Certificate number: 0004087490-01

Certificate Date: 07 Aug 2019

★ Star rating: 7.3



Assessor details

Accreditation number:	20945
Name:	Dimitrios Harakidas
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Declaration of interest:	No potential conflicts of interest to declare
Software:	AccuRate Sustainability V2.3.3.13 SP4
AAO:	ABSA

Overview

Dwelling details

Street:	Unit 1, 39 Crammond Boulevard					
Suburb:	Caringbah					
State:	NSW	Postcode:	2229			
Туре:	New	NCC Class: NatHERS	1a			
Lot/DP		climate zone:	56			
	Lot 66 DP 12496	Exposure:	Suburban			

Key construction and insulation materials

(see following pages for details)

Construction:	Brick wall/Plasterboard
	Clay tile roof
	Plaster (cement:sand 1:4)/Slab
Insulation:	R2.0 wall insulation
	R4.0 ceiling insulation
	Floor (uninsulated)
Glazing:	Aluminium B SG Clear

Net floor area (m²)

Conditioned: Unconditioned:	161.0 42.7	(MJ/m ²)		
Garage:	24.5	Heating:	22.9	
TOTAL:	203.7	Cooling:	11.3	
		TOTAL:	34.1	

Annual thermal

Plan documents

Plan ref/date:**39CRA / DA01 / 24.07.2019**Prepared by:**RS**

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Ceiling penetration (see following pages for		**NOTE: This total is the maximum number of ceiling penetrations allowed to a
Sealed: Unsealed: TOTAL:**	41 0 41	 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
Principle downlight typ	e: Lig	taken into account with the rating.
Principle downlight typ Window selection default windows o	-	A second s

-10% SHGC 7.3

+10% SHGC 7.4

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.



Certificate number: 0004087490-01 Certificate Date:

07 Aug 2019

★ Star rating:

7.3

Building features

Window type and performance value

Window ID	Window type	U-value	SHGC
ALM-001-01 A	DEFAULTS: Aluminium A SG Clear	6.7	0.57
ALM-002-01 A	DEFAULTS: Aluminium B SG Clear	6.7	0.70

Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
GARAGE	ALM-002-01 A	W01	595	1791	N	None
BATH	ALM-002-01 A	W02	940	610	Ν	None
GUEST	ALM-002-01 A	W03	1800	724	Ν	None
GUEST	ALM-002-01 A	W03	1800	724	N	None
LOUNGE	ALM-002-01 A	W04	595	1570	Ν	None
LOUNGE	ALM-002-01 A	W04	595	1570	Ν	None
KLD	ALM-002-01 A	W05	1370	1570	Ν	None
KLD	ALM-002-01 A	W05	1370	1570	Ν	None
KLD	ALM-001-01 A	D02	2109	2400	W	None
MB	ALM-001-01 A	D01	2109	1500	E	None
WIRM	ALM-002-01 A	W07	1800	610	E	None
WIRM	ALM-002-01 A	W07	1800	610	E	None
ESM	ALM-002-01 A	W08	940	610	Ν	None
B1	ALM-002-01 A	W09	940	1791	Ν	None
B2	ALM-002-01 A	W09	940	1791	Ν	None
B3	ALM-002-01 A	W09	940	1791	Ν	None
BATH UP	ALM-002-01 A	W10	595	1791	W	None
LDRY	ALM-002-01 A	W06	940	610	W	None

ID	Window type				U-value	SHGC		
GEN-04-004a	Double-glazed	d clear: norma			0.0	0.00		
Roof window and skylight schedule								
Location	ID	Roof window/skylight no.	Area (m ²)	Orientation	Outdoor shade	Indoor shade/diffuser		

External wa	ll type						
ID	Wall type		Insulation		Wa	ll wrap or fo	
EW-001	Plasterboard	Glass fibre batt: R2.0 Yes					
EW-002	Plasterboard Polystyrene expanded (k = 0.039): R2.6 No						
External wall schedule							
Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)	
GARAGE	EW-001	5090	3000	S	Yes	2200	
GARAGE	EW-001	3866	3000	E	Yes	1735	
GARAGE	EW-001	6333	3000	Ν	No		

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Certificate number:	0004087490-01	Certificate Da	ate:	07 Aug 2019	★ Star rating:	7.3 NATIONW HOU ENERGY RATING S
uilding feature	es continued					
BATH	EW-001	1890	3000	Ν	No	
GUEST	EW-001	3200	3000	N	No	
ENTRY - STAIRS	EW-001	2200	3000	E	Yes	7090
LOUNGE	EW-001	4340	3000	Ν	No	
KLD	EW-001	5213	4055	N	No	
KLD	EW-001	3517	4125	W	Yes	3400
KLD	EW-001	847	4222	N	Yes	3750
MB	EW-002	2756	2700	E	Yes	1375
WIRM	EW-002	1507	2700	S	Yes	2745
WIRM	EW-002	2857	2700	E	Yes	5500
WIRM	EW-002	1600	2700	N	Yes	5500
ESM	EW-002	2900	2700	N	Yes	5500
B1	EW-002	3600	2700	N	Yes	5500
B2	EW-002	3600	2700	N	Yes	5500

2700

2700

2700

1460

1260

4222

4289

Ν

W

Ν

W

W

Ν

W

B3

B3

B3

B3

BATH UP

LDRY

LDRY

EW-002

EW-002

EW-002

EW-002

EW-002

EW-001

EW-001

2454

297

1143

2494

2710

2180

2546

Internal wall type						
Wall type	Area (m ²)	Insulation	Wall wrap or foil			
Plasterboard	14.2	Glass fibre batt: R2.0	No			
Plasterboard	164.6		No			
Brick wall	135.2		No			
	Wall typePlasterboardPlasterboard	Wall typeArea (m²)Plasterboard14.2Plasterboard164.6	Wall typeArea (m²)InsulationPlasterboard14.2Glass fibre batt: R2.0Plasterboard164.6			

Floors					
Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
GARAGE/Ground	Concrete Slab 125 mm: bare/bare	24.5			
BATH/Ground	Concrete Slab 125 mm: ceramic tiles/bare	5.2			Ceramic tile
GUEST/Ground	Concrete Slab 125 mm: carpet/bare	12.4			Carpet 10 + rubber underlay 8
ENTRY - STAIRS/Ground	Concrete Slab 125 mm: ceramic tiles/bare	17.0			Ceramic tile
LOUNGE/Ground	Concrete Slab 125 mm: ceramic tiles/bare	27.4			Ceramic tile
KLD/Ground	Concrete Slab 125 mm: ceramic tiles/bare	35.8			Ceramic tile
LANDING/GARAGE	Framed (particleboard) - air gap - Carpet + R2.0 - Garage & OA	0.2		R2.0	Carpet 10 + felt underlay 10
LANDING/GUEST	Framed (particleboard) - air gap - Carpet	0.7			Carpet 10 + felt underlay 10

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5500

1869

1050

5500

5500

3750

Yes

Yes

Yes

Yes

Yes

Yes

No

Certificate number: 0004087490-01 Certificate Date:

07 Aug 2019

★ Star rating:



7.3

Building	features	continued
Dunung	j icatal co	Commuca

Ballang leatare				
LANDING/ENTRY - STAIRS	Framed (particleboard) - air gap - Carpet	10.8		Carpet 10 + felt underlay 10
LANDING/LOUNGE	Framed (particleboard) - air gap - Carpet	3.3		Carpet 10 + felt underlay 10
MB/GARAGE	Framed (particleboard) - air gap - Carpet + R2.0 - Garage & OA	4.5	R2.0	Carpet 10 + felt underlay 10
MB/Outdoor Air	Framed (particleboard) - air gap - Carpet + R2.0 - Garage & OA	8.2	R2.0	Carpet 10 + felt underlay 10
MB/ENTRY - STAIRS	Framed (particleboard) - air gap - Carpet	4.4		Carpet 10 + felt underlay 10
WIRM/GARAGE	Framed (particleboard) - air gap - Carpet + R2.0 - Garage & OA	4.6	R2.0	Carpet 10 + felt underlay 10
ESM/GARAGE	Framed (particleboard) - air gap - Ceramic tiles + R2.0 - Garage & OA	5.7	R2.0	Ceramic tile
B1/GARAGE	Framed (particleboard) - air gap - Carpet + R2.0 - Garage & OA	4.4	R2.0	Carpet 10 + felt underlay 10
B1/BATH	Framed (particleboard) - air gap - Carpet	4.0		Carpet 10 + felt underlay 10
B1/ENTRY - STAIRS	Framed (particleboard) - air gap - Carpet	1.2		Carpet 10 + felt underlay 10
B2/GUEST	Framed (particleboard) - air gap - Carpet	9.6		Carpet 10 + felt underlay 10
B2/LOUNGE	Framed (particleboard) - air gap - Carpet	0.6		Carpet 10 + felt underlay 10
B3/LOUNGE	Framed (particleboard) - air gap - Carpet	10.7		Carpet 10 + felt underlay 10
BATH UP/LOUNGE	Framed (particleboard) - air gap - Ceramic tiles	7.5		Ceramic tile
ROOF SPACE/MB	Plasterboard 10 mm + R4.0 bulk insulation	18.7	R4.0	
ROOF SPACE/WIRM	Plasterboard 10 mm + R4.0 bulk insulation	4.6	R4.0	
ROOF SPACE/ESM	Plasterboard 10 mm + R4.0 bulk insulation	5.6	R4.0	
ROOF SPACE/B1	Plasterboard 10 mm + R4.0 bulk insulation	10.1	R4.0	
ROOF SPACE/B2	Plasterboard 10 mm + R4.0 bulk insulation	10.8	R4.0	
ROOF SPACE/B3	Plasterboard 10 mm + R4.0 bulk insulation	10.7	R4.0	
ROOF SPACE/BATH UP	Plasterboard 10 mm + R4.0 bulk insulation	7.5	R4.0	
ROOF SPACE/LANDING	Plasterboard 10 mm + R4.0 bulk insulation	15.5	R4.0	
LDRY/Ground	Concrete Slab 125 mm: ceramic tiles/bare	5.6		Ceramic tile

Ceiling type			
Location	Construction	Added insulation	Roof space above
WIRM/GARAGE	Framed (particleboard) - air gap - Carpet + R2.0 - Garage & OA	R2.0	No
ESM/GARAGE		R2.0	No

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Certificate number: 0004087490-01 Certificate Date:

07 Aug 2019

★ Star rating:

7.3

Building features continued

Building leature	5 oontinued		
	Framed (particleboard) - air gap - Ceramic tiles + R2.0 - Garage & OA		
B1/GARAGE	Framed (particleboard) - air gap - Carpet + R2.0 - Garage & OA	R2.0	No
LANDING/GARAGE	E Framed (particleboard) - air gap - Carpet + R2.0 - Garage & OA	R2.0	No
MB/GARAGE	Framed (particleboard) - air gap - Carpet + R2.0 - Garage & OA	R2.0	No
B1/BATH	Framed (particleboard) - air gap - Carpet		No
B2/GUEST	Framed (particleboard) - air gap - Carpet		No
LANDING/GUEST	Framed (particleboard) - air gap - Carpet		No
B1/ENTRY - STAIRS	Framed (particleboard) - air gap - Carpet		No
LANDING/ENTRY - STAIRS	Framed (particleboard) - air gap - Carpet		No
MB/ENTRY - STAIRS	Framed (particleboard) - air gap - Carpet		No
B2/LOUNGE	Framed (particleboard) - air gap - Carpet		No
LANDING/LOUNGE	E Framed (particleboard) - air gap - Carpet		No
B3/LOUNGE	Framed (particleboard) - air gap - Carpet		No
BATH UP/LOUNGE	Framed (particleboard) - air gap - Ceramic tiles		No
ROOF SPACE/LANDING	Plasterboard 10 mm + R4.0 bulk insulation	R4.0	Yes
ROOF SPACE/MB	Plasterboard 10 mm + R4.0 bulk insulation	R4.0	Yes
ROOF SPACE/WIRM	Plasterboard 10 mm + R4.0 bulk insulation	R4.0	Yes
ROOF SPACE/ESM	Plasterboard 10 mm + R4.0 bulk insulation	R4.0	Yes
ROOF SPACE/B1	Plasterboard 10 mm + R4.0 bulk insulation	R4.0	Yes
ROOF SPACE/B2	Plasterboard 10 mm + R4.0 bulk insulation	R4.0	Yes
ROOF SPACE/B3	Plasterboard 10 mm + R4.0 bulk insulation	R4.0	Yes
ROOF SPACE/BATH UP	Plasterboard 10 mm + R4.0 bulk insulation	R4.0	Yes

Ceiling penetrations

Location	Number	Туре	Diameter (mm) Sealed/unsealed
GARAGE	2	Downlight	Sealed
BATH	1	Downlight	Sealed
GUEST	1	Downlight	Sealed
ENTRY - STA	AIRS4	Downlight	Sealed
LOUNGE	1	Downlight	Sealed
KLD	14	Downlight	Sealed
LANDING	6	Downlight	Sealed
MB	1	Downlight	Sealed
WIRM	1	Downlight	Sealed
ESM	1	Downlight	Sealed
B1	4	Downlight	Sealed
B2	4	Downlight	Sealed
B3	4	Downlight	Sealed

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Certificate num	ber: 0004087490-	01 Certificate Date:	07 Aug 2019	★ Star rating:	7.3	NATIONWI HOUS ENERGY RATING SCI
Building fea	tures continue	d				
BATH UP	2	Downlight			Sealed	
LDRY	1	Downlight			Sealed	

Ceiling fans			
Location	Number	Diameter (mm)	
None Present			

Roof type			
Construction	Added insulation	Roof colour	
Tiles (terracotta) + Anticon R1.80	R1.8	Medium	
Metal deck system - R4.0	R4.0	Medium	
Terrace above - T/F - Plasterboard R4.0	R4.0	Medium	

Certificate number: 0004087490-01

Certificate Date: 07 Aug 2019

★ Star rating: 7.3



Additional information

Default ceiling penetration density calculated as lighting plan has not been provided. All openable windows other than located on ground floor or are louvre type (if applicable) are 10% only due to safety regulations/restrictions.

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