Certificate number: 0004618468 Certificate Date: 25 Feb 2020 ★ Star rating: 4.5



#### Assessor details

Accreditation

number: 20045

Name: Peter Barlow

Organisation: Barlow Energy Efficiency Services

Email: bees1@optusnet.com.au

Phone: **(02) 9705 7097** 

Declaration Employed by designer of the building

of interest:

Software: AccuRate Sustainability V2.3.3.13 SP4

AAO: ABSA

#### **Overview**

Lot/DP

#### **Dwelling details**

Street: **10 Spring Road**Suburb: **North Curl Curl** 

State: NSW Postcode: 2099

Type: New NCC Class: 1a

NatHERS

number: Lot 47 DP 20103 Exposure: Suburban

climate zone: 56

#### 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 High Solar

Gain low-E

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

 Conditioned:
 202.9

 Unconditioned:
 61.9

 Garage:
 41.4

 TOTAL:
 264.7

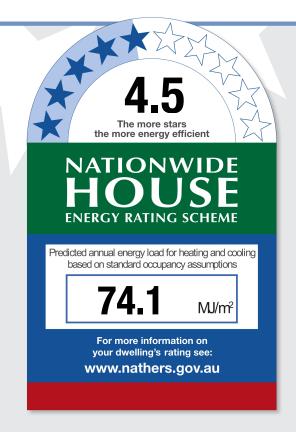
# Annual thermal performance loads (MJ/m²)

Heating: **47.7** Cooling: **26.4** TOTAL: **74.1** 

#### Plan documents

Plan ref/date: Job No. CC161

Prepared by: Classic Country Cottages



#### **Ceiling penetrations**

(see following pages for details)

Sealed: 2

Unsealed: 0
TOTAL:\*\*

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded 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: No Ceiling Penetration Downlights

# 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 **4.5** 

+10% SHGC 4.5

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.



Certificate number: **0004618468** Certificate Date: **25 Feb 2020** ★ Star rating:



# **Building features**

Window type and	l performance value
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Window ID	Window type	U-value	SHGC
ALM-004-03 A	DEFAULTS: Aluminium B DG Air Fill High Solar Gain low-E -Clear	4.3	0.53
ALM-006-01 A	DEFAULTS: Aluminium B DG Argon Fill Clear-Clear	4.5	0.61

#### Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Garage	ALM-006-01 A	W6	1000	1500	N	None
Guest	ALM-004-03 A	D2	2100	1800	W	None
Guest	ALM-004-03 A	W5	1100	1800	S	None
Powder	ALM-004-03 A	W4	1200	800	S	None
Study	ALM-004-03 A	W3	1200	800	S	None
Study	ALM-004-03 A	W2	1200	800	Е	None
Cloak	ALM-004-03 A	W1	1200	450	S	None
Entry/Hall/Stair	ALM-006-01 A	D1 Sidelight	2113	432	S	None
Kitchen/Dining	ALM-006-01 A	W13	650	2400	S	None
Kitchen/Dining	ALM-004-03 A	W12	1800	600	S	None
Kitchen/Dining	ALM-004-03 A	W11	1800	600	S	None
Kitchen/Dining	ALM-004-03 A	D6	2100	3000	Е	None
Kitchen/Dining	ALM-006-01 A	W10a	675	3000	E	None
Kitchen/Dining	ALM-006-01 A	D5	2100	1800	N	None
Lounge	ALM-006-01 A	D4	2100	3000	Е	None
Lounge	ALM-006-01 A	W10	675	3000	Е	None
Lounge	ALM-004-03 A	W9	1800	600	N	None
Lounge	ALM-004-03 A	W8	1800	600	N	None
Laundry	ALM-004-03 A	W7	1000	800	N	None
Hall/Stair (1st)	ALM-006-01 A	W24	1000	1500	N	None
Hall/Stair (1st)	ALM-006-01 A	W25	800	1800	Е	None
Bed 1	ALM-006-01 A	W26	450	1500	N	None
Bed 1	ALM-006-01 A	W27	800	1800	Е	None
Bed 1	ALM-004-03 A	W28	1200	500	Е	None
Bed 1	ALM-004-03 A	W29	1200	2100	S	None
Bed 1	ALM-004-03 A	W30	1200	500	W	None
Ensuite 1	ALM-004-03 A	W14	1100	800	S	None
Bath (1st)	ALM-006-01 A	W15	1100	1500	S	None
Living (1st)	ALM-004-03 A	W16	1200	500	Е	None
Living (1st)	ALM-004-03 A	W17	1200	2100	S	None
Living (1st)	ALM-004-03 A	W18	1200	500	W	None
Living (1st)	ALM-006-01 A	W19	800	1800	W	None
Bed 2	ALM-006-01 A	W20	600	1800	W	None
Bed 2	ALM-004-03 A	W21	1200	600	N	None
Bed 2	ALM-004-03 A	W22	1200	600	N	None
Bed 3	ALM-006-01 A	W23	1000	1500	N	None

Roof window and	d skylight type and	performance value
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ID Window type U-value SHG0	
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None Present

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# **Building features continued**

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

External wall t	уре					
ID	Wall type		Insulation		Wa	ıll wrap or foi
EW-004	Fibre-cement s	heet/Plasterboard	Glass fibre ba	tt: R2.5	No	)
External wall s	schedule					
Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Garage	EW-004	6120	3060	W	Yes	450
Garage	EW-004	6820	3060	N	Yes	300
Garage	EW-004	600	3060	Е	No	
Guest	EW-004	4350	2700	W	Yes	450
Guest	EW-004	3600	2700	S	Yes	1800
Powder	EW-004	1800	2700	S	Yes	1800
Study	EW-004	1800	2700	S	Yes	1800
Study	EW-004	1350	2700	Е	Yes	3800
Cloak	EW-004	1600	2700	S	Yes	1800
Entry/Hall/Stair	EW-004	1600	2700	S	Yes	1800
Entry/Hall/Stair	EW-004	1100	2960	N	Yes	600
Kitchen/Dining	EW-004	1350	2700	W	Yes	3800
Kitchen/Dining	EW-004	4700	2700	S	Yes	450
Kitchen/Dining	EW-004	2500	2400	S	Yes	450
Kitchen/Dining	EW-004	4735	3250	Е	Yes	1800
Kitchen/Dining	EW-004	2570	4100	N	Yes	5400
Lounge	EW-004	4825	3250	Е	Yes	4370
Lounge	EW-004	1100	2400	N	Yes	600
Lounge	EW-004	600	2300	Е	Yes	4370
Lounge	EW-004	3000	2200	N	No	
Lounge	EW-004	600	2300	W	No	
Lounge	EW-004	1100	2400	N	Yes	600
Laundry	EW-004	1200	2700	N	Yes	600
Laundry	EW-004	400	2700	Е	No	
Laundry	EW-004	900	2700	N	No	
Hall/Stair (1st)	EW-004	2290	2550	N	Yes	600
Hall/Stair (1st)	EW-004	5300	2700	Е	Yes	450
Bed 1	EW-004	5200	900	N	Yes	600
Bed 1	EW-004	3985	2000	Е	Yes	450
Bed 1	EW-004	590	2400	S	Yes	600
Bed 1	EW-004	750	2400	Е	Yes	300
Bed 1	EW-004	2620	2600	S	Yes	300
Bed 1	EW-004	750	2400	W	Yes	300
Bed 1	EW-004	590	2400	S	Yes	600

<sup>\*</sup> 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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WIR 1         EW-004         2100         2400         S         Yes           Ensuite 1         EW-004         1800         2400         S         Yes           Bath (1st)         EW-004         2100         2400         S         Yes           Living (1st)         EW-004         875         2400         S         Yes           Living (1st)         EW-004         750         2400         E         Yes           Living (1st)         EW-004         2820         2600         S         Yes           Living (1st)         EW-004         750         2400         W         Yes           Living (1st)         EW-004         875         2400         S         Yes           Living (1st)         EW-004         4605         3250         W         Yes           Bed 2         EW-004         4515         2850         W         Yes           Bed 2         EW-004         400         2400         S         No           Bed 2         EW-004         1150         1150         W         Yes					ıres continued	Building featu
Bath (1st)         EW-004         2100         2400         S         Yes           Living (1st)         EW-004         875         2400         S         Yes           Living (1st)         EW-004         750         2400         E         Yes           Living (1st)         EW-004         2820         2600         S         Yes           Living (1st)         EW-004         750         2400         W         Yes           Living (1st)         EW-004         875         2400         S         Yes           Living (1st)         EW-004         4605         3250         W         Yes           Bed 2         EW-004         4515         2850         W         Yes           Bed 2         EW-004         400         2400         S         No	Yes 600	S	2400	2100	EW-004	WIR 1
Living (1st)       EW-004       875       2400       S       Yes         Living (1st)       EW-004       750       2400       E       Yes         Living (1st)       EW-004       2820       2600       S       Yes         Living (1st)       EW-004       750       2400       W       Yes         Living (1st)       EW-004       875       2400       S       Yes         Living (1st)       EW-004       4605       3250       W       Yes         Bed 2       EW-004       4515       2850       W       Yes         Bed 2       EW-004       400       2400       S       No	Yes 600	S	2400	1800	EW-004	Ensuite 1
Living (1st)       EW-004       750       2400       E       Yes         Living (1st)       EW-004       2820       2600       S       Yes         Living (1st)       EW-004       750       2400       W       Yes         Living (1st)       EW-004       875       2400       S       Yes         Living (1st)       EW-004       4605       3250       W       Yes         Bed 2       EW-004       4515       2850       W       Yes         Bed 2       EW-004       400       2400       S       No	Yes 600	S	2400	2100	EW-004	Bath (1st)
Living (1st)       EW-004       2820       2600       S       Yes         Living (1st)       EW-004       750       2400       W       Yes         Living (1st)       EW-004       875       2400       S       Yes         Living (1st)       EW-004       4605       3250       W       Yes         Bed 2       EW-004       4515       2850       W       Yes         Bed 2       EW-004       400       2400       S       No	Yes 600	S	2400	875	EW-004	Living (1st)
Living (1st)       EW-004       750       2400       W       Yes         Living (1st)       EW-004       875       2400       S       Yes         Living (1st)       EW-004       4605       3250       W       Yes         Bed 2       EW-004       4515       2850       W       Yes         Bed 2       EW-004       400       2400       S       No	Yes 300	E	2400	750	EW-004	Living (1st)
Living (1st)       EW-004       875       2400       S       Yes         Living (1st)       EW-004       4605       3250       W       Yes         Bed 2       EW-004       4515       2850       W       Yes         Bed 2       EW-004       400       2400       S       No	Yes 300	S	2600	2820	EW-004	Living (1st)
Living (1st)       EW-004       4605       3250       W       Yes         Bed 2       EW-004       4515       2850       W       Yes         Bed 2       EW-004       400       2400       S       No	Yes 300	W	2400	750	EW-004	Living (1st)
Bed 2       EW-004       4515       2850       W       Yes         Bed 2       EW-004       400       2400       S       No	Yes 600	S	2400	875	EW-004	Living (1st)
Bed 2 EW-004 400 2400 S No	Yes 450	W	3250	4605	EW-004	Living (1st)
	Yes 450	W	2850	4515	EW-004	Bed 2
Bed 2 EW-004 1150 1150 W Yes	No	S	2400	400	EW-004	Bed 2
	Yes 450	W	1150	1150	EW-004	Bed 2
Bed 2 EW-004 4055 2400 N Yes	Yes 600	N	2400	4055	EW-004	Bed 2
Bed 3 EW-004 3365 2400 N Yes	Yes 600	N	2400	3365	EW-004	Bed 3
Bed 3 EW-004 400 2500 E Yes	Yes 300	E	2500	400	EW-004	Bed 3

Internal wall type					
ID	Wall type	Area (m²)	Insulation	Wall wrap or foil	
IW-001	Plasterboard	173.7		No	
IW-006	Plasterboard	97.6	Glass fibre batt: R2.0	No	

Floors					
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Garage/Ground	Concrete Slab 150 mm: bare/bare	41.4			
Guest/Outdoor Air	Framed flr with ceramic tiles - no ceiling - R2.0 bulk insul	15.7		R2.0	Ceramic tile
Powder/Outdoor Air	Framed flr with ceramic tiles - no ceiling - R2.0 bulk insul	5.5		R2.0	Ceramic tile
Study/Outdoor Air	Framed flr with ceramic tiles - no ceiling - R2.0 bulk insul	5.5		R2.0	Ceramic tile
Cloak/Outdoor Air	Framed flr with ceramic tiles - no ceiling - R2.0 bulk insul	4.1		R2.0	Ceramic tile
Entry/Hall/Stair/Out door Air	Framed flr with parquet timber floor - no ceiling - R2.0 insul	19.8		R2.0	
Kitchen/Dining/Out door Air	Framed flr with parquet timber floor - no ceiling - R2.0 insul	34.1		R2.0	
Lounge/Outdoor Air	Framed flr with parquet timber floor - no ceiling - R2.0 insul	26.8		R2.0	
Laundry/Outdoor Air	Framed flr with ceramic tiles - no ceiling - R2.0 bulk insul	7.8		R2.0	Ceramic tile
Hall/Stair (1st)/Garage	Framed flr with carpet-underfelt - PB ceiling under - R2.0 bulk insu			R2.0	Carpet underlay (felt)
Hall/Stair (1st)/Laundry	Framed flr with carpet-underfelt - PB ceiling under	3.6			Carpet underlay (felt)
Hall/Stair (1st)/Cloak	Framed flr with carpet-underfelt - PB ceiling under	0.1			Carpet underlay (felt)

<sup>\*</sup> 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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# **Building features continued**

Hall/Stair (1st)/Entry/Hall/Stair	Framed flr with carpet-underfelt - 11.1 PB ceiling under		Carpet underlay (felt)
Bed 1/Entry/Hall/Stair	Framed flr with carpet-underfelt - 0.4 PB ceiling under		Carpet underlay (felt)
Bed 1/Kitchen/Dining	Framed flr with carpet-underfelt - 18.2 PB ceiling under		Carpet underlay (felt)
	Framed flr with carpet-underfelt - 0.6 PB ceiling under		Carpet underlay (felt)
WIR 1/Entry/Hall/Stair	Framed flr with carpet-underfelt - 2.8 PB ceiling under		Carpet underlay (felt)
WIR 1/Kitchen/Dining	Framed flr with carpet-underfelt - 2.5 PB ceiling under		Carpet underlay (felt)
Ensuite 1/Outdoor Air	Framed flr with ceramic tiles - PB 0.9 ceiling under		Ceramic tile
Ensuite 1/Entry/Hall/Stair	Framed flr with ceramic tiles - PB 1.1 ceiling under		Ceramic tile
Ensuite 1/Cloak	Framed flr with ceramic tiles - PB 3.6 ceiling under		Ceramic tile
Bath (1st)/Study	Framed flr with ceramic tiles - PB 4.8 ceiling under		Ceramic tile
Bath (1st)/Entry/Hall/Stair	Framed flr with ceramic tiles - PB 2.4 ceiling under		Ceramic tile
Living (1st)/Garage	Framed flr with carpet-underfelt - 4.6 PB ceiling under - R2.0 bulk insul	R2.0	Carpet underlay (felt)
Living (1st)/Entry/Hall/Stair	Framed flr with carpet-underfelt - 2.1 PB ceiling under		Carpet underlay (felt)
Living (1st)/Powder	Framed flr with carpet-underfelt - 4.7 PB ceiling under		Carpet underlay (felt)
Living (1st)/Guest	Framed flr with carpet-underfelt - 11.8 PB ceiling under		Carpet underlay (felt)
Bed 2/Garage	Framed flr with carpet-underfelt - 16.7 PB ceiling under - R2.0 bulk insul	R2.0	Carpet underlay (felt)
Bed 3/Garage	Framed flr with carpet-underfelt - 12.7 PB ceiling under - R2.0 bulk insul	R2.0	Carpet underlay (felt)
Bed 3/Laundry	Framed flr with carpet-underfelt - 3.7 PB ceiling under		Carpet underlay (felt)
Bed 3/Entry/Hall/Stair	Framed flr with carpet-underfelt - 0.3 PB ceiling under		Carpet underlay (felt)

O - :		type	
LA	IIInn	TVDC	Δ.
OCI	шч	LVDC	ë.

Location	Construction	Added insulation	Roof space above
Hall/Stair (1st)/Garage	Framed flr with carpet-underfelt - PB ceiling under - R2.0 bul k insul	R2.0	No
Living (1st)/Garage	Framed flr with carpet-underfelt - PB ceiling under - R2.0 bul k insul	R2.0	No
Bed 2/Garage	Framed flr with carpet-underfelt - PB ceiling under - R2.0 bul k insul	R2.0	No
Bed 3/Garage	Framed flr with carpet-underfelt - PB ceiling under - R2.0 bul k insul	R2.0	No
Living (1st)/Guest	Framed flr with carpet-underfelt - PB ceiling under		No
Living (1st)/Powder	Framed flr with carpet-underfelt - PB ceiling under		No
Bath (1st)/Study	Framed flr with ceramic tiles - PB ceiling under		No

<sup>\*</sup> 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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# **Building features continued**

Hall/Stair (1st)/Cloak	Framed flr with carpet-underfelt - PB ceiling under	No
Ensuite 1/Cloak	Framed flr with ceramic tiles - PB ceiling under	No
Hall/Stair (1st)/Entry/Hall/Sta	Framed flr with carpet-underfelt - PB ceiling under air	No
Bed 1/Entry/Hall/Stair	Framed flr with carpet-underfelt - PB ceiling under	No
WIR 1/Entry/Hall/Stair	Framed flr with carpet-underfelt - PB ceiling under	No
Ensuite 1/Entry/Hall/Stair	Framed flr with ceramic tiles - PB ceiling under	No
Bath (1st)/Entry/Hall/Sta	Framed flr with ceramic tiles - PB ceiling under air	No
Living (1st)/Entry/Hall/Sta	Framed flr with carpet-underfelt - PB ceiling under air	No
Bed 3/Entry/Hall/Stair	Framed flr with carpet-underfelt - PB ceiling under	No
Bed 1/Kitchen/Dining	Framed flr with carpet-underfelt - PB ceiling under	No
WIR 1/Kitchen/Dining	Framed flr with carpet-underfelt - PB ceiling under	No
Hall/Stair (1st)/Laundry	Framed flr with carpet-underfelt - PB ceiling under	No
Bed 3/Laundry	Framed flr with carpet-underfelt - PB ceiling under	No

Ceiling penetrations	Ceil	ing pei	netrations
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Location	Number	Туре	Diameter (mm)	Sealed/unsealed
Powder	1	Ceiling exhaust fan	160	Unsealed
Kitchen/Dining	1	Ceiling exhaust fan	160	Sealed
Ensuite 1	1	Ceiling exhaust fan	160	Sealed
Bath (1st)	1	Ceiling exhaust fan	160	Sealed

# **Ceiling fans**

Location	Number	Diameter (mm)	
None Present			

#### **Roof type**

Construction	Added insulation	Roof colour
as_ROOF-A001 #E017 © 22.5 deg Colourbond steel roof + Anticon R1.0 insul with R4.0 bulk insul + Plasterb'd ceiling under	R5.0	Medium
as_ROOF-A001 #3015 © 22.5 deg Colourbond steel roof + Anticon R1.0 insul with Plasterb'd ceiling under	R1.0	Medium



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

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