Certificate number: 0004491056 Certificate Date: 19 Dec 2019 ★ Star rating: 5.7



Assessor details

Accreditation

number: **20758**

Name: Cameron McFadzean

Organisation: Deneb Design

Email: info@denebdesign.com.au

Phone: **02 99977480**

Declaration The Assessor has been engaged in the

of interest: project design or development

Software: **BERS Pro v4.4.0.0 (3.21)**

AAO: ABSA

Overview

Dwelling details

Street: 21 TASMAN STREET

Suburb: Dee Why

Lot/DP

State: NSW Postcode: 2099
Type: New Dwelling NCC Class: 1A

NatHERS

climate zone: 56

number: **27/7435** 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

R5.0 ceiling insulation R1.5 floor insulation

Glazing: ALM-002-03 A Aluminium B SG High

Solar Gain Low-E

Net floor area (m²)

 Conditioned:
 311.0

 Unconditioned:
 55.0

 Garage:
 43.0

 TOTAL:
 366.0

Annual thermal performance loads (MJ/m²)

Heating: **34.7** Cooling: **21.9** TOTAL: **56.6**

Plan documents

Plan ref/date: Dec2019

Prepared by: **DenebDesignArchitecture**



Ceiling penetrations

(see following pages for details)

Sealed: 0
Unsealed: 0

TOTAL:**

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: Unknown

0

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If any of windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.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.



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

Certificate number: 0004491056 Certificate Date: 19 Dec 2019 ★ Star rating: 5.



Building features

Window type and performance value					
Window ID	Window type	U-value	SHGC		
ALM-002-03 A	ALM-002-03 A Aluminium B SG High Solar Gain Low-E	5.4	0.58		
ALM-004-03 A	ALM-004-03 A Aluminium B DG Air Fill High Solar Gain low-E -Clear	4.3	0.53		
ALM-003-03 A	ALM-003-03 A Aluminium A DG Air Fill High Solar Gain low-E -Clear	4.3	0.47		
ALM-001-03 A	ALM-001-03 A Aluminium A SG High Solar Gain Low-E	5.4	0.49		

Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Garage 1	ALM-002-03 A	n/a	450	1230	Е	No Shading
Garage 1	ALM-002-03 A	n/a	450	1230	W	No Shading
Media	ALM-002-03 A	n/a	450	1230	W	No Shading
StairsLower	ALM-002-03 A	n/a	450	840	E	No Shading
Living	ALM-004-03 A	n/a	2400	3600	N	No Shading
Bedroom 4	ALM-002-03 A	n/a	2080	600	W	No Shading
Bedroom 4	ALM-002-03 A	n/a	2080	600	W	No Shading
Entry	ALM-002-03 A	n/a	3450	600	N	No Shading
Entry	ALM-003-03 A	n/a	2400	900	N	No Shading
Entry	ALM-002-03 A	n/a	300	450	Е	No Shading
Kitchen/Living	ALM-002-03 A	n/a	300	2130	Е	No Shading
Kitchen/Living	ALM-004-03 A	n/a	3250	1790	S	No Shading
Kitchen/Living	ALM-004-03 A	n/a	2400	4400	S	No Shading
Kitchen/Living	ALM-002-03 A	n/a	750	4290	W	No Shading
Retreat	ALM-002-03 A	n/a	2400	3600	N	No Shading
Bedroom 2	ALM-002-03 A	n/a	1110	1810	W	No Shading
Bedroom 3	ALM-002-03 A	n/a	1110	1810	W	No Shading
Bedroom 1	ALM-002-03 A	n/a	2400	600	S	No Shading
Bedroom 1	ALM-002-03 A	n/a	2400	2980	S	No Shading
Ensuite	ALM-002-03 A	n/a	1110	970	W	No Shading
Ensuite	ALM-002-03 A	n/a	1110	970	W	No Shading
Walkway/Void	ALM-002-03 A	n/a	300	450	Е	No Shading
Walkway/Void	ALM-002-03 A	n/a	300	450	Е	No Shading
Walkway/Void	ALM-001-03 A	n/a	2400	1025	S	No Shading
Walkway/Void	ALM-002-03 A	n/a	2400	1050	S	No Shading
Walkway/Void	ALM-002-03 A	n/a	2400	2150	N	No Shading
Walkway/Void	ALM-002-03 A	n/a	600	20000	W	No Shading

Roof window and	d 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

Roof window and skylight schedule

<u></u>						
Location	ID	Roof window/skylight no.	Area (m²)	Orientation	Outdoor shade	Indoor shade/diffuser
Living	GEN-04-008a	1	0.8	W	None	No
Bedroom 4	GEN-04-008a	1	0.3	W	None	No
Butlers Ldry	GEN-04-008a	1	0.3	W	None	No

Certificate number: 0004491056 Certificate Date: 19 Dec 2019 ★ Star rating: 5.7



Building features continued

Walkway/Void

EW-1

Kitchen/Living GEN-04-008a 1 1.4 W None No

ID	Wall type		Insulation			all wrap or foi
EW-1	Brick Veneer		Bulk Insulation R2.5)
EW-2	Cavity Brick		Bulk Insulation R2.5		No)
External wall	schedule					
Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Garage 1	EW-1	6600	2450	N	No	0
Garage 1	EW-1	6400	2450	E	No	0
Garage 1	EW-1	4195	2450	W	No	0
Garage 1	EW-1	2236	2450	W	No	0
Media	EW-1	4995	2450	S	No	0
Media	EW-1	5395	2450	W	No	0
StairsLower	EW-1	995	2450	N	No	0
StairsLower	EW-1	5400	2450	Е	No	0
StairsLower	EW-1	2195	2450	S	No	0
Living	EW-1	5995	3450	W	No	200
Living	EW-1	4995	3450	N	No	1800
Bedroom 4	EW-1	4190	3450	W	No	200
Butlers Ldry	EW-1	4790	3450	W	No	200
Entry	EW-1	2795	3450	N	No	1800
Entry	EW-2	12195	3450	E	No	400
Kitchen/Living	EW-2	9195	3450	Е	No	400
Kitchen/Living	EW-1	7800	3450	S	No	2000
Kitchen/Living	EW-1	6395	3450	W	No	200
Retreat	EW-1	4995	2450	W	No	400
Retreat	EW-1	3995	2450	N	No	600
Bedroom 2	EW-1	4190	2450	W	No	400
Bedroom 3	EW-1	4390	2450	W	No	400
Bedroom 1	EW-1	4795	2450	S	No	400
Bedroom 1	EW-1	4195	2450	W	No	400
Ensuite	EW-1	3590	2450	W	No	400
Walkway/Void	EW-1	21400	2450	E	No	300
Walkway/Void	EW-1	2195	2450	S	No	400

Internal wall type			
Wall type	Area (m²)	Insulation	Wall wrap or foil
IW-1 - Cavity wall, direct fix plasterboard, single gap	244.0	No insulation	No

2450

Ν

No

2995

600

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

Certificate number: 0004491056 Certificate Date:

19 Dec 2019





Building features continued

Floors					
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Garage 1	Concrete Slab on Ground 100mm	43.4	None	Bulk Insulation in Contact with Floor R1.5	
Media	Concrete Slab on Ground 100mm	26.5	None	Bulk Insulation in Contact with Floor R1.5	Cork Tiles or Parquetry 8mm
StairsLower	Concrete Slab on Ground 100mm	7.7	None	Bulk Insulation in Contact with Floor R1.5	Cork Tiles or Parquetry 8mm
Living/Garage 1	Concrete Above Plasterboard 100mm	24.5		No Insulation	Carpet 10mm
Living	Concrete Slab on Ground 100mm	3.1	None	Bulk Insulation in Contact with Floor R1.5	Cork Tiles or Parquetry 8mm
Bath_Lower/Media	Concrete Above Plasterboard 100mm	4.1		No Insulation	Carpet 10mm
Bedroom 4/Garage	Concrete Above Plasterboard 100mm	0.5		No Insulation	Carpet 10mm
Bedroom 4/Media	Concrete Above Plasterboard 100mm	12.0		No Insulation	Carpet 10mm
Bedroom 4	Concrete Slab on Ground 100mm	2.4	None	Bulk Insulation in Contact with Floor R1.5	
Butlers Ldry/Media	Concrete Above Plasterboard 100mm	2.1		No Insulation	Carpet 10mm
Butlers Ldry	Concrete Slab on Ground 100mm	9.3	None	Bulk Insulation in Contact with Floor R1.5	Cork Tiles or Parquetry 8mn
Entry/Garage 1	Concrete Above Plasterboard 100mm	16.5		No Insulation	Carpet 10mm
Entry/Media	Concrete Above Plasterboard 100mm	6.3		No Insulation	Carpet 10mm
Entry/StairsLower	Concrete Above Plasterboard 100mm	7.9		No Insulation	Carpet 10mm
Entry	Concrete Slab on Ground 100mm	7.7	None	Bulk Insulation in Contact with Floor R1.5	Cork Tiles or Parquetry 8mm
Kitchen/Living /Media	Concrete Above Plasterboard 100mm	1.4		No Insulation	Carpet 10mm
Kitchen/Living	Concrete Slab on Ground 100mm	65.4	None	Bulk Insulation in Contact with Floor R1.5	Cork Tiles or Parquetry 8mm
Retreat/Living	Timber Above Plasterboard 150mm	15.9		No Insulation	Carpet 10mm
Retreat/Entry	Timber Above Plasterboard 150mm	0.5		No Insulation	Carpet 10mm
Retreat	Suspended Concrete Slab 150mm	3.1	Totally Open	Bulk Insulation in Contact with Floor R1.5	Cork Tiles or Parquetry 8mn
Bedroom 2/Bedroom 4	Timber Above Plasterboard 150mm	5.3		No Insulation	Carpet 10mm
Bedroom 2/Butlers Ldry	Timber Above Plasterboard 150mm	3.9		No Insulation	Carpet 10mm
Bedroom 2/Entry	Timber Above Plasterboard	2.6		No Insulation	Carpet 10mm

Certificate number: 0004491056 Certificate Date: 19 Dec 2019 ★ Star rating:



Building features continued

	150mm				
Bedroom 2/Kitchen/Living	Timber Above Plasterboard 150mm	4.2		No Insulation	Carpet 10mm
Bedroom 3/Living	Timber Above Plasterboard 150mm	5.9		No Insulation	Carpet 10mm
Bedroom 3/Bath_Lower	Timber Above Plasterboard 150mm	0.5		No Insulation	Carpet 10mm
Bedroom 3/Bedroom 4	Timber Above Plasterboard 150mm	6.5		No Insulation	Carpet 10mm
Bedroom 1/Kitchen/Living	Timber Above Plasterboard 150mm	27.0		No Insulation	Carpet 10mm
Ensuite/Butlers Ldry	Timber Above Plasterboard 150mm	3.8		No Insulation	Ceramic Tiles 8mm
Ensuite/Kitchen/Liv ing	Timber Above Plasterboard 150mm	3.8		No Insulation	Ceramic Tiles 8mm
Bath_Upstairs/Bat h_Lower	Timber Above Plasterboard 150mm	3.9		No Insulation	Ceramic Tiles 8mm
Bath_Upstairs/Entry	Timber Above Plasterboard 150mm	2.8		No Insulation	Ceramic Tiles 8mm
Walkway/Void/Livi	Timber Above Plasterboard 150mm	0.5		No Insulation	Cork Tiles or Parquetry 8mm
Walkway/Void/Entry	Timber Above Plasterboard 150mm	32.3		No Insulation	Cork Tiles or Parquetry 8mm
Walkway/Void/Kitc hen/Living	Timber Above Plasterboard 150mm	20.2		No Insulation	Cork Tiles or Parquetry 8mm
Walkway/Void	Suspended Concrete Slab 150mm	2.3	Totally Open	Bulk Insulation in Contact with Floor R1.5	Cork Tiles or Parquetry 8mm

Cei	ling 1	type

Location	Construction	Added insulation	Roof space above
Garage 1	Plasterboard	Bulk Insulation R5	No
Garage 1	Concrete Above Plasterboard	No Insulation	No
Media	Plasterboard	Bulk Insulation R5	No
Media	Concrete Above Plasterboard	No Insulation	No
StairsLower	Plasterboard	Bulk Insulation R5	No
StairsLower	Concrete Above Plasterboard	No Insulation	No
Living	Plasterboard	Bulk Insulation R5	No
Living	Timber Above Plasterboard	No Insulation	No
Bath_Lower	Plasterboard	Bulk Insulation R5	No
Bath_Lower	Timber Above Plasterboard	No Insulation	No
Bedroom 4	Plasterboard	Bulk Insulation R5	No
Bedroom 4	Timber Above Plasterboard	No Insulation	No
Butlers Ldry	Plasterboard	Bulk Insulation R5	No

Certificate number: 0004491056 Certificate Date:

19 Dec 2019

★ Star rating:

Building features continued

Butlers Ldry	Timber Above Plasterboard	No Insulation	No
Entry	Plasterboard	Bulk Insulation R5	No
Entry	Timber Above Plasterboard	No Insulation	No
Kitchen/Living	Plasterboard	Bulk Insulation R5	No
Kitchen/Living	Timber Above Plasterboard	No Insulation	No
Retreat	Plasterboard	Bulk Insulation R5	No
Bedroom 2	Plasterboard	Bulk Insulation R5	No
Bedroom 3	Plasterboard	Bulk Insulation R5	No
Bedroom 1	Plasterboard	Bulk Insulation R5	No
Ensuite	Plasterboard	Bulk Insulation R5	No
Bath_Upstairs	Plasterboard	Bulk Insulation R5	No
Walkway/Void	Plasterboard	Bulk Insulation R5	No

Ceiling	penetrations
---------	--------------

Location	Number	Туре	Diameter (mm) Sealed/unse	aled
None Present				

Ceiling fans

Location	Number	Diameter (mm)	
None Present			

D	0	of	44	m	_
-	u	UI	L١	/b	C

Construction	Added Roof colour insulation
Corrugated Iron	Bulk, Reflective Medium Side Down, Anti- glare Up R0.7

Certificate number: 0004491056 **Certificate Date:** 19 Dec 2019 ★Star rating: 5.7



Additional informatic



Certificate no.: Assessor Name: Accreditation no.:

Certificate date: **Dwelling Address:** 21 TASMAN STREET

2099

www.nathers.gov.au

0004491056

Cameron McFadzean

20758

19 Dec 2019

denebdesign





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

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