Certificate number: 0002214997-01 Certificate Date: 28 Nov 2017 ★ Star rating: 7.2



Assessor details

Accreditation

number: **20945**

Name: **Dimitrios Harakidas**

Organisation: AENEC

Email: info@aenec.com.au

Phone: **0416 316 204**

Declaration No potential conflicts of interest to

of interest: declare

Software: AccuRate Sustainability V2.3.3.13 SP3

AAO: ABSA

Overview

Dwelling details

Street: Unit U1, 474 President Avenue

Suburb: Kirrawee

Lot/DP

State: NSW Postcode: 2232

New NCC Class: 2

Type: New NCC Class: 2

NatHERS climate zone: **56**

number: A/373691 Exposure: Suburban

Key construction and insulation materials

(see following pages for details)

Construction: Timber (Radiata pine)/Plasterboard

Metal roof/Plasterboard/Plasterboard

Timber/Slab

Insulation: R2.0 wall insulation

Ceiling (uninsulated) R2.5 floor insulation

Glazing: Al Thermally Broken B DG Air Fill Low

Solar Gain

Net floor area (m²)

Conditioned: 105.0 Unconditioned: 12.0

Garage:

TOTAL: **117.0**

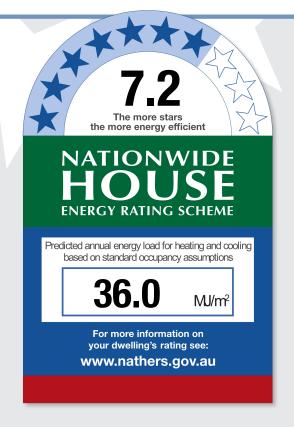
Annual thermal performance loads (MJ/m²)

Heating: **12.0**Cooling: **24.0**TOTAL: **36.0**

Plan documents

Plan ref/date: **1681/11.17**

Prepared by: W



Ceiling penetrations

(see following pages for details)

Sealed: 24
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: Light-emitting diode (LED)

24

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 **7.3**

+10% SHGC 7.1

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: **0002214997-01** Certificate Date: **28 Nov 2017**

★ Star rating:



Building features

Window type and performance value				
Window ID	Window type	U-value	SHGC	
ATB-004-04 B	DEFAULTS: Al Thermally Broken B DG Air Fill Low Solar Gain low-E-Clear: U = 3.10: SHGC = 0.27	3.1	0.27	
ATB-003-04 B	DEFAULTS: Al Thermally Broken A DG Air Fill Low Solar Gain low-E -Clear: U = 3.10: SHGC = 0.27	3.1	0.27	

Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
1ENTRY	ATB-004-04 B	D01-w	650	1200	S	None
1KLD	ATB-004-04 B	D02	2400	5390	N	None
1KLD	ATB-004-04 B	W03	700	2100	E	None
1KLD	ATB-004-04 B	W04	600	2100	E	None
1WC	ATB-003-04 B	W01	1000	600	S	None
1PTY	ATB-003-04 B	W02	1000	600	S	None
1BED1	ATB-003-04 B	W08I	600	700	Е	None
1BED1	ATB-004-04 B	W08f	600	1100	E	None
1BED1	ATB-004-04 B	D04	2400	2600	N	None
1BED2	ATB-003-04 B	W07I	1500	700	E	None
1BED2	ATB-004-04 B	W07f	1500	1100	E	None
1BED3	ATB-003-04 B	W07I	1500	700	Е	None
1BED3	ATB-004-04 B	W07f	1500	1100	Е	None
1BATH	ATB-003-04 B	W06I	600	600	S	None
1BATH	ATB-004-04 B	W06f	600	600	S	None
1VOID	ATB-004-04 B	W09	1260	2500	N	None

Roof window and skylight typ	be and performance value
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ID	Window type	U-value	SHGC
DG-Generic-02 A	DEFAULTS: Clear AI DG DEFAULT ROOF WINDOW System 02	4.2	0.72

Roof window and skylight schedule

Location	ID	Roof window/skylight no.	Area (m²)	Orientation	Outdoor shade	Indoor shade/diffuser
1STAIRS/HALL	DG-Generic-02 A	SK01	1.4	S	80% shade	None
1BATH	DG-Generic-02 A	SK2	0.7	S	None	Roller Blind

External wall type

ID	Wall type	Insulation	Wall wrap or foil
EW-001	Double Brick	Polystyrene extruded: R2.0	No
EW-002	Timber (Radiata pine)/F	Plasterboard Glass fibre batt: R2.0	No
EW-003	Double Brick	Polystyrene extruded: R2.0	No
EW-004	Timber (Radiata pine)/F	Plasterboard Glass fibre batt: R2.0	No

External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
1ENTRY	EW-003	1930	2700	S	Yes	1110

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1KLD EW-003 729 2700 E Yes 1KLD EW-003 5390 2700 N Yes 1KLD EW-001 6480 2700 E Yes 1KLD EW-003 330 2700 N Yes 1WC EW-001 730 2700 W Yes 1WC EW-001 2220 2700 S Yes 1PTY EW-001 1480 2700 S Yes 1PTY EW-001 2670 2700 E Yes 1BED1 EW-002 4290 2700 N Yes 1BED1 EW-002 3670 2700 N Yes	
1KLD EW-001 6480 2700 E Yes 1KLD EW-003 330 2700 N Yes 1WC EW-001 730 2700 W Yes 1WC EW-001 2220 2700 S Yes 1PTY EW-001 1480 2700 S Yes 1PTY EW-001 2670 2700 E Yes 1BED1 EW-002 4290 2700 E Yes	710
1KLD EW-003 330 2700 N Yes 1WC EW-001 730 2700 W Yes 1WC EW-001 2220 2700 S Yes 1PTY EW-001 1480 2700 S Yes 1PTY EW-001 2670 2700 E Yes 1BED1 EW-002 4290 2700 E Yes	1508
1WC EW-001 730 2700 W Yes 1WC EW-001 2220 2700 S Yes 1PTY EW-001 1480 2700 S Yes 1PTY EW-001 2670 2700 E Yes 1BED1 EW-002 4290 2700 E Yes	110
1WC EW-001 2220 2700 S Yes 1PTY EW-001 1480 2700 S Yes 1PTY EW-001 2670 2700 E Yes 1BED1 EW-002 4290 2700 E Yes	2508
1PTY EW-001 1480 2700 S Yes 1PTY EW-001 2670 2700 E Yes 1BED1 EW-002 4290 2700 E Yes	4180
1PTY EW-001 2670 2700 E Yes 1BED1 EW-002 4290 2700 E Yes	110
1BED1 EW-002 4290 2700 E Yes	110
	110
1BED1 FW-002 3670 2700 N Yes	800
1000 10 100 100 100 100 100 100 100 100	600
1BED2 EW-002 3100 2700 E Yes	800
1BED3 EW-002 3670 2700 S Yes	560
1BED3 EW-002 3100 2700 E Yes	800
1BATH EW-002 2500 2700 S Yes	560
1VOID EW-004 2500 2700 N Yes	600

Internal wall type				
ID	Wall type	Area (m²)	Insulation	Wall wrap or foi
IW-001	Brick	15.5		No
IW-002	Plasterboard	116.0		No
IW-003	Brick	52.5		No

Floors					
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
1STAIRS_B/Neigh bour	Concrete Slab 200 mm: bare/bare	3.8			
1ENTRY/Neighbour	Concrete Slab 200 mm: timber/R2.5/conc light	3.5		R2.5	
1KLD/Neighbour	Concrete Slab 200 mm: timber/R2.5/conc light	40.4		R2.5	
1KLD/1STAIRS_B	Concrete Slab 200 mm: timber/R2.5/conc light	3.8		R2.5	
1WC/Neighbour	Concrete Slab 200 mm: ceramic tiles/R2.5/conc light	2.2		R2.5	Ceramic tile
1LDRY/Neighbour	Concrete Slab 200 mm: ceramic tiles/R2.5/conc light	2.6		R2.5	Ceramic tile
1PTY/Neighbour	Concrete Slab 200 mm: timber/R2.5/conc light	4.7		R2.5	
1STAIRS/HALL/1E NTRY	Timber: carpet/air gap/plasterboard	0.3			Carpet 10 + rubber underlay 8
1STAIRS/HALL/1K LD	Timber: carpet/air gap/plasterboard	9.7			Carpet 10 + rubber underlay 8
1STAIRS/HALL/1L DRY	Timber: carpet/air gap/plasterboard	0.9			Carpet 10 + rubber underlay 8
1STAIRS/HALL/Ne ighbour	Timber: carpet/air gap/plasterboard	0.4			Carpet 10 + rubber underlay 8
1BED1/Outdoor Air	Timber: carpet/R2.0/fcboard	0.5		R2.0	

^{*} 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

				Carpet 10 + rubber underlay 8
1BED1/1KLD	Timber: carpet/air gap/plasterboard	14.7		Carpet 10 + rubber underlay 8
1BED1/Neighbour	Timber: carpet/air gap/plasterboard	1.8		Carpet 10 + rubber underlay 8
1BED2/1KLD	Timber: carpet/air gap/plasterboard	9.6		Carpet 10 + rubber underlay 8
1BED2/Neighbour	Timber: carpet/air gap/plasterboard	0.8		Carpet 10 + rubber underlay 8
1BED3/1KLD	Timber: carpet/air gap/plasterboard	0.2		Carpet 10 + rubber underlay 8
1BED3/1WC	Timber: carpet/air gap/plasterboard	1.8		Carpet 10 + rubber underlay 8
1BED3/1LDRY	Timber: carpet/air gap/plasterboard	1.4		Carpet 10 + rubber underlay 8
1BED3/1PTY	Timber: carpet/air gap/plasterboard	4.7		Carpet 10 + rubber underlay 8
1BED3/Neighbour	Timber: carpet/air gap/plasterboard	2.4		Carpet 10 + rubber underlay 8
1BATH/Outdoor Air	Timber: ceramic tile/R2.0/fcboard	1.9	R2.0	Ceramic tile
1BATH/1ENTRY	Timber: ceramic tile/air gap/plasterboard	2.9		Ceramic tile
1BATH/1WC	Timber: ceramic tile/air gap/plasterboard	0.3		Ceramic tile
1BATH/1LDRY	Timber: ceramic tile/air gap/plasterboard	0.1		Ceramic tile
1BATH/Neighbour	Timber: ceramic tile/air gap/plasterboard	1.2		Ceramic tile
1ENS1/1KLD	Timber: ceramic tile/air gap/plasterboard	4.7		Ceramic tile
1VOID/1KLD	Timber: carpet/air gap/plasterboard	3.4		Carpet 10 + rubber underlay 8
1VOID/Neighbour	Timber: carpet/air gap/plasterboard	0.4		Carpet 10 + rubber underlay 8

Ceiling type			
Location	Construction	Added insulation	Roof space above
1KLD/1STAIRS_B	Concrete Slab 200 mm: timber/R2.5/conc light	R2.5	No
1STAIRS/HALL/1E NTRY	Timber: carpet/air gap/plasterboard		No
1BATH/1ENTRY	Timber: ceramic tile/air gap/plasterboard		No
Neighbour/1ENTRY	Timber: ceramic tile/air gap/plasterboard		No
1STAIRS/HALL/1K LD	Timber: carpet/air gap/plasterboard		No
1BED1/1KLD	Timber: carpet/air gap/plasterboard		No
1BED2/1KLD	Timber: carpet/air gap/plasterboard		No
1BED3/1KLD	Timber: carpet/air gap/plasterboard		No
1ENS1/1KLD	Timber: ceramic tile/air gap/plasterboard		No
1VOID/1KLD	Timber: carpet/air gap/plasterboard		No

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Neighbour/1KLD Timber: carpet/air gap/plasterboard

No

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Building features continued

1BED3/1WC	Timber: carpet/air gap/plasterboard	No
1BATH/1WC	Timber: ceramic tile/air gap/plasterboard	No
Neighbour/1WC	Timber: ceramic tile/air gap/plasterboard	No
1STAIRS/HALL/1L DRY	Timber: carpet/air gap/plasterboard	No
1BED3/1LDRY	Timber: carpet/air gap/plasterboard	No
1BATH/1LDRY	Timber: ceramic tile/air gap/plasterboard	No
Neighbour/1LDRY	Timber: ceramic tile/air gap/plasterboard	No
1BED3/1PTY	Timber: carpet/air gap/plasterboard	No

Ceiling penetrations				
Location	Number	Туре	Diameter (mm) Sealed/unsealed	
1STAIRS_B	1	Downlight	Sealed	
1ENTRY	1	Downlight	Sealed	
1KLD	14	Downlight	Sealed	
1PTY	1	Downlight	Sealed	
1STAIRS/HALL	5	Downlight	Sealed	
1BED1	7	Downlight	Sealed	
1BED2	5	Downlight	Sealed	
1BED3	3	Downlight	Sealed	
1BATH	3	Downlight	Sealed	
1VOID	1	Downlight	Sealed	

Ceiling fans			
Location	Number	Diameter (mm)	
None Present			

Roof type			
Construction	Added insulation	Roof colour	
Metal roof system	R4.0	Medium	
Metal roof system +airgap/plasterboard	R4.0	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

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