

Nationwide House Energy Rating Scheme* Certificate



Certificate number: **0003410511**

Certificate Date: **29 Nov 2018**

★ Star rating: **5.1**

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: **100765**

Name: **Jamie Bonnefin**

Organisation: **Certified Energy**

Email: **jamie@certified.energy**

Phone: **1300 443 674**

Declaration of interest: **None**

Software: **BERS Pro v4.3.0.2c (3.13)**

AAO: **ABSA**

Overview

Dwelling details

Street: **7 Waimea Street**

Suburb: **North Balgowlah**

State: **NSW**

Postcode: **2093**

Type: **New Dwelling**

NCC Class: **1A**

NatHERS

climate zone: **56**

Lot/DP

number: **132/12315**

Exposure: **Suburban**

Key construction and insulation materials

(see following pages for details)

Construction: **Brick Veneer**

Corrugated Iron

Concrete Slab on Ground

Insulation:

R2.5 wall insulation

R4.0 ceiling insulation

No floor insulation

Glazing:

ALM-004-03 A Aluminium B DG Air Fill

High Solar Gain low-E -Clear

Net floor area (m²)

Conditioned: **309.0**

Unconditioned: **83.0**

Garage: **54.0**

TOTAL: **392.0**

Annual thermal performance loads (MJ/m²)

Heating: **39.4**

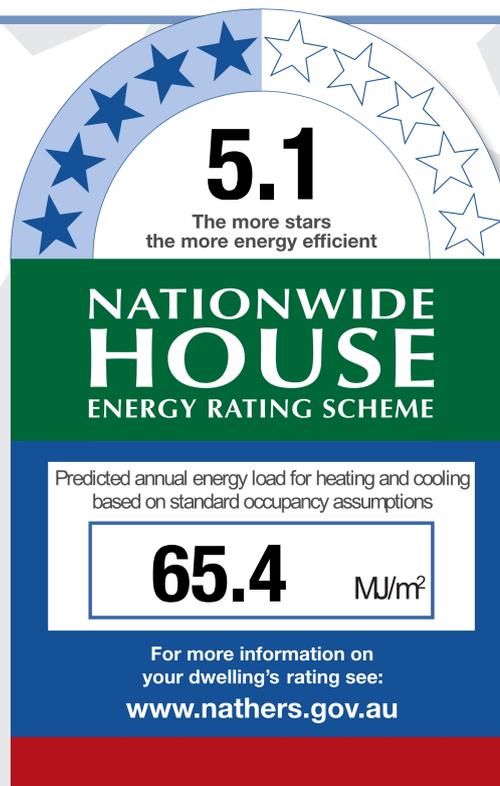
Cooling: **26.0**

TOTAL: **65.4**

Plan documents

Plan ref/date: **7 Waimea Street**

Prepared by: **Rapid Plans Building Design and Architectural Drafting**



Ceiling penetrations

(see following pages for details)

Sealed: **89**

Unsealed: **0**

TOTAL:** **89**

****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-004-03 A	ALM-004-03 A Aluminium B DG Air Fill High Solar Gain low-E -Clear	4.3	0.53
ALM-004-01 A	ALM-004-01 A Aluminium B DG Air Fill Clear-Clear	4.8	0.59
ALM-002-01 A	ALM-002-01 A Aluminium B SG Clear	6.7	0.70

Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Kitchen/Living	ALM-004-03 A	n/a	750	3600	W	No Shading
Kitchen/Living	ALM-004-03 A	n/a	600	3600	E	No Shading
Kitchen/Living	ALM-004-03 A	n/a	2400	6332	S	No Shading
Kitchen/Living	ALM-004-03 A	n/a	2400	4485	S	No Shading
Kitchen/Living	ALM-004-03 A	n/a	2400	4055	S	No Shading
Kitchen/Living	ALM-004-01 A	n/a	600	6412	S	No Shading
Kitchen/Living	ALM-004-01 A	n/a	600	4565	S	No Shading
Kitchen/Living	ALM-004-01 A	n/a	600	4055	S	No Shading
Garage	ALM-002-01 A	n/a	750	3000	E	No Shading
LDY	ALM-002-01 A	n/a	900	750	E	No Shading
Office	ALM-004-03 A	n/a	2400	2320	N	No Shading
Bath	ALM-002-01 A	n/a	1200	1200	W	No Shading
Bedroom Guest	ALM-004-03 A	n/a	600	2400	W	No Shading
Bedroom Guest	ALM-004-03 A	n/a	2400	3822	N	No Shading
Stairs FF/Void	ALM-004-03 A	n/a	2400	1960	N	No Shading
Rumpus	ALM-004-03 A	n/a	600	2400	W	No Shading
Rumpus	ALM-004-03 A	n/a	2400	6074	N	No Shading
Bath FF	ALM-004-03 A	n/a	600	1800	W	No Shading
WC	ALM-004-03 A	n/a	600	750	W	No Shading
Hallway FF	ALM-004-03 A	n/a	1500	1800	N	Horizontal Louvres, Horizontal Blades
Bedroom Master	ALM-004-03 A	n/a	2400	4664	S	No Shading
Ens master	ALM-004-03 A	n/a	600	2500	W	No Shading
Ens master	ALM-004-03 A	n/a	600	2400	W	No Shading
Ens master	ALM-004-03 A	n/a	2100	1900	S	No Shading
Bedroom 2	ALM-004-03 A	n/a	600	2400	E	No Shading
Bedroom 2	ALM-004-03 A	n/a	1500	3000	S	No Shading
Bedroom 4	ALM-004-03 A	n/a	600	3000	E	No Shading
Bedroom 4	ALM-004-03 A	n/a	1500	3000	S	No Shading
Bedroom 3	ALM-004-03 A	n/a	1500	3000	N	Horizontal Louvres, Horizontal Blades
Bedroom 3	ALM-004-03 A	n/a	600	3000	E	No Shading

Roof window and skylight type and performance value

ID	Window type	U-value	SHGC
GEN-04-009a	Double-glazed opal, Timber and Aluminium Frame	0.0	0.00

Roof window and skylight schedule

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Location	ID	Roof window/skylight no.	Area (m ²)	Orientation	Outdoor shade	Indoor shade/diffuser
Kitchen/Living	GEN-04-009a	1	1.1	S	None	No
Kitchen/Living	GEN-04-009a	2	1.1	S	None	No
Stairs FF/Void	GEN-04-009a	1	1.1	N	None	No
Stairs FF/Void	GEN-04-009a	2	1.1	N	None	No
Stairs FF/Void	GEN-04-009a	3	1.1	N	None	No
Stairs FF/Void	GEN-04-009a	4	1.1	N	None	No
Ens master	GEN-04-009a	1	1.1	N	None	No

External wall type

ID	Wall type	Insulation	Wall wrap or foil
EW-1	Brick Veneer	Foil reflective both sides of the Bulk Insulation R2.5	Yes
EW-2	Weatherboard Cavity Panel Direct Fix	Foil reflective both sides of the Bulk Insulation R2.5	Yes

External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Kitchen/Living	EW-1	6095	3200	W	No	0
Kitchen/Living	EW-1	5195	3200	E	No	1000
Kitchen/Living	EW-1	15400	3200	S	No	4200
Hallway GF	EW-1	2190	3200	N	No	1600
Garage	EW-1	1600	3200	W	No	8700
Garage	EW-1	7700	3200	N	No	0
Garage	EW-1	7595	3200	E	No	0
LDY	EW-1	2695	3200	E	No	0
LDY	EW-1	1000	3200	S	No	9400
Office	EW-1	2395	3200	N	No	800
Office	EW-1	800	3200	E	No	9900
Pantry	EW-1	1290	3200	W	No	0
Bath	EW-1	3190	3200	W	No	0
Bedroom Guest	EW-1	4095	3200	W	No	0
Bedroom Guest	EW-1	4095	3200	N	No	800
Stairs FF/Void	EW-2	2195	2700	N	No	0
Stairs FF/Void	EW-2	900	2700	E	No	0
Rumpus	EW-2	4095	2700	W	No	0
Rumpus	EW-2	6200	2700	N	No	1000
Rumpus	EW-2	800	2700	E	No	0
Bath FF	EW-2	3190	2700	W	No	0
WC	EW-2	990	2700	W	No	0
Hallway FF	EW-2	2690	2700	N	No	0
Bedroom Master	EW-2	1000	2700	E	No	4800
Bedroom Master	EW-2	4795	2700	S	No	700
Ens master	EW-2	600	2700	W	No	0
Ens master	EW-2	900	2700	S	No	0

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Ens master	EW-2	2500	2700	W	No	0
Ens master	EW-2	900	2700	N	No	0
Ens master	EW-2	3295	2700	W	No	0
Ens master	EW-2	2195	2700	S	No	700
Bedroom 2	EW-2	2900	2700	E	No	700
Bedroom 2	EW-2	4095	2700	S	No	700
Bedroom 4	EW-2	4495	2700	E	No	0
Bedroom 4	EW-2	3995	2700	S	No	700
Bedroom 3	EW-2	3995	2700	N	No	0
Bedroom 3	EW-2	4595	2700	E	No	0

Internal wall type

Wall type	Area (m ²)	Insulation	Wall wrap or foil
IW-1 - Cavity wall, direct fix plasterboard, single gap	347.0	No insulation	No
IW-2 - Cavity wall, direct fix plasterboard, single gap	45.0	Bulk Insulation, No Air Gap R1	No

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Kitchen/Living	Concrete Slab on Ground 100mm	88.8	None	No Insulation	Bare
Hallway GF	Concrete Slab on Ground 100mm	36.8	None	No Insulation	Bare
Garage	Concrete Slab on Ground 100mm	53.9	None	No Insulation	Bare
WC GF	Concrete Slab on Ground 100mm	5.1	None	No Insulation	Bare
LDY	Concrete Slab on Ground 100mm	11.2	None	No Insulation	Bare
Office	Concrete Slab on Ground 100mm	9.4	None	No Insulation	Bare
Pantry	Concrete Slab on Ground 100mm	4.3	None	No Insulation	Bare
Bath	Concrete Slab on Ground 100mm	8.9	None	No Insulation	Bare
Bedroom Guest	Concrete Slab on Ground 100mm	16.4	None	No Insulation	Bare
Stairs FF/Void/Hallway GF	Timber Above Plasterboard 19mm	26.4		No Insulation	Cork Tiles or Parquetry 8mm
Rumpus/Office	Timber Above Plasterboard 19mm	9.7		No Insulation	Cork Tiles or Parquetry 8mm
Rumpus/Bedroom Guest	Timber Above Plasterboard 19mm	15.3		No Insulation	Cork Tiles or Parquetry 8mm
Bath FF/Bath	Timber Above Plasterboard 19mm	7.9		No Insulation	Ceramic Tiles 8mm
WC/Pantry	Timber Above Plasterboard 19mm	2.3		No Insulation	Ceramic Tiles 8mm

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Hallway FF/Kitchen/Living	Timber Above Plasterboard 19mm	2.7		No Insulation	Cork Tiles or Parquetry 8mm
Hallway FF/Hallway GF	Timber Above Plasterboard 19mm	7.3		No Insulation	Cork Tiles or Parquetry 8mm
Hallway FF/Garage	Timber Above Plasterboard 19mm	8.9		No Insulation	Cork Tiles or Parquetry 8mm
Hallway FF/WC GF	Timber Above Plasterboard 19mm	3.1		No Insulation	Cork Tiles or Parquetry 8mm
Hallway FF/Pantry	Timber Above Plasterboard 19mm	0.7		No Insulation	Cork Tiles or Parquetry 8mm
Bedroom Master/Kitchen/Living	Timber Above Plasterboard 19mm	20.1		No Insulation	Cork Tiles or Parquetry 8mm
Bedroom Master/Hallway GF	Timber Above Plasterboard 19mm	0.9		No Insulation	Cork Tiles or Parquetry 8mm
Ens master/Kitchen/Living	Timber Above Plasterboard 19mm	13.8		No Insulation	Ceramic Tiles 8mm
Ens master/Pantry	Timber Above Plasterboard 19mm	0.6		No Insulation	Ceramic Tiles 8mm
Ens master	Suspended Timber Floor 19mm	1.5	Totally Open	Bulk Insulation in Contact with Floor R4	Ceramic Tiles 8mm
WIR/Kitchen/Living	Timber Above Plasterboard 19mm	8.1		No Insulation	Cork Tiles or Parquetry 8mm
Bedroom 2/Kitchen/Living	Timber Above Plasterboard 19mm	16.8		No Insulation	Cork Tiles or Parquetry 8mm
Bedroom 2/Hallway GF	Timber Above Plasterboard 19mm	1.9		No Insulation	Cork Tiles or Parquetry 8mm
Bedroom 2/WC GF	Timber Above Plasterboard 19mm	0.6		No Insulation	Cork Tiles or Parquetry 8mm
Bedroom 4/Kitchen/Living	Timber Above Plasterboard 19mm	5.1		No Insulation	Cork Tiles or Parquetry 8mm
Bedroom 4/Garage	Timber Above Plasterboard 19mm	2.1		No Insulation	Cork Tiles or Parquetry 8mm
Bedroom 4/WC GF	Timber Above Plasterboard 19mm	1.6		No Insulation	Cork Tiles or Parquetry 8mm
Bedroom 4/LDY	Timber Above Plasterboard 19mm	8.8		No Insulation	Cork Tiles or Parquetry 8mm
Bedroom 3/Garage	Timber Above Plasterboard 19mm	18.0		No Insulation	Cork Tiles or Parquetry 8mm

Ceiling type

Location	Construction	Added insulation	Roof space above
Kitchen/Living	Plasterboard	Bulk Insulation R4	No
Kitchen/Living	Timber Above Plasterboard	No Insulation	No
Hallway GF	Plasterboard	Bulk Insulation R4	No
Hallway GF	Timber Above Plasterboard	No Insulation	No
Garage	Plasterboard	Bulk Insulation R4	No

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Garage	Timber Above Plasterboard	No Insulation	No
WC GF	Plasterboard	Bulk Insulation R4	No
WC GF	Timber Above Plasterboard	No Insulation	No
LDY	Plasterboard	Bulk Insulation R4	No
LDY	Timber Above Plasterboard	No Insulation	No
Office	Plasterboard	Bulk Insulation R4	No
Office	Timber Above Plasterboard	No Insulation	No
Pantry	Plasterboard	Bulk Insulation R4	No
Pantry	Timber Above Plasterboard	No Insulation	No
Bath	Plasterboard	Bulk Insulation R4	No
Bath	Timber Above Plasterboard	No Insulation	No
Bedroom Guest	Plasterboard	Bulk Insulation R4	No
Bedroom Guest	Timber Above Plasterboard	No Insulation	No
Stairs FF/Void	Plasterboard	Bulk Insulation R4	No
Rumpus	Plasterboard	Bulk Insulation R4	No
Bath FF	Plasterboard	Bulk Insulation R4	No
WC	Plasterboard	Bulk Insulation R4	No
Hallway FF	Plasterboard	Bulk Insulation R4	No
Bedroom Master	Plasterboard	Bulk Insulation R4	No
Ens master	Plasterboard	Bulk Insulation R4	No
WIR	Plasterboard	Bulk Insulation R4	No
Bedroom 2	Plasterboard	Bulk Insulation R4	No
Bedroom 4	Plasterboard	Bulk Insulation R4	No
Bedroom 3	Plasterboard	Bulk Insulation R4	No

Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
Kitchen/Living	18	Downlights - LED	150	Sealed
Kitchen/Living	1	Exhaust Fans	300	Sealed
Hallway GF	8	Downlights - LED	150	Sealed
WC GF	2	Downlights - LED	150	Sealed
WC GF	1	Exhaust Fans	300	Sealed
LDY	3	Downlights - LED	150	Sealed
Office	2	Downlights - LED	150	Sealed

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Pantry	1	Downlights - LED	150	Sealed
Bath	2	Downlights - LED	150	Sealed
Bath	1	Exhaust Fans	300	Sealed
Bedroom Guest	4	Downlights - LED	150	Sealed
Stairs FF/Void	6	Downlights - LED	150	Sealed
Rumpus	6	Downlights - LED	150	Sealed
Bath FF	2	Downlights - LED	150	Sealed
Bath FF	1	Exhaust Fans	300	Sealed
WC	1	Downlights - LED	150	Sealed
Hallway FF	5	Downlights - LED	150	Sealed
Bedroom Master	6	Downlights - LED	150	Sealed
Ens master	4	Downlights - LED	150	Sealed
Ens master	1	Exhaust Fans	300	Sealed
WIR	2	Downlights - LED	150	Sealed
Bedroom 2	4	Downlights - LED	150	Sealed
Bedroom 4	4	Downlights - LED	150	Sealed
Bedroom 3	4	Downlights - LED	150	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 R1.8	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