

# Nationwide House Energy Rating Scheme\* Certificate



Certificate number: **0004302535**

Certificate Date: **24 Oct 2019**

★ Star rating: **5.2**

BERS Pro v4.3.0.0 (3.13) cannot be used to model 'roof windows'. Roof windows are 'openable or fixed windows in a roof' and do not have a shaft, as distinct from skylights which incorporate a built-in shaft and are not ventilated. BERS Pro v4.3 can only model skylights. If a roof window is present on the floor plan then this certificate is not valid.

## Assessor details

Accreditation number: **20570**  
Name: **John Caley**  
Organisation: **Ecological Design Pty Ltd**  
Email: **john@ecologicaldesign.com.au**  
Phone: **0418 262 706**  
Declaration of interest: **The Assessor has provided design advice to the Applicant**  
Software: **BERS Pro v4.3.0.2d (3.13)**  
AAO: **ABSA**

## Overview

### Dwelling details

Street: **1E Bungan Head Rd**  
Suburb: **Newport**  
State: **NSW** Postcode: **2106**  
Type: **New Dwelling** NCC Class: **1A**  
NatHERS climate zone: **56**  
Lot/DP number: **1167665** Exposure: **Suburban**

### Key construction and insulation materials

(see following pages for details)

Construction: **Tilt up Concrete**  
**Corrugated Iron**  
**Suspended Concrete Slab**  
Insulation: **R2.7 wall insulation**  
**R3.5 ceiling insulation**  
**R2.0 floor insulation**  
Glazing: **ALM-002-01 A Aluminium B SG Clear**

### Net floor area (m<sup>2</sup>)

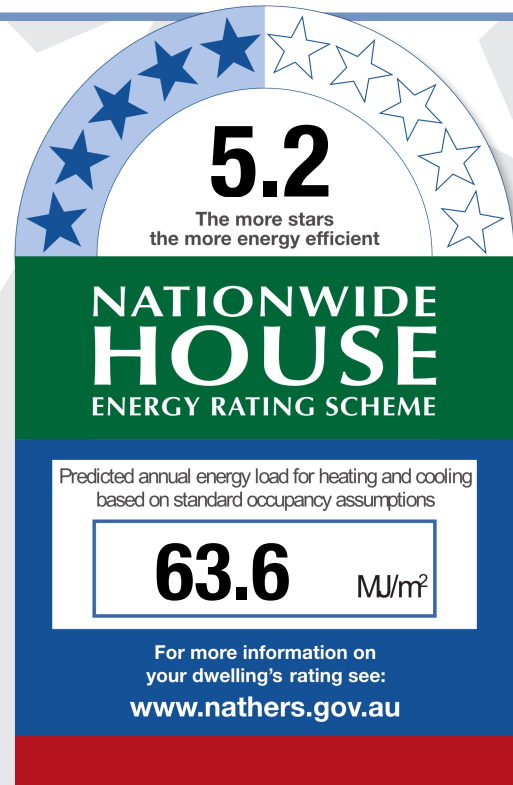
Conditioned: **179.0**  
Unconditioned: **16.0**  
Garage: **0.0**  
TOTAL: **195.0**

### Annual thermal performance loads (MJ/m<sup>2</sup>)

Heating: **39.0**  
Cooling: **24.7**  
TOTAL: **63.6**

### Plan documents

Plan ref/date: **DA1 Dated**  
Prepared by: **Design Tribe Projects**



### Ceiling penetrations

(see following pages for details)

Sealed: **41**  
Unsealed: **0**  
TOTAL:\*\* **41**

\*\*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

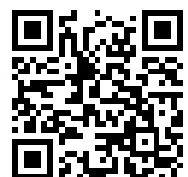
Note on allowable window values:  
Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

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-006-01 A	ALM-006-01 A Aluminium B DG Argon Fill Clear-Clear	4.5	0.61
ALM-002-01 A	ALM-002-01 A Aluminium B SG Clear	6.7	0.70
ALM-005-01 A	ALM-005-01 A Aluminium A DG Argon Fill Clear-Clear	4.5	0.50

### Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Kitchen/Liv/din	ALM-006-01 A	n/a	3000	3450	N	No Shading
Kitchen/Liv/din	ALM-002-01 A	n/a	600	1725	N	No Shading
Kitchen/Liv/din	ALM-002-01 A	n/a	600	1725	N	No Shading
Kitchen/Liv/din	ALM-006-01 A	n/a	2100	2100	S	No Shading
Kitchen/Liv/din	ALM-006-01 A	n/a	2100	3040	S	No Shading
Kitchen/Liv/din	ALM-006-01 A	n/a	3000	8830	W	Vertical Louvres, Horizontal Blades
Kitchen/Liv/din	ALM-002-01 A	n/a	600	4415	W	Vertical Louvres, Horizontal Blades
Kitchen/Liv/din	ALM-002-01 A	n/a	600	4415	W	Vertical Louvres, Horizontal Blades
Kitchen/Liv/din	ALM-002-01 A	n/a	600	4810	N	No Shading
Kitchen/Liv/din	ALM-006-01 A	n/a	3000	4720	E	No Shading
Kitchen/Liv/din	ALM-002-01 A	n/a	600	2360	E	No Shading
Kitchen/Liv/din	ALM-002-01 A	n/a	600	2360	E	No Shading
Study	ALM-006-01 A	n/a	850	3290	W	No Shading
Study	ALM-002-01 A	n/a	1940	900	N	No Shading
Bathroom	ALM-002-01 A	n/a	1940	900	N	No Shading
landing	ALM-005-01 A	n/a	2700	900	E	No Shading
Bedroom_1	ALM-002-01 A	n/a	1860	900	W	Vertical Louvres, Horizontal Blades
Bedroom_1	ALM-002-01 A	n/a	1860	2882	W	Vertical Louvres, Horizontal Blades
Bedroom_1	ALM-002-01 A	n/a	1860	1270	N	No Shading
Bedroom_1	ALM-002-01 A	n/a	1940	900	N	No Shading
Bedroom_2	ALM-002-01 A	n/a	2700	900	E	No Shading
Bedroom_2	ALM-002-01 A	n/a	2700	900	E	No Shading
Master	ALM-002-01 A	n/a	1940	900	S	No Shading
Master	ALM-002-01 A	n/a	1860	900	W	Vertical Louvres, Horizontal Blades
Master	ALM-002-01 A	n/a	1869	3287	W	Vertical Louvres, Horizontal Blades
Master	ALM-002-01 A	n/a	1860	1550	N	No Shading
Bath_02	ALM-002-01 A	n/a	1940	900	N	No Shading
Bath_02	ALM-002-01 A	n/a	1940	900	E	No Shading
ens	ALM-002-01 A	n/a	2700	900	E	No Shading
ens	ALM-002-01 A	n/a	1940	780	W	No Shading

### Roof window and skylight type and performance value

ID	Window type	U-value	SHGC
GEN-04-008a	Double-glazed clear, Timber and Aluminium Frame	0.0	0.00

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### Roof window and skylight schedule

Location	ID	Roof window/skylight no.	Area (m²)	Orientation	Outdoor shade	Indoor shade/diffuser
landing	GEN-04-008a	1	1.3	N	None	No

### External wall type

ID	Wall type	Insulation	Wall wrap or foil
EW-1	Extruded Poly Cavity Panel Direct Fix	Foil Anti-glare one side and Reflective other of the Bulk Insulation R2.7	Yes
EW-2	Tilt up Concrete	Foil Anti-glare one side and Reflective other of the Bulk Insulation R2.7	Yes

### External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Kitchen/Liv/din	EW-1	3700	3850	N	No	950
Kitchen/Liv/din	EW-2	995	2700	E	No	6600
Kitchen/Liv/din	EW-2	1900	2700	S	No	4200
Kitchen/Liv/din	EW-1	4850	3850	E	No	8500
Kitchen/Liv/din	EW-1	11100	3850	S	No	100
Kitchen/Liv/din	EW-1	10650	3850	W	No	1850
Kitchen/Liv/din	EW-1	5000	3850	N	No	900
Kitchen/Liv/din	EW-1	4800	3850	E	No	850
Study	EW-2	3995	2700	W	No	450
Study	EW-2	2745	2700	N	No	750
Bathroom	EW-2	450	2700	S	No	6550
Bathroom	EW-2	1995	2700	N	No	750
Bathroom	EW-2	4000	2700	E	No	6150
landing	EW-2	3200	2700	N	No	550
landing	EW-2	2340	2700	E	No	100
landing	EW-2	700	2700	W	No	2100
Bedroom_1	EW-2	1445	2700	W	No	950
Bedroom_1	EW-2	450	2700	S	No	7000
Bedroom_1	EW-2	2900	2700	W	No	500
Bedroom_1	EW-2	1300	2700	N	No	400
Bedroom_1	EW-2	350	2700	E	No	5650
Bedroom_1	EW-2	3145	2700	N	No	750
Bedroom_2	EW-2	3695	2700	E	No	100
Bedroom_2	EW-2	3395	2700	S	No	150
Master	EW-2	4395	2700	S	No	100
Master	EW-2	1400	2700	W	No	900
Master	EW-2	400	2700	S	No	1500
Master	EW-2	3350	2700	W	No	500
Master	EW-2	1595	2700	N	No	1250
Bath_02	EW-2	2395	2700	N	No	750
Bath_02	EW-2	3395	2700	E	No	100

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ens	EW-2	1300	2700	E	No	100
ens	EW-2	3000	2700	S	No	100
ens	EW-2	1300	2700	W	No	50

## Internal wall type

Wall type	Area (m <sup>2</sup> )	Insulation	Wall wrap or foil
IW-1 - Cavity wall, direct fix plasterboard, single gap	108.0	No insulation	No

## Floors

Location	Construction	Area (m <sup>2</sup> )	Sub floor ventilation	Added insulation	Covering
Kitchen/Liv/din	Suspended Concrete Slab 150mm	90.6	Open	Bulk Insulation in Contact with Floor R2	Bare
Study	Suspended Concrete Slab 150mm	10.7	Open	Bulk Insulation in Contact with Floor R2	Cork Tiles or Parquetry 8mm
Bathroom	Suspended Concrete Slab 150mm	7.8	Open	Bulk Insulation in Contact with Floor R2	Ceramic Tiles 8mm
landing/Kitchen/Liv/din	Concrete Above Plasterboard 150mm	2.1		No Insulation	Carpet 10mm
landing/Bathroom	Concrete Above Plasterboard 150mm	0.5		No Insulation	Carpet 10mm
landing	Suspended Concrete Slab 150mm	8.4	Open	Bulk Insulation in Contact with Floor R2	Carpet 10mm
Bedroom_1/Bathroom	Concrete Above Plasterboard 150mm	1.9		No Insulation	Carpet 10mm
Bedroom_1	Suspended Concrete Slab 150mm	15.3	Open	Bulk Insulation in Contact with Floor R2	Carpet 10mm
Bedroom_2	Suspended Concrete Slab 150mm	13.0	Open	Bulk Insulation in Contact with Floor R2	Carpet 10mm
Master/Kitchen/Liv/din	Concrete Above Plasterboard 150mm	12.1		No Insulation	Carpet 10mm
Master	Suspended Concrete Slab 150mm	14.1	Open	Bulk Insulation in Contact with Floor R2	Carpet 10mm
Bath_02	Suspended Concrete Slab 150mm	8.5	Open	Bulk Insulation in Contact with Floor R2	Ceramic Tiles 8mm
ens	Suspended Concrete Slab 150mm	11.3	Open	Bulk Insulation in Contact with Floor R2	Ceramic Tiles 8mm

## Ceiling type

Location	Construction	Added	Roof space
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		insulation	above
Kitchen/Liv/din	Plasterboard	Bulk Insulation R3.5	Yes
Kitchen/Liv/din	Concrete Above Plasterboard	No Insulation	No
Study	Plasterboard	Bulk Insulation R3.5	Yes
Bathroom	Plasterboard	Bulk Insulation R3.5	Yes
Bathroom	Concrete Above Plasterboard	No Insulation	No
landing	Plasterboard	Bulk Insulation R3.5	Yes
Bedroom_1	Plasterboard	Bulk Insulation R3.5	Yes
Bedroom_2	Plasterboard	Bulk Insulation R3.5	Yes
Master	Plasterboard	Bulk Insulation R3.5	Yes
Bath_02	Plasterboard	Bulk Insulation R3.5	Yes
ens	Plasterboard	Bulk Insulation R3.5	Yes

## Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
Kitchen/Liv/din	16	Downlights - LED	150	Sealed
Study	3	Downlights - LED	150	Sealed
Bathroom	2	Downlights - LED	150	Sealed
Bathroom	1	Exhaust Fans	300	Sealed
landing	3	Downlights - LED	150	Sealed
landing	1	Exhaust Fans	300	Sealed
Bedroom_2	4	Downlights - LED	150	Sealed
Master	4	Downlights - LED	150	Sealed
Bath_02	2	Downlights - LED	150	Sealed
Bath_02	1	Exhaust Fans	300	Sealed
ens	3	Downlights - LED	150	Sealed
ens	1	Exhaust Fans	300	Sealed

## Ceiling fans

Location	Number	Diameter (mm)
None Present		

## Roof type

Construction	Added insulation	Roof colour
Corrugated Iron	Bulk, Reflective Side Down, Anti-glare Up R1	Light

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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](http://www.nathers.gov.au)

For more information on energy efficient design and insulation visit [www.yourhome.gov.au](http://www.yourhome.gov.au)