Certificate number: 0004302535-01 Certificate Date: 07 Apr 2020 ★ Star rating: 5.3



#### Assessor details

Accreditation

number: 20570 Name: John Caley

Organisation: Ecological Design Pty Ltd
Email: john@ecologicaldesign.com.au

Phone: **0418 262 706** 

Declaration

yes - not managed

of interest: Software:

BERS Pro v4.4.0.0 (3.21)

AAO: ABSA

#### **Overview**

# **Dwelling details**

Street: 1E Bungan Head Rd

Suburb: Newport

State: NSW Postcode: 2106
Type: New Dwelling NCC Class: 1A

NatHERS

Lot/DP climate zone: **56** 

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

R4.0 ceiling insulation R1.7 floor insulation

Glazing: ALM-002-01 A Aluminium B SG Clear

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

 Conditioned:
 182.0

 Unconditioned:
 20.0

 Garage:
 0.0

 TOTAL:
 202.0

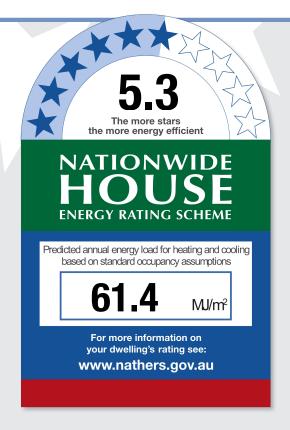
# Annual thermal performance loads (MJ/m²)

Heating: **35.5**Cooling: **25.9**TOTAL: **61.4** 

#### Plan documents

Plan ref/date: **DA1** 

Prepared by: **Design Tribe Projects** 



#### **Ceiling penetrations**

(see following pages for details)

Sealed: 81
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: **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If any of windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.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 typ	be and p	erforman	ice value
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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

# Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Kitchen/Liv/din	ALM-006-01 A	n/a	2700	3445	N	No Shading
Kitchen/Liv/din	ALM-002-01 A	n/a	600	1722	N	No Shading
Kitchen/Liv/din	ALM-002-01 A	n/a	600	1722	N	No Shading
Kitchen/Liv/din	ALM-006-01 A	n/a	2700	900	E	No Shading
Kitchen/Liv/din	ALM-006-01 A	n/a	2150	2100	S	No Shading
Study	ALM-006-01 A	n/a	840	3316	W	No Shading
Study	ALM-002-01 A	n/a	840	2100	N	No Shading
Bathroom	ALM-002-01 A	n/a	2700	900	S	No Shading
landing	ALM-002-01 A	n/a	1350	2292	N	No Shading
landing	ALM-002-01 A	n/a	2700	1200	Е	No Shading
landing	ALM-002-01 A	n/a	2700	1235	W	No Shading
Bedroom_02	ALM-002-01 A	n/a	1940	3575	W	Vertical Louvres, Horizontal Blades
Bedroom_02	ALM-002-01 A	n/a	1860	1300	N	No Shading
Bedroom_02	ALM-002-01 A	n/a	1940	900	N	No Shading
Bedroom_02	ALM-002-01 A	n/a	2700	900	E	No Shading
Bedroom_01	ALM-002-01 A	n/a	2700	900	E	No Shading
Bedroom_01	ALM-002-01 A	n/a	2700	900	Е	No Shading
Master	ALM-002-01 A	n/a	2700	900	S	No Shading
Master	ALM-002-01 A	n/a	1940	3748	W	Vertical Louvres, Horizontal Blades
Master	ALM-002-01 A	n/a	1940	1063	N	No Shading
Bath_02	ALM-002-01 A	n/a	1350	900	N	No Shading
Bath_02	ALM-002-01 A	n/a	1350	1300	W	No Shading
ens	ALM-002-01 A	n/a	2700	700	W	No Shading
ens	ALM-002-01 A	n/a	2700	700	E	No Shading
living	ALM-006-01 A	n/a	2700	3442	Е	No Shading
living	ALM-002-01 A	n/a	600	1721	Е	No Shading
living	ALM-002-01 A	n/a	600	1721	Е	No Shading
living	ALM-006-01 A	n/a	2150	3037	S	No Shading
living	ALM-002-01 A	n/a	600	4406	W	Vertical Louvres, Horizontal Blades
living	ALM-002-01 A	n/a	600	4406	W	Vertical Louvres, Horizontal Blades
living	ALM-006-01 A	n/a	2700	8812	W	Vertical Louvres, Horizontal Blades

Root	window	and s	kyligh	nt type	and	per	tormance val	ue
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ID	Window type	U-value	SHGC	
GEN-04-008a	Double-glazed clear, Timber and Aluminium Frame	0.0	0.00	

# Roof window and skylight schedule

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# **Building features continued**

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

External wall type							
ID	Wall type		Insulation		Wa	all wrap or foi	
EW-1	Tilt up Concrete		Foil Anti-glare of the Bulk Ins	one side and Rosulation R2.7	eflective other Ye	es	
External wall s	schedule						
Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)	
Kitchen/Liv/din	EW-1	4040	3850	N	No	750	
Kitchen/Liv/din	EW-1	1240	3850	E	No	650	
Kitchen/Liv/din	EW-1	850	3850	Е	No	2900	
Kitchen/Liv/din	EW-1	6395	3850	S	No	1250	
Study	EW-1	3745	2700	W	No	500	
Study	EW-1	2700	2700	N	No	550	
Study	EW-1	3745	3850	Е	No	650	
Bathroom	EW-1	1795	2700	S	No	1300	
Bathroom	EW-1	1450	2700	N	No	250	
Bathroom	EW-1	3750	2700	Е	No	1100	
landing	EW-1	2900	2700	N	No	0	
landing	EW-1	1540	2700	Е	No	0	
landing	EW-1	2090	2700	S	No	0	
landing	EW-1	1290	2700	W	No	0	
Bedroom_02	EW-1	652	2700	W	No	0	
Bedroom_02	EW-1	500	2700	S	No	0	
Bedroom_02	EW-1	3600	2700	W	No	0	
Bedroom_02	EW-1	1300	2700	N	No	0	
Bedroom_02	EW-1	500	2700	E	No	0	
Bedroom_02	EW-1	3350	2700	N	No	0	
Bedroom 02	EW-1	3995	2700	E	No	0	
Bedroom 02	EW-1	245	2700	W	No	0	
Bedroom_02	EW-1	2700	2700	S	No	0	
Bedroom_01	EW-1	4000	2700	E	No	0	
Bedroom_01	EW-1	3445	2700	S	No	0	
Bedroom_01	EW-1	2550	2700	N	No	0	
Master	EW-1	3150	2700	N	No	0	
Master	EW-1	295	2700	W	No	0	
Master	EW-1	4995	2700	S	No	0	
Master	EW-1	700	2700	W	No	0	
Master	EW-1	550	2700	S	No	0	
Master	EW-1	3850	2700	W	No	0	
Master	EW-1	1200	2700	N	No	0	
Master	EW-1	600	2700	E	No	0	

<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 feat	tures continue	ed				
Bath_02	EW-1	3200	2700	N	No	0
Bath_02	EW-1	3995	2700	Е	No	0
Bath_02	EW-1	3995	2700	W	No	0
ens	EW-1	3300	2700	S	No	0
ens	EW-1	1000	2700	W	No	0
ens	EW-1	1000	2700	Е	No	0
living	EW-1	4350	3850	Е	No	950
living	EW-1	4795	3850	S	No	1250
living	EW-1	10150	3850	W	No	3750
living	EW-1	4800	3850	N	No	950

Internal wall type						
Wall type	Area (m²)	Insulation	Wall wrap or foil			
IW-1 - Cavity wall, direct fix plasterboard, single gap	108.0	No insulation	No			

Floors					
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Kitchen/Liv/din	Concrete Slab on Ground 150mm	36.6	None	Bulk Insulation in Contact with Floor R1.7	Bare
Study	Concrete Slab on Ground 150mm	10.0	None	Bulk Insulation in Contact with Floor R1.7	Cork Tiles or Parquetry 8mm
Bathroom	Concrete Slab on Ground 150mm	7.1	None	Bulk Insulation in Contact with Floor R1.7	
landing/Kitchen/Liv /din	Concrete Above Plasterboard 150mm	15.0		No Insulation	Cork Tiles or Parquetry 8mm
landing/Study	Concrete Above Plasterboard 150mm	0.8		No Insulation	Cork Tiles or Parquetry 8mm
landing/living	Concrete Above Plasterboard 150mm	0.9		No Insulation	Cork Tiles or Parquetry 8mm
landing	Suspended Concrete Slab 150mm	1.4	Open	Bulk Insulation in Contact with Floor R1.7	Cork Tiles or Parquetry 8mm
Bedroom_02/living	Concrete Above Plasterboard 150mm	14.8		No Insulation	Cork Tiles or Parquetry 8mm
Bedroom_02	Suspended Concrete Slab 150mm	3.3	Open	Bulk Insulation in Contact with Floor R1.7	Cork Tiles or Parquetry 8mm
Bedroom_01/Kitch en/Liv/din	Concrete Above Plasterboard 150mm	1.6		No Insulation	Cork Tiles or Parquetry 8mm
Bedroom_01/Bathr oom	Concrete Above Plasterboard 150mm	7.2		No Insulation	Cork Tiles or Parquetry 8mm
Bedroom_01	Suspended Concrete Slab 150mm	4.8	Open	Bulk Insulation in Contact with Floor R1.7	Cork Tiles or Parquetry 8mm
Master/Kitchen/Liv/din	Concrete Above Plasterboard 150mm	9.3		No Insulation	Cork Tiles or Parquetry 8mm

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#### **Building features continued** Master/living Concrete Above Plasterboard 19.2 No Insulation Cork Tiles or 150mm Parquetry 8mm Suspended Concrete Slab Master 1.1 Open Bulk Insulation Cork Tiles or 150mm in Contact with Parquetry 8mm Floor R1.7 Bath\_02/Study Concrete Above Plasterboard 9.2 No Insulation Ceramic Tiles 150mm 8mm Bath\_02 Suspended Concrete Slab 3.4 Open **Bulk Insulation Ceramic Tiles** 150mm in Contact with 8mm Floor R1.7 ens/Kitchen/Liv/din Concrete Above Plasterboard 8.1 No Insulation Cork Tiles or 150mm Parquetry 8mm Suspended Concrete Slab 1.3 Open Bulk Insulation Cork Tiles or ens 150mm in Contact with Parquetry 8mm Floor R1.7 Suspended Concrete Slab living 48.5 Open **Bulk Insulation Bare** 150mm in Contact with Floor R1.7

Location	Construction	Added insulation	Roof space above
Kitchen/Liv/din	Plasterboard	Bulk Insulation R4	Yes
Kitchen/Liv/din	Concrete Above Plasterboard	No Insulation	No
Study	Concrete Above Plasterboard	No Insulation	No
Bathroom	Concrete Above Plasterboard	No Insulation	No
landing	Plasterboard	Bulk Insulation R4	Yes
Bedroom_02	Plasterboard	Bulk Insulation R4	Yes
Bedroom_01	Plasterboard	Bulk Insulation R4	Yes
Master	Plasterboard	Bulk Insulation R4	Yes
Bath_02	Plasterboard	Bulk Insulation R4	Yes
ens	Plasterboard	Bulk Insulation R4	Yes
living	Plasterboard	Bulk Insulation R4	Yes
living	Concrete Above Plasterboard	No Insulation	No

Ceiling penetrations						
Location	Number	Туре	Diameter (mm)	Sealed/unsealed		
Kitchen/Liv/din	15	Downlights - LED	150	Sealed		
Kitchen/Liv/din	1	Exhaust Fans	300	Sealed		
Study	4	Downlights - LED	150	Sealed		
Bathroom	2	Downlights - LED	150	Sealed		
Bathroom	1	Exhaust Fans	300	Sealed		

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anding	7	Downlights - LED	150	Sealed
landing	1	Exhaust Fans	300	Sealed
Bedroom_02	4	Downlights - LED	150	Sealed
Bedroom_01	4	Downlights - LED	150	Sealed
Master	12	Downlights - LED	150	Sealed
Bath_02	4	Downlights - LED	150	Sealed
Bath_02	1	Exhaust Fans	300	Sealed
ens	4	Downlights - LED	150	Sealed
ens	1	Exhaust Fans	300	Sealed
living	20	Downlights - LED	150	Sealed

Ceiling fans						
Location	Number	Diameter (mm)				
None Present						

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





Additional information		
W20 to sliders and ext shading		
W10 and 17 ext shading		

# **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

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