

Nationwide House Energy Rating Scheme* Certificate



Certificate number: **0003462280**

Certificate Date: **12 Dec 2018**

★ Star rating: **5.4**

BERS Pro v4.3.0.0 (3.13) cannot be used to model 'roof windows'. Roof windows are 'openable or fixed windows in a roof' and do not have a shaft, as distinct from skylights which incorporate a built-in shaft and are not ventilated. BERS Pro v4.3 can only model skylights. If a roof window is present on the floor plan then this certificate is not valid.

Assessor details

Accreditation number: **VIC/BDAV/12/1441**
Name: **Ian Fry**
Organisation: **Frys Energywise**
Email: **comply@frysenergywise.com.au**
Phone: **02 9899 2825**
Declaration of interest: **The Assessor has provided design advice to the Applicant**
Software: **BERS Pro v4.3.0.2d (3.13)**
AAO: **BDAV**

Overview

Dwelling details

Street: **183 Barrenjoey Road**
Suburb: **Newport**
State: **NSW** Postcode: **2106**
Type: **New Dwelling** NCC Class: **1A**
NatHERS climate zone: **56**
Lot/DP number: **12/654117** Exposure: **Exposed**

Key construction and insulation materials

(see following pages for details)

Construction: **AAC cavity panel on battens**
Corrugated Iron
Waffle pod slab 225 mm
Insulation: **R2.5 wall insulation**
R4.0 ceiling insulation
No floor insulation
Glazing: **WID-012-04 A Aluminium Awning**
Window SG 4mmClr

Net floor area (m²)

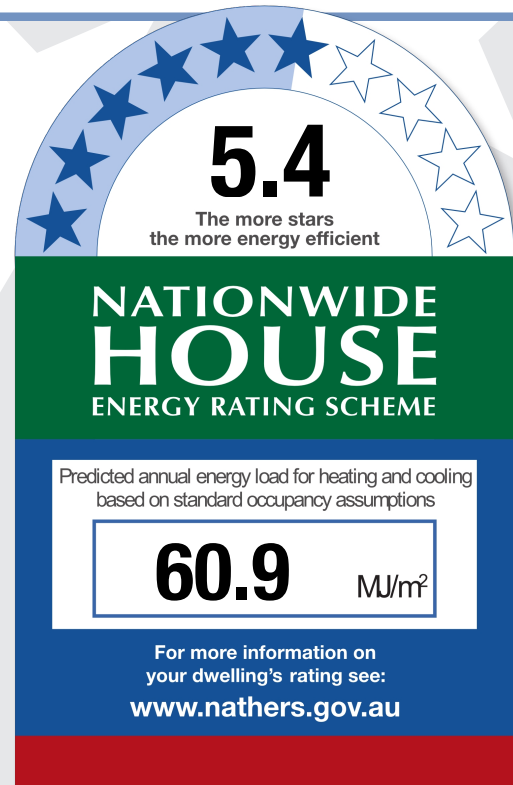
Conditioned: **236.0**
Unconditioned: **42.0**
Garage: **36.0**
TOTAL: **277.0**

Annual thermal performance loads (MJ/m²)

Heating: **39.7**
Cooling: **21.3**
TOTAL: **60.9**

Plan documents

Plan ref/date: **J1372**
Prepared by: **SN**



Ceiling penetrations

(see following pages for details)

Sealed: **5**
Unsealed: **0**
TOTAL:** **5**

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: **Unknown**

Window selection - default windows only

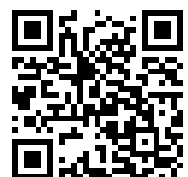
Note on allowable window values:
Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

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 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.



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Building features

Window type and performance value

Window ID	Window type	U-value	SHGC
WID-002-01 A	WID-002-01 A Al Residential Bi fold Door SG 4mm Clear	6.2	0.62
WID-013-07 A	WID-013-07 A Aluminium Awning Window DG 4/6/4ET	3.9	0.53
WID-008-10 A	WID-008-10 A Al Architectural Paragon Bi Fold Door DG 4/12/4EA	3.7	0.47
WID-012-04 A	WID-012-04 A Aluminium Awning Window SG 4mmClr	6.4	0.64
WID-005-20 A	WID-005-20 A Al Residential Internal Sliding Door DG 4/12/4ET	3.2	0.61
WID-006-09 A	WID-006-09 A Al Residential Sliding Window DG 3mm Clear / 6mm Air Gap / 4mm Energy Advanta	4.0	0.56

Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Laundry	WID-002-01 A	n/a	2400	820	S	No Shading
Kit/Liv/Dining	WID-013-07 A	n/a	300	2000	S	No Shading
Kit/Liv/Dining	WID-013-07 A	n/a	300	2000	S	No Shading
Kit/Liv/Dining	WID-013-07 A	n/a	700	4900	S	No Shading
Kit/Liv/Dining	WID-008-10 A	n/a	3000	4500	W	No Shading
Kit/Liv/Dining	WID-013-07 A	n/a	3000	6300	N	No Shading
Kit/Liv/Dining	WID-013-07 A	n/a	3000	2400	W	No Shading
Kit/Liv/Dining	WID-008-10 A	n/a	3000	4500	N	No Shading
Entry	WID-013-07 A	n/a	1800	3900	N	No Shading
Ensuite	WID-012-04 A	n/a	1200	600	S	No Shading
Ensuite	WID-012-04 A	n/a	1800	2900	W	No Shading
Ensuite	WID-012-04 A	n/a	1800	1200	N	No Shading
Master	WID-013-07 A	n/a	1800	2700	W	No Shading
Master	WID-005-20 A	n/a	2400	1600	W	No Shading
Master	WID-013-07 A	n/a	1800	1200	N	No Shading
Pass/Stair/Loun	WID-013-07 A	n/a	1200	1800	N	No Shading
Pass/Stair/Loun	WID-013-07 A	n/a	1200	4300	N	No Shading
Pass/Stair/Loun	WID-005-20 A	n/a	2700	3700	N	No Shading
Pass/Stair/Loun	WID-006-09 A	n/a	2700	3000	E	No Shading
Pass/Stair/Loun	WID-012-04 A	n/a	2700	900	E	No Shading
Bed 4	WID-012-04 A	n/a	2500	3200	E	No Shading
Ensuite	WID-012-04 A	n/a	1200	600	S	No Shading
Bed 3	WID-012-04 A	n/a	1200	600	S	No Shading
Bed 3	WID-012-04 A	n/a	1200	600	S	No Shading
Bed 2	WID-012-04 A	n/a	1200	600	S	No Shading
Bed 2	WID-012-04 A	n/a	1200	600	S	No Shading
Garage	WID-012-04 A	n/a	600	2700	S	No Shading

Roof window and skylight type and performance value

ID	Window type	U-value	SHGC
None Present			

Roof window and skylight schedule

Location	ID	Roof window/skylight no.	Area (m²)	Orientation	Outdoor shade	Indoor shade/diffuser
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Certificate number: **0003462280**

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★ Star rating:

5.4



Building features continued

None Present

External wall type

ID	Wall type	Insulation	Wall wrap or foil
EW-1	AAC cavity panel on battens	Foil, Anti-glare one side + Bulk Insulation R2.5	Yes
EW-2	AAC cavity panel on battens	No insulation	No

External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Laundry	EW-1	1790	2750	S	No	100
Butlers	EW-1	2290	3607	S	No	100
Kit/Liv/Dining	EW-1	11595	3607	S	No	100
Kit/Liv/Dining	EW-1	5400	3607	W	No	100
Kit/Liv/Dining	EW-1	6700	3607	N	No	100
Kit/Liv/Dining	EW-1	2800	3607	W	No	3300
Kit/Liv/Dining	EW-1	4895	3607	N	No	100
Entry	EW-1	7695	2750	N	No	1600
Entry	EW-1	2195	2750	E	No	2800
Ensuite	EW-1	3795	2750	S	No	100
Ensuite	EW-1	3500	2750	W	No	2400
Ensuite	EW-1	1200	2750	N	No	2100
Master	EW-1	4695	2750	W	No	100
Master	EW-1	4595	2750	N	No	100
Pass/Stair/Loun	EW-1	11195	2750	N	No	100
Pass/Stair/Loun	EW-1	3900	2750	E	No	2900
Bed 4	EW-1	1595	2750	N	No	5500
Bed 4	EW-1	4300	2750	E	No	1300
Bed 4	EW-1	3295	2750	S	No	100
Ensuite	EW-1	1890	2750	S	No	100
Bed 3	EW-1	3190	2750	S	No	100
Bed 2	EW-1	3990	2750	S	No	100
WIR	EW-1	2390	2750	S	No	100
Garage	EW-2	2400	2836	N	No	3800
Garage	EW-2	6000	2836	E	No	400
Garage	EW-2	5995	2836	S	No	100

Internal wall type

Wall type	Area (m²)	Insulation	Wall wrap or foil
IW-1 - Cavity wall, direct fix plasterboard, single gap	44.0	Bulk Insulation, No Air Gap R2	No
IW-2 - Cavity wall, direct fix plasterboard, single gap	183.0	No insulation	No

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5.4



Building features continued

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Laundry	Waffle pod slab 225 mm 100mm	5.6	None	Waffle Pod 225mm	Ceramic Tiles 8mm
Butlers	Waffle pod slab 225 mm 100mm	6.2	None	Waffle Pod 225mm	Ceramic Tiles 8mm
Kit/Liv/Dining	Waffle pod slab 225 mm 100mm	76.8	None	Waffle Pod 225mm	Ceramic Tiles 8mm
Entry	Waffle pod slab 225 mm 100mm	21.4	None	Waffle Pod 225mm	Ceramic Tiles 8mm
Powder	Waffle pod slab 225 mm 100mm	4.8	None	Waffle Pod 225mm	Ceramic Tiles 8mm
Ensuite/Kit/Liv/Dining	Timber Above Plasterboard 19mm	13.0	Totally Open	No Insulation	Ceramic Tiles 8mm
Master/Kit/Liv/Dining	Timber Above Plasterboard 19mm	12.4		No Insulation	Carpet+Rubber Underlay 18mm
Master	Suspended Timber Floor 19mm	8.8		Bulk Insulation, Gap to Floor R2.5	Carpet+Rubber Underlay 18mm
Pass/Stair/Loun/Kit/Liv/Dining	Timber Above Plasterboard 19mm	11.8	Totally Open	No Insulation	Carpet+Rubber Underlay 18mm
Pass/Stair/Loun/Entry	Timber Above Plasterboard 19mm	19.5		No Insulation	Carpet+Rubber Underlay 18mm
Pass/Stair/Loun/Powder	Timber Above Plasterboard 19mm	3.7		No Insulation	Carpet+Rubber Underlay 18mm
Pass/Stair/Loun/Garage	Timber Above Plasterboard 19mm	6.2		Bulk Insulation R2.5	Carpet+Rubber Underlay 18mm
Bed 4/Garage	Timber Above Plasterboard 19mm	13.6		Bulk Insulation R2.5	Carpet+Rubber Underlay 18mm
Ensuite/Garage	Timber Above Plasterboard 19mm	4.1		Bulk Insulation R2.5	Ceramic Tiles 8mm
Bed 3/Laundry	Timber Above Plasterboard 19mm	5.7		No Insulation	Carpet+Rubber Underlay 18mm
Bed 3/Butlers	Timber Above Plasterboard 19mm	4.4		No Insulation	Carpet+Rubber Underlay 18mm
Bed 3/Entry	Timber Above Plasterboard 19mm	2.2		No Insulation	Carpet+Rubber Underlay 18mm
Bed 3/Powder	Timber Above Plasterboard 19mm	0.5		No Insulation	Carpet+Rubber Underlay 18mm
Bed 2/Butlers	Timber Above Plasterboard 19mm	1.9	None	No Insulation	Carpet+Rubber Underlay 18mm
Bed 2/Kit/Liv/Dining	Timber Above Plasterboard 19mm	10.9		No Insulation	Carpet+Rubber Underlay 18mm
Bed 2/Powder	Timber Above Plasterboard 19mm	0.9		No Insulation	Carpet+Rubber Underlay 18mm
WIR/Kit/Liv/Dining	Timber Above Plasterboard 19mm	8.0		No Insulation	Carpet+Rubber Underlay 18mm
Ensuite/Kit/Liv/Dining	Timber Above Plasterboard 19mm	4.3		No Insulation	Ceramic Tiles 8mm
Ensuite/Garage	Timber Above Plasterboard 19mm	4.4		Bulk Insulation R2.5	Ceramic Tiles 8mm
Garage	Waffle pod slab 225 mm 100mm	36.3		Waffle Pod 225mm	Bare

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5.4



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Ceiling type

Location	Construction	Added insulation	Roof space above
Laundry	Timber Above Plasterboard	No Insulation	No
Butlers	Timber Above Plasterboard	No Insulation	No
Kit/Liv/Dining	Plasterboard	Bulk Insulation R4	Yes
Kit/Liv/Dining	Timber Above Plasterboard	No Insulation	No
Entry	Timber Above Plasterboard	No Insulation	No
Powder	Timber Above Plasterboard	No Insulation	No
Ensuite	Plasterboard	Bulk Insulation R4	Yes
Master	Plasterboard	Bulk Insulation R4	Yes
Pass/Stair/Loun	Plasterboard	Bulk Insulation R4	Yes
Bed 4	Plasterboard	Bulk Insulation R4	Yes
Ensuite	Plasterboard	Bulk Insulation R4	Yes
Bed 3	Plasterboard	Bulk Insulation R4	Yes
Bed 2	Plasterboard	Bulk Insulation R4	Yes
WIR	Plasterboard	Bulk Insulation R4	Yes
Ensuite	Plasterboard	Bulk Insulation R4	Yes
Ensuite	Plasterboard	Bulk Insulation R4	Yes
Garage	Plasterboard	No insulation	Yes
Garage	Timber Above Plasterboard	Bulk Insulation R2.5	No

Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
Powder	1	Exhaust Fans	0	Sealed
Ensuite	1	Exhaust Fans	300	Sealed
Ensuite	1	Exhaust Fans	300	Sealed
Ensuite	1	Exhaust Fans	300	Sealed
Ensuite	1	Exhaust Fans	300	Sealed

Ceiling fans

Location	Number	Diameter (mm)
None Present		

Roof type

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5.4



Building features continued

Construction	Added insulation	Roof colour
Corrugated Iron	Bulk, Reflective Side Down, No Air Gap Above R1.3	Dark
Waterproofing Membrane	No Insulation, Only an Air Gap	Dark
Corrugated Iron	Bulk, Reflective Side Down, No Air Gap Above R1.3	Dark
Waterproofing Membrane	No Insulation, Only an Air Gap	Dark

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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