Certificate number: 0003405925-02 Certificate Date: 06 Dec 2018 ★ Star rating: 5.0



#### Assessor details

Accreditation

number: **20042** 

Name: Peter Cumming

Organisation: NatHERS & BASIX Solutions
Email: basixsolutions@gmail.com

Phone: **0299797674** 

Declaration No potential conflicts of interest to

of interest: declare

Software: AccuRate Sustainability V2.3.3.13 SP4

AAO: ABSA

#### Overview

#### **Dwelling details**

Street: 33 Hillcrest Avenue

Suburb: Mona Vale

State: NSW Postcode: 2103
Type: New NCC Class: 1a

NatHERS

Lot/DP climate zone: **56** 

number: Lot 43 DP 6195 Exposure: Suburban

#### Key construction and insulation materials

(see following pages for details)

Construction: Plasterboard wall

Metal roof/Plasterboard

Slab

Insulation: R3.8 wall insulation

R2.0 ceiling insulation R2.5 floor insulation

Glazing: Al Thermally Broken B DG Air Fill High

**Solar Gain** 

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

 Conditioned:
 243.5

 Unconditioned:
 76.7

 Garage:
 31.0

 TOTAL:
 320.1

# Annual thermal performance loads (MJ/m²)

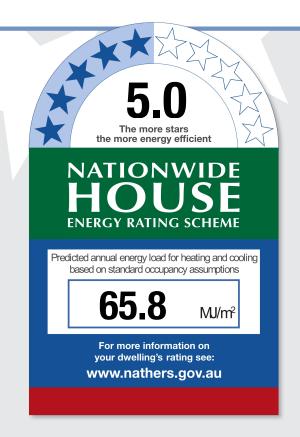
 Heating:
 39.8

 Cooling:
 26.0

 TOTAL:
 65.8

#### Plan documents

Plan ref/date: 1809/Sep 18
Prepared by: Luke Trovato



#### **Ceiling penetrations**

(see following pages for details)

Sealed: 4

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 **5.0** 

+10% SHGC 4.9

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.



<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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5.0

## **Building features**

Window ID	Window type	U-value	SHGC
ALM-002-03 A	DEFAULTS: Aluminium B SG High Solar Gain Low-E	5.4	0.58
ATB-003-03 B	DEFAULTS: Al Thermally Broken A DG Air Fill High Solar Gain low-E-Clear	3.1	0.39
ATB-004-03 B	DEFAULTS: Al Thermally Broken B DG Air Fill High Solar Gain low-E-Clear	3.1	0.49

#### Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
storage	ALM-002-03 A	W09	800	600	NW	None
storage	ATB-004-03 B	W09 fixed	800	1800	NW	None
storage	ALM-002-03 A	W09 louvre	800	600	NW	None
Bed 3	ALM-002-03 A	W08	800	600	NW	None
Bed 3	ATB-004-03 B	W08 fixed	800	2400	NW	None
Bed 3	ATB-003-03 B	W07	1500	1450	SW	None
Rumpus	ALM-002-03 A	W06	800	600	NW	Miniature louvres
Rumpus	ALM-002-03 A	W06 louvre	800	600	NW	Miniature louvres
Rumpus	ATB-004-03 B	W06 fixed	800	1800	NW	Miniature louvres
Rumpus	ATB-004-03 B	W05	2400	3500	SW	None
Bed 2	ATB-004-03 B	W03	2400	3000	SW	None
Bath	ALM-002-03 A	W02	800	600	SE	None
Bath	ATB-004-03 B	W02 fixed	800	1350	SE	None
WC	ALM-002-03 A	W01	800	600	SE	None
WC	ATB-004-03 B	W01 fixed	800	1200	SE	None
Entry/hall/linen	ATB-003-03 B	W10 door	2400	1200	NE	None
Entry/hall/linen	ALM-002-03 A	W10 louvre	2400	550	NE	None
Pantry	ATB-004-03 B	W25	500	1850	NW	None
Kitchen/dining/lin en	ATB-004-03 B	W24	500	2400	NW	Miniature louvres
Kitchen/dining/lin en	ALM-002-03 A	W24 louvre	500	650	NW	Miniature louvres
Kitchen/dining/lin en	ATB-003-03 B	W23	1400	1150	SW	Miniature louvres
Kitchen/dining/lin en	ATB-004-03 B	W21	2400	3500	SW	Miniature louvres
Kitchen/dining/lin en	ALM-002-03 A	W20	2400	800	SE	None
living	ATB-004-03 B	W19	2400	3500	SW	Miniature louvres
living	ALM-002-03 A	W14	2400	800	NE	Miniature louvres
Bath FF	ALM-002-03 A	W12	500	700	SE	None
Bath FF	ALM-002-03 A	W13	500	700	SE	None
Guest Bed	ATB-004-03 B	W11	2400	3050	NE	Miniature louvres
Guest Bed	ATB-004-03 B	W28	800	3050	NE	None
Landing/void SF	ALM-002-03 A	W27	2430	650	NE	None
Landing/void SF	ATB-004-03 B	W27 fixed	2430	1100	NE	None
	ALM-002-03 A	W37	1000	1750	NE	None
Ensuite	ALM-002-03 A	W35	600	2350	NW	None
Ensuite	ATB-004-03 B	W34	1200	900	SE	None
Study	ALM-002-03 A	W33a	1400	600	NW	Miniature louvres

<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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Study	ATB-004-03 B	W33a fixed	1400	3100	NW	Miniature louvres
Study	ALM-002-03 A	W32	1400	600	SW	Miniature louvres
Study	ATB-004-03 B	W32 fixed	1400	2250	SW	Miniature louvres
Master Suite	ATB-004-03 B	W31	2400	3500	SW	None
Master Suite	ALM-002-03 A	W30a	1400	600	SE	Miniature louvres
Master Suite	ATB-004-03 B	W30afixed	1400	3100	SE	Miniature louvres
WIR	ALM-002-03 A	W29	720	2300	NE	None
Stair GF	ATB-004-03 B	W26 part of	1600	1200	NW	None
Stair FF	ATB-004-03 B	W26 & 36 part of	2350	1200	NW	None
Stair SF	ATB-004-03 B	W36 part of	1500	1200	NW	None
Stair SF	ALM-002-03 A	W37	1000	2550	NE	None

ID	Window	type			U-value	SHGC
None Presen	it					
Roof windo	w and skyligh	t schedule				
Location	ID	Roof window/skylight	Area (m²)	Orientation	Outdoor shade	Indoor shade/diffuser

External wall	type					
ID	Wall type		Insulation		Wa	all wrap or foil
EW-006	Plasterboard		Polystyrene expanded (k = 0.039): R1.3/Polystyrene expanded: R2.5			es
EW-008	Retaining Conc	rete block			No	)
External wall	schedule					
Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
storage	EW-008	3850	2600	SE	No	,
storage	EW-008	5600	2600	NE	No	
storage	EW-006	5400	1350	NW	No	
storage	EW-006	2850	2600	SW	No	
storage	EW-008	5400	1250	NW	No	
storage	EW-008	1500	1210	SE	No	
hall/linen GF	EW-008	1700	2600	NE	No	
hall/linen GF	EW-008	3050	2600	SE	No	
Bed 3	EW-006	1600	2600	NE	No	
Bed 3	EW-006	4950	2600	NW	No	
Bed 3	EW-006	1450	2600	SW	No	
Rumpus	EW-006	4650	2600	NW	Yes	300
Rumpus	EW-006	3950	2600	SW	Yes	3000
Bed 2	EW-006	4850	2600	SW	Yes	3000
Bed 2	EW-006	3700	2600	SE	Yes	450
Bath	EW-006	1950	2400	SE	Yes	450

<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

Certificate number: **0003405925-02** Certificate Date: **06 Dec 2018** ★ Star rating:



5.0

## **Building features continued**

Building features	s continued					
WC	EW-006	1800	2400	SE	Yes	450
WC	EW-008	1100	2400	NE	No	
Wash room	EW-008	2500	2400	NE	No	
Garage	EW-006	3150	2350	SW	No	
Garage	EW-006	5600	2600	NW	No	
Garage	EW-006	5900	2850	NE	Yes	500
Garage	EW-006	4000	2650	SE	No	
Entry/hall/linen	EW-006	1750	2600	NE	Yes	1700
Pantry	EW-006	1750	2400	NE	No	
Pantry	EW-006	1850	2400	NW	No	
Kitchen/dining/linen	EW-006	3050	2400	NW	No	
Kitchen/dining/linen	EW-006	1150	2400	SW	Yes	400
Kitchen/dining/linen		3650	2600	NW	No	
Kitchen/dining/linen		4600	2600	SW	Yes	
Kitchen/dining/linen	EW-006	1300	2600	SE	Yes	4800
Kitchen/pantry roofspace	EW-006	600	1350	NE	No	
Kitchen/pantry roofspace	EW-006	5000	1150	NW	No	
Kitchen/pantry roofspace	EW-006	1150	950	SW	Yes	400
living	EW-006	4900	2600	SW	Yes	1400
living	EW-006	5350	2600	SE	No	
living	EW-006	1200	2600	NE	Yes	400
roofspace living	EW-006	1650	600	SW	Yes	1500
roofspace living	EW-006	5350	850	SE	No	
roofspace living	EW-006	1200	1100	NE	Yes	400
Bath FF	EW-006	3000	2400	SE	No	
Guest Bed	EW-006	500	3900	SW	No	
Guest Bed	EW-006	3800	4090	SE	No	
Guest Bed	EW-006	3050	4280	NE	Yes	450
Bath FF roofspace		3000	1300	SE	No	
Landing/void SF	EW-006	1500	1000	NW	No	
Landing/void SF	EW-006	1750	2550	NE	Yes	1700
Landing/void SF	EW-006	5200	1800	SE	No	
Landing/void SF	EW-006	1750	1000	NE	Yes	600
Ensuite	EW-006	1000	2700	NE	No	
Ensuite	EW-006	2350	1450	NW	No	
Ensuite	EW-006	900	1450	SE	Yes	350
Study	EW-006	5080	2000	NW	No	
Study	EW-006	2850	2500	SW	Yes	1250
Master Suite	EW-006	4450	2500	SW	Yes	1250
Master Suite	EW-006	3930	2050	SE	No	
Master Suite	EW-006	1300	1150	SE	No	
WIR	EW-006	1500	2000	SE	No	
WIR Stoir CE	EW-006	2300	1900	NE NW	No	
Stair GF	EW-006	2800	2460	NW SE	No	
Stair GF	EW-008	1700	3000		No	
Stair GF	EW-008	2800	2250	NW	No	

Certificate number: 0003405925-02 Certificate Date: 06 Dec 2018 ★ Star rating:



Stair GF	EW-008	2700	1390	NE	No	
Stair FF	EW-006	2800	2350	NW	No	
Stair SF	EW-006	3000	2300	NW	No	
Stair SF	EW-006	2550	1600	NE	Yes	600

Internal wall type					
ID	Wall type	Area (m²)	Insulation	Wall wrap or foil	
IW-001	Plasterboard	267.0	Polyester or polyester/wool blanket: R2.0	No	
IW-005	Plasterboard	7.7	Glass fibre batt: R3.0	No	

Floors	Floors					
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering	
storage/Ground	Concrete Slab 200 mm: bare	31.0	-	R2.5	-	
hall/linen GF/Ground	Concrete/timber flooring	9.9		R2.5		
Bed 3/Ground	Concrete Slab 200 mm: carpet/bare	21.1		R2.5	Carpet 10 + felt underlay 10	
Rumpus/Ground	Concrete/timber flooring	21.7		R2.5		
Bed 2/Ground	Concrete Slab 200 mm: carpet/bare	19.7		R2.5	Carpet 10 + felt underlay 10	
Bath/Ground	Concrete Slab 200 mm: ceramic tiles/bare	7.2		R2.5	Ceramic tile	
WC/Ground	Concrete Slab 200 mm: ceramic tiles/bare	2.0		R2.5	Ceramic tile	
Wash room/Ground	Concrete Slab 200 mm: ceramic tiles/bare	4.4		R2.5	Ceramic tile	
Garage/storage	concrete garage floor	31.0		R2.5		
Entry/hall/linen/Ground	Concrete/timber flooring	8.4		R2.5		
Entry/hall/linen/hall /linen GF	Timber/air gap/plasterboard	2.5		R2.0		
Pantry/Bed 3	Timber/air gap/plasterboard	8.8		R2.0		
Kitchen/dining/line n/Bed 3	Timber/air gap/plasterboard	12.3		R2.0		
Kitchen/dining/line n/Rumpus	Timber/air gap/plasterboard	17.5		R2.0		
Kitchen/dining/line n/Ground	Concrete/timber flooring	0.8		R2.5		
Kitchen/dining/line n/hall/linen GF	Timber/air gap/plasterboard	6.3		R2.0		
Kitchen/dining/line n/Bed 2	Timber/air gap/plasterboard	3.2		R2.0		
Kitchen/pantry roofspace/Pantry	Plasterboard 13 mm + R3.0 bulk insulation	1.1		R3.0		
Kitchen/pantry roofspace/Kitchen/ dining/linen	Plasterboard 13 mm + R3.0 bulk insulation	4.9		R3.0		
living/Bath		7.2		R2.0		

<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

Certificate number: 0003405925-02 Certificate Date: 06 Dec 2018 ★ Star rating:



5.0

## **Building features continued**

suliding features	s continuea			
	Timber (hardwood): carpet/air gap/plasterboard			Carpet 10 + felt underlay 10
living/Wash room	Timber (hardwood): carpet/air gap/plasterboard	4.4	R2.0	Carpet 10 + felt underlay 10
living/WC	Timber (hardwood): carpet/air gap/plasterboard	2.0	R2.0	Carpet 10 + felt underlay 10
living/Bed 2	Timber (hardwood): carpet/air gap/plasterboard	12.6	R2.0	Carpet 10 + felt underlay 10
roofspace living/living	Plasterboard 13 mm + R3.0 bulk insulation	8.6	R3.0	
Bath FF/Ground	Concrete Slab 200 mm: ceramic tiles/bare	5.6	R2.5	Ceramic tile
Guest Bed/Ground	Concrete Slab 200 mm: carpet/bare	13.1	R2.5	Carpet 10 + felt underlay 10
Bath FF roofspace/Entry/ha II/linen	Plasterboard 13 mm + R3.0 bulk insulation	1.9	R3.0	
Bath FF roofspace/Bath FF	Plasterboard 13 mm + R3.0 bulk insulation	5.6	R3.0	
Bath FF roofspace/Kitchen/ dining/linen	Plasterboard 13 mm + R3.0 bulk insulation	0.9	R3.0	
Landing/void SF/Kitchen/dining/li nen	Timber/air gap/plasterboard	0.6	R2.0	
Landing/void SF/Entry/hall/linen	Timber/air gap/plasterboard	17.2	R2.0	
Ensuite/Pantry	Timber (hardwood): ceramic tiles/air gap/plasterboard	7.5	R2.0	Ceramic tile
Ensuite/Kitchen/din ing/linen	Timber (hardwood): ceramic tiles/air gap/plasterboard	2.0	R2.0	Ceramic tile
Study/Kitchen/dinin g/linen	Timber/air gap/plasterboard	14.5	R2.0	
Master Suite/living	Timber/air gap/plasterboard	11.5	R2.0	
Master Suite/Kitchen/dinin g/linen	Timber/air gap/plasterboard	10.0	R2.0	
Master Suite/Entry/hall/line n	Timber/air gap/plasterboard	0.2	R2.0	
WIR/living	Timber/air gap/plasterboard	4.7	R2.0	
Roofspace ensuite/Bed entry/Ensuite	Plasterboard 13 mm + R3.0 bulk insulation	9.5	R3.0	
Roofspace ensuite/Bed entry/Master Suite	Plasterboard 13 mm + R3.0 bulk insulation	2.3	R3.0	
Roofspace ensuite/Bed entry/Landing/void SF	Plasterboard 13 mm + R3.0 bulk insulation	16.9	R3.0	
Stair GF/Ground	Concrete/timber flooring	8.1	R2.5	
Stair FF/Stair GF	Timber/air gap/plasterboard	8.1	R2.0	
Stall 11/Stall GI	3-1-1			

Certificate number: **0003405925-02** Certificate Date: **06 Dec 2018** ★ Star rating:



5.0

## **Building features continued**

### **Ceiling type**

Location	Construction	Added insulation	Roof space above
Garage/storage	concrete garage floor	R2.5	No
Entry/hall/linen/hall /linen GF	Timber/air gap/plasterboard	R2.0	No
Kitchen/dining/line n/hall/linen GF	Timber/air gap/plasterboard	R2.0	No
Pantry/Bed 3	Timber/air gap/plasterboard	R2.0	No
Kitchen/dining/line n/Bed 3	Timber/air gap/plasterboard	R2.0	No
Kitchen/dining/line n/Rumpus	Timber/air gap/plasterboard	R2.0	No
Kitchen/dining/line n/Bed 2	Timber/air gap/plasterboard	R2.0	No
living/Bed 2	Timber (hardwood): carpet/air gap/plasterboard	R2.0	No
living/Bath	Timber (hardwood): carpet/air gap/plasterboard	R2.0	No
living/WC	Timber (hardwood): carpet/air gap/plasterboard	R2.0	No
living/Wash room	Timber (hardwood): carpet/air gap/plasterboard	R2.0	No
Landing/void SF/Entry/hall/linen	Timber/air gap/plasterboard	R2.0	No
Master Suite/Entry/hall/line n	Timber/air gap/plasterboard	R2.0	No
Bath FF roofspace/Entry/ha II/linen	Plasterboard 13 mm + R3.0 bulk insulation	R3.0	Yes
Kitchen/pantry roofspace/Pantry	Plasterboard 13 mm + R3.0 bulk insulation	R3.0	Yes
Ensuite/Pantry	Timber (hardwood): ceramic tiles/air gap/plasterboard	R2.0	No
Kitchen/pantry roofspace/Kitchen/ dining/linen	Plasterboard 13 mm + R3.0 bulk insulation	R3.0	Yes
Landing/void SF/Kitchen/dining/li nen	Timber/air gap/plasterboard	R2.0	No
Ensuite/Kitchen/din ing/linen	Timber (hardwood): ceramic tiles/air gap/plasterboard	R2.0	No
Study/Kitchen/dinin g/linen	Timber/air gap/plasterboard	R2.0	No
Master Suite/Kitchen/dinin g/linen	Timber/air gap/plasterboard	R2.0	No
Bath FF roofspace/Kitchen/ dining/linen	Plasterboard 13 mm + R3.0 bulk insulation	R3.0	Yes
Master Suite/living	Timber/air gap/plasterboard	R2.0	No
WIR/living	Timber/air gap/plasterboard	R2.0	No
roofspace living/living	Plasterboard 13 mm + R3.0 bulk insulation	R3.0	Yes
Bath FF roofspace/Bath FF	Plasterboard 13 mm + R3.0 bulk insulation	R3.0	Yes
Roofspace ensuite/Bed entry/Landing/void SF	Plasterboard 13 mm + R3.0 bulk insulation	R3.0	Yes

<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

Certificate number: 0003405925-02 Certificate Date: 06 Dec 2018 ★ Star rating:



5.0

**Building features continued** Roofspace Plasterboard 13 mm + R3.0 bulk insulation R3.0 Yes ensuite/Bed entry/Ensuite Roofspace Plasterboard 13 mm + R3.0 bulk insulation R3.0 Yes ensuite/Bed entry/Master Suite Stair FF/Stair GF Timber/air gap/plasterboard R2.0 No Stair SF/Stair FF Timber/air gap/plasterboard R2.0 No

Location	Number	Туре	Diameter (mm)	Sealed/unsealed
Bath	1	Ceiling exhaust fan	300	Sealed
Kitchen/dining en	g/lin 1	Ceiling exhaust fan	300	Sealed
living	1	Chimney	300	Sealed
Bath FF	1	Ceiling exhaust fan	300	Sealed
Ensuite	1	Ceiling exhaust fan	300	Sealed

Ceiling fans			
Location	Number	Diameter (mm)	
None Present			

Construction	Added insulation	Roof colour
Metal deck raked ceiling	R4.6	Medium
Metal deck to roofspace	R1.2	Medium
Deck	R3.0	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

Certificate number: 0003660024 Certificate Date: 05 Mar 2019 ★ Star rating: 5.1



#### Assessor details

Accreditation

number: 20042

Name: Peter Cumming

Organisation: NatHERS & BASIX Solutions
Email: basixsolutions@gmail.com

Phone: **0299797674** 

Declaration No potential conflicts of interest to

of interest: declare

Software: AccuRate Sustainability V2.3.3.13 SP4

AAO: ABSA

#### Overview

#### **Dwelling details**

Street: Unit CABANA, 33 Hillcrest Avenue

Suburb: Mona Vale

Lot/DP

State: NSW Postcode: 2103
Type: New NCC Class: 1a

NatHERS

climate zone: **56** 

number: Lot 43 DP 6195 Exposure: Suburban

#### Key construction and insulation materials

(see following pages for details)

Construction: Plasterboard wall

Metal roof/Plasterboard

Slab

Insulation: R3.8 wall insulation

Floor (uninsulated)

Glazing: Al Thermally Broken B DG Air Fill High

**Solar Gain** 

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

Conditioned: 51.1 Unconditioned: 5.2

Garage:

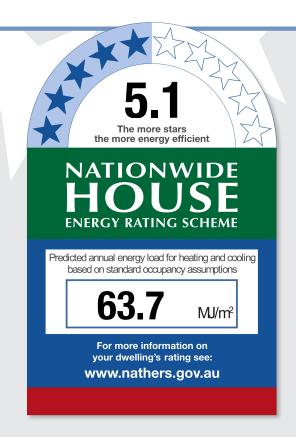
TOTAL: **56.3** 

# Annual thermal performance loads (MJ/m²)

Heating: **38.2**Cooling: **25.5**TOTAL: **63.7** 

#### Plan documents

Plan ref/date: 1809/Dec 18
Prepared by: Luke Trovato



#### **Ceiling penetrations**

(see following pages for details)

Sealed: 1

Unsealed: 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

0

## 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 **5.1** 

+10% SHGC **5.2** 

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.



<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

Certificate number: 0003660024 Certificate Date: 05 Mar 2019 ★ Star rating:



## **Building features**

Window ID	Window type	<b>U-value</b>	SHGC
ATB-004-03 B	DEFAULTS: Al Thermally Broken B DG Air Fill High Solar Gain low-E-Clear	3.1	0.49
ALM-002-02 A	DEFAULTS: Aluminium B SG Tint	6.6	0.49

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Living/kitchen	ette ALM-002-02 A	CW08	600	2750	NW	Outdoor venetians
Living/kitchen	ette ALM-002-02 A	CW08 louvre	600	600	NW	Outdoor venetians
Living/kitchen	ette ALM-002-02 A	CW08 louvre	600	600	NW	Outdoor venetians
Living/kitchen	ette ATB-004-03 B	CW01	2400	5000	NE	Outdoor venetians
Living/kitchen	ette ALM-002-02 A	CW03	2400	1225	SE	None
Living/kitchen	ette ALM-002-02 A	CW02	2400	1225	SE	None
Bedroom 1	ATB-004-03 B	CW04	2400	2700	NE	None
Bedroom 1	ALM-002-02 A	CW05	1500	600	SW	Outdoor venetians
Bedroom 1	ALM-002-02 A	CW05 fixed	1500	2000	SW	Outdoor venetians
Bed 2	ALM-002-02 A	CW07	1500	600	SW	Outdoor venetians
Bed 2	ALM-002-02 A	CW07 fixed	1500	2000	SW	Outdoor venetians
Bathroom	ALM-002-02 A	CW06	600	1000	SW	None

ID	Window	type		U-value	SHGC
None Preser	nt				
Roof windo	w and skyligl	nt schedule			
				Outdoor shade	

External wall ty	pe					
ID	Wall type		Insulation		Wa	all wrap or foil
EW-006	Plasterboard		Polystyrene e R1.3/Polystyre	xpanded (k = 0.0 ene expanded: R	039): Ye 32.5	es
EW-008	Retaining Concr	ete block			No	)
EW-010	Timber				No	)
External wall so	chedule					
Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Living/kitchenette	EW-006	3950	3512	NW	No	

Certificate number: 0003660024 Certificate Date: 05 Mar 2019 ★ Star rating:



5.1

Building feature	s continued	l				
Living/kitchenette	EW-006	6750	3848	NE	Yes	600
Living/kitchenette	EW-006	3950	3512	SE	Yes	3000
Bedroom 1	EW-006	2700	3175	NE	Yes	4600
Bedroom 1	EW-006	3000	2940	SE	No	
Bedroom 1	EW-006	3950	2700	SW	No	
Bed 2	EW-006	3000	2940	NW	No	
Bed 2	EW-006	3150	2700	SW	No	
Bathroom	EW-006	450	2650	NW	No	
Bathroom	EW-006	450	2650	SE	No	
Bathroom	EW-006	2400	2605	SW	No	
subfloor	EW-008	9700	2100	W	Yes	2900

Internal v	vall type			
ID	Wall type	Area (m²)	Insulation	Wall wrap or foil
IW-001	Plasterboard	46.5		No

Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Living/kitchenette/ Ground	Concrete Slab 200 mm: ceramic tiles/bare	26.7			Ceramic tile
Bedroom 1/Ground	Concrete Slab 200 mm: ceramic tiles/bare	0.6			Ceramic tile
Bedroom 1/subfloor	Concrete slab/tile to subfloor	8.8		R1.0	Ceramic tile
Bed 2/subfloor	Concrete slab/tile to subfloor	10.7		R1.0	Ceramic tile
Bed 2/Ground	Concrete Slab 200 mm: ceramic tiles/bare	1.2			Ceramic tile
Bathroom/subfloor	Concrete slab/tile to subfloor	5.2		R1.0	Ceramic tile
Hall/laundry/subflo or	Concrete slab/tile to subfloor	2.6		R1.0	Ceramic tile
Hall/laundry/Ground	Concrete Slab 200 mm: ceramic tiles/bare	0.5			Ceramic tile
subfloor/Ground	Concrete Slab 200 mm: bare	27.6	Very Open		

Location	Construction	Added insulation	Roof space above
Bedroom 1/subfloor	Concrete slab/tile to subfloor	R1.0	No
Bed 2/subfloor	Concrete slab/tile to subfloor	R1.0	No
Bathroom/subfloor	Concrete slab/tile to subfloor	R1.0	No
Hall/laundry/subflo or	Concrete slab/tile to subfloor	R1.0	No

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Certificate number: 0003660024

Certificate Date:

05 Mar 2019

★ Star rating:



## **Building features continued**

Ceiling penetrations						
Location	Number	Туре	Diameter (mm)	Sealed/unsealed		
Living/kitchene	ette 1	Ceiling exhaust fan	300	Sealed		

er Diameter (mm)
-

Roof type		
Construction	Added insulation	Roof colour
Metal deck raked ceiling	R4.6	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

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