

Nationwide House Energy Rating Scheme* Certificate

Certificate number: 0001877869

Certificate Date: 06 Sep 2017

★ Star rating: 5.1



Assessor details

Accreditation number: **20069**
Name: **Paul Brennan**
Organisation: **The House Energy Rating Company of Australia Pty Ltd**
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Declaration of interest: **Employed by designer of the building**
Software: **AccuRate Sustainability V2.3.3.13 SP3**
AAO: **ABSA**

Overview

Dwelling details

Street: **Unit A, 240 St Johns Road**
Suburb: **Forest Lodge**
State: **NSW** Postcode: **2037**
Type: **New** NCC Class: **1a**
NatHERS climate zone: **56**
Lot/DP number: **1; 902999** Exposure: **Suburban**

Key construction and insulation materials

(see following pages for details)

Construction: **Double Brick**
Metal roof/Plasterboard
Timber/Slab
Insulation: **R1.5 wall insulation**
Ceiling (uninsulated)
Floor (uninsulated)
Glazing: **Al Thermally Broken B DG Argon Fill**
High Solar

Net floor area (m²)

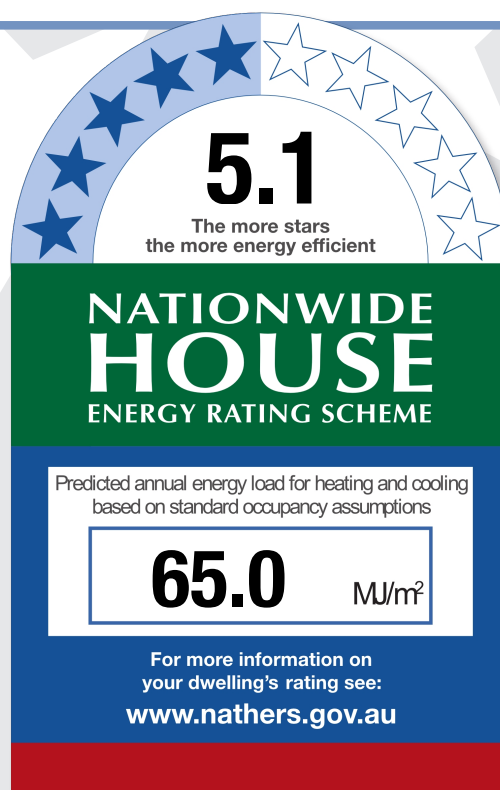
Conditioned: **136.0**
Unconditioned: **12.0**
Garage:
TOTAL: **148.0**

Annual thermal performance loads (MJ/m²)

Heating: **40.0**
Cooling: **25.0**
TOTAL: **65.0**

Plan documents

Plan ref/date: **September, 2017**
Prepared by: **the Quinlan Group**



Ceiling penetrations

(see following pages for details)

Sealed: **0**
Unsealed: **2**
TOTAL:** **2**

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.

Principle downlight type: **No downlights modelled**

Window selection - default windows only

Note on allowable window values: With a 10% tolerance to the nominated SHGC window values shown on page 2, the following ratings are achieved:

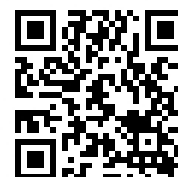
-10% SHGC **5.0**

+10% SHGC **5.2**

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If the rating listed above falls below 6.0 stars or the required rating, then the window with this tolerance can NOT be selected.

Scan to access this certificate online and confirm this is valid.



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Building features

Window type and performance value

Window ID	Window type	U-value	SHGC
ATB-005-03 B	DEFAULTS: AI Thermally Broken A DG Argon Fill High Solar Gain low-E -Clear	2.9	0.44
ATB-006-03 B	DEFAULTS: AI Thermally Broken B DG Argon Fill High Solar Gain low-E -Clear	2.9	0.51

Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
liv/kitchen	ATB-006-03 B	1	2700	1600	SW	Miniature louvres
liv/kitchen	ATB-006-03 B	2	600	2000	SW	None
liv/kitchen	ATB-006-03 B	1	2400	3000	SE	None
liv/kitchen	ATB-006-03 B	1	2700	900	SE	Miniature louvres
laundry	ATB-006-03 B	1	1100	700	NW	None
ENTRY HALL	ATB-006-03 B	1	2400	1700	SW	Miniature louvres
ENTRY HALL	ATB-006-03 B	2	2400	1700	SW	Miniature louvres
ENTRY HALL	ATB-006-03 B	3	2400	1700	SW	Miniature louvres
ENTRY HALL	ATB-006-03 B	4	2400	1700	SW	Miniature louvres
ENTRY HALL	ATB-006-03 B	1	2400	700	SE	None
lounge	ATB-006-03 B	1	1500	800	NW	None
bed 1	ATB-006-03 B	1	1400	2000	SE	None
bed 1	ATB-005-03 B	2	1400	1000	SE	None
bed 2	ATB-005-03 B	1	2400	650	SE	None
bed 3	ATB-006-03 B	1	2400	700	NW	None
upper hall	ATB-006-03 B	1	2400	1100	SW	Miniature louvres
upper hall	ATB-006-03 B	2	2400	2200	SW	Miniature louvres
bed 4	ATB-006-03 B	1	1400	900	SW	None
bed 4	ATB-006-03 B	2	1400	900	SW	None
bath 4	ATB-006-03 B	1	450	1400	SE	None
bath 4	ATB-005-03 B	2	450	700	SE	None
top stairwell	ATB-006-03 B	1	2400	1100	SW	Miniature louvres
top stairwell	ATB-006-03 B	2	1800	900	SW	Miniature louvres
top stairwell	ATB-006-03 B	3	2400	1300	SW	Miniature louvres

Roof window and skylight type and performance value

ID	Window type	U-value	SHGC
DG-Generic-02 A	DEFAULTS: Clear AI DG DEFAULT ROOF WINDOW System 02	4.2	0.72

Roof window and skylight schedule

Location	ID	Roof window/skylight no.	Area (m ²)	Orientation	Outdoor shade	Indoor shade/diffuser
bath lower	DG-Generic-02 A	1	0.8	NW	80% shade	None
upper bath	DG-Generic-02 A	1	1.3	NW	80% shade	None

External wall type

ID	Wall type	Insulation	Wall wrap or foil
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Building features continued

EW-002	Steel/Brick wall	Glass fibre batt: R1.5	No
EW-003	Double Brick	Polystyrene expanded: R1.5	No
EW-005	Fibre-cement	Glass fibre batt: R3.0	No

External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
liv/kitchen	EW-003	8500	2700	SW	No	
liv/kitchen	EW-003	3300	2700	SE	Yes	2000
liv/kitchen	EW-003	900	2700	SE	No	
laundry	EW-003	2000	2700	SW	No	
laundry	EW-003	700	2700	NW	No	
ENTRY HALL	EW-003	900	2700	NW	No	
ENTRY HALL	EW-003	7000	2700	SW	No	
ENTRY HALL	EW-003	800	2700	SE	No	
ENTRY HALL	EW-003	3300	2700	SW	No	
lounge	EW-003	2300	3400	NW	Yes	1400
lounge	EW-003	1000	3200	NW	No	
bed 1	EW-002	3600	3000	SW	No	
bed 1	EW-002	3000	3000	SE	No	
bed 2	EW-003	3500	2500	SW	No	
bed 2	EW-003	700	2500	SE	No	
bed 3	EW-003	3500	2500	SW	No	
bed 3	EW-003	700	2500	NW	No	
upper bath	EW-003	1800	2500	SW	No	
upper hall	EW-003	3400	2500	SW	No	
upper hall	EW-003	3000	2500	NW	No	
bed 4	EW-002	4000	2700	SW	No	
bath 4	EW-002	2500	2700	SW	No	
bath 4	EW-002	3000	2700	SE	No	
top stairwell	EW-002	3500	2400	SW	No	
top stairwell	EW-002	3000	2700	NW	No	
roofspace	EW-005	5000	1087	NE	No	
roofspace	EW-005	5000	1087	SW	No	

Internal wall type

ID	Wall type	Area (m ²)	Insulation	Wall wrap or foil
IW-001	Plasterboard	101.5		No
IW-002	Concrete blocks	135.6		No

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
liv/kitchen/Ground	as_FLOR-B004 #2503 © 250mm Concrete Floor slab with timber on packing strips (no insul)	36.0			

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laundry/Ground	as_FLOR-B004 #2505 © 250mm 5.0 Concrete Floor slab with ceramic tiles (no insul)	Ceramic tile
ENTRY HALL/Ground	as_FLOR-B004 #2503 © 250mm 19.0 Concrete Floor slab with timber on packing strips (no insul)	
bath lower/Ground	as_FLOR-B004 #2505 © 250mm 4.0 Concrete Floor slab with ceramic tiles (no insul)	Ceramic tile
lounge/Ground	as_FLOR-B004 #2503 © 250mm 14.0 Concrete Floor slab with timber on packing strips (no insul)	
bed 1/Outdoor Air	as_FLOR-B007 #1003 © 250mm 7.0 Concrete Floor slab with timber on packing strips (no insul)	
bed 1/liv/kitchen	as_FLOR-B007 #1003 © 250mm 4.0 Concrete Floor slab with timber on packing strips (no insul)	
bed 2/liv/kitchen	as_FLOR-B007 #1003 © 250mm 10.0 Concrete Floor slab with timber on packing strips (no insul)	
bed 3/laundry	as_FLOR-B007 #1003 © 250mm 5.0 Concrete Floor slab with timber on packing strips (no insul)	
bed 3/liv/kitchen	as_FLOR-B007 #1003 © 250mm 5.0 Concrete Floor slab with timber on packing strips (no insul)	
upper bath/liv/kitchen	as_FLOR-B007 #1005 © 250mm 5.0 Concrete Floor slab with ceramic tiles (no insul)	Ceramic tile
upper hall/ENTRY HALL	as_FLOR-B004 #2503 © 250mm 11.0 Concrete Floor slab with timber on packing strips (no insul)	
upper hall/liv/kitchen	as_FLOR-B004 #2503 © 250mm 8.0 Concrete Floor slab with timber on packing strips (no insul)	
bed 4/upper hall	as_FLOR-B007 #1003 © 250mm 7.0 Concrete Floor slab with timber on packing strips (no insul)	
bed 4/upper bath	as_FLOR-B007 #1003 © 250mm 1.0 Concrete Floor slab with timber on packing strips (no insul)	
bed 4/bed 3	as_FLOR-B007 #1003 © 250mm 7.0 Concrete Floor slab with timber on packing strips (no insul)	
bath 4/bed 2	as_FLOR-B007 #1005 © 250mm 2.0 Concrete Floor slab with ceramic tiles (no insul)	Ceramic tile
bath 4/upper bath	as_FLOR-B007 #1005 © 250mm 4.0 Concrete Floor slab with ceramic tiles (no insul)	Ceramic tile
bath 4/upper hall	as_FLOR-B007 #1005 © 250mm 1.0 Concrete Floor slab with ceramic tiles (no insul)	Ceramic tile
top stairwell/upper hall	as_FLOR-B007 #1003 © 250mm 9.0 Concrete Floor slab with timber on packing strips (no insul)	
roofspace/lounge	as_CEIL-A001.flr - 2017 © 10mm 14.0 Plasterboard ceiling fixed to	R4.0

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Building features continued

ceiling joists above + R4.0 bulk insulation

Ceiling type

Location	Construction	Added insulation	Roof space above
bed 1/liv/kitchen	as_FLOR-B007 #1003 © 250mm Concrete Floor slab with timber on packing strips (no insul)		No
bed 2/liv/kitchen	as_FLOR-B007 #1003 © 250mm Concrete Floor slab with timber on packing strips (no insul)		No
bed 3/liv/kitchen	as_FLOR-B007 #1003 © 250mm Concrete Floor slab with timber on packing strips (no insul)		No
upper bath/liv/kitchen	as_FLOR-B007 #1005 © 250mm Concrete Floor slab with ceramic tiles (no insul)		No
upper hall/liv/kitchen	as_FLOR-B004 #2503 © 250mm Concrete Floor slab with timber on packing strips (no insul)		No
bed 3/laundry	as_FLOR-B007 #1003 © 250mm Concrete Floor slab with timber on packing strips (no insul)		No
upper hall/ENTRY HALL	as_FLOR-B004 #2503 © 250mm Concrete Floor slab with timber on packing strips (no insul)		No
roofscape/lounge	as_CEIL-A001.flr - 2017 © 10mm Plasterboard ceiling fixed to R4.0 ceiling joists above + R4.0 bulk insulation		Yes
bath 4/bed 2	as_FLOR-B007 #1005 © 250mm Concrete Floor slab with ceramic tiles (no insul)		No
bed 4/bed 3	as_FLOR-B007 #1003 © 250mm Concrete Floor slab with timber on packing strips (no insul)		No
bed 4/upper bath	as_FLOR-B007 #1003 © 250mm Concrete Floor slab with timber on packing strips (no insul)		No
bath 4/upper bath	as_FLOR-B007 #1005 © 250mm Concrete Floor slab with ceramic tiles (no insul)		No
bed 4/upper hall	as_FLOR-B007 #1003 © 250mm Concrete Floor slab with timber on packing strips (no insul)		No
bath 4/upper hall	as_FLOR-B007 #1005 © 250mm Concrete Floor slab with ceramic tiles (no insul)		No
top stairwell/upper hall	as_FLOR-B007 #1003 © 250mm Concrete Floor slab with timber on packing strips (no insul)		No

Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
liv/kitchen	1	Ceiling exhaust fan	200	Unsealed
laundry	1	Ceiling exhaust fan	200	Unsealed
bath lower	1	Ceiling exhaust fan	200	Unsealed
upper bath	1	Ceiling exhaust fan	200	Unsealed
bath 4	1	Ceiling exhaust fan	200	Unsealed

Ceiling fans

Location	Number	Diameter (mm)
None Present		

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Building features continued

Roof type

Construction	Added insulation	Roof colour
as_ROOF-A011 #E017 © 45 deg Colourbond steel roof + Anticon R1.0 insul with R4.0 bulk insul + Plasterb'd ceiling under	R5.0	Medium
as_ROOF-A042 #3011 © 45 deg Clay tile roof + RFL with no ceiling under		Medium
as_ROOF-A021 #E017 © Horiz pitch Colourbond steel roof + Anticon R1.0 insul with R4.0 bulk insul + Plasterb'd ceiling under	R5.0	Medium

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Additional information

Explanatory notes

About this report

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

General Information

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

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

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using the underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance.

The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

Accredited Assessors

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

Disclaimer

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

Contact

For more information on the Nationwide House Energy Rating Scheme (NatHERS), visit www.nathers.gov.au

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