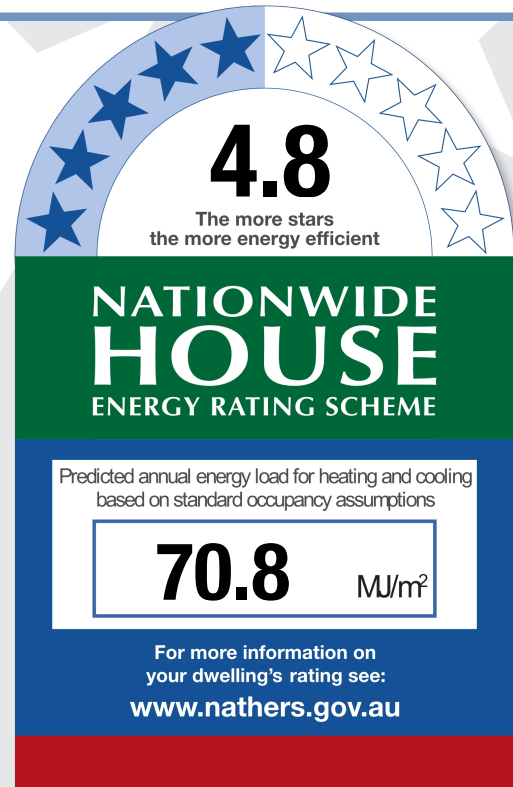
Conditioned: **174.0**
Unconditioned: **25.0**
Garage: **0.0**
TOTAL: **199.0**

Annual thermal performance loads (MJ/m²)

Heating: **44.3**
Cooling: **26.5**
TOTAL: **70.8**

Plan documents

Plan ref/date: **Rev B Issued on 15/11/19**
Prepared by: **Thodey Design**



Ceiling penetrations

(see following pages for details)

Sealed: **47**
Unsealed: **0**
TOTAL:** **47**

****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: **LED**

Window selection - default windows only

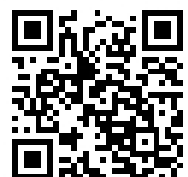
Note on allowable window values:
Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/- 5% SHGC tolerance is allowed with this rating.

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 any of windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

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-005-04 A	ALM-005-04 A Aluminium A DG Argon Fill Low Solar Gain low-E - Clear	4.8	0.34
ALM-006-04 A	ALM-006-04 A Aluminium B DG Argon Fill Low Solar Gain low-E - Clear	4.8	0.34
ATB-005-04 B	ATB-005-04 B AI Thermally Broken A DG Argon Fill Low Solar Gain low-E -Clear	3.0	0.27
ATB-006-03 B	ATB-006-03 B AI Thermally Broken B DG Argon Fill High Solar Gain low-E -Clear	2.9	0.51
ATB-006-04 B	ATB-006-04 B AI Thermally Broken B DG Argon Fill Low Solar Gain low-E -Clear	3.0	0.26
ATB-005-03 B	ATB-005-03 B AI Thermally Broken A DG Argon Fill High Solar Gain low-E -Clear	2.9	0.44

Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Stairs Ground	ALM-005-04 A	n/a	1200	1966	W	No Shading
Stairs Ground	ALM-006-04 A	n/a	1200	1966	W	No Shading
Stairs Ground	ALM-006-04 A	n/a	1400	2600	N	No Shading
Stairs Ground	ALM-006-04 A	n/a	2700	1910	E	No Shading
Family/Rumpus	ALM-005-04 A	n/a	1400	2037	E	No Shading
Family/Rumpus	ALM-006-04 A	n/a	2400	2900	S	No Shading
Guest	ALM-006-04 A	n/a	2400	3660	S	No Shading
Ens	ALM-006-04 A	n/a	1400	1600	W	No Shading
Kitchen/Living	ATB-005-04 B	n/a	1400	2400	E	Horizontal Louvres, Horizontal Blades
Kitchen/Living	ATB-006-03 B	n/a	1400	1200	S	Horizontal Louvres, Horizontal Blades
Kitchen/Living	ATB-006-04 B	n/a	2400	4960	W	Horizontal Louvres, Horizontal Blades
Kitchen/Living	ATB-005-04 B	n/a	1400	2400	N	Horizontal Louvres, Horizontal Blades
Kitchen/Living	ATB-006-03 B	n/a	400	2710	S	No Shading
Kitchen/Living	ATB-006-03 B	n/a	674	7155	E	No Shading
Lounge	ATB-006-03 B	n/a	1400	2037	E	Horizontal Louvres, Horizontal Blades
Lounge	ATB-005-03 B	n/a	2400	1060	S	No Shading
Lounge	ATB-006-03 B	n/a	2400	4100	S	No Shading
Lounge	ATB-006-03 B	n/a	2400	900	W	No Shading
Lounge	ATB-006-03 B	n/a	1519	8355	E	No Shading
WC	ALM-005-04 A	n/a	1400	2130	W	No Shading
Bath	ALM-005-04 A	n/a	1400	1600	W	No Shading
Bedroom 2	ALM-005-04 A	n/a	1400	1600	W	No Shading
Bedroom 3	ALM-005-04 A	n/a	1400	1600	W	No Shading
Ens	ALM-005-04 A	n/a	1400	1600	W	No Shading
Master	ALM-006-04 A	n/a	1400	2400	N	No Shading
Master	ALM-005-04 A	n/a	1400	2200	E	No Shading

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Master	ATB-006-03 B	n/a	763	4329	N	No Shading
Master	ATB-006-03 B	n/a	564	4600	E	No Shading
Hall	ATB-006-04 B	n/a	2400	3903	E	Horizontal Louvres, Horizontal Blades
Hall	ATB-006-03 B	n/a	564	3688	E	No Shading
Stairs Lvl1	ALM-006-04 A	n/a	1400	2600	N	Horizontal Louvres, Horizontal Blades
Stairs Lvl1	ATB-006-03 B	n/a	763	4216	N	No Shading

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-1	Concrete block, lined	Anti-glare foil with bulk no gap R2.7	Yes
EW-2	Fibro Cavity Panel on Battens	Foil reflective both sides of the Bulk Insulation R2.7	Yes

External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Stairs Ground	EW-1	1995	2700	W	No	0
Stairs Ground	EW-1	3700	2700	N	No	500
Stairs Ground	EW-1	1995	2700	E	No	1800
Family/Rumpus	EW-1	2895	2700	N	No	0
Family/Rumpus	EW-1	6595	2700	E	No	400
Family/Rumpus	EW-1	3795	2700	S	No	2500
Guest	EW-1	4095	2700	S	No	2500
Guest	EW-1	3195	2700	W	No	0
Ens	EW-1	1990	2700	W	No	0
Lift	EW-1	1395	2700	W	No	0
Lift	EW-1	1295	2700	N	No	0
Kitchen/Living	EW-2	7100	2600	E	No	500
Kitchen/Living	EW-2	2800	2600	S	No	500
Kitchen/Living	EW-2	5200	2600	W	No	500
Kitchen/Living	EW-2	4000	2600	N	No	700
Lounge	EW-2	6695	2600	E	No	500
Lounge	EW-2	9800	2600	S	No	3000
Lounge	EW-2	1295	2600	W	No	500

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WC	EW-2	2190	2600	W	No	500
Bath	EW-2	1690	2600	W	No	500
Lift	EW-2	1390	2600	W	No	500
Bedroom 2	EW-2	3090	2600	W	No	500
Bedroom 3	EW-2	2890	2600	W	No	500
Ens	EW-2	2390	2600	W	No	500
Master	EW-2	2995	2600	W	No	500
Master	EW-2	4300	2600	N	No	400
Master	EW-2	5395	2600	E	No	500
Hall	EW-2	3995	2600	E	No	500
Stairs Lvl1	EW-2	4290	2600	N	No	800

Internal wall type

Wall type	Area (m ²)	Insulation	Wall wrap or foil
IW-1 - Cavity wall, direct fix plasterboard, single gap	197.0	Bulk Insulation, No Air Gap R2	No

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Stairs Ground	Suspended AAC (75mm) 75mm	7.2	Enclosed	Bulk Insulation in Contact with Floor R5	Cork Tiles or Parquetry 8mm
Family/Rumpus	Suspended AAC (75mm) 75mm	28.4	Enclosed	Bulk Insulation in Contact with Floor R5	Cork Tiles or Parquetry 8mm
Guest	Suspended AAC (75mm) 75mm	14.4	Enclosed	Bulk Insulation in Contact with Floor R5	Cork Tiles or Parquetry 8mm
WIR	Suspended AAC (75mm) 75mm	2.3	Enclosed	Bulk Insulation in Contact with Floor R5	Cork Tiles or Parquetry 8mm
Ens	Suspended AAC (75mm) 75mm	3.5	Enclosed	Bulk Insulation in Contact with Floor R5	Ceramic Tiles 8mm
Lift	Suspended AAC (75mm) 75mm	1.7	Enclosed	Bulk Insulation in Contact with Floor R5	Cork Tiles or Parquetry 8mm
Kitchen/Living	Suspended AAC (75mm) 75mm	28.3	Totally Open	Bulk Insulation in Contact with Floor R5	Cork Tiles or Parquetry 8mm
Lounge/Family/Rumpus	AAC Above Plasterboard 75mm	24.4		Bulk Insulation R2	Cork Tiles or Parquetry 8mm
Lounge/Guest	AAC Above Plasterboard 75mm	9.5		Bulk Insulation R2	Cork Tiles or Parquetry 8mm
Lounge	Suspended AAC (75mm) 75mm	12.5	Totally Open	Bulk Insulation in Contact with Floor R5	Cork Tiles or Parquetry 8mm
Ldry/Guest	AAC Above Plasterboard 150mm	2.9		Bulk Insulation R2	Ceramic Tiles 8mm

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WC/Guest	AAC Above Plasterboard 150mm	1.9		Bulk Insulation R2	Ceramic Tiles 8mm
Bath/WIR	AAC Above Plasterboard 150mm	2.1		Bulk Insulation R2	Ceramic Tiles 8mm
Bath/Ens	AAC Above Plasterboard 150mm	3.0		Bulk Insulation R2	Ceramic Tiles 8mm
Lift/Lift	AAC Above Plasterboard 150mm	1.6		Bulk Insulation R2	Cork Tiles or Parquetry 8mm
Bedroom 2	Suspended AAC (75mm) 75mm	9.5	Enclosed	Bulk Insulation in Contact with Floor R5	Cork Tiles or Parquetry 8mm
Bedroom 3	Suspended AAC (75mm) 75mm	8.9	Enclosed	Bulk Insulation in Contact with Floor R5	Cork Tiles or Parquetry 8mm
Ens	Suspended AAC (75mm) 75mm	4.3	Enclosed	Bulk Insulation in Contact with Floor R5	Cork Tiles or Parquetry 8mm
WIR	Suspended AAC (75mm) 75mm	2.8	Enclosed	Bulk Insulation in Contact with Floor R5	Cork Tiles or Parquetry 8mm
Master	Suspended AAC (75mm) 75mm	15.2	Enclosed	Bulk Insulation in Contact with Floor R5	Cork Tiles or Parquetry 8mm
Hall/Family/Rumpus	AAC Above Plasterboard 75mm	3.8		Bulk Insulation R2	Cork Tiles or Parquetry 8mm
Hall	Suspended AAC (75mm) 75mm	6.0	Totally Open	Bulk Insulation in Contact with Floor R5	Cork Tiles or Parquetry 8mm
Stairs Lvl1/Stairs Ground	AAC Above Plasterboard 75mm	6.5		Bulk Insulation R2	Cork Tiles or Parquetry 8mm
Stairs Lvl1	Suspended AAC (75mm) 75mm	1.3	Totally Open	Bulk Insulation in Contact with Floor R5	Cork Tiles or Parquetry 8mm

Ceiling type

Location	Construction	Added insulation	Roof space above
Stairs Ground	AAC Above Plasterboard	Bulk Insulation R2	No
Family/Rumpus	AAC Above Plasterboard	Bulk Insulation R2	No
Guest	AAC Above Plasterboard	Bulk Insulation R2	No
WIR	AAC Above Plasterboard	Bulk Insulation R2	No
Ens	AAC Above Plasterboard	Bulk Insulation R2	No
Lift	AAC Above Plasterboard	Bulk Insulation R2	No
Kitchen/Living	Plasterboard	Bulk Insulation R6	No
Lounge	Plasterboard	Bulk Insulation R6	No
Ldry	Plasterboard	Bulk Insulation R6	No

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Building features continued

WC	Plasterboard	Bulk Insulation R6	No
Bath	Plasterboard	Bulk Insulation R6	No
Lift	Plasterboard	Bulk Insulation R6	No
Bedroom 2	Plasterboard	Bulk Insulation R6	No
Bedroom 3	Plasterboard	Bulk Insulation R6	No
Ens	Plasterboard	Bulk Insulation R6	No
WIR	Plasterboard	Bulk Insulation R6	No
Master	Plasterboard	Bulk Insulation R6	No
Hall	Plasterboard	Bulk Insulation R6	No
Stairs Lvl1	Plasterboard	Bulk Insulation R6	No

Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
Family/Rumpus	7	Downlights - LED	150	Sealed
Guest	4	Downlights - LED	150	Sealed
WIR	1	Downlights - LED	150	Sealed
Ens	1	Downlights - LED	150	Sealed
Kitchen/Living	6	Downlights - LED	150	Sealed
Lounge	12	Downlights - LED	150	Sealed
Ldry	1	Downlights - LED	150	Sealed
WC	1	Downlights - LED	150	Sealed
Bath	2	Downlights - LED	150	Sealed
Bedroom 2	1	Downlights - LED	150	Sealed
Bedroom 3	1	Downlights - LED	150	Sealed
Ens	1	Downlights - LED	150	Sealed
WIR	1	Downlights - LED	150	Sealed
Master	4	Downlights - LED	150	Sealed
Hall	4	Downlights - LED	150	Sealed

Ceiling fans

Location	Number	Diameter (mm)
None Present		

Roof type

Construction	Added insulation	Roof colour
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Building features continued

Corrugated Iron

Bulk, Reflective Light
Side Down, Anti-
glare Up R1.8

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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