

Nationwide House Energy Rating Scheme* Certificate

Certificate number: 0004205290

Certificate Date: 13 Sep 2019

★ Star rating: 4.6



Assessor details

Accreditation number: **20045**
Name: **Peter Barlow**
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Declaration of interest: **Employed by designer of the building**
Software: **AccuRate Sustainability V2.3.3.13 SP4**
AAO: **ABSA**

Overview

Dwelling details

Street: **17a Woodbine Street**
Suburb: **North Balgowlah**
State: **NSW** Postcode: **2093**
Type: **New** NCC Class: **1a**
NatHERS climate zone: **56**
Lot/DP number: **Lot B DP 400573** Exposure: **Suburban**

Key construction and insulation materials

(see following pages for details)

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

Net floor area (m²)

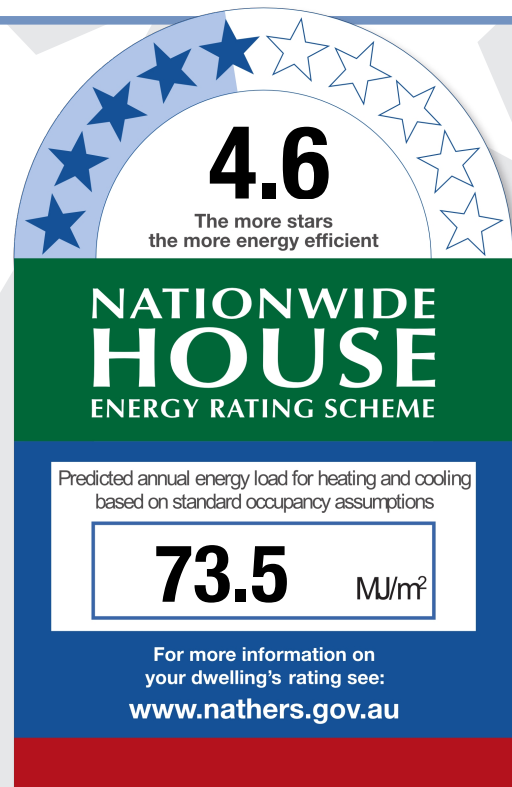
Conditioned: **196.8**
Unconditioned: **51.9**
Garage: **35.4**
TOTAL: **248.7**

Annual thermal performance loads (MJ/m²)

Heating: **47.8**
Cooling: **25.6**
TOTAL: **73.5**

Plan documents

Plan ref/date: **Job No. CC156 / Sept 2019**
Prepared by: **Classic Country Cottages**



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: **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 **4.6**
+10% SHGC **4.6**

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-001-03 A	DEFAULTS: Aluminium A SG High Solar Gain Low-E	5.4	0.49
ALM-002-03 A	DEFAULTS: Aluminium B SG High Solar Gain Low-E	5.4	0.58

Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Garage	ALM-002-03 A	W11	800	1500	N	None
Garage	ALM-002-03 A	W12	800	1500	N	None
Entry Hall	ALM-002-03 A	D1 Sidelight	2107	432	N	None
Kitchen/Dining/Lounge	ALM-002-03 A	D2	2100	3000	N	None
Kitchen/Dining/Lounge	ALM-002-03 A	W13	600	1500	N	None
Kitchen/Dining/Lounge	ALM-002-03 A	W1	1500	600	E	None
Kitchen/Dining/Lounge	ALM-002-03 A	W2	1500	600	E	None
Kitchen/Dining/Lounge	ALM-002-03 A	W14	550	1700	E	None
Kitchen/Dining/Lounge	ALM-002-03 A	W15	562	1700	E	None
Kitchen/Dining/Lounge	ALM-002-03 A	W3	1200	1500	E	None
Kitchen/Dining/Lounge	ALM-002-03 A	W4	1200	1500	E	None
Kitchen/Dining/Lounge	ALM-002-03 A	D3	2100	4000	S	None
Kitchen/Dining/Lounge	ALM-002-03 A	D4	2100	1400	S	None
Study Nook	ALM-002-03 A	W5	1000	1200	S	None
Bed 5	ALM-002-03 A	W6	600	1800	W	None
Powder	ALM-002-03 A	W7	1500	600	W	None
Laundry	ALM-002-03 A	W8	1100	600	W	None
Laundry	ALM-001-03 A	Glazed half door	1200	820	W	None
Bed 1	ALM-002-03 A	W18	600	1800	E	None
Bed 1	ALM-002-03 A	Half D5	2100	900	S	None
Bed 1	ALM-002-03 A	Half D5	2100	900	S	None
Ensuite 1	ALM-002-03 A	W19	1000	1200	W	None
Bed 4	ALM-002-03 A	W20	600	1800	W	None
Bed 3	ALM-002-03 A	W21	600	1800	W	None
Bed 3	ALM-002-03 A	D6	2100	1800	N	None
Bed 2	ALM-002-03 A	D7	2100	1800	N	None
Bed 2	ALM-002-03 A	W16	600	1800	E	None
Bath (1st)	ALM-002-03 A	W17	600	1200	E	None
Living	ALM-002-03 A	W9	1500	600	W	None
Living	ALM-002-03 A	W10	1500	600	W	None
Living	ALM-002-03 A	W12A	1200	1500	E	None

Roof window and skylight type and performance value

* Nationwide House Energy Rating Scheme (NatHERS) is an initiative of the Australian, state and territory governments. For more details see www.nathers.gov.au

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ID	Window type	U-value	SHGC
None Present			

Roof window and skylight schedule

Location	ID	Roof window/skylight no.	Area (m ²)	Orientation	Outdoor shade	Indoor shade/diffuser
None Present						

External wall type

ID	Wall type	Insulation	Wall wrap or foil
EW-004	Fibre-cement sheet/Plasterboard		No
EW-005	Fibre-cement sheet/Plasterboard	Glass fibre batt: R2.0	No

External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Garage	EW-004	5820	2700	W	No	
Garage	EW-004	6090	2700	N	No	
Garage	EW-004	5820	2700	E	Yes	6400
Entry Hall	EW-005	1510	2450	N	Yes	2800
Kitchen/Dining/Lounge	EW-005	4910	2400	N	Yes	2800
Kitchen/Dining/Lounge	EW-005	1600	1700	N	Yes	2800
Kitchen/Dining/Lounge	EW-005	2000	500	W	Yes	300
Kitchen/Dining/Lounge	EW-005	2000	500	E	Yes	300
Kitchen/Dining/Lounge	EW-005	1100	2800	E	Yes	450
Kitchen/Dining/Lounge	EW-005	3750	3900	E	Yes	450
Kitchen/Dining/Lounge	EW-005	2400	1300	E	Yes	450
Kitchen/Dining/Lounge	EW-005	500	2450	N	Yes	450
Kitchen/Dining/Lounge	EW-005	4770	3100	E	Yes	300
Kitchen/Dining/Lounge	EW-005	5400	2400	S	Yes	1100
Kitchen/Dining/Lounge	EW-005	2250	2450	S	Yes	1100
Study Nook	EW-005	1550	2450	S	Yes	1100
Bed 5	EW-005	3170	2450	S	Yes	1100
Bed 5	EW-005	4380	2450	W	Yes	600
Powder	EW-005	1800	2450	W	Yes	600
Laundry	EW-005	1800	2450	W	Yes	600
Hall/Stair (1st)	EW-005	1100	400	E	Yes	600
Bed 1	EW-005	4800	1500	E	Yes	600
Bed 1	EW-005	3200	3100	S	Yes	450

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Bed 1	EW-005	1100	3500	S	Yes	450
Ensuite 1	EW-005	2000	2850	S	Yes	450
Ensuite 1	EW-005	2400	2418	W	Yes	600
WIR 1	EW-005	2280	2418	W	Yes	600
Bed 4	EW-005	3300	2418	W	Yes	600
Bed 3	EW-005	600	2300	S	Yes	450
Bed 3	EW-005	5805	2200	W	Yes	600
Bed 3	EW-005	3000	2800	N	Yes	450
Bed 2	EW-005	3000	2800	N	Yes	450
Bed 2	EW-005	4300	2200	E	Yes	600
Bath (1st)	EW-005	900	2600	N	Yes	450
Bath (1st)	EW-005	3605	1500	E	Yes	600
Living	EW-005	4000	2450	W	Yes	600
Living	EW-005	2600	2450	E	Yes	7050

Internal wall type

ID	Wall type	Area (m ²)	Insulation	Wall wrap or foil
IW-001	Plasterboard	214.0		No
IW-007	Plasterboard	13.2	Glass fibre batt: R2.0	No

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Garage/Ground	Concrete Slab 150 mm: bare/bare	35.4			
Entry Hall/Outdoor Air	Framed flr with parquet timber floor - no ceiling - R2.0 insul	13.7		R2.0	
Kitchen/Dining/Lounge/Outdoor Air	Framed flr with parquet timber floor - no ceiling - R2.0 insul	63.6		R2.0	
Pantry/Outdoor Air	Framed flr with parquet timber floor - no ceiling - R2.0 insul	3.8		R2.0	
Study Nook/Outdoor Air	Framed flr with carpet-underfelt - no ceiling - R2.0 bulk insul	3.3		R2.0	Carpet 10 + rubber underlay 8
Bed 5/Outdoor Air	Framed flr with carpet-underfelt - no ceiling - R2.0 bulk insul	13.9		R2.0	Carpet 10 + rubber underlay 8
Powder/Outdoor Air	Framed flr with ceramic tiles - no ceiling - R2.0 bulk insul	3.6		R2.0	Ceramic tile
Laundry/Outdoor Air	Framed flr with ceramic tiles - no ceiling - R2.0 bulk insul	5.7		R2.0	Ceramic tile
Hall/Stair (1st)/Living	Framed flr with carpet-underfelt - PB ceiling under	2.6			Carpet 10 + rubber underlay 8
Hall/Stair (1st)/Pantry	Framed flr with carpet-underfelt - PB ceiling under	0.6			Carpet 10 + rubber underlay 8
Hall/Stair (1st)/Entry Hall	Framed flr with carpet-underfelt - PB ceiling under	3.5			Carpet 10 + rubber underlay 8
Hall/Stair (1st)/Kitchen/Dining/Lounge	Framed flr with carpet-underfelt - PB ceiling under	0.4			Carpet 10 + rubber underlay 8

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Bed 1/Kitchen/Dining/Lounge	Framed flr with carpet-underfelt - PB ceiling under	10.4		Carpet 10 + rubber underlay 8
Bed 1/Study Nook	Framed flr with carpet-underfelt - PB ceiling under	3.3		Carpet 10 + rubber underlay 8
Bed 1/Pantry	Framed flr with carpet-underfelt - PB ceiling under	3.0		Carpet 10 + rubber underlay 8
Bed 1/Bed 5	Framed flr with carpet-underfelt - PB ceiling under	2.4		Carpet 10 + rubber underlay 8
Ensuite 1/Bed 5	Framed flr with ceramic tiles - PB ceiling under	4.8		Ceramic tile
WIR 1/Powder	Framed flr with carpet-underfelt - PB ceiling under	0.5		Carpet 10 + rubber underlay 8
WIR 1/Bed 5	Framed flr with carpet-underfelt - PB ceiling under	3.7		Carpet 10 + rubber underlay 8
Bed 4/Powder	Framed flr with carpet-underfelt - PB ceiling under	2.2		Carpet 10 + rubber underlay 8
Bed 4/Laundry	Framed flr with carpet-underfelt - PB ceiling under	4.7		Carpet 10 + rubber underlay 8
Bed 4/Bed 5	Framed flr with carpet-underfelt - PB ceiling under	0.3		Carpet 10 + rubber underlay 8
Bed 4/Entry Hall	Framed flr with carpet-underfelt - PB ceiling under	4.4		Carpet 10 + rubber underlay 8
Bed 3/Living	Framed flr with carpet-underfelt - PB ceiling under	8.4		Carpet 10 + rubber underlay 8
Bed 3/Garage	Framed flr with carpet-underfelt - PB ceiling under	9.0		Carpet 10 + rubber underlay 8
Bed 2/Living	Framed flr with carpet-underfelt - PB ceiling under	3.1		Carpet 10 + rubber underlay 8
Bed 2/Outdoor Air	Framed flr with carpet-underfelt - PB ceiling under	1.8		Carpet 10 + rubber underlay 8
Bed 2/Garage	Framed flr with carpet-underfelt - PB ceiling under	8.1		Carpet 10 + rubber underlay 8
Bath (1st)/Living	Framed flr with ceramic tiles - PB ceiling under	0.5		Ceramic tile
Bath (1st)/Entry Hall	Framed flr with ceramic tiles - PB ceiling under	6.6		Ceramic tile
Living/Outdoor Air	Framed flr with carpet-underfelt - no ceiling - R2.0 bulk insul	21.7	R2.0	Carpet 10 + rubber underlay 8

Ceiling type

Location	Construction	Added insulation	Roof space above
Bed 3/Garage	Framed flr with carpet-underfelt - PB ceiling under		No
Bed 2/Garage	Framed flr with carpet-underfelt - PB ceiling under		No
Hall/Stair (1st)/Entry Hall	Framed flr with carpet-underfelt - PB ceiling under		No
Bed 4/Entry Hall	Framed flr with carpet-underfelt - PB ceiling under		No
Bath (1st)/Entry Hall	Framed flr with ceramic tiles - PB ceiling under		No
Hall/Stair (1st)/Kitchen/Dining/Lounge	Framed flr with carpet-underfelt - PB ceiling under		No

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Bed 1/Kitchen/Dining/Lounge	Framed flr with carpet-underfelt - PB ceiling under	No
Hall/Stair (1st)/Pantry	Framed flr with carpet-underfelt - PB ceiling under	No
Bed 1/Pantry	Framed flr with carpet-underfelt - PB ceiling under	No
Bed 1/Study Nook	Framed flr with carpet-underfelt - PB ceiling under	No
Bed 1/Bed 5	Framed flr with carpet-underfelt - PB ceiling under	No
Ensuite 1/Bed 5	Framed flr with ceramic tiles - PB ceiling under	No
WIR 1/Bed 5	Framed flr with carpet-underfelt - PB ceiling under	No
Bed 4/Bed 5	Framed flr with carpet-underfelt - PB ceiling under	No
WIR 1/Powder	Framed flr with carpet-underfelt - PB ceiling under	No
Bed 4/Powder	Framed flr with carpet-underfelt - PB ceiling under	No
Bed 4/Laundry	Framed flr with carpet-underfelt - PB ceiling under	No
Hall/Stair (1st)/Living	Framed flr with carpet-underfelt - PB ceiling under	No
Bed 3/Living	Framed flr with carpet-underfelt - PB ceiling under	No
Bed 2/Living	Framed flr with carpet-underfelt - PB ceiling under	No
Bath (1st)/Living	Framed flr with ceramic tiles - PB ceiling under	No

Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
Entry Hall	4	Downlight		Sealed
Kitchen/Dining/Lounge	16	Downlight		Sealed
Kitchen/Dining/Lounge	1	Ceiling exhaust fan	160	Sealed
Pantry	1	Downlight		Sealed
Study Nook	1	Downlight		Sealed
Bed 5	3	Downlight		Sealed
Powder	1	Downlight		Sealed
Powder	1	Ceiling exhaust fan	160	Sealed
Laundry	2	Downlight		Sealed
Hall/Stair (1st)	3	Downlight		Sealed
Bed 1	6	Downlight		Sealed
Ensuite 1	2	Downlight		Sealed
Ensuite 1	2	Ceiling exhaust fan	160	Sealed
WIR 1	1	Downlight		Sealed
Bed 4	4	Downlight		Sealed
Bed 3	4	Downlight		Sealed
Bed 2	4	Downlight		Sealed
Bath (1st)	2	Downlight		Sealed
Bath (1st)	1	Ceiling exhaust fan	160	Sealed
Living	6	Downlight		Sealed

Ceiling fans

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Location	Number	Diameter (mm)
None Present		

Roof type

Construction	Added insulation	Roof colour
22.5 deg Colourbond steel roof + Anticon R1.3 insul with R4.0 bulk insul + Plasterb'd ceiling under	R5.3	Light
Framed roof with w/p membrane and tiles-no insul_pb ceiling under		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