



Roger Rao

Accredited Rater No:VIC/BDAV/10/1044

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04 August, 2017

ENERGY RATING SUMMARY:

The energy rating assessment was conducted based on information contained in the attached endorsed plans. The endorsed plans should be read in conjunction with the prelevant Energy Efficiency Report. The property will achieve average 6 Stars (min 5 stars) only if the recommendations outlined on page 1 of energy report are implemented during the construction. In assessing the development all effort was taken in trying to achieve economies of scale by attempting to retain where possible uniformity in particular materials.

The following rating and energy usage are achieved **1 VINE STREET, HEIDELBERG** as per energy efficiency reports.

ADDRESS	BASELINE RATING	MJ/m ²
G.01	★★★★★★ 5.6 STAR	140.4
G.02	★★★★★★ 7.3STAR	81.5
G.03	★★★★★★ 7.2 STAR	85.0
G.04	★★★★★★ 6.4 STAR	110.6
G.05	★★★★★★ 5.6 STAR	141.4
1.01	★★★★★★ 6.1 STAR	120.0
1.02	★★★★★★ 7.7 STAR	67.0
1.03	★★★★★★ 7.1 STAR	89.3
1.04	★★★★★★ 7.2 STAR	85.6
2.01	★★★★★★ 5.2 STAR	157.0
2.02	★★★★★★ 5.8 STAR	133.6
2.03	★★★★★★ 5.8 STAR	133.2
3.01	★★★★★★ 5.3 STAR	150.4
Average Rating	★★★★★★ 6.3 STAR	

SPECIFICATION:

WALL: All conditioned area external concrete panel walls with furring channels to have 25MM Foilboard fixed to internal side.

WA.05a,05b,06a,06b,06c,06d,07a to have 25mm foilboard fixed to internal side of concrete wall.



WA.07b,08b,11a,11b,13a,13b to have R2.7 bulk insulation within 90mm frames.

WA.04a,07c,08c,08d,10a,10b,12a,12b to have R1.5 bulk insulation within 60mm frames.

WA.09 to have R1.5 to 60mm studs and R2.7 to 90mm studs.

CEILINGS:

R5.0 bulk ceiling insulation to ceilings overlapped with upper floor balcony(including G04, G05, 101,103,201,202,203).

R5.0 bulk insulation plus sarking to all flat deck roofs.

FLOORS:

R1.5 insulation fixed to ceiling of basement overlapped with ground floor apartments.

R1.5 bulk insulation to elevated floor exposed to external air (UNIT 1.04).

R1.5 bulk insulation to unit 3.01's floor overlap with second floor corridor.

WINDOWS:(Refer to NatHERS Certificate for individual window performance value)

All units: All windows and glazing doors to be aluminium frames. All type A windows(awning,casement) to achieve U-VALUE=4.1 and SHGC= 0.47(Double Glazing). All type B windows(sliding, fixed) to achieve U-VALUE=4.1 and SHGC=0.52 (Double Glazing).

LOSS OF CEILING INSULATION:

Refer to NatHERS Certificate for all sealed and unsealed ceiling penetrations. No Downlights had been modeled.

OTHER:

- Thermal insulation must form a continuous barrier with ceilings and walls contributing to the thermal barrier. Insulation to abut or overlap adjoining insulation other than being interrupted by a structural member. Bulk insulation to be installed so that it maintains its thickness.
- All external doors to be fitted with weather strips.
- All windows to be fitted with weather seals.
- Gaps & cracks around doors, windows and service penetrations to be sealed. Exhaust fans to be self-closing (fitted with a 'DRAFTSTOPPA' or similarly sealed).

The BCA 2015 Part 3.12.5.5 requires the lamp power density or illumination power density of artificial lighting not to exceed

- (i) In a class 1 building, 5 W/m²
- (ii) On a verandah or balcony attached to the class 1, 4 W/m²



(iii) In a class 10 building, 3 W/m²

LIMITATION:

This assessment has been based on but not limited to the sources of information detailed above. Whilst Starating has endeavoured to ensure all information in this report is accurate at time of printing, we do not accept any liability in relation to anything that is done as a result of information that may be omitted in part or whole of this document. This assessment provides the minimum requirements to achieve compliance with the regulations specified and does not provide advice on achieving environmental best practice or optimising the design for Energy Efficiency or Cost.

Building Permit documentation will need to be amended to reflect any recommendations provided in this report. It is the responsibility of the applicant / permit holder to ensure all conditions listed within this report, are satisfied prior to the completion of the proposed work and issue of Certificate of Final Inspection.

Yours sincerely

Roger Rao
STARATING

ACCREDITED ENERGY RATER

ACCREDITATION NO: VIC/BDAV/10/1044

MEMBER



Building Designers
Association Victoria

Nationwide House Energy Rating Scheme* — Class 2 summary



Certificate Number: 3RS401XNQB

Date of Certificate: 7 Aug 2017

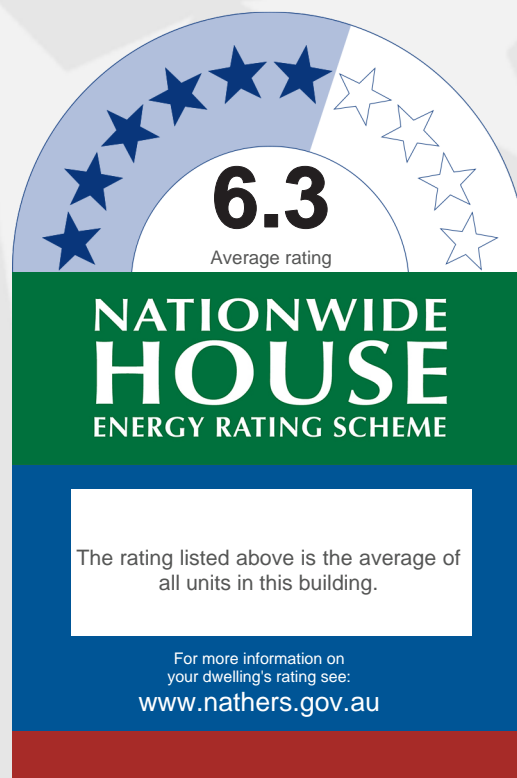
★ Average star rating: 6.3

Assessor details

Accreditation number: VIC/BDAV/10/1044
Name: rujun rao
Organisation:
Email: starating@yahoo.com.au
Phone: 0433283009
Declaration of interest: No potential conflicts of interest to declare
Software: FirstRate5 v5.2.6
AAO: BDAV

Dwelling details

Address: 1 VINE STREET
Suburb: HEIDELBERG
State: VIC
Postcode: 3084



Summary of all dwellings

Certification details

Certificate number	Unit number	Annual thermal performance loads (MJ/m2)			Star rating
		Heating load	Cooling load	Total load	
TZ2FFANCV4	1.01	98	22	120	6.1
ITQTUILTL7	1.02	54.7	12.3	67	7.7
C809Q13JCU	1.03	71.2	18.1	89.3	7.1
LZ93O6Q4XG	1.04	66.2	19.4	85.6	7.2
O92ZUPNE0Q	2.01	136.4	20.6	157	5.2
54H4W2EAE1	2.02	118.3	15.3	133.6	5.8
IEI6M74SWR	2.03	98	34.2	132.2	5.8
VAEYMMTVK9	3.01	125.6	24.8	150.4	5.3
9SKSKPXW7L	G.01	115.8	24.6	140.4	5.6
O0XHSBI14D	G.02	74.2	7.3	81.5	7.3
PHW15MFU4P	G.03	70.1	14.9	85	7.2
WECFI3O7T9	G.04	87.3	23.3	110.6	6.4
BGLZZQJ3I2	G.05	118.8	22.6	141.4	5.6

This building achieves an average star rating of: **6.3**

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: 9SKSKPXW7L

Date of Certificate: 6 Aug 2017

★ Star rating: 5.6



Assessor details

Accreditation number: VIC/BDAV/10/1044
Name: RUJUN RAO
Organisation: rujun rao
Email: starating@yahoo.com.au
Phone: 0433283009
Declaration of interest: No potential conflicts of interest to declare
Software: FirstRate5: 5.2.6 (3.13)
AAO: BDAV

Overview

Dwelling details

Address: G.01, 1 VINE STREET
Suburb: HEIDELBERG
State: VIC Postcode: 3084
Type: New Home NCC Class: Class 2
Lot/DP number: - NatHERS climate zone: 62
Exposure: suburban

Key construction and insulation materials

(see following pages for details)

Construction: Wall: AS PER WORKING DRAWINGS
Roof: AS PER WORKING DRAWINGS
Floor: AS PER WORKING DRAWINGS
Insulation: Wall: AS PER WORKING DRAWINGS
Roof: AS PER WORKING DRAWINGS
Floor: AS PER WORKING DRAWINGS
Glazing: ALUMINIUM
AS PER WORKING DRAWINGS

Net floor area (m²)

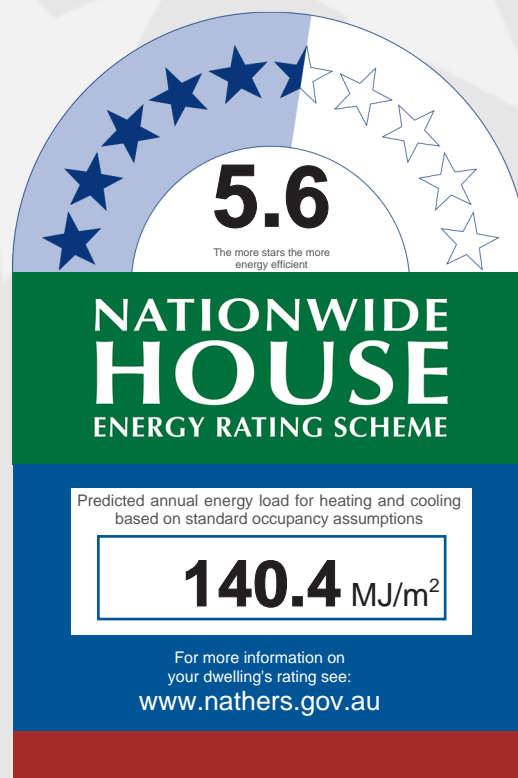
Conditioned: 61.3
Unconditioned: 3.4
Garage: -
TOTAL: 64.7

Annual thermal performance loads (MJ/m²)

Heating: 115.8
Cooling: 24.6
TOTAL: 140.4

Plan documents

Plan ref/date: 1.8.2017
Prepared by: ArdenSiena



Ceiling penetrations

(see following pages for details)

Sealed: 3
Unsealed: 0
TOTAL:** 3

Principal downlight type: No downlights modelled

NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. **If this number is exceeded 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.

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 the 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.



<https://www.fr5.com.au/QRCodeLand ing?PublicId=9SKSKPXW7L>

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **9SKSKPXW7L**

Date of Certificate: **6 Aug 2017**

★ Star rating: **5.6**



Building Features

Windows type and performance value

Window ID	Window type	U-value	SHGC
ALM-006-03 A	Aluminium B DG Argon Fill High Solar Gain low-E -Clear	4.1	0.52

Windows schedule

Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name	Outdoor shade
ALM-006-03 A	W6	1750	3300	SW	Bedroom 1	No
ALM-006-03 A	W5	1750	3009	SW	Bedroom 2	No
ALM-006-03 A	W3	2700	800	SW	Kitchen/Living	No
ALM-006-03 A	W4	2700	2810	SW	Kitchen/Living	No
ALM-006-03 A	W2	2700	1600	SE	Kitchen/Living	No
ALM-006-03 A	W03	2700	800	SE	Kitchen/Living	No
ALM-006-03 A	W01	2700	1550	SE	Kitchen/Living	No

Roof windows and skylight type and performance value

ID	Window type	U-value	SHGC
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Roof window and skylight schedule

ID	Roof window/ skylight no.	Area (m ²)	Orientation	Zone name	Outdoor shade	Indoor shade/diffuser
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External wall type

Type	Insulation	Wall wrap
1 : VA - AFS162 FINSH 3 WA06c	Polystyrene expanded (k = 0.039) (R0.6)	Yes
2 : VA - AFS162 party wall 1 WA08a		No
3 : VA - AFS162 FINSH 4 WA06d	Polystyrene expanded (k = 0.039) (R0.6)	Yes
4 : VA - AFS162 internal 3 WA07c	Glass fibre batt: R1.5 (R1.5)	No
5 : VA - AFS162 party wall 2 WA08b	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R2.7)	No
6 : FR5 - Fibro Clad Framed		No
7 : VA - AFS162 FINSH 1 WA06a	Polystyrene expanded (k = 0.039) (R0.6)	Yes

External wall schedule

Wall type	Area (m ²)	Orientation	Zone name	Fixed shade	Eaves
1 : VA - AFS162 FINSH 3 WA06c	5.8	SW	Bedroom 1	Yes	No
2 : VA - AFS162 party wall 1 WA08a	9.3	NW	Bedroom 1	No	No

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **9SKSKPXW7L**

Date of Certificate: **6 Aug 2017**

★ Star rating: **5.6**



Building Features

3 : VA - AFS162 FINSH 4 WA06d	3.1	SW	Bedroom 1	Yes	No
1 : VA - AFS162 FINSH 3 WA06c	5.3	SW	Bedroom 2	Yes	Yes
3 : VA - AFS162 FINSH 4 WA06d	2.9	SW	Bedroom 2	Yes	No
4 : VA - AFS162 internal 3 WA07c	4.4	NE	Bath	Yes	Yes
4 : VA - AFS162 internal 3 WA07c	2.5	NE	Bath	No	No
4 : VA - AFS162 internal 3 WA07c	8	NE	Ens	No	No
5 : VA - AFS162 party wall 2 WA08b	3.7	NW	Ens	No	No
6 : FR5 - Fibro Clad Framed	10.1	SW	Kitchen/Living	No	Yes
6 : FR5 - Fibro Clad Framed	6.8	SE	Kitchen/Living	Yes	Yes
1 : VA - AFS162 FINSH 3 WA06c	1.4	SE	Kitchen/Living	Yes	Yes
1 : VA - AFS162 FINSH 3 WA06c	3.7	SE	Kitchen/Living	Yes	No
6 : FR5 - Fibro Clad Framed	4.2	SE	Kitchen/Living	Yes	Yes
1 : VA - AFS162 FINSH 3 WA06c	1.7	SE	Kitchen/Living	Yes	Yes
7 : VA - AFS162 FINSH 1 WA06a	2.6	NE	Kitchen/Living	Yes	No
4 : VA - AFS162 internal 3 WA07c	9.4	NE	Kitchen/Living	Yes	Yes
2 : VA - AFS162 party wall 1 WA08a	4.3	NW	Wir	No	No

Internal wall type

Type	Area (m ²)	Insulation
1 : VA - 64mm Internal Plasterboard WA10a	82.4	Glass fibre batt: R1.5 (R1.5)
2 : FR5 - Internal Plasterboard Stud Wall	16	
3 : VA - 92mm Internal Plasterboard WA11a	39.8	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R2.7)

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Bedroom 1	SuspSlab	11.3	Enclosed	1.5	Carpet
Bedroom 2	SuspSlab	11.5	Enclosed	1.5	Carpet
Bath	SuspSlab	3.4	Enclosed	1.5	Tiles
Ens	SuspSlab	4	Enclosed	1.5	Tiles
Kitchen/Living	SuspSlab	25.5	Enclosed	1.5	floattimber
Corridor	SuspSlab	5.5	Enclosed	1.5	floattimber
Wir	SuspSlab	3.5	Enclosed	1.5	Carpet

Ceiling type

Nationwide House Energy Rating Scheme* Certificate



Certificate Number: **9SKSKPXW7L**

Date of Certificate: **6 Aug 2017**

★ Star rating: **5.6**

Building Features

Location	Material	Added insulation	Roof space above
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Ceiling penetrations

Location	Number	Type	Width (mm)	Length (mm)	Seal/ unsealed
Bath	1	Exhaust Fans	200	200	Sealed
Ens	1	Exhaust Fans	200	200	Sealed
Kitchen/Living	1	Exhaust Fans	200	200	Sealed

Ceiling fans

Location	Number	Diameter (mm)
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Roof type

Material	Added insulation	Roof colour
Ceil: Ceiling	0.0	medium

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **9SKSKPXW7L**

Date of Certificate: **6 Aug 2017**

★ Star rating: **5.6**



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 this 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 an 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* Certificate

Certificate Number: O0XHSBI14D

Date of Certificate: 6 Aug 2017

★ Star rating: 7.3



Assessor details

Accreditation number: VIC/BDAV/10/1044
Name: RUJUN RAO
Organisation: rujun rao
Email: starating@yahoo.com.au
Phone: 0433283009
Declaration of interest: No potential conflicts of interest to declare
Software: FirstRate5: 5.2.6 (3.13)
AAO: BDAV

Overview

Dwelling details

Address: G.02, 1 VINE STREET
Suburb: HEIDELBERG
State: VIC Postcode: 3084
Type: New Home NCC Class: Class 2
Lot/DP number: - NatHERS climate zone: 62
Exposure: suburban

Key construction and insulation materials

(see following pages for details)

Construction: Wall: AS PER WORKING DRAWINGS
Roof: AS PER WORKING DRAWINGS
Floor: AS PER WORKING DRAWINGS
Insulation: Wall: AS PER WORKING DRAWINGS
Roof: AS PER WORKING DRAWINGS
Floor: AS PER WORKING DRAWINGS
Glazing: ALUMINIUM
AS PER WORKING DRAWINGS

Net floor area (m²)

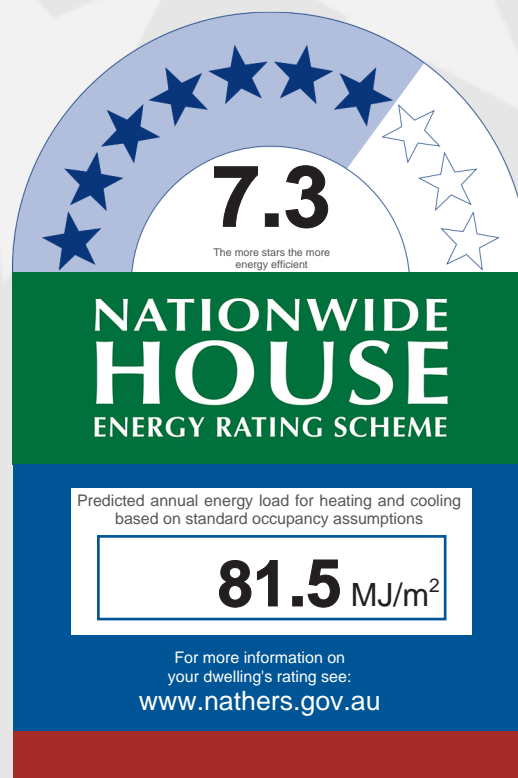
Conditioned: 61.2
Unconditioned: 3.5
Garage: -
TOTAL: 64.7

Annual thermal performance loads (MJ/m²)

Heating: 74.2
Cooling: 7.3
TOTAL: 81.5

Plan documents

Plan ref/date: 1.8.2017
Prepared by: ArdenSiena



Ceiling penetrations

(see following pages for details)

Sealed: 3
Unsealed: 0
TOTAL:** 3

Principal downlight type: No downlights modelled

NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. **If this number is exceeded 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.

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 the 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.



<https://www.fr5.com.au/QRCodeLandIng?PublicId=O0XHSBI14D>

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: O0XHSBI14D

Date of Certificate: 6 Aug 2017

★ Star rating: 7.3



Building Features

Windows type and performance value

Window ID	Window type	U-value	SHGC
ALM-005-03 A	Aluminium A DG Argon Fill High Solar Gain low-E -Clear	4.1	0.47
ALM-006-03 A	Aluminium B DG Argon Fill High Solar Gain low-E -Clear	4.1	0.52

Windows schedule

Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name	Outdoor shade
ALM-005-03 A	W1	1750	2000	SW	Bedroom 1	No
ALM-005-03 A	W2	1750	2000	SW	Bedroom 2	No
ALM-006-03 A	W3	2700	2700	SW	Kitchen/Living	No

Roof windows and skylight type and performance value

ID	Window type	U-value	SHGC
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Roof window and skylight schedule

ID	Roof window/ skylight no.	Area (m ²)	Orientation	Zone name	Outdoor shade	Indoor shade/ diffuser
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External wall type

Type	Insulation	Wall wrap
1 : VA - AFS162 FINSH 4 WA06d	Polystyrene expanded (k = 0.039) (R0.6)	Yes
2 : VA - AFS162 party wall 1 WA08a		No
3 : VA - AFS162 FINSH 3 WA06c	Polystyrene expanded (k = 0.039) (R0.6)	Yes
4 : VA - AFS162 internal 3 WA07c	Glass fibre batt: R1.5 (R1.5)	No
5 : VA - AFS162 party wall 2 WA08b	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R2.7)	No
6 : FR5 - Fibro Clad Framed		No

External wall schedule

Wall type	Area (m ²)	Orientation	Zone name	Fixed shade	Eaves
1 : VA - AFS162 FINSH 4 WA06d	3.1	SW	Bedroom 1	Yes	No
2 : VA - AFS162 party wall 1 WA08a	9.3	SE	Bedroom 1	No	No
3 : VA - AFS162 FINSH 3 WA06c	5.8	SW	Bedroom 1	Yes	Yes
1 : VA - AFS162 FINSH 4 WA06d	2.9	SW	Bedroom 2	Yes	No
3 : VA - AFS162 FINSH 3 WA06c	5.3	SW	Bedroom 2	Yes	Yes
4 : VA - AFS162 internal 3 WA07c	6.9	NE	Bath	No	No

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **O0XHSBI14D**

Date of Certificate: **6 Aug 2017**

★ Star rating: **7.3**



Building Features

5 : VA - AFS162 party wall 2 WA08b	3.9	SE	Ens	No	No
4 : VA - AFS162 internal 3 WA07c	7.9	NE	Ens	No	No
4 : VA - AFS162 internal 3 WA07c	12	NE	Kitchen/Living	No	No
2 : VA - AFS162 party wall 1 WA08a	17.7	NW	Kitchen/Living	No	No
3 : VA - AFS162 FINSH 3 WA06c	2.7	SW	Kitchen/Living	Yes	No
6 : FR5 - Fibro Clad Framed	7.3	SW	Kitchen/Living	Yes	Yes
2 : VA - AFS162 party wall 1 WA08a	4.1	SE	Wir	No	No

Internal wall type

Type	Area (m ²)	Insulation
1 : VA - 64mm Internal Plasterboard WA10a	81.8	Glass fibre batt: R1.5 (R1.5)
2 : FR5 - Internal Plasterboard Stud Wall	16	
3 : VA - 92mm Internal Plasterboard WA11a	40.6	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R2.7)

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Bedroom 1	SuspSlab	11.3	Enclosed	1.5	Carpet
Bedroom 2	SuspSlab	11.5	Enclosed	1.5	Carpet
Bath	SuspSlab	3.5	Enclosed	1.5	Tiles
Ens	SuspSlab	4.2	Enclosed	1.5	Tiles
Kitchen/Living	SuspSlab	25.5	Enclosed	1.5	floattimber
Corridor	SuspSlab	5.3	Enclosed	1.5	floattimber
Wir	SuspSlab	3.3	Enclosed	1.5	Carpet

Ceiling type

Location	Material	Added insulation	Roof space above
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Ceiling penetrations

Location	Number	Type	Width (mm)	Length (mm)	Seal/ unsealed
Bath	1	Exhaust Fans	200	200	Sealed
Ens	1	Exhaust Fans	200	200	Sealed
Kitchen/Living	1	Exhaust Fans	200	200	Sealed

Ceiling fans

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: O0XHSBI14D

Date of Certificate: 6 Aug 2017

★ Star rating: 7.3



Building Features

Location	Number	Diameter (mm)
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Roof type

Material	Added insulation	Roof colour
Ceil: Ceiling	0.0	medium

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: O0XHSBI14D

Date of Certificate: 6 Aug 2017

★ Star rating: 7.3



Additional information

Explanatory notes

About this report

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Disclaimer

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Contact

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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: PHW15MFU4P

Date of Certificate: 6 Aug 2017

★ Star rating: 7.2



Assessor details

Accreditation number: VIC/BDAV/10/1044
Name: RUJUN RAO
Organisation: rujun rao
Email: starating@yahoo.com.au
Phone: 0433283009
Declaration of interest: No potential conflicts of interest to declare
Software: FirstRate5: 5.2.6 (3.13)
AAO: BDAV

Overview

Dwelling details

Address: G.03, 1 VINE STREET
Suburb: HEIDELBERG
State: VIC Postcode: 3084
Type: New Home NCC Class: Class 2
Lot/DP number: - NatHERS climate zone: 62
Exposure: suburban

Key construction and insulation materials

(see following pages for details)

Construction: Wall: AS PER WORKING DRAWINGS
Roof: AS PER WORKING DRAWINGS
Floor: AS PER WORKING DRAWINGS
Insulation: Wall: AS PER WORKING DRAWINGS
Roof: AS PER WORKING DRAWINGS
Floor: AS PER WORKING DRAWINGS
Glazing: ALUMINIUM
AS PER WORKING DRAWINGS

Net floor area (m²)

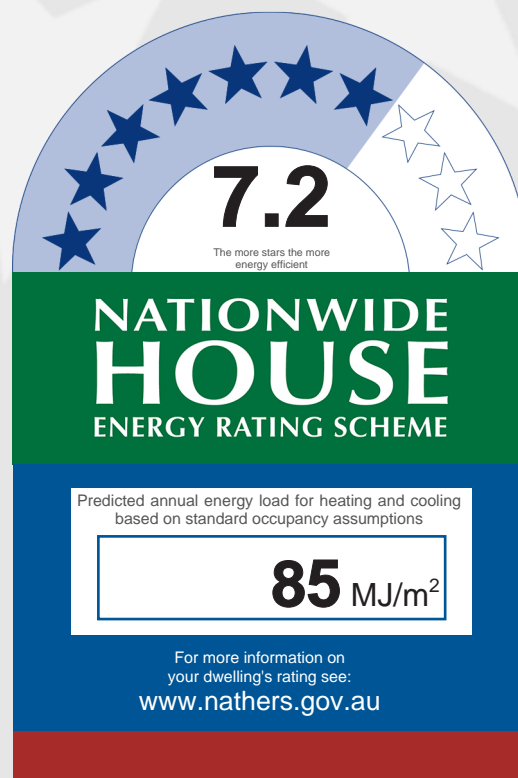
Conditioned: 56.5
Unconditioned: 3.2
Garage: -
TOTAL: 59.7

Annual thermal performance loads (MJ/m²)

Heating: 70.1
Cooling: 14.9
TOTAL: 85

Plan documents

Plan ref/date: 1.8.2017
Prepared by: ArdenSiena



Ceiling penetrations

(see following pages for details)

Sealed: 3
Unsealed: 0
TOTAL:** 3

Principal downlight type: No downlights modelled

NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. **If this number is exceeded 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.

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.

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Building Features

Windows type and performance value

Window ID	Window type	U-value	SHGC
ALM-005-03 A	Aluminium A DG Argon Fill High Solar Gain low-E -Clear	4.1	0.47
ALM-006-03 A	Aluminium B DG Argon Fill High Solar Gain low-E -Clear	4.1	0.52

Windows schedule

Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name	Outdoor shade
ALM-005-03 A	W3	1750	750	SW	Ens	No
ALM-006-03 A	W3	1750	750	NW	Ens	No
ALM-006-03 A	W2	1750	3000	SW	Bedroom 2	No
ALM-006-03 A	W1	2700	2845	SW	Kitchen/Living	No
ALM-005-03 A	W4	1750	1500	NW	Bedroom 1	No

Roof windows and skylight type and performance value

ID	Window type	U-value	SHGC
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Roof window and skylight schedule

ID	Roof window/ skylight no.	Area (m ²)	Orientation	Zone name	Outdoor shade	Indoor shade/diffuser
----	---------------------------	------------------------	-------------	-----------	---------------	-----------------------

External wall type

Type	Insulation	Wall wrap
1 : VA - AFS162 FINSH 3 WA06c	Polystyrene expanded (k = 0.039) (R0.6)	Yes
2 : VA - AFS200 FINSH 2 WA05b	Polystyrene expanded (k = 0.039) (R0.6)	Yes
3 : VA - AFS162 FINSH 4 WA06d	Polystyrene expanded (k = 0.039) (R0.6)	Yes
4 : VA - AFS162 party wall 4 WA08d	Glass fibre batt: R1.5 (R1.5)	No
5 : VA - AFS162 party wall 1 WA08a		No
6 : FR5 - Fibro Clad Framed		No
7 : VA - AFS162 internal 3 WA07c	Glass fibre batt: R1.5 (R1.5)	No
8 : VA - AFS162 party wall 4 WA09	Glass fibre batt: R1.5 (R1.5);Glass fibre batt (k = 0.044 density = 12 kg/m3) (R2.7)	No

External wall schedule

Wall type	Area (m ²)	Orientation	Zone name	Fixed shade	Eaves
1 : VA - AFS162 FINSH 3 WA06c	2.1	SW	Ens	Yes	No
1 : VA - AFS162 FINSH 3 WA06c	3.3	SW	Ens	Yes	No

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **PHW15MFU4P**

Date of Certificate: **6 Aug 2017**

★ Star rating: **7.2**



Building Features

2 : VA - AFS200 FINSH 2 WA05b	1.4	NW	Ens	Yes	No
2 : VA - AFS200 FINSH 2 WA05b	2.1	NW	Ens	No	No
3 : VA - AFS162 FINSH 4 WA06d	1.8	SW	Ens	Yes	No
3 : VA - AFS162 FINSH 4 WA06d	0.8	NW	Ens	Yes	No
1 : VA - AFS162 FINSH 3 WA06c	0.9	SW	Bedroom 2	Yes	No
1 : VA - AFS162 FINSH 3 WA06c	5.4	SW	Bedroom 2	Yes	Yes
3 : VA - AFS162 FINSH 4 WA06d	0.5	SW	Bedroom 2	Yes	No
3 : VA - AFS162 FINSH 4 WA06d	2.9	SW	Bedroom 2	Yes	No
4 : VA - AFS162 party wall 4 WA08d	6.1	NE	Bath	No	No
5 : VA - AFS162 party wall 1 WA08a	2.8	NW	Kitchen/Living	No	No
6 : FR5 - Fibro Clad Framed	7.7	SW	Kitchen/Living	Yes	Yes
1 : VA - AFS162 FINSH 3 WA06c	2.7	SW	Kitchen/Living	Yes	No
5 : VA - AFS162 party wall 1 WA08a	17.7	SE	Kitchen/Living	No	No
7 : VA - AFS162 internal 3 WA07c	2.9	NE	Kitchen/Living	No	No
8 : VA - AFS162 party wall 4 WA09	9.5	NE	Kitchen/Living	No	No
5 : VA - AFS162 party wall 1 WA08a	8.7	NE	Bedroom 1	No	No
2 : VA - AFS200 FINSH 2 WA05b	0.8	NW	Bedroom 1	Yes	No
2 : VA - AFS200 FINSH 2 WA05b	6	NW	Bedroom 1	Yes	No
3 : VA - AFS162 FINSH 4 WA06d	0.4	NW	Bedroom 1	Yes	No
3 : VA - AFS162 FINSH 4 WA06d	3.3	NW	Bedroom 1	Yes	No

Internal wall type

Type	Area (m ²)	Insulation
1 : VA - 64mm Internal Plasterboard WA10a	73	Glass fibre batt: R1.5 (R1.5)
2 : FR5 - Internal Plasterboard Stud Wall	16.4	
3 : VA - 92mm Internal Plasterboard WA11a	23.2	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R2.7)

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Ens	SuspSlab	4.6	Enclosed	1.5	Tiles
Bedroom 2	SuspSlab	10.1	Enclosed	1.5	Carpet
Bath	SuspSlab	3.2	Enclosed	1.5	Tiles
Kitchen/Living	SuspSlab	27.2	Enclosed	1.5	floattimber
Corridor	SuspSlab	2.1	Enclosed	1.5	floattimber

Nationwide House Energy Rating Scheme* Certificate



Certificate Number: **PHW15MFU4P**

Date of Certificate: **6 Aug 2017**

★ Star rating: **7.2**

Building Features

Bedroom 1 SuspSlab 12.5 Enclosed 1.5 Carpet

Ceiling type

Location	Material	Added insulation	Roof space above
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Ceiling penetrations

Location	Number	Type	Width (mm)	Length (mm)	Seal/ unsealed
Ens	1	Exhaust Fans	200	200	Sealed
Bath	1	Exhaust Fans	200	200	Sealed
Kitchen/Living	1	Exhaust Fans	200	200	Sealed

Ceiling fans

Location	Number	Diameter (mm)
----------	--------	---------------

Roof type

Material	Added insulation	Roof colour
Ceil: Ceiling	0.0	medium

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: PHW15MFU4P

Date of Certificate: 6 Aug 2017

★ Star rating: 7.2



Additional information

Explanatory notes

About this report

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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 this 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 an 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.

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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **WECFI307T9**

Date of Certificate: **6 Aug 2017**

★ Star rating: **6.4**



Assessor details

Accreditation number: **VIC/BDAV/10/1044**
Name: **RUJUN RAO**
Organisation: **rujun rao**
Email: **starating@yahoo.com.au**
Phone: **0433283009**
Declaration of interest: **No potential conflicts of interest to declare**
Software: **FirstRate5: 5.2.6 (3.13)**
AAO: **BDAV**

Overview

Dwelling details

Address: **G.04, 1 VINE STREET**
Suburb: **HEIDELBERG**
State: **VIC** Postcode: **3084**
Type: **New Home** NCC Class: **Class 2**
Lot/DP number: **-** NatHERS climate zone: **62**
Exposure: **suburban**

Key construction and insulation materials

(see following pages for details)

Construction: Wall: **AS PER WORKING DRAWINGS**
Roof: **AS PER WORKING DRAWINGS**
Floor: **AS PER WORKING DRAWINGS**
Insulation: Wall: **AS PER WORKING DRAWINGS**
Roof: **AS PER WORKING DRAWINGS**
Floor: **AS PER WORKING DRAWINGS**
Glazing: **ALUMINIUM**
AS PER WORKING DRAWINGS

Net floor area (m²)

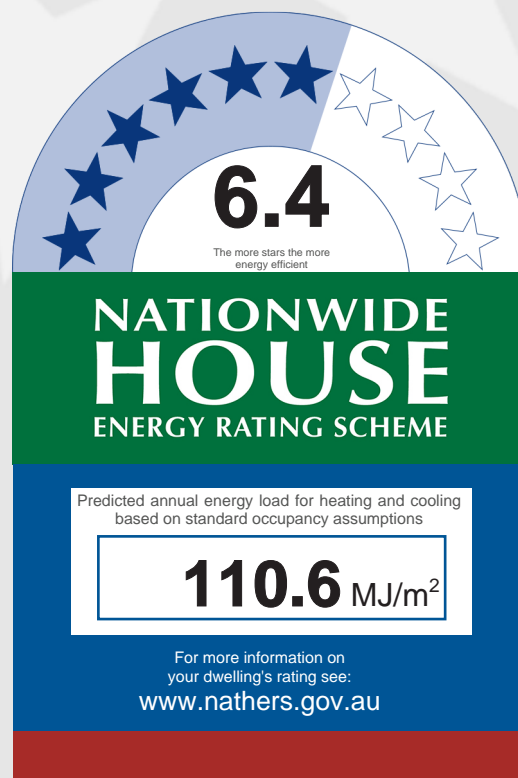
Conditioned: **90.6**
Unconditioned: **4.4**
Garage: **-**
TOTAL: **95**

Annual thermal performance loads (MJ/m²)

Heating: **87.3**
Cooling: **23.3**
TOTAL: **110.6**

Plan documents

Plan ref/date: **13.7.2017**
Prepared by: **ArdenSiena**



Ceiling penetrations

(see following pages for details)

Sealed: **3**
Unsealed: **0**
TOTAL:** **3**

Principal downlight type: **No downlights modelled**

****NOTE:** This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. **If this number is exceeded 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.

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.

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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: WECFI307T9

Date of Certificate: 6 Aug 2017

★ Star rating: 6.4



Building Features

Windows type and performance value

Window ID	Window type	U-value	SHGC
ALM-005-03 A	Aluminium A DG Argon Fill High Solar Gain low-E -Clear	4.1	0.47
ALM-006-03 A	Aluminium B DG Argon Fill High Solar Gain low-E -Clear	4.1	0.52

Windows schedule

Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name	Outdoor shade
ALM-005-03 A	W7	1750	2000	NE	Bedroom 3	No
ALM-005-03 A	W6	1750	2000	NE	Bedroom 2	No
ALM-006-03 A	W3	1750	1000	NE	Ens	No
ALM-005-03 A	W4	1750	300	SE	Ens	No
ALM-005-03 A	W4	1750	500	SE	Ens	No
ALM-006-03 A	W2	2700	2800	NW	Kitchen/Living	No
ALM-006-03 A	W1	2700	3560	NW	Kitchen/Living	No
ALM-006-03 A	W5	2700	3130	NE	Bedroom 1	No

Roof windows and skylight type and performance value

ID	Window type	U-value	SHGC
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Roof window and skylight schedule

ID	Roof window/ skylight no.	Area (m ²)	Orientation	Zone name	Outdoor shade	Indoor shade/diffuser
----	---------------------------	------------------------	-------------	-----------	---------------	-----------------------

External wall type

Type	Insulation	Wall wrap
1 : VA - AFS162 FINSH 1 WA06a	Polystyrene expanded (k = 0.039) (R0.6)	Yes
2 : VA - AFS162 internal 1 WA07a	Polystyrene expanded (k = 0.039) (R0.6)	Yes
3 : VA - AFS162 party wall 1 WA08a		No
4 : VA - AFS162 party wall 4 WA09	Glass fibre batt: R1.5 (R1.5);Glass fibre batt (k = 0.044 density = 12 kg/m3) (R2.7)	No
5 : VA - AFS162 FINSH 1+ WA10b	Polystyrene expanded (k = 0.039) (R0.6);Glass fibre batt: R1.5 (R1.5)	Yes
6 : VA - AFS162 FINSH 4+internal	Polystyrene expanded (k = 0.039) (R0.6);Glass fibre batt: R1.5 (R1.5)	Yes
7 : VA - AFS200 FINSH 1 WA05a	Polystyrene expanded (k = 0.039) (R0.6)	Yes
8 : FR5 - Fibro Clad Framed		No

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **WECFI307T9**

Date of Certificate: **6 Aug 2017**

★ Star rating: **6.4**



Building Features

9 : VA - AFS162 FINSH 4 WA06d	Polystyrene expanded (k = 0.039) (R0.6)	Yes
10 : FR5 - Brick Veneer		No

External wall schedule

Wall type	Area (m ²)	Orientation	Zone name	Fixed shade	Eaves
1 : VA - AFS162 FINSH 1 WA06a	8.1	NE	Bedroom 3	Yes	Yes
2 : VA - AFS162 internal 1 WA07a	8	SW	Bedroom 3	No	No
3 : VA - AFS162 party wall 1 WA08a	11	SE	Bedroom 3	No	No
1 : VA - AFS162 FINSH 1 WA06a	9.8	NE	Bedroom 2	Yes	Yes
4 : VA - AFS162 party wall 4 WA09	9.4	SW	Bath	No	No
2 : VA - AFS162 internal 1 WA07a	3.4	SE	Bath	No	No
5 : VA - AFS162 FINSH 1+ WA10b	4.2	NE	Ens	No	No
5 : VA - AFS162 FINSH 1+ WA10b	4.4	SE	Ens	Yes	Yes
5 : VA - AFS162 FINSH 1+ WA10b	1.4	SE	Ens	Yes	No
6 : VA - AFS162 FINSH 4+internal	2.3	NE	Ens	No	No
1 : VA - AFS162 FINSH 1 WA06a	6.4	NE	Kitchen/Living	No	No
7 : VA - AFS200 FINSH 1 WA05a	1.3	NW	Kitchen/Living	Yes	No
8 : FR5 - Fibro Clad Framed	7.7	NW	Kitchen/Living	Yes	No
7 : VA - AFS200 FINSH 1 WA05a	2.6	NW	Kitchen/Living	Yes	No
8 : FR5 - Fibro Clad Framed	9.7	NW	Kitchen/Living	Yes	No
3 : VA - AFS162 party wall 1 WA08a	14.7	SW	Kitchen/Living	No	No
3 : VA - AFS162 party wall 1 WA08a	3	SE	Kitchen/Living	No	No
9 : VA - AFS162 FINSH 4 WA06d	3.5	NE	Kitchen/Living	No	No
9 : VA - AFS162 FINSH 4 WA06d	0.7	NW	Kitchen/Living	Yes	No
9 : VA - AFS162 FINSH 4 WA06d	1.4	NW	Kitchen/Living	Yes	No
2 : VA - AFS162 internal 1 WA07a	11.4	SW	Entry/Corridor	No	No
10 : FR5 - Brick Veneer	8.9	NE	Bedroom 1	Yes	Yes

Internal wall type

Type	Area (m ²)	Insulation
1 : VA - 64mm Internal Plasterboard WA10a	124.8	Glass fibre batt: R1.5 (R1.5)
2 : VA - 92mm Internal Plasterboard WA11a	29.4	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R2.7)
3 : VA - 51mm Internal Plasterboard 2 WA12b	4.4	Glass fibre batt: R1.5 (R1.5)
4 : FR5 - Internal Plasterboard Stud Wall	5.4	

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **WECFI307T9**

Date of Certificate: **6 Aug 2017**

★ Star rating: **6.4**



Building Features

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Bedroom 3	SuspSlab	12.2	Enclosed	1.5	Carpet
Bedroom 2	SuspSlab	10.8	Enclosed	1.5	Carpet
Bath	SuspSlab	4.4	Enclosed	1.5	Tiles
Ens	SuspSlab	1.9	Enclosed	1.5	Tiles
Ens	SuspSlab	5	Enclosed	1.5	Tiles
Kitchen/Living	SuspSlab	30.2	Enclosed	1.5	floattimber
Kitchen/Living	SuspSlab	7.8	Enclosed	1.5	floattimber
Entry/Corridor	SuspSlab	7.8	Enclosed	1.5	floattimber
Bedroom 1	SuspSlab	15	Enclosed	1.5	Carpet

Ceiling type

Location	Material	Added insulation	Roof space above
Ens	Plasterboard	5.0	No
Kitchen/Living	Plasterboard	5.0	No

Ceiling penetrations

Location	Number	Type	Width (mm)	Length (mm)	Seal/ unsealed
Bath	1	Exhaust Fans	200	200	Sealed
Ens	1	Downlights	200	200	Sealed
Kitchen/Living	1	Exhaust Fans	200	200	Sealed

Ceiling fans

Location	Number	Diameter (mm)
----------	--------	---------------

Roof type

Material	Added insulation	Roof colour
Ceil: Ceiling	0.0	medium
Slab: Slab - Suspended Slab	0.0	medium

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **WECFI307T9**

Date of Certificate: **6 Aug 2017**

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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **BGLZZQJ312**

Date of Certificate: **6 Aug 2017**

★ Star rating: **5.6**



Assessor details

Accreditation number: **VIC/BDAV/10/1044**
Name: **RUJUN RAO**
Organisation: **rujun rao**
Email: **starating@yahoo.com.au**
Phone: **0433283009**
Declaration of interest: **No potential conflicts of interest to declare**
Software: **FirstRate5: 5.2.6 (3.13)**
AAO: **BDAV**

Overview

Dwelling details

Address: **G.05, 1 VINE STREET**
Suburb: **HEIDELBERG**
State: **VIC** Postcode: **3084**
Type: **New Home** NCC Class: **Class 2**
Lot/DP number: **-** NatHERS climate zone: **62**
Exposure: **suburban**

Key construction and insulation materials

(see following pages for details)

Construction: Wall: **AS PER WORKING DRAWINGS**
Roof: **AS PER WORKING DRAWINGS**
Floor: **AS PER WORKING DRAWINGS**
Insulation: Wall: **AS PER WORKING DRAWINGS**
Roof: **AS PER WORKING DRAWINGS**
Floor: **AS PER WORKING DRAWINGS**
Glazing: **ALUMINIUM**
AS PER WORKING DRAWINGS

Net floor area (m²)

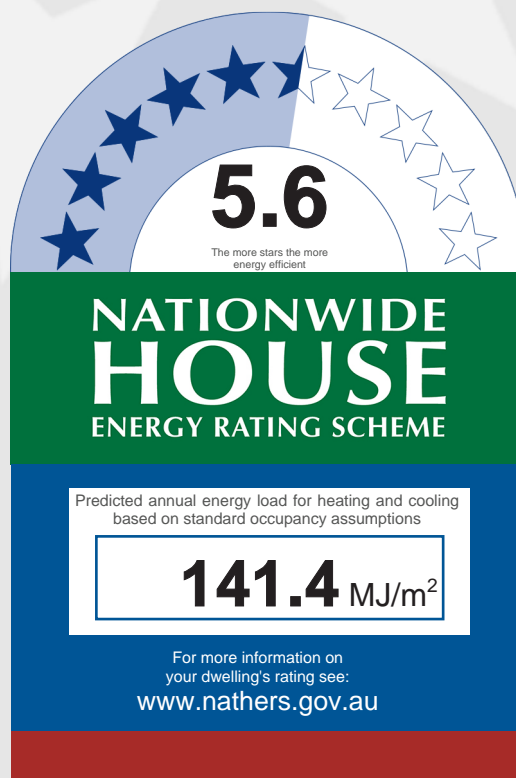
Conditioned: **58**
Unconditioned: **3.7**
Garage: **-**
TOTAL: **61.7**

Annual thermal performance loads (MJ/m²)

Heating: **118.8**
Cooling: **22.6**
TOTAL: **141.4**

Plan documents

Plan ref/date: **1.8.2017**
Prepared by: **ArdenSiena**



Ceiling penetrations

(see following pages for details)

Sealed: **3**
Unsealed: **0**
TOTAL:** **3**

Principal downlight type: **No downlights modelled**

NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. **If this number is exceeded 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.

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 the 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.



<https://www.fr5.com.au/QRCodeLandIng?PublicId=BGLZZQJ312>

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: BGLZZQJ3I2

Date of Certificate: 6 Aug 2017

★ Star rating: 5.6



Building Features

Windows type and performance value

Window ID	Window type	U-value	SHGC
ALM-006-03 A	Aluminium B DG Argon Fill High Solar Gain low-E -Clear	4.1	0.52
ALM-005-03 A	Aluminium A DG Argon Fill High Solar Gain low-E -Clear	4.1	0.47

Windows schedule

Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name	Outdoor shade
ALM-006-03 A	G.01	2700	1700	NE	Bedroom 1	No
ALM-005-03 A	G.03	1750	2000	NE	Bedroom 2	No
ALM-005-03 A	G.02	1750	1000	NW	Ens	No
ALM-006-03 A	G.07	2700	2308	SE	Kitchen/Living	No
ALM-006-03 A	G.06	2700	800	SE	Kitchen/Living	No
ALM-006-03 A	G.06	2700	800	NE	Kitchen/Living	No
ALM-006-03 A	G.05	1750	2585	NE	Kitchen/Living	No
ALM-006-03 A	G.04	1750	2760	NE	Kitchen/Living	No

Roof windows and skylight type and performance value

ID	Window type	U-value	SHGC
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Roof window and skylight schedule

ID	Roof window/ skylight no.	Area (m ²)	Orientation	Zone name	Outdoor shade	Indoor shade/diffuser
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External wall type

Type	Insulation	Wall wrap
1 : VA - AFS162 party wall 1 WA08a		No
2 : VA - AFS162 internal 1 WA07a	Polystyrene expanded (k = 0.039) (R0.6)	Yes
3 : FR5 - Fibro Clad Framed		No
4 : VA - AFS200 FINSH 1 WA05a	Polystyrene expanded (k = 0.039) (R0.6)	Yes
5 : VA - AFS162 internal 2 WA07b	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R2.7)	No
6 : VA - Internal to lift	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R2.7)	No
7 : VA - 200Concrete Panel 1 WA04a	Glass fibre batt: R1.5 (R1.5)	No

External wall schedule

Wall type	Area (m ²)	Orientation	Zone name	Fixed shade	Eaves
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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **BGLZZQJ312**

Date of Certificate: **6 Aug 2017**

★ Star rating: **5.6**



Building Features

1 : VA - AFS162 party wall 1 WA08a	11	NW	Bedroom 1	No	No
2 : VA - AFS162 internal 1 WA07a	8.9	SW	Bedroom 1	No	No
3 : FR5 - Fibro Clad Framed	4.8	NE	Bedroom 1	Yes	Yes
4 : VA - AFS200 FINSH 1 WA05a	8.1	NE	Bedroom 2	No	No
5 : VA - AFS162 internal 2 WA07b	7.3	SW	Bath	No	No
4 : VA - AFS200 FINSH 1 WA05a	1.6	NW	Ens	Yes	No
4 : VA - AFS200 FINSH 1 WA05a	4.3	NW	Ens	Yes	Yes
4 : VA - AFS200 FINSH 1 WA05a	3.8	NE	Ens	No	No
6 : VA - Internal to lift	1.3	SE	Kitchen/Living	No	No
7 : VA - 200Concrete Panel 1 WA04a	14.7	SW	Kitchen/Living	No	No
3 : FR5 - Fibro Clad Framed	8.6	SE	Kitchen/Living	Yes	Yes
3 : FR5 - Fibro Clad Framed	2.2	NE	Kitchen/Living	No	Yes
4 : VA - AFS200 FINSH 1 WA05a	7.2	NE	Kitchen/Living	No	Yes
4 : VA - AFS200 FINSH 1 WA05a	9.7	NE	Kitchen/Living	No	No
2 : VA - AFS162 internal 1 WA07a	5.2	SW	Entry/Corridor	No	No
6 : VA - Internal to lift	6.7	SE	Entry/Corridor	No	No

Internal wall type

Type	Area (m ²)	Insulation
1 : VA - 64mm Internal Plasterboard WA10a	42.6	Glass fibre batt: R1.5 (R1.5)
2 : VA - 92mm Internal Plasterboard WA11a	67	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R2.7)

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Bedroom 1	SuspSlab	13.2	Enclosed	1.5	Carpet
Bedroom 2	SuspSlab	6.6	Enclosed	1.5	Carpet
Bedroom 2	SuspSlab	4.5	Enclosed	1.5	Carpet
Bath	SuspSlab	3.7	Enclosed	1.5	Tiles
Ens	SuspSlab	2	Enclosed	1.5	Tiles
Ens	SuspSlab	1.7	Enclosed	1.5	Tiles
Kitchen/Living	SuspSlab	19.2	Enclosed	1.5	floattimber
Kitchen/Living	SuspSlab	4.1	Enclosed	1.5	floattimber
Entry/Corridor	SuspSlab	6.8	Enclosed	1.5	floattimber

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **BGLZZQJ3I2**

Date of Certificate: **6 Aug 2017**

★ Star rating: **5.6**



Building Features

Ceiling type

Location	Material	Added insulation	Roof space above
Bedroom 2	Plasterboard	5.0	No
Ens	Plasterboard	5.0	No
Kitchen/Living	Plasterboard	5.0	No

Ceiling penetrations

Location	Number	Type	Width (mm)	Length (mm)	Seal/ unsealed
Bath	1	Exhaust Fans	200	200	Sealed
Ens	1	Exhaust Fans	200	200	Sealed
Kitchen/Living	1	Exhaust Fans	200	200	Sealed

Ceiling fans

Location	Number	Diameter (mm)
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Roof type

Material	Added insulation	Roof colour
Ceil: Ceiling	0.0	medium
Slab:Slab - Suspended Slab	0.0	light

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **BGLZZQJ312**

Date of Certificate: **6 Aug 2017**

★ Star rating: **5.6**



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 this 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 an 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.

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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* Certificate

Certificate Number: TZ2FFANCV4

Date of Certificate: 6 Aug 2017

★ Star rating: 6.1



Assessor details

Accreditation number: VIC/BDAV/10/1044
Name: RUJUN RAO
Organisation: rujun rao
Email: starating@yahoo.com.au
Phone: 0433283009
Declaration of interest: No potential conflicts of interest to declare
Software: FirstRate5: 5.2.6 (3.13)
AAO: BDAV

Overview

Dwelling details

Address: 1.01, 1 VINE STREET
Suburb: HEIDELBERG
State: VIC Postcode: 3084
Type: New Home NCC Class: Class 2
Lot/DP number: - NatHERS climate zone: 62
Exposure: suburban

Key construction and insulation materials

(see following pages for details)

Construction: Wall: AS PER WORKING DRAWINGS
Roof: AS PER WORKING DRAWINGS
Floor: AS PER WORKING DRAWINGS
Insulation: Wall: AS PER WORKING DRAWINGS
Roof: AS PER WORKING DRAWINGS
Floor: AS PER WORKING DRAWINGS
Glazing: ALUMINIUM
AS PER WORKING DRAWINGS

Net floor area (m²)

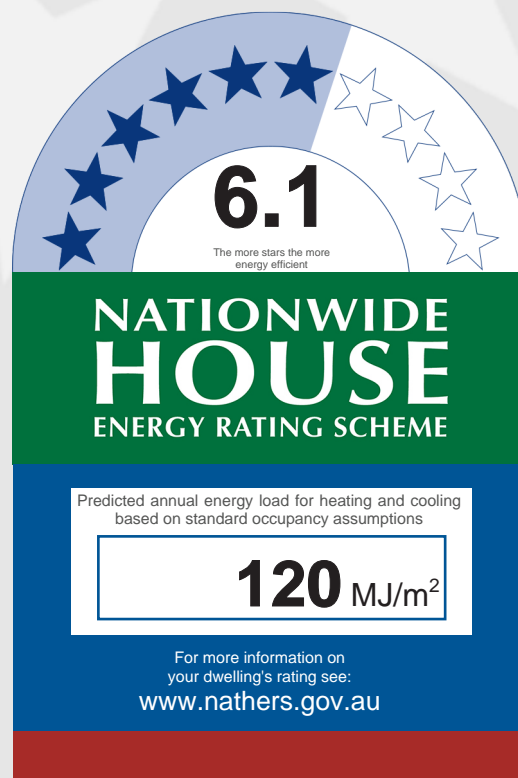
Conditioned: 79.9
Unconditioned: 3.7
Garage: -
TOTAL: 83.6

Annual thermal performance loads (MJ/m²)

Heating: 98
Cooling: 22
TOTAL: 120

Plan documents

Plan ref/date: 1.8.2017
Prepared by: ArdenSiena



Ceiling penetrations

(see following pages for details)

Sealed: 3
Unsealed: 0
TOTAL:** 3

Principal downlight type: No downlights modelled

NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. **If this number is exceeded 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.

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.

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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: TZ2FFANCV4

Date of Certificate: 6 Aug 2017

★ Star rating: 6.1



Building Features

Windows type and performance value

Window ID	Window type	U-value	SHGC
ALM-006-03 A	Aluminium B DG Argon Fill High Solar Gain low-E -Clear	4.1	0.52
ALM-005-03 A	Aluminium A DG Argon Fill High Solar Gain low-E -Clear	4.1	0.47

Windows schedule

Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name	Outdoor shade
ALM-006-03 A	W6	1750	2931	SW	Bedroom 2	No
ALM-006-03 A	W5	1750	2958	SW	Bedroom 3	No
ALM-006-03 A	W3	2700	800	SW	Kitchen/Living	No
ALM-006-03 A	W4	2700	2810	SW	Kitchen/Living	No
ALM-006-03 A	W2	2700	1600	SE	Kitchen/Living	No
ALM-006-03 A	W03	2700	800	SE	Kitchen/Living	No
ALM-005-03 A	W01	1750	1550	SE	Kitchen/Living	No
ALM-006-03 A	W07	2700	2000	SW	Bedroom 1	No

Roof windows and skylight type and performance value

ID	Window type	U-value	SHGC
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Roof window and skylight schedule

ID	Roof window/ skylight no.	Area (m ²)	Orientation	Zone name	Outdoor shade	Indoor shade/diffuser
----	---------------------------	------------------------	-------------	-----------	---------------	-----------------------

External wall type

Type	Insulation	Wall wrap
1 : VA - AFS162 FINSH 1 WA06a	Polystyrene expanded (k = 0.039) (R0.6)	Yes
2 : VA - AFS162 internal 2 WA07b	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R2.7)	No
3 : VA - AFS162 party wall 1 WA08a		No
4 : FR5 - Fibro Clad Framed		No
5 : VA - AFS162 FINSH 3 WA06c	Polystyrene expanded (k = 0.039) (R0.6)	Yes
6 : VA - AFS162 internal 3 WA07c	Glass fibre batt: R1.5 (R1.5)	No

External wall schedule

Wall type	Area (m ²)	Orientation	Zone name	Fixed shade	Eaves
1 : VA - AFS162 FINSH 1 WA06a	8.1	SW	Bedroom 2	Yes	Yes

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **TZ2FFANCV4**

Date of Certificate: **6 Aug 2017**

★ Star rating: **6.1**



Building Features

1 : VA - AFS162 FINSH 1 WA06a	8.1	SW	Bedroom 3	Yes	Yes
2 : VA - AFS162 internal 2 WA07b	6.8	NE	Bath	No	No
2 : VA - AFS162 internal 2 WA07b	10.3	NE	Ens	No	No
3 : VA - AFS162 party wall 1 WA08a	5.2	NW	Ens	No	No
4 : FR5 - Fibro Clad Framed	10	SW	Kitchen/Living	Yes	No
4 : FR5 - Fibro Clad Framed	6.9	SE	Kitchen/Living	Yes	Yes
5 : VA - AFS162 FINSH 3 WA06c	1.4	SE	Kitchen/Living	Yes	Yes
5 : VA - AFS162 FINSH 3 WA06c	3.7	SE	Kitchen/Living	Yes	No
1 : VA - AFS162 FINSH 1 WA06a	5.8	SE	Kitchen/Living	No	No
1 : VA - AFS162 FINSH 1 WA06a	2.6	NE	Kitchen/Living	Yes	No
6 : VA - AFS162 internal 3 WA07c	14	NE	Kitchen/Living	Yes	Yes
6 : VA - AFS162 internal 3 WA07c	1.8	NE	Kitchen/Living	No	No
5 : VA - AFS162 FINSH 3 WA06c	2.3	SW	Bedroom 1	Yes	Yes
4 : FR5 - Fibro Clad Framed	5.5	SW	Bedroom 1	Yes	Yes
1 : VA - AFS162 FINSH 1 WA06a	0.9	SW	Bedroom 1	Yes	No
3 : VA - AFS162 party wall 1 WA08a	12.1	NW	Bedroom 1	No	No

Internal wall type

Type	Area (m ²)	Insulation
1 : VA - 64mm Internal Plasterboard WA10a	105.8	Glass fibre batt: R1.5 (R1.5)
2 : FR5 - Internal Plasterboard Stud Wall	35.8	
3 : VA - 92mm Internal Plasterboard WA11a	20.4	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R2.7)

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Bedroom 2	SuspSlab	9.8	Enclosed	0.0	Carpet
Bedroom 3	SuspSlab	9.6	Enclosed	0.0	Carpet
Bath	SuspSlab	3.7	Enclosed	0.0	Tiles
Ens	SuspSlab	7.3	Enclosed	0.0	Tiles
Kitchen/Living	SuspSlab	21.4	Enclosed	0.0	floattimber
Kitchen/Living	SuspSlab	13	Enclosed	0.0	floattimber
Entry/Corridor	SuspSlab	3.9	Enclosed	0.0	floattimber
Bedroom 1	SuspSlab	15	Enclosed	0.0	Carpet

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: TZ2FFANCV4

Date of Certificate: 6 Aug 2017

★ Star rating: 6.1



Building Features

Ceiling type

Location	Material	Added insulation	Roof space above
Kitchen/Living	Plasterboard	5.0	No

Ceiling penetrations

Location	Number	Type	Width (mm)	Length (mm)	Seal/ unsealed
Bath	1	Exhaust Fans	200	200	Sealed
Ens	1	Exhaust Fans	200	200	Sealed
Kitchen/Living	1	Exhaust Fans	200	200	Sealed

Ceiling fans

Location	Number	Diameter (mm)
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Roof type

Material	Added insulation	Roof colour
Ceil: Ceiling	0.0	medium
Slab:Slab - Suspended Slab	0.0	light

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: TZ2FFANCV4

Date of Certificate: 6 Aug 2017

★ Star rating: 6.1



Additional information

Explanatory notes

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Nationwide House Energy Rating Scheme* Certificate



Certificate Number: ITQTUILTL7

Date of Certificate: 6 Aug 2017

★ Star rating: 7.7

Assessor details

Accreditation number: **VIC/BDAV/10/1044**
Name: **RUJUN RAO**
Organisation: **rujun rao**
Email: **starating@yahoo.com.au**
Phone: **0433283009**
Declaration of interest: **No potential conflicts of interest to declare**
Software: **FirstRate5: 5.2.6 (3.13)**
AAO: **BDAV**

Overview

Dwelling details

Address: **1.02, 1 VINE STREET**
Suburb: **HEIDELBERG**
State: **VIC** Postcode: **3084**
Type: **New Home** NCC Class: **Class 2**
Lot/DP number: **-** NatHERS climate zone: **62**
Exposure: **suburban**

Key construction and insulation materials

(see following pages for details)

Construction: Wall: **AS PER WORKING DRAWINGS**
Roof: **AS PER WORKING DRAWINGS**
Floor: **AS PER WORKING DRAWINGS**
Insulation: Wall: **AS PER WORKING DRAWINGS**
Roof: **AS PER WORKING DRAWINGS**
Floor: **AS PER WORKING DRAWINGS**
Glazing: **ALUMINIUM**
AS PER WORKING DRAWINGS

Net floor area (m²)

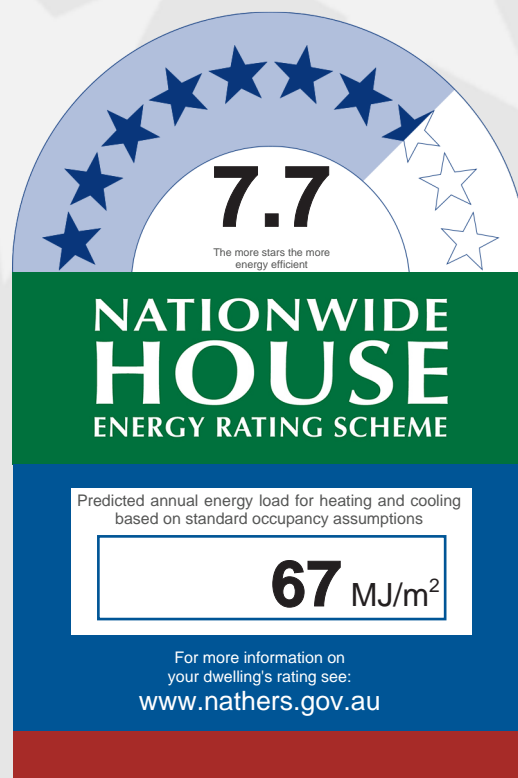
Conditioned: **59.3**
Unconditioned: **4.3**
Garage: **-**
TOTAL: **63.6**

Annual thermal performance loads (MJ/m²)

Heating: **54.7**
Cooling: **12.3**
TOTAL: **67**

Plan documents

Plan ref/date: **1.8.2017**
Prepared by: **ArdenSiena**



Ceiling penetrations

(see following pages for details)

Sealed: **3**
Unsealed: **0**
TOTAL:** **3**

Principal downlight type: **No downlights modelled**

NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. **If this number is exceeded 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.

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.

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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: ITQTUILTL7

Date of Certificate: 6 Aug 2017

★ Star rating: 7.7



Building Features

Windows type and performance value

Window ID	Window type	U-value	SHGC
ALM-006-03 A	Aluminium B DG Argon Fill High Solar Gain low-E -Clear	4.1	0.52
ALM-005-03 A	Aluminium A DG Argon Fill High Solar Gain low-E -Clear	4.1	0.47

Windows schedule

Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name	Outdoor shade
ALM-006-03 A	W3	2700	1800	SW	Bedroom 1	No
ALM-005-03 A	W2	1750	2285	SW	Bedroom 2	No
ALM-006-03 A	W3	2700	3	SW	Kitchen/Living	No
ALM-006-03 A	W1	2700	2452	SW	Kitchen/Living	No

Roof windows and skylight type and performance value

ID	Window type	U-value	SHGC
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Roof window and skylight schedule

ID	Roof window/ skylight no.	Area (m ²)	Orientation	Zone name	Outdoor shade	Indoor shade/ diffuser
----	---------------------------	------------------------	-------------	-----------	---------------	------------------------

External wall type

Type	Insulation	Wall wrap
1 : FR5 - Fibro Clad Framed		No
2 : VA - AFS162 FINSH 3 WA06c	Polystyrene expanded (k = 0.039) (R0.6)	Yes
3 : VA - AFS162 party wall 1 WA08a		No
4 : VA - AFS162 internal 3 WA07c	Glass fibre batt: R1.5 (R1.5)	No
5 : VA - AFS162 party wall 4 WA08d	Glass fibre batt: R1.5 (R1.5)	No
6 : VA - AFS162 party wall 2 WA08b	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R2.7)	No

External wall schedule

Wall type	Area (m ²)	Orientation	Zone name	Fixed shade	Eaves
1 : FR5 - Fibro Clad Framed	5.3	SW	Bedroom 1	Yes	No
2 : VA - AFS162 FINSH 3 WA06c	3.7	SW	Bedroom 1	Yes	No
3 : VA - AFS162 party wall 1 WA08a	8.4	NW	Bedroom 1	No	No
2 : VA - AFS162 FINSH 3 WA06c	1.8	SW	Bedroom 2	Yes	No
2 : VA - AFS162 FINSH 3 WA06c	6.2	SW	Bedroom 2	Yes	Yes

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: ITQTUILTL7

Date of Certificate: 6 Aug 2017

★ Star rating: 7.7



Building Features

4 : VA - AFS162 internal 3 WA07c	4.1	NE	Bath	No	No
5 : VA - AFS162 party wall 4 WA08d	3	NE	Bath	No	No
5 : VA - AFS162 party wall 4 WA08d	7.9	NE	Ens	No	No
6 : VA - AFS162 party wall 2 WA08b	4.4	NW	Ens	No	No
1 : FR5 - Fibro Clad Framed	6.7	SW	Kitchen/Living	Yes	Yes
2 : VA - AFS162 FINSH 3 WA06c	3.3	SW	Kitchen/Living	Yes	Yes
3 : VA - AFS162 party wall 1 WA08a	17.6	SE	Kitchen/Living	No	No
4 : VA - AFS162 internal 3 WA07c	11.9	NE	Kitchen/Living	No	No
3 : VA - AFS162 party wall 1 WA08a	4.2	NW	Wir	No	No

Internal wall type

Type	Area (m ²)	Insulation
1 : VA - 64mm Internal Plasterboard WA10a	74	Glass fibre batt: R1.5 (R1.5)
2 : FR5 - Internal Plasterboard Stud Wall	20.4	
3 : VA - 92mm Internal Plasterboard WA11a	42.4	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R2.7)

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Bedroom 1	SuspSlab	10.4	Enclosed	0.0	Carpet
Bedroom 2	SuspSlab	10.3	Enclosed	0.0	Carpet
Bath	SuspSlab	4.3	Enclosed	0.0	Tiles
Ens	SuspSlab	4.8	Enclosed	0.0	Tiles
Kitchen/Living	SuspSlab	25.3	Enclosed	0.0	floattimber
Entry/Corridor	SuspSlab	5.3	Enclosed	0.0	floattimber
Wir	SuspSlab	3.4	Enclosed	0.0	Carpet

Ceiling type

Location	Material	Added insulation	Roof space above
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Ceiling penetrations

Location	Number	Type	Width (mm)	Length (mm)	Seal/ unsealed
Bath	1	Exhaust Fans	200	200	Sealed
Ens	1	Exhaust Fans	200	200	Sealed
Kitchen/Living	1	Exhaust Fans	200	200	Sealed

Nationwide House Energy Rating Scheme* Certificate



Certificate Number: ITQTUILTL7

Date of Certificate: 6 Aug 2017

★ Star rating: 7.7

Building Features

Ceiling fans

Location	Number	Diameter (mm)
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Roof type

Material	Added insulation	Roof colour
Ceil: Ceiling	0.0	medium

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: ITQTUILTL7

Date of Certificate: 6 Aug 2017

★ Star rating: 7.7



Additional information

Explanatory notes

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General Information

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The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

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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

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For more information on energy efficient design and insulation visit www.yourhome.gov.au

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **C809Q13JCU**

Date of Certificate: **6 Aug 2017**

★ Star rating: **7.1**



Assessor details

Accreditation number: **VIC/BDAV/10/1044**
Name: **RUJUN RAO**
Organisation: **rujun rao**
Email: **starating@yahoo.com.au**
Phone: **0433283009**
Declaration of interest: **No potential conflicts of interest to declare**
Software: **FirstRate5: 5.2.6 (3.13)**
AAO: **BDAV**

Overview

Dwelling details

Address: **1.03, 1 VINE STREET**
Suburb: **HEIDELBERG**
State: **VIC** Postcode: **3084**
Type: **New Home** NCC Class: **Class 2**
Lot/DP number: **-** NatHERS climate zone: **62**
Exposure: **suburban**

Key construction and insulation materials

(see following pages for details)

Construction: Wall: **AS PER WORKING DRAWINGS**
Roof: **AS PER WORKING DRAWINGS**
Floor: **AS PER WORKING DRAWINGS**
Insulation: Wall: **AS PER WORKING DRAWINGS**
Roof: **AS PER WORKING DRAWINGS**
Floor: **AS PER WORKING DRAWINGS**
Glazing: **ALUMINIUM**
AS PER WORKING DRAWINGS

Net floor area (m²)

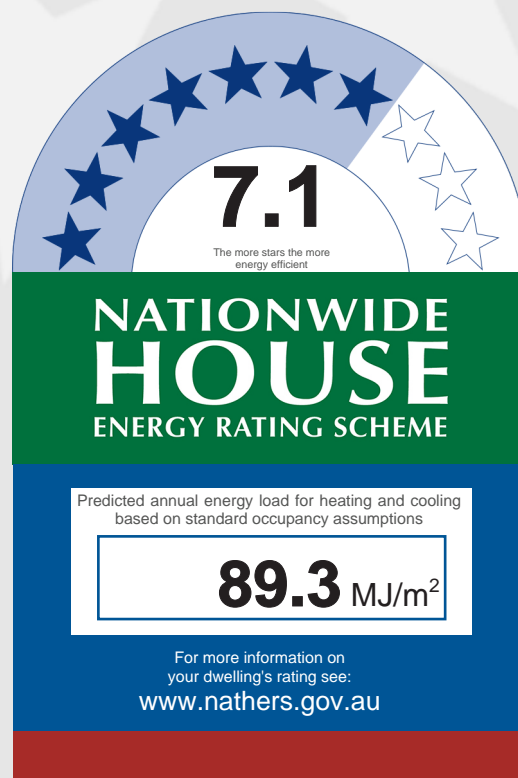
Conditioned: **87.9**
Unconditioned: **4.2**
Garage: **-**
TOTAL: **92.1**

Annual thermal performance loads (MJ/m²)

Heating: **71.2**
Cooling: **18.1**
TOTAL: **89.3**

Plan documents

Plan ref/date: **1.8.2017**
Prepared by: **ArdenSiena**



Ceiling penetrations

(see following pages for details)

Sealed: **3**
Unsealed: **0**
TOTAL:** **3**

Principal downlight type: **No downlights modelled**

****NOTE:** This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. **If this number is exceeded 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.

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 the 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.



<https://www.fr5.com.au/QRCodeLandIng?PublicId=C809Q13JCU>

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: C809Q13JCU

Date of Certificate: 6 Aug 2017

★ Star rating: 7.1



Building Features

Windows type and performance value

Window ID	Window type	U-value	SHGC
ALM-006-03 A	Aluminium B DG Argon Fill High Solar Gain low-E -Clear	4.1	0.52
ALM-005-03 A	Aluminium A DG Argon Fill High Solar Gain low-E -Clear	4.1	0.47

Windows schedule

Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name	Outdoor shade
ALM-006-03 A	W1	2700	3000	SW	Bedroom 1	No
ALM-005-03 A	W3	1000	1500	NW	Bedroom 2	No
ALM-006-03 A	W2	2700	750	NW	Bedroom 2	No
ALM-006-03 A	W2	2700	750	SW	Bedroom 2	No
ALM-005-03 A	W4	1000	1500	NW	Bedroom 3	No
ALM-006-03 A	W7	1750	3000	NE	Kitchen/Living	No
ALM-006-03 A	W6	2700	3500	NE	Kitchen/Living	No
ALM-006-03 A	W3	2700	3	NW	Kitchen/Living	No
ALM-006-03 A	W5	1750	2700	NW	Kitchen/Living	No

Roof windows and skylight type and performance value

ID	Window type	U-value	SHGC
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Roof window and skylight schedule

ID	Roof window/ skylight no.	Area (m ²)	Orientation	Zone name	Outdoor shade	Indoor shade/ diffuser
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External wall type

Type	Insulation	Wall wrap
1 : VA - AFS162 party wall 1 WA08a		No
2 : VA - AFS162 FINSH 3 WA06c	Polystyrene expanded (k = 0.039) (R0.6)	Yes
3 : VA - AFS162 FINSH 1 WA06a	Polystyrene expanded (k = 0.039) (R0.6)	Yes
4 : FR5 - Fibro Clad Framed		No
5 : VA - AFS200 FINSH 2 WA05b	Polystyrene expanded (k = 0.039) (R0.6)	Yes
6 : VA - AFS162 party wall 2 WA08b	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R2.7)	No
7 : VA - AFS162 party wall 4 WA08d	Glass fibre batt: R1.5 (R1.5)	No
8 : VA - AFS162 internal 1 WA07a	Polystyrene expanded (k = 0.039) (R0.6)	Yes

External wall schedule

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **C809Q13JCU**

Date of Certificate: **6 Aug 2017**

★ Star rating: **7.1**



Building Features

Wall type	Area (m ²)	Orientation	Zone name	Fixed shade	Eaves
1 : VA - AFS162 party wall 1 WA08a	9.6	SE	Bedroom 1	No	No
2 : VA - AFS162 FINSH 3 WA06c	0.6	SW	Bedroom 1	Yes	No
3 : VA - AFS162 FINSH 1 WA06a	0.7	SW	Bedroom 1	Yes	No
4 : FR5 - Fibro Clad Framed	8.3	SW	Bedroom 1	Yes	No
3 : VA - AFS162 FINSH 1 WA06a	1.5	SW	Bedroom 1	Yes	No
5 : VA - AFS200 FINSH 2 WA05b	7.3	NW	Bedroom 2	No	Yes
4 : FR5 - Fibro Clad Framed	2.1	NW	Bedroom 2	No	Yes
4 : FR5 - Fibro Clad Framed	2.1	SW	Bedroom 2	Yes	Yes
2 : VA - AFS162 FINSH 3 WA06c	5.6	SW	Bedroom 2	Yes	Yes
5 : VA - AFS200 FINSH 2 WA05b	8.5	NW	Bedroom 3	No	No
5 : VA - AFS200 FINSH 2 WA05b	1	NW	Bedroom 3	No	Yes
6 : VA - AFS162 party wall 2 WA08b	2.9	SE	Bath	No	No
1 : VA - AFS162 party wall 1 WA08a	11.2	SE	Kitchen/Living	No	No
3 : VA - AFS162 FINSH 1 WA06a	12.2	NE	Kitchen/Living	Yes	Yes
4 : FR5 - Fibro Clad Framed	9.5	NE	Kitchen/Living	Yes	Yes
5 : VA - AFS200 FINSH 2 WA05b	9.4	NW	Kitchen/Living	No	Yes
5 : VA - AFS200 FINSH 2 WA05b	3.8	NW	Kitchen/Living	No	No
1 : VA - AFS162 party wall 1 WA08a	3.1	SE	Ens	No	No
6 : VA - AFS162 party wall 2 WA08b	2.4	SE	Ens	No	No
1 : VA - AFS162 party wall 1 WA08a	8.6	NE	Entry	No	No
7 : VA - AFS162 party wall 4 WA08d	11	SW	Entry	No	No
8 : VA - AFS162 internal 1 WA07a	3.3	SE	Entry	No	No

Internal wall type

Type	Area (m ²)	Insulation
1 : FR5 - Internal Plasterboard Stud Wall	29.6	
2 : VA - 92mm Internal Plasterboard WA11a	57.4	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R2.7)
3 : VA - 64mm Internal Plasterboard WA10a	74.2	Glass fibre batt: R1.5 (R1.5)

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Bedroom 1	SuspSlab	13.4	Enclosed	0.0	Carpet
Bedroom 2	SuspSlab	3.3	Enclosed	0.0	Carpet

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **C809Q13JCU**

Date of Certificate: **6 Aug 2017**

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Building Features

Bedroom 2	SuspSlab	6.7	Enclosed	0.0	Carpet
Bedroom 3	SuspSlab	3.4	Enclosed	0.0	Carpet
Bedroom 3	SuspSlab	6.7	Enclosed	0.0	Carpet
Bath	SuspSlab	4.2	Enclosed	0.0	Tiles
Kitchen/Living	SuspSlab	19.2	Enclosed	0.0	floattimber
Kitchen/Living	SuspSlab	19.7	Enclosed	0.0	floattimber
Corridor	SuspSlab	4.5	Enclosed	0.0	floattimber
Ens	SuspSlab	6.1	Enclosed	0.0	Tiles
Entry	SuspSlab	4.7	Enclosed	0.0	floattimber

Ceiling type

Location	Material	Added insulation	Roof space above
Bedroom 2	Plasterboard	5.0	No
Bedroom 3	Plasterboard	5.0	No
Kitchen/Living	Plasterboard	5.0	No

Ceiling penetrations

Location	Number	Type	Width (mm)	Length (mm)	Seal/ unsealed
Bath	1	Exhaust Fans	200	200	Sealed
Kitchen/Living	1	Exhaust Fans	200	200	Sealed
Ens	1	Exhaust Fans	200	200	Sealed

Ceiling fans

Location	Number	Diameter (mm)
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Roof type

Material	Added insulation	Roof colour
Ceil: Ceiling	0.0	medium
Slab: Slab - Suspended Slab	0.0	medium

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Additional information

Explanatory notes

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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **LZ9306Q4XG**

Date of Certificate: **6 Aug 2017**

★ Star rating: **7.2**



Assessor details

Accreditation number: **VIC/BDAV/10/1044**
Name: **RUJUN RAO**
Organisation: **rujun rao**
Email: **starating@yahoo.com.au**
Phone: **0433283009**
Declaration of interest: **No potential conflicts of interest to declare**
Software: **FirstRate5: 5.2.6 (3.13)**
AAO: **BDAV**

Overview

Dwelling details

Address: **1.04, 1 VINE STREET**
Suburb: **HEIDELBERG**
State: **VIC** Postcode: **3084**
Type: **New Home** NCC Class: **Class 2**
Lot/DP number: **-** NatHERS climate zone: **62**
Exposure: **suburban**

Key construction and insulation materials

(see following pages for details)

Construction: Wall: **AS PER WORKING DRAWINGS**
Roof: **AS PER WORKING DRAWINGS**
Floor: **AS PER WORKING DRAWINGS**
Insulation: Wall: **AS PER WORKING DRAWINGS**
Roof: **AS PER WORKING DRAWINGS**
Floor: **AS PER WORKING DRAWINGS**
Glazing: **ALUMINIUM**
AS PER WORKING DRAWINGS

Net floor area (m²)

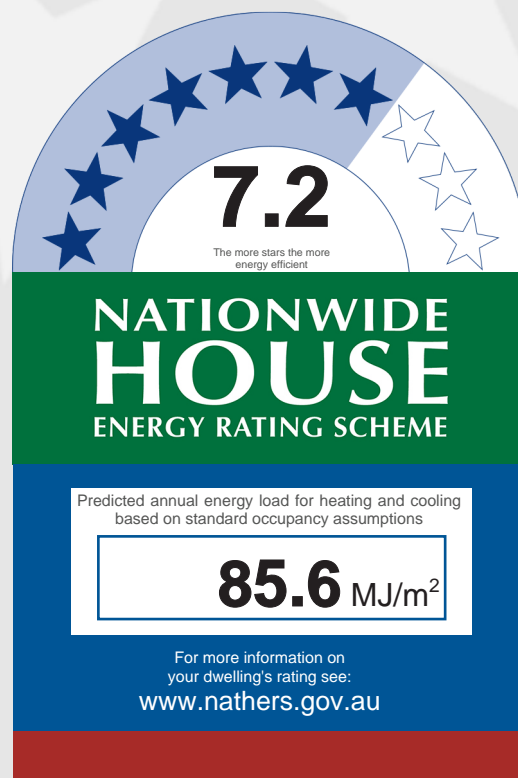
Conditioned: **76.4**
Unconditioned: **3.1**
Garage: **-**
TOTAL: **79.5**

Annual thermal performance loads (MJ/m²)

Heating: **66.2**
Cooling: **19.4**
TOTAL: **85.6**

Plan documents

Plan ref/date: **1.8.2017**
Prepared by: **ArdenSiena**



Ceiling penetrations

(see following pages for details)

Sealed: **3**
Unsealed: **0**
TOTAL:** **3**

Principal downlight type: **No downlights modelled**

NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. **If this number is exceeded 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.

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.

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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **LZ9306Q4XG**

Date of Certificate: **6 Aug 2017**

★ Star rating: **7.2**



Building Features

Windows type and performance value

Window ID	Window type	U-value	SHGC
ALM-006-03 A	Aluminium B DG Argon Fill High Solar Gain low-E -Clear	4.1	0.52

Windows schedule

Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name	Outdoor shade
ALM-006-03 A	W2	1000	2500	NE	Bedroom 2	No
ALM-006-03 A	W2	2700	1480	SE	Kitchen/Living	No
ALM-006-03 A	W3	2700	2200	NE	Kitchen/Living	No
ALM-006-03 A	W4	2700	3660	NE	Kitchen/Living	No
ALM-006-03 A	W01	1000	2930	NE	Bedroom 1	No

Roof windows and skylight type and performance value

ID	Window type	U-value	SHGC
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Roof window and skylight schedule

ID	Roof window/ skylight no.	Area (m ²)	Orientation	Zone name	Outdoor shade	Indoor shade/ diffuser
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External wall type

Type	Insulation	Wall wrap
1 : VA - AFS162 FINSH 1 WA06a	Polystyrene expanded (k = 0.039) (R0.6)	Yes
2 : VA - AFS162 FINSH 2 WA06b	Polystyrene expanded (k = 0.039) (R0.6)	Yes
3 : VA - AFS162 party wall 1 WA08a		No
4 : VA - AFS162 internal 1 WA07a	Polystyrene expanded (k = 0.039) (R0.6)	Yes
5 : VA - Internal to lift	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R2.7)	No
6 : FR5 - Fibro Clad Framed		No

External wall schedule

Wall type	Area (m ²)	Orientation	Zone name	Fixed shade	Eaves
1 : VA - AFS162 FINSH 1 WA06a	3.5	NE	Bedroom 2	No	No
2 : VA - AFS162 FINSH 2 WA06b	2.5	NE	Bedroom 2	Yes	No
1 : VA - AFS162 FINSH 1 WA06a	3.5	NE	Bedroom 2	Yes	No
3 : VA - AFS162 party wall 1 WA08a	6.3	NW	Ens	No	No
3 : VA - AFS162 party wall 1 WA08a	7.8	SW	Ens	No	No

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **LZ9306Q4XG**

Date of Certificate: **6 Aug 2017**

★ Star rating: **7.2**



Building Features

4 : VA - AFS162 internal 1 WA07a	19.7	SW	Kitchen/Living	No	No
5 : VA - Internal to lift	8	SE	Kitchen/Living	No	No
5 : VA - Internal to lift	0.9	SW	Kitchen/Living	No	No
6 : FR5 - Fibro Clad Framed	4.1	SE	Kitchen/Living	Yes	Yes
6 : FR5 - Fibro Clad Framed	16.5	NE	Kitchen/Living	Yes	Yes
1 : VA - AFS162 FINSH 1 WA06a	2.6	SE	Kitchen/Living	Yes	No
1 : VA - AFS162 FINSH 1 WA06a	0.9	NE	Kitchen/Living	Yes	No
1 : VA - AFS162 FINSH 1 WA06a	1.7	NE	Kitchen/Living	Yes	No
2 : VA - AFS162 FINSH 2 WA06b	1.2	NE	Kitchen/Living	Yes	No
1 : VA - AFS162 FINSH 1 WA06a	1.7	NE	Kitchen/Living	Yes	No
4 : VA - AFS162 internal 1 WA07a	11	SW	Corridor	No	No
2 : VA - AFS162 FINSH 2 WA06b	3.5	NW	Bedroom 1	Yes	No
3 : VA - AFS162 party wall 1 WA08a	4.6	NW	Bedroom 1	No	No
4 : VA - AFS162 internal 1 WA07a	4.1	SW	Bedroom 1	No	No
1 : VA - AFS162 FINSH 1 WA06a	4.5	NE	Bedroom 1	No	No
1 : VA - AFS162 FINSH 1 WA06a	4.5	NE	Bedroom 1	Yes	No
2 : VA - AFS162 FINSH 2 WA06b	3.1	NE	Bedroom 1	Yes	No

Internal wall type

Type	Area (m ²)	Insulation
1 : VA - 64mm Internal Plasterboard WA10a	74.6	Glass fibre batt: R1.5 (R1.5)
2 : VA - 92mm Internal Plasterboard WA11a	53.8	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R2.7)
3 : FR5 - Internal Plasterboard Stud Wall	5.4	

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Bedroom 2	SuspSlab	2.5	Enclosed	0.0	Carpet
Bedroom 2	SuspSlab	5.7	Enclosed	0.0	Carpet
Bedroom 2	SuspSlab	4.3	Elevated	1.5	Carpet
Bath	SuspSlab	3.1	Enclosed	0.0	Tiles
Ens	SuspSlab	6.7	Enclosed	0.0	Tiles
Kitchen/Living	SuspSlab	19.5	Enclosed	0.0	floattimber
Kitchen/Living	SuspSlab	15.6	Enclosed	0.0	floattimber
Kitchen/Living	SuspSlab	1.8	Elevated	1.5	floattimber

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **LZ9306Q4XG**

Date of Certificate: **6 Aug 2017**

★ Star rating: **7.2**



Building Features

Corridor	SuspSlab	4.1	Enclosed	0.0	floattimber
Bedroom 1	SuspSlab	3.6	Enclosed	0.0	Carpet
Bedroom 1	SuspSlab	7.1	Enclosed	0.0	Carpet
Bedroom 1	SuspSlab	5.6	Elevated	1.5	Carpet

Ceiling type

Location	Material	Added insulation	Roof space above
Bedroom 2	Plasterboard	5.0	No
Bedroom 2	Plasterboard	5.0	No
Kitchen/Living	Plasterboard	5.0	No
Kitchen/Living	Plasterboard	5.0	No
Bedroom 1	Plasterboard	5.0	No
Bedroom 1	Plasterboard	5.0	No

Ceiling penetrations

Location	Number	Type	Width (mm)	Length (mm)	Seal/ unsealed
Bath	1	Exhaust Fans	200	200	Sealed
Ens	1	Exhaust Fans	200	200	Sealed
Kitchen/Living	1	Exhaust Fans	200	200	Sealed

Ceiling fans

Location	Number	Diameter (mm)
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Roof type

Material	Added insulation	Roof colour
Ceiling: Ceiling	0.0	medium
Slab:Slab - Suspended Slab	0.0	light

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **LZ9306Q4XG**

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★ Star rating: **7.2**



Additional information

Explanatory notes

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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.

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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **O92ZUPNE0Q**

Date of Certificate: **6 Aug 2017**

★ Star rating: **5.2**



Assessor details

Accreditation number: **VIC/BDAV/10/1044**
Name: **RUJUN RAO**
Organisation: **rujun rao**
Email: **starating@yahoo.com.au**
Phone: **0433283009**
Declaration of interest: **No potential conflicts of interest to declare**
Software: **FirstRate5: 5.2.6 (3.13)**
AAO: **BDAV**

Overview

Dwelling details

Address: **2.01, 1 VINE STREET**
Suburb: **HEIDELBERG**
State: **VIC** Postcode: **3084**
Type: **New Home** NCC Class: **Class 2**
Lot/DP number: **-** NatHERS climate zone: **62**
Exposure: **suburban**

Key construction and insulation materials

(see following pages for details)

Construction: Wall: **AS PER WORKING DRAWINGS**
Roof: **AS PER WORKING DRAWINGS**
Floor: **AS PER WORKING DRAWINGS**
Insulation: Wall: **AS PER WORKING DRAWINGS**
Roof: **AS PER WORKING DRAWINGS**
Floor: **AS PER WORKING DRAWINGS**
Glazing: **ALUMINIUM**
AS PER WORKING DRAWINGS

Net floor area (m²)

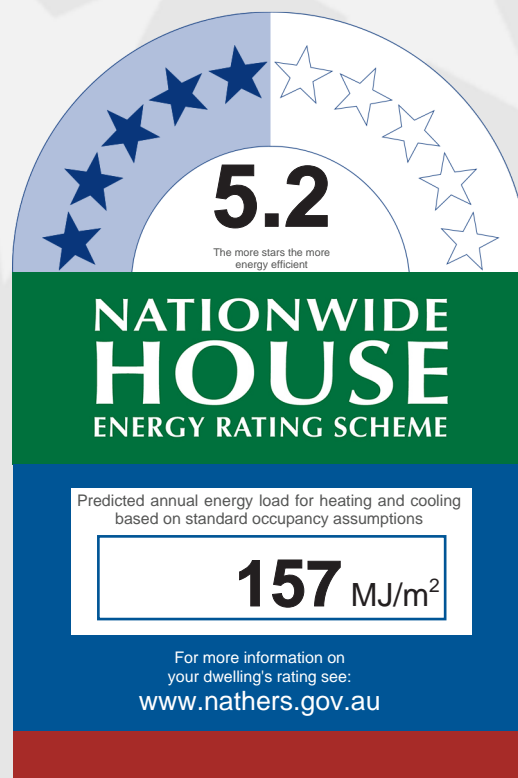
Conditioned: **67.3**
Unconditioned: **4.1**
Garage: **-**
TOTAL: **71.4**

Annual thermal performance loads (MJ/m²)

Heating: **136.4**
Cooling: **20.6**
TOTAL: **157**

Plan documents

Plan ref/date: **1.8.2017**
Prepared by: **ArdenSiena**



Ceiling penetrations

(see following pages for details)

Sealed: **3**
Unsealed: **0**
TOTAL:** **3**

Principal downlight type: **No downlights modelled**

****NOTE:** This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. **If this number is exceeded 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.

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.

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Building Features

Windows type and performance value

Window ID	Window type	U-value	SHGC
ALM-006-03 A	Aluminium B DG Argon Fill High Solar Gain low-E -Clear	4.1	0.52

Windows schedule

Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name	Outdoor shade
ALM-006-03 A	W05	2700	2100	SW	Bedroom 1	No
ALM-006-03 A	W01	2700	2200	SE	Bedroom 2	No
ALM-006-03 A	W02	2700	3060	SE	Kitchen/Living	No
ALM-006-03 A	W04	2700	2200	SW	Kitchen/Living	No
ALM-006-03 A	W03	2700	2340	SW	Kitchen/Living	No

Roof windows and skylight type and performance value

ID	Window type	U-value	SHGC
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Roof window and skylight schedule

ID	Roof window/ skylight no.	Area (m ²)	Orientation	Zone name	Outdoor shade	Indoor shade/ diffuser
----	---------------------------	------------------------	-------------	-----------	---------------	------------------------

External wall type

Type	Insulation	Wall wrap
1 : VA - AFS162 FINSH 2 WA06b	Polystyrene expanded (k = 0.039) (R0.6)	Yes
2 : FR5 - Fibro Clad Framed		No
3 : VA - AFS162 party wall 1 WA08a		No
4 : VA - AFS162 internal 1 WA07a	Polystyrene expanded (k = 0.039) (R0.6)	Yes
5 : VA - AFS162 FINSH 1 WA06a	Polystyrene expanded (k = 0.039) (R0.6)	Yes
6 : VA - AFS162 party wall 2 WA08b	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R2.7)	No
7 : VA - AFS162 party wall 4 WA08d	Glass fibre batt: R1.5 (R1.5)	No

External wall schedule

Wall type	Area (m ²)	Orientation	Zone name	Fixed shade	Eaves
1 : VA - AFS162 FINSH 2 WA06b	3.3	SW	Bedroom 1	Yes	No
2 : FR5 - Fibro Clad Framed	5.7	SW	Bedroom 1	Yes	No
3 : VA - AFS162 party wall 1 WA08a	16.1	NW	Bedroom 1	No	No
4 : VA - AFS162 internal 1 WA07a	11	NE	Bedroom 2	Yes	Yes

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **O92ZUPNE0Q**

Date of Certificate: **6 Aug 2017**

★ Star rating: **5.2**



Building Features

2 : FR5 - Fibro Clad Framed	6	SE	Bedroom 2	Yes	Yes
5 : VA - AFS162 FINSH 1 WA06a	2.1	SE	Bedroom 2	Yes	Yes
2 : FR5 - Fibro Clad Framed	8.3	SE	Kitchen/Living	Yes	Yes
5 : VA - AFS162 FINSH 1 WA06a	1.8	SE	Kitchen/Living	Yes	Yes
4 : VA - AFS162 internal 1 WA07a	4.5	NE	Kitchen/Living	Yes	Yes
5 : VA - AFS162 FINSH 1 WA06a	1.6	SW	Kitchen/Living	Yes	Yes
2 : FR5 - Fibro Clad Framed	6	SW	Kitchen/Living	Yes	Yes
5 : VA - AFS162 FINSH 1 WA06a	2.2	SW	Kitchen/Living	Yes	Yes
2 : FR5 - Fibro Clad Framed	6.4	SW	Kitchen/Living	Yes	Yes
4 : VA - AFS162 internal 1 WA07a	5.7	NE	Ens	Yes	Yes
6 : VA - AFS162 party wall 2 WA08b	3.1	NW	Ens	No	No
7 : VA - AFS162 party wall 4 WA08d	5.7	NW	Ens	No	No
4 : VA - AFS162 internal 1 WA07a	3.5	NE	Bath	Yes	Yes
4 : VA - AFS162 internal 1 WA07a	4	SE	Bath	Yes	Yes
4 : VA - AFS162 internal 1 WA07a	2.5	SE	Bath	Yes	Yes

Internal wall type

Type	Area (m ²)	Insulation
1 : VA - 64mm Internal Plasterboard WA10a	84.2	Glass fibre batt: R1.5 (R1.5)
2 : FR5 - Internal Plasterboard Stud Wall	13.6	
3 : VA - 92mm Internal Plasterboard WA11a	17.4	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R2.7)

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Bedroom 1	SuspSlab	13.2	Enclosed	0.0	Carpet
Bedroom 1	SuspSlab	4.9	Enclosed	0.0	Carpet
Bedroom 2	SuspSlab	4.1	Enclosed	0.0	Carpet
Bedroom 2	SuspSlab	7.5	Enclosed	0.0	Carpet
Kitchen/Living	SuspSlab	13.3	Enclosed	0.0	floattimber
Kitchen/Living	SuspSlab	17.3	Enclosed	0.0	floattimber
Ens	SuspSlab	6.9	Enclosed	0.0	Tiles
Bath	SuspSlab	4.1	Enclosed	0.0	Tiles

Ceiling type

Nationwide House Energy Rating Scheme* Certificate



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Building Features

Location	Material	Added insulation	Roof space above
Bedroom 1	Plasterboard	5.0	No
Bedroom 2	Plasterboard	5.0	No
Kitchen/Living	Plasterboard	5.0	No

Ceiling penetrations

Location	Number	Type	Width (mm)	Length (mm)	Seal/ unsealed
Kitchen/Living	1	Exhaust Fans	200	200	Sealed
Ens	1	Exhaust Fans	200	200	Sealed
Bath	1	Exhaust Fans	200	200	Sealed

Ceiling fans

Location	Number	Diameter (mm)
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Roof type

Material	Added insulation	Roof colour
Ceil: Ceiling	0.0	medium
Slab:Slab - Suspended Slab	0.0	light

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Certificate Number: **O92ZUPNE0Q**

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Additional information

Explanatory notes

About this report

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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **54H4W2EAE1**

Date of Certificate: **6 Aug 2017**

★ Star rating: **5.8**



Assessor details

Accreditation number: **VIC/BDAV/10/1044**
Name: **RUJUN RAO**
Organisation: **rujun rao**
Email: **starating@yahoo.com.au**
Phone: **0433283009**
Declaration of interest: **No potential conflicts of interest to declare**
Software: **FirstRate5: 5.2.6 (3.13)**
AAO: **BDAV**

Overview

Dwelling details

Address: **2.02, 1 VINE STREET**
Suburb: **HEIDELBERG**
State: **VIC** Postcode: **3084**
Type: **New Home** NCC Class: **Class 2**
Lot/DP number: **-** NatHERS climate zone: **62**
Exposure: **suburban**

Key construction and insulation materials

(see following pages for details)

Construction: Wall: **AS PER WORKING DRAWINGS**
Roof: **AS PER WORKING DRAWINGS**
Floor: **AS PER WORKING DRAWINGS**
Insulation: Wall: **AS PER WORKING DRAWINGS**
Roof: **AS PER WORKING DRAWINGS**
Floor: **AS PER WORKING DRAWINGS**
Glazing: **ALUMINIUM**
AS PER WORKING DRAWINGS

Net floor area (m²)

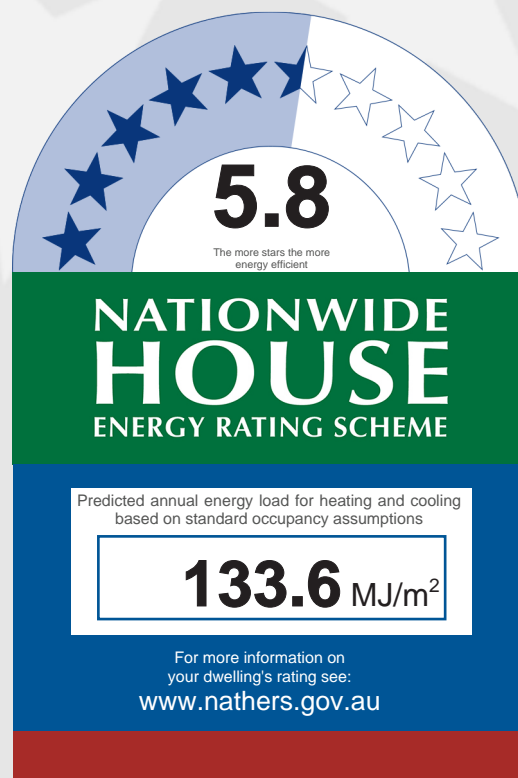
Conditioned: **77.2**
Unconditioned: **3.5**
Garage: **-**
TOTAL: **80.7**

Annual thermal performance loads (MJ/m²)

Heating: **118.3**
Cooling: **15.3**
TOTAL: **133.6**

Plan documents

Plan ref/date: **1.8.2017**
Prepared by: **ArdenSiena**



Ceiling penetrations

(see following pages for details)

Sealed: **3**
Unsealed: **0**
TOTAL:** **3**

Principal downlight type: **No downlights modelled**

****NOTE:** This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. **If this number is exceeded 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.

Window selection - default windows only

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Nationwide House Energy Rating Scheme* Certificate

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★ Star rating: 5.8



Building Features

Windows type and performance value

Window ID	Window type	U-value	SHGC
ALM-006-03 A	Aluminium B DG Argon Fill High Solar Gain low-E -Clear	4.1	0.52
ALM-005-03 A	Aluminium A DG Argon Fill High Solar Gain low-E -Clear	4.1	0.47

Windows schedule

Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name	Outdoor shade
ALM-006-03 A	W01	2700	3200	SW	Kitchen / Living	No
ALM-005-03 A	W02	1750	2000	SW	Bedroom 2	No
ALM-005-03 A	W03	1750	2200	SW	Bedroom 1	No

Roof windows and skylight type and performance value

ID	Window type	U-value	SHGC
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Roof window and skylight schedule

ID	Roof window/ skylight no.	Area (m ²)	Orientation	Zone name	Outdoor shade	Indoor shade/ diffuser
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External wall type

Type	Insulation	Wall wrap
1 : VA - AFS162 party wall 1 WA08a		No
2 : VA - AFS162 party wall 2 WA08b	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R2.7)	No
3 : VA - AFS162 internal 1 WA07a	Polystyrene expanded (k = 0.039) (R0.6)	Yes
4 : FR5 - Fibro Clad Framed		No
5 : VA - AFS162 FINSH 2 WA06b	Polystyrene expanded (k = 0.039) (R0.6)	Yes
6 : VA - AFS162 FINSH 1 WA06a	Polystyrene expanded (k = 0.039) (R0.6)	Yes
7 : VA - AFS162 party wall 3 WA08c	Glass fibre batt: R1.5 (R1.5)	No

External wall schedule

Wall type	Area (m ²)	Orientation	Zone name	Fixed shade	Eaves
1 : VA - AFS162 party wall 1 WA08a	22.1	SE	Kitchen / Living	No	No
2 : VA - AFS162 party wall 2 WA08b	2.9	SE	Kitchen / Living	No	No
3 : VA - AFS162 internal 1 WA07a	3.1	NE	Kitchen / Living	No	No
2 : VA - AFS162 party wall 2 WA08b	5.8	NE	Kitchen / Living	No	No
1 : VA - AFS162 party wall 1 WA08a	2.1	NW	Kitchen / Living	No	No

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Building Features

4 : FR5 - Fibro Clad Framed	8.7	SW	Kitchen / Living	No	No
5 : VA - AFS162 FINSH 2 WA06b	2.1	SW	Kitchen / Living	Yes	No
6 : VA - AFS162 FINSH 1 WA06a	7.2	SW	Bedroom 2	Yes	No
6 : VA - AFS162 FINSH 1 WA06a	0.6	SW	Bedroom 1	Yes	No
6 : VA - AFS162 FINSH 1 WA06a	6.1	SW	Bedroom 1	Yes	No
6 : VA - AFS162 FINSH 1 WA06a	2.2	SW	Bedroom 1	Yes	Yes
6 : VA - AFS162 FINSH 1 WA06a	8.8	NW	Bedroom 1	No	No
7 : VA - AFS162 party wall 3 WA08c	4.4	NW	Ens	No	No
2 : VA - AFS162 party wall 2 WA08b	11.4	NE	Ens	No	No
1 : VA - AFS162 party wall 1 WA08a	3.9	NW	Bath	No	No
3 : VA - AFS162 internal 1 WA07a	0.8	NE	Bath	No	No
1 : VA - AFS162 party wall 1 WA08a	5.8	NE	Bath	No	No
1 : VA - AFS162 party wall 1 WA08a	4.6	NW	Wir	No	No

Internal wall type

Type	Area (m ²)	Insulation
1 : VA - 64mm Internal Plasterboard WA10a	49.4	Glass fibre batt: R1.5 (R1.5)
2 : VA - 92mm Internal Plasterboard WA11a	25.4	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R2.7)
3 : FR5 - Internal Plasterboard Stud Wall	64.4	

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Kitchen / Living	SuspSlab	39.6	Enclosed	0.0	floattimber
Kitchen / Living	SuspSlab	5.1	Enclosed	0.0	floattimber
Bedroom 2	SuspSlab	6.7	Enclosed	0.0	Carpet
Bedroom 2	SuspSlab	3.8	Enclosed	0.0	Carpet
Bedroom 1	SuspSlab	6.7	Enclosed	0.0	Carpet
Bedroom 1	SuspSlab	4.9	Enclosed	0.0	Carpet
Ens	SuspSlab	6.6	Enclosed	0.0	Tiles
Bath	SuspSlab	3.5	Enclosed	0.0	Tiles
Wir	SuspSlab	3.9	Enclosed	0.0	Carpet

Ceiling type

Location	Material	Added insulation	Roof space above
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Nationwide House Energy Rating Scheme* Certificate



Certificate Number: **54H4W2EAE1**

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Building Features

Kitchen / Living	Plasterboard	5.0	No
Bedroom 2	Plasterboard	0.0	No
Bedroom 2	Plasterboard	5.0	No
Bedroom 1	Plasterboard	5.0	No

Ceiling penetrations

Location	Number	Type	Width (mm)	Length (mm)	Seal/ unsealed
Kitchen / Living	1	Exhaust Fans	200	200	Sealed
Ens	1	Exhaust Fans	200	200	Sealed
Bath	1	Exhaust Fans	200	200	Sealed

Ceiling fans

Location	Number	Diameter (mm)
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Roof type

Material	Added insulation	Roof colour
Ceil: Ceiling	0.0	medium
Slab: Slab - Suspended Slab	0.0	light

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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: IEI6M74SWR

Date of Certificate: 6 Aug 2017

★ Star rating: 5.8



Assessor details

Accreditation number: VIC/BDAV/10/1044
Name: RUJUN RAO
Organisation: rujun rao
Email: starating@yahoo.com.au
Phone: 0433283009
Declaration of interest: No potential conflicts of interest to declare
Software: FirstRate5: 5.2.6 (3.13)
AAO: BDAV

Overview

Dwelling details

Address: 2.03, 1 VINE STREET
Suburb: HEIDELBERG
State: VIC Postcode: 3084
Type: New Home NCC Class: Class 2
Lot/DP number: - NatHERS climate zone: 62
Exposure: suburban

Key construction and insulation materials

(see following pages for details)

Construction: Wall: AS PER WORKING DRAWINGS
Roof: AS PER WORKING DRAWINGS
Insulation: Floor: AS PER WORKING DRAWINGS
Wall: AS PER WORKING DRAWINGS
Roof: AS PER WORKING DRAWINGS
Floor: AS PER WORKING DRAWINGS
Glazing: ALUMINIUM
AS PER WORKING DRAWINGS

Net floor area (m²)

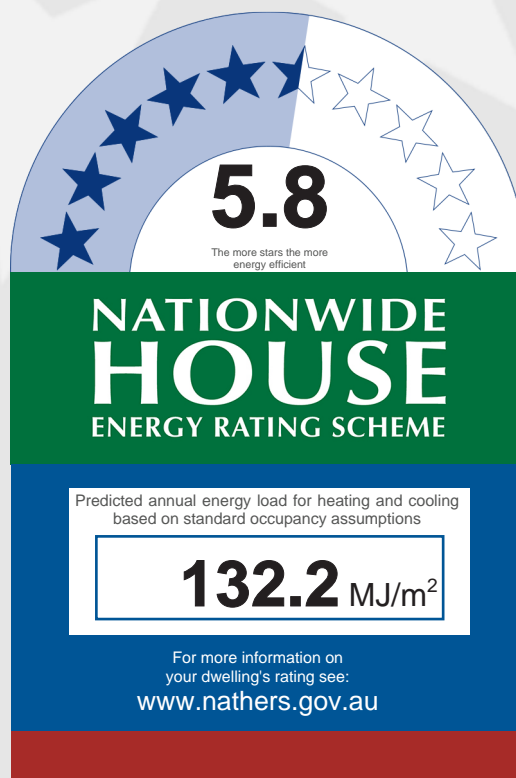
Conditioned: 86.9
Unconditioned: 3.2
Garage: -
TOTAL: 90.1

Annual thermal performance loads (MJ/m²)

Heating: 98
Cooling: 34.2
TOTAL: 132.2

Plan documents

Plan ref/date: 1.8.2017
Prepared by: ArdenSiena



Ceiling penetrations

(see following pages for details)

Sealed: 3
Unsealed: 0
TOTAL:** 3

Principal downlight type: No downlights modelled

NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. **If this number is exceeded 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.

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 the 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.



<https://www.fr5.com.au/QRCodeLandIng?PublicId=IEI6M74SWR>

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: IEI6M74SWR

Date of Certificate: 6 Aug 2017

★ Star rating: 5.8



Building Features

Windows type and performance value

Window ID	Window type	U-value	SHGC
ALM-006-03 A	Aluminium B DG Argon Fill High Solar Gain low-E -Clear	4.1	0.52
ALM-005-03 A	Aluminium A DG Argon Fill High Solar Gain low-E -Clear	4.1	0.47

Windows schedule

Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name	Outdoor shade
ALM-006-03 A	W5	2700	1150	NE	Kitchen / Living	No
ALM-006-03 A	W4	2700	2203	NW	Kitchen / Living	No
ALM-006-03 A	W7	1750	4880	NE	Kitchen / Living	No
ALM-006-03 A	W6	2700	4390	NE	Kitchen / Living	No
ALM-005-03 A	W2	1750	800	NW	Ens	No
ALM-005-03 A	W03	1750	2000	SW	Bedroom 2	No
ALM-006-03 A	W8	1750	4490	NE	Entry	No
ALM-006-03 A	W3	2700	3106	NW	Bedroom 1	No

Roof windows and skylight type and performance value

ID	Window type	U-value	SHGC
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Roof window and skylight schedule

ID	Roof window/ skylight no.	Area (m ²)	Orientation	Zone name	Outdoor shade	Indoor shade/diffuser
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External wall type

Type	Insulation	Wall wrap
1 : FR5 - Fibro Clad Framed		No
2 : VA - Fibro Clad Framed+R2.7+gap	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R2.7)	No
3 : VA - AFS200 FINSH 1 WA05a	Polystyrene expanded (k = 0.039) (R0.6)	Yes
4 : VA - AFS162 party wall 1 WA08a		No
5 : VA - AFS162 party wall 3otherside	Glass fibre batt: R1.5 (R1.5)	No
6 : VA - AFS162 party wall other side	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R2.7)	No
7 : VA - AFS162 internal 1 WA07a	Polystyrene expanded (k = 0.039) (R0.6)	Yes
8 : VA - AFS200 FINSH 2 WA05b	Polystyrene expanded (k = 0.039) (R0.6)	Yes
9 : VA - AFS162 FINSH 1 WA06a	Polystyrene expanded (k = 0.039) (R0.6)	Yes
10 : VA - AFS162 FINSH 4 WA06d	Polystyrene expanded (k = 0.039) (R0.6)	Yes

Nationwide House Energy Rating Scheme* Certificate

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Building Features

11 : VA - AFS162 party wall 2 WA08b Glass fibre batt (k = 0.044 density = 12 kg/m3) (R2.7) No

External wall schedule

Wall type	Area (m ²)	Orientation	Zone name	Fixed shade	Eaves
1 : FR5 - Fibro Clad Framed	3.8	NE	Kitchen / Living	Yes	Yes
1 : FR5 - Fibro Clad Framed	5.4	NW	Kitchen / Living	Yes	Yes
2 : VA - Fibro Clad Framed+R2.7+gap	1.2	NW	Kitchen / Living	Yes	Yes
3 : VA - AFS200 FINSH 1 WA05a	2.5	NW	Kitchen / Living	Yes	No
4 : VA - AFS162 party wall 1 WA08a	3.6	SE	Kitchen / Living	No	No
5 : VA - AFS162 party wall 3otherside	5.2	SE	Kitchen / Living	No	No
6 : VA - AFS162 party wall other side	9.6	SW	Kitchen / Living	No	No
4 : VA - AFS162 party wall 1 WA08a	2.1	SW	Kitchen / Living	No	No
7 : VA - AFS162 internal 1 WA07a	2.2	SE	Kitchen / Living	No	No
2 : VA - Fibro Clad Framed+R2.7+gap	13.4	NE	Kitchen / Living	Yes	No
1 : FR5 - Fibro Clad Framed	12	NE	Kitchen / Living	Yes	Yes
8 : VA - AFS200 FINSH 2 WA05b	3.1	NW	Kitchen / Living	Yes	Yes
3 : VA - AFS200 FINSH 1 WA05a	4.2	NW	Ens	Yes	Yes
9 : VA - AFS162 FINSH 1 WA06a	6	SW	Ens	Yes	Yes
10 : VA - AFS162 FINSH 4 WA06d	2.3	NW	Ens	Yes	No
10 : VA - AFS162 FINSH 4 WA06d	3.3	SW	Ens	Yes	No
4 : VA - AFS162 party wall 1 WA08a	9.4	SE	Bedroom 2	No	No
9 : VA - AFS162 FINSH 1 WA06a	5.3	SW	Bedroom 2	Yes	Yes
10 : VA - AFS162 FINSH 4 WA06d	2.9	SW	Bedroom 2	Yes	No
7 : VA - AFS162 internal 1 WA07a	3.3	SE	Entry	Yes	No
2 : VA - Fibro Clad Framed+R2.7+gap	12.3	NE	Entry	Yes	No
4 : VA - AFS162 party wall 1 WA08a	5.7	SW	Entry	No	No
11 : VA - AFS162 party wall 2 WA08b	6.5	SW	Bath	No	No
4 : VA - AFS162 party wall 1 WA08a	3.5	SE	Bath	No	No
1 : FR5 - Fibro Clad Framed	7.8	NW	Bedroom 1	Yes	Yes

Internal wall type

Type	Area (m ²)	Insulation
1 : FR5 - Internal Plasterboard Stud Wall	127.8	

Floors

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: IEI6M74SWR

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★ Star rating: 5.8



Building Features

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Kitchen / Living	SuspSlab	21.1	Enclosed	0.0	floattimber
Kitchen / Living	SuspSlab	26.4	Enclosed	0.0	floattimber
Ens	SuspSlab	8.2	Enclosed	0.0	Carpet
Bedroom 2	SuspSlab	3.1	Enclosed	0.0	Carpet
Bedroom 2	SuspSlab	7.4	Enclosed	0.0	Carpet
Entry	SuspSlab	2.8	Enclosed	0.0	Tiles
Entry	SuspSlab	2.8	Enclosed	0.0	floattimber
Bath	SuspSlab	3.2	Enclosed	0.0	Tiles
Wir	SuspSlab	4	Enclosed	0.0	Carpet
Bedroom 1	SuspSlab	11.1	Enclosed	0.0	Carpet

Ceiling type

Location	Material	Added insulation	Roof space above
Kitchen / Living	Plasterboard	5.0	No
Ens	Plasterboard	5.0	No
Bedroom 2	Plasterboard	5.0	No
Entry	Plasterboard	5.0	No
Bedroom 1	Plasterboard	5.0	No

Ceiling penetrations

Location	Number	Type	Width (mm)	Length (mm)	Seal/ unsealed
Kitchen / Living	1	Exhaust Fans	200	200	Sealed
Ens	1	Exhaust Fans	200	200	Sealed
Bath	1	Exhaust Fans	200	200	Sealed

Ceiling fans

Location	Number	Diameter (mm)
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Roof type

Material	Added insulation	Roof colour
Ceil: Ceiling	0.0	medium
Slab:Slab - Suspended Slab	0.0	light

Nationwide House Energy Rating Scheme* Certificate

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Additional information

Explanatory notes

About this report

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The actual energy consumption of your home may vary significantly from the predicted energy load figures in this 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 an 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.

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Contact

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For more information on energy efficient design and insulation visit www.yourhome.gov.au

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: VAEYMMTVK9

Date of Certificate: 6 Aug 2017

★ Star rating: 5.3



Assessor details

Accreditation number: VIC/BDAV/10/1044
Name: RUJUN RAO
Organisation: rujun rao
Email: starating@yahoo.com.au
Phone: 0433283009
Declaration of interest: No potential conflicts of interest to declare
Software: FirstRate5: 5.2.6 (3.13)
AAO: BDAV

Overview

Dwelling details

Address: 3.01, 1 VINE STREET
Suburb: HEIDELBERG
State: VIC Postcode: 3084
Type: New Home NCC Class: Class 2
Lot/DP number: - NatHERS climate zone: 62
Exposure: suburban

Key construction and insulation materials

(see following pages for details)

Construction: Wall: AS PER WORKING DRAWINGS
Roof: AS PER WORKING DRAWINGS
Floor: AS PER WORKING DRAWINGS
Insulation: Wall: AS PER WORKING DRAWINGS
Roof: AS PER WORKING DRAWINGS
Floor: AS PER WORKING DRAWINGS
Glazing: ALUMINIUM
AS PER WORKING DRAWINGS

Net floor area (m²)

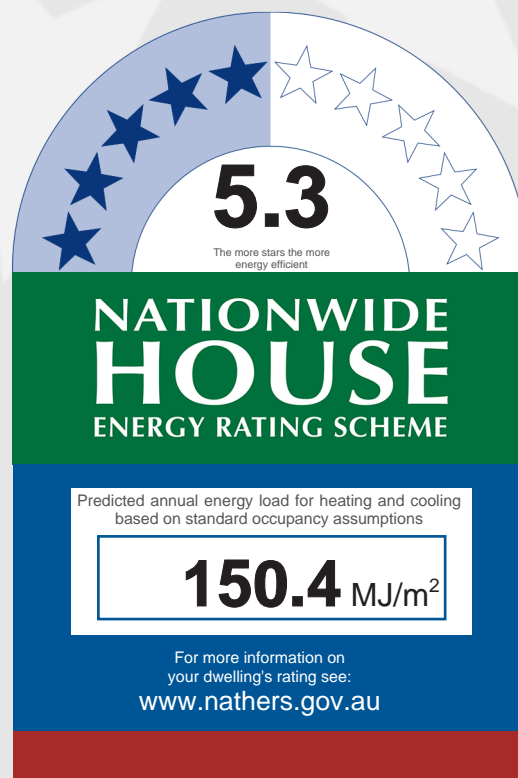
Conditioned: 146.3
Unconditioned: 11.4
Garage: -
TOTAL: 157.7

Annual thermal performance loads (MJ/m²)

Heating: 125.6
Cooling: 24.8
TOTAL: 150.4

Plan documents

Plan ref/date: 13.7.2017
Prepared by: ArdenSiena



Ceiling penetrations

(see following pages for details)

Sealed: 0
Unsealed: 0
TOTAL:** 0

Principal downlight type: No downlights modelled

****NOTE:** This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. **If this number is exceeded 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.

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.

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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: VAEYMMTVK9

Date of Certificate: 6 Aug 2017

★ Star rating: 5.3



Building Features

Windows type and performance value

Window ID	Window type	U-value	SHGC
ALM-005-03 A	Aluminium A DG Argon Fill High Solar Gain low-E -Clear	4.1	0.47
ALM-006-03 A	Aluminium B DG Argon Fill High Solar Gain low-E -Clear	4.1	0.52

Windows schedule

Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name	Outdoor shade
ALM-005-03 A	W04	1750	5040	SW	Kitchen/Living	No
ALM-006-03 A	W03	1750	940	SE	Kitchen/Living	No
ALM-006-03 A	W02	2700	3800	SW	Kitchen/Living	No
ALM-006-03 A	W01	2700	4390	SE	Kitchen/Living	No
ALM-005-03 A	W16	800	5050	NE	Kitchen/Living	No
ALM-006-03 A	W09	2700	3450	NW	Bedroom 1	No
ALM-005-03 A	W08	2700	1000	NW	Bedroom 1	No
ALM-006-03 A	W07	2700	3220	SW	Bedroom 1	No
ALM-005-03 A	W12	2700	1000	NE	Bedroom 1	No
ALM-006-03 A	W11	600	3850	NE	Bedroom 1	No
ALM-005-03 A	W10	2700	1000	NE	Bedroom 1	No
ALM-006-03 A	W06	2700	3635	SW	Bedroom 2	No
ALM-006-03 A	W05	2700	3550	SW	Bedroom 3	No
ALM-006-03 A	W13	2700	1030	NW	Ens	No
ALM-005-03 A	W14	1750	1699	NE	Ens	No
ALM-005-03 A	W15	1750	1200	NE	Ens	No
ALM-006-03 A	W17	800	2600	NE	L'dry	No
ALM-006-03 A	3-W01	2700	3000	SW	Public	No
ALM-006-03 A	3-W01	2700	435	SW	Public	No
ALM-006-03 A	3-W02	2700	1400	SE	Public	No

Roof windows and skylight type and performance value

ID	Window type	U-value	SHGC
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Roof window and skylight schedule

ID	Roof window/ skylight no.	Area (m ²)	Orientation	Zone name	Outdoor shade	Indoor shade/ diffuser
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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **VAEYMMTVK9**

Date of Certificate: **6 Aug 2017**

★ Star rating: **5.3**



Building Features

External wall type

Type	Insulation	Wall wrap
1 : VA - Fibro Clad Framed+R2.7 WA13b	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R2.7)	No
2 : FR5 - Fibro Clad Framed		No
3 : FR5 - Brick Veneer		No
4 : VA - 92mm Internal Plasterboard WA11a	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R2.7)	No
5 : VA - Internal to lift	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R2.7)	No
6 : VA - 200Concrete Panel		No

External wall schedule

Wall type	Area (m ²)	Orientation	Zone name	Fixed shade	Eaves
1 : VA - Fibro Clad Framed+R2.7 WA13b	13.7	SW	Kitchen/Living	No	Yes
1 : VA - Fibro Clad Framed+R2.7 WA13b	3	SE	Kitchen/Living	Yes	Yes
1 : VA - Fibro Clad Framed+R2.7 WA13b	1.3	SW	Kitchen/Living	Yes	Yes
2 : FR5 - Fibro Clad Framed	10.6	SW	Kitchen/Living	Yes	Yes
2 : FR5 - Fibro Clad Framed	11.7	SE	Kitchen/Living	Yes	Yes
3 : FR5 - Brick Veneer	0.5	NE	Kitchen/Living	Yes	No
1 : VA - Fibro Clad Framed+R2.7 WA13b	18.9	NE	Kitchen/Living	Yes	No
2 : FR5 - Fibro Clad Framed	9.9	NW	Bedroom 1	No	Yes
1 : VA - Fibro Clad Framed+R2.7 WA13b	3.8	NW	Bedroom 1	No	Yes
2 : FR5 - Fibro Clad Framed	3.1	NW	Bedroom 1	No	Yes
2 : FR5 - Fibro Clad Framed	8.9	SW	Bedroom 1	Yes	Yes
1 : VA - Fibro Clad Framed+R2.7 WA13b	1.7	SW	Bedroom 1	Yes	Yes
2 : FR5 - Fibro Clad Framed	2.9	NE	Bedroom 1	Yes	Yes
1 : VA - Fibro Clad Framed+R2.7 WA13b	10.7	NE	Bedroom 1	Yes	Yes
2 : FR5 - Fibro Clad Framed	2.8	NE	Bedroom 1	Yes	Yes
2 : FR5 - Fibro Clad Framed	9.8	SW	Bedroom 2	No	Yes
1 : VA - Fibro Clad Framed+R2.7 WA13b	2.9	NW	Bedroom 2	Yes	Yes
2 : FR5 - Fibro Clad Framed	9.7	SW	Bedroom 3	No	Yes
2 : FR5 - Fibro Clad Framed	3	NW	Ens	Yes	Yes
1 : VA - Fibro Clad Framed+R2.7 WA13b	8.5	NE	Ens	No	No
4 : VA - 92mm Internal Plasterboard WA11a	0.6	SE	L'dry	No	No
5 : VA - Internal to lift	4	SE	L'dry	No	No
1 : VA - Fibro Clad Framed+R2.7 WA13b	7	NE	L'dry	Yes	No
4 : VA - 92mm Internal Plasterboard WA11a	0.7	NW	Public	No	No

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **VAEYMMTVK9**

Date of Certificate: **6 Aug 2017**

★ Star rating: **5.3**



Building Features

2 : FR5 - Fibro Clad Framed	8.5	SW	Public	Yes	Yes
1 : VA - Fibro Clad Framed+R2.7 WA13b	1.2	SW	Public	Yes	No
2 : FR5 - Fibro Clad Framed	3.8	SE	Public	Yes	No
6 : VA - 200Concrete Panel	13.3	NE	Public	No	No

Internal wall type

Type	Area (m ²)	Insulation
1 : VA - 92mm Internal Plasterboard WA11a	73.8	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R2.7)
2 : VA - Fibro Clad Framed+R2.7 WA13b	5.8	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R2.7)
3 : VA - 64mm Internal Plasterboard WA10a	137.2	Glass fibre batt: R1.5 (R1.5)
4 : FR5 - Brick Veneer	5.6	

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Kitchen/Living	SuspSlab	60.3	Enclosed	0.0	floattimber
Kitchen/Living	SuspSlab	1	Enclosed	1.5	floattimber
Kitchen/Living	SuspSlab	1.1	Enclosed	1.5	floattimber
Kitchen/Living	SuspSlab	6.7	Enclosed	0.0	floattimber
Bedroom 1	SuspSlab	32.7	Enclosed	0.0	floattimber
Bedroom 2	SuspSlab	12.6	Enclosed	0.0	Carpet
Bedroom 3	SuspSlab	12.4	Enclosed	0.0	Carpet
Corridor	SuspSlab	5.9	Enclosed	0.0	floattimber
Ens	SuspSlab	5.3	Enclosed	0.0	Tiles
Ens	SuspSlab	3.5	Enclosed	0.0	Tiles
Bath	SuspSlab	4.6	Enclosed	0.0	Tiles
L'dry	SuspSlab	1.2	Enclosed	0.0	Tiles
L'dry	SuspSlab	1.7	Enclosed	1.5	Tiles
L'dry	SuspSlab	0.8	Enclosed	0.0	Tiles
L'dry	SuspSlab	0.7	Enclosed	1.5	Tiles
Public	SuspSlab	1.9	Enclosed	1.5	Carpet
Public	SuspSlab	5.1	Enclosed	1.5	Carpet

Ceiling type

Location	Material	Added insulation	Roof space above
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Nationwide House Energy Rating Scheme* Certificate

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Building Features

Kitchen/Living	Plasterboard	5.0	No
Kitchen/Living	Plasterboard	5.0	No
Kitchen/Living	Plasterboard	5.0	No
Kitchen/Living	Plasterboard	5.0	No
Bedroom 1	Plasterboard	5.0	No
Bedroom 2	Plasterboard	5.0	No
Bedroom 3	Plasterboard	5.0	No
Corridor	Plasterboard	5.0	No
Ens	Plasterboard	5.0	No
Ens	Plasterboard	5.0	No
Bath	Plasterboard	5.0	No
L'dry	Plasterboard	5.0	No
L'dry	Plasterboard	5.0	No
L'dry	Plasterboard	5.0	No
L'dry	Plasterboard	5.0	No
Public	Plasterboard	5.0	No
Public	Plasterboard	5.0	No

Ceiling penetrations

Location	Number	Type	Width (mm)	Length (mm)	Seal/ unsealed
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Ceiling fans

Location	Number	Diameter (mm)
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Roof type

Material	Added insulation	Roof colour
Framed:Flat - Flat Framed (Metal Deck)	0.0	light
Slab:Slab - Suspended Slab	0.0	light

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Additional information

Explanatory notes

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