

Nationwide House Energy Rating Scheme* Certificate



Certificate number: **0002116390**

Certificate Date: **06 Nov 2017**

★ Star rating: **5.9**

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 v4.3.0.2a (3.13)**

AAO: **BDAV**

Overview

Dwelling details

Street: **Unit B, 11 Macadamia Circuit**

Suburb: **Kingswood**

State: **NSW**

Postcode: **2747**

Type: **New Dwelling**

NCC Class: **1A**

NatHERS

climate zone: **28**

Lot/DP

number: **24/1194171**

Exposure: **Suburban**

Key construction and insulation materials

(see following pages for details)

Construction: **Brick Veneer**

Roof Tiles

Waffle pod slab 300 mm

Insulation:

R2.5 wall insulation

R4.0 ceiling insulation

No floor insulation

Glazing: **BRD-001-01 A ESS Sliding Window (52mm) SG 3Clr**

Net floor area (m²)

Conditioned: **199.0**

Unconditioned: **49.0**

Garage: **33.0**

TOTAL: **248.0**

Annual thermal performance loads (MJ/m²)

Heating: **54.0**

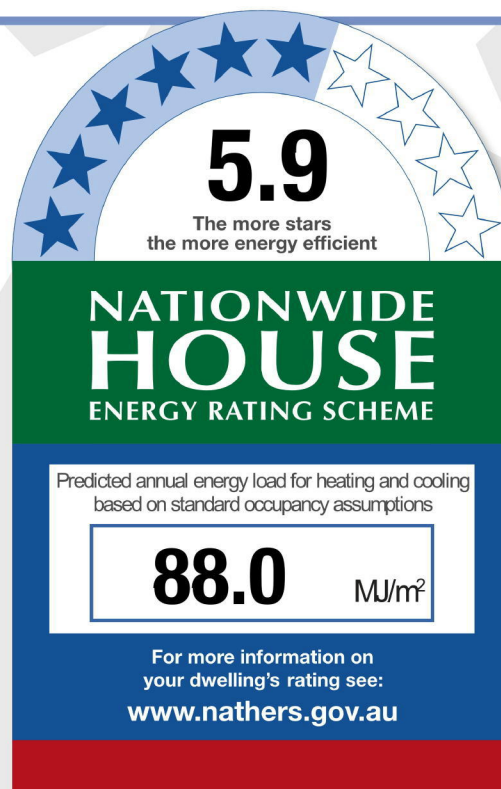
Cooling: **35.0**

TOTAL: **88.0**

Plan documents

Plan ref/date: **Macadamia Circuit**

Prepared by: **MZ**



Ceiling penetrations

(see following pages for details)

Sealed: **0**

Unsealed: **0**

TOTAL:** **0**

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
BRD-001-01 A	BRD-001-01 A ESS Sliding Window (52mm) SG 3Clr	6.4	0.76
BRD-041-01 A	BRD-041-01 A SIG Fixed Lite Externally Glazed (125mm) SG 4Clr	6.2	0.74
BRD-063-16 A	BRD-063-16 A SIG Fixed Lite (67mm) SG 4SP10	4.1	0.66
BRD-033-13 A	BRD-033-13 A ESS Sliding Door (80mm) SG 4SP10	4.3	0.63
BRD-001-20 A	BRD-001-20 A ESS Sliding Window (52mm) SG 4mmEnTec(SP10)	4.6	0.67
BRD-063-01 A	BRD-063-01 A SIG Fixed Lite (67mm) SG 4Clr	6.0	0.78
BRD-033-01 A	BRD-033-01 A ESS Sliding Door (80mm) SG 4Clr	6.2	0.74

Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Guest	BRD-001-01 A	n/a	1800	1800	NW	No Shading
Living	BRD-041-01 A	n/a	600	3000	NW	No Shading
Living	BRD-041-01 A	n/a	600	3000	NW	No Shading
Living	BRD-001-01 A	n/a	1800	900	NE	No Shading
Living	BRD-001-01 A	n/a	1800	900	NE	No Shading
PWD	BRD-001-01 A	n/a	900	900	NE	No Shading
Kitchen/Living	BRD-063-16 A	n/a	700	2400	NE	No Shading
Kitchen/Living	BRD-063-16 A	n/a	700	2400	SE	No Shading
Kitchen/Living	BRD-033-13 A	n/a	2340	2400	SE	No Shading
Kitchen/Living	BRD-033-13 A	n/a	2340	3000	SE	No Shading
Kitchen/Living	BRD-001-20 A	n/a	1800	900	SW	No Shading
Kitchen/Living	BRD-001-20 A	n/a	1800	900	SW	No Shading
Bedroom 2	BRD-001-01 A	n/a	1200	1800	NE	No Shading
Bedroom 3	BRD-063-01 A	n/a	600	3000	NW	No Shading
Bedroom 3	BRD-063-01 A	n/a	600	3000	NW	No Shading
Bedroom 3	BRD-001-01 A	n/a	1200	1800	NE	No Shading
Bedroom 4	BRD-001-01 A	n/a	1200	900	SW	No Shading
Bedroom 4	BRD-001-01 A	n/a	1200	900	SW	No Shading
Bedroom 4	BRD-033-01 A	n/a	2340	1800	NW	No Shading
Bedroom 1	BRD-001-01 A	n/a	1200	900	SE	No Shading
Bedroom 1	BRD-001-01 A	n/a	1200	900	SE	No Shading
Bedroom 1	BRD-033-01 A	n/a	2340	1800	SW	No Shading
Ensuite 1	BRD-001-01 A	n/a	900	1200	SE	No Shading
Bath	BRD-001-01 A	n/a	900	1200	SW	No Shading
Bath	BRD-001-01 A	n/a	900	900	SW	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 (m ²)	Orientation	Outdoor shade	Indoor shade/diffuser
None Present						

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External wall type

ID	Wall type	Insulation	Wall wrap or foil
EW-1	Brick Veneer	No insulation	No
EW-2	Cavity Brick	No insulation	No
EW-3	Brick Veneer	Foil, Anti-glare one side + Bulk Insulation R2.5	Yes
EW-4	Weatherboard Cavity Panel Direct Fix	Foil, Anti-glare one side + Bulk Insulation R2.5	Yes

External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Garage 1	EW-1	5500	4720	SW	No	600
Garage 1	EW-2	5995	4720	NW	No	600
Garage 1	EW-1	5000	4720	SE	No	600
Guest	EW-3	2995	3690	NW	No	600
Guest	EW-3	400	3691	NW	No	1800
Guest	EW-3	800	3690	NE	No	6400
Living	EW-3	300	3691	NW	No	800
Living	EW-3	3700	3690	NW	No	100
Living	EW-3	4300	3690	NE	No	100
Living	EW-3	400	3690	SE	No	100
Living	EW-3	1800	3690	SW	No	12300
PWD	EW-3	400	2660	NW	No	100
PWD	EW-3	1195	2660	NE	No	100
Entry/Stairs	EW-3	2290	3690	NE	No	100
Entry/Stairs	EW-3	2290	3690	NW	No	2600
Laundry	EW-3	1190	2660	NE	No	100
Kitchen/Living	EW-3	1195	3690	NE	No	100
Kitchen/Living	EW-3	4400	2660	NE	No	100
Kitchen/Living	EW-3	3400	2660	SE	No	3100
Kitchen/Living	EW-3	600	2660	SW	No	7900
Kitchen/Living	EW-3	2800	2660	SE	No	3700
Kitchen/Living	EW-3	3000	2660	SW	No	5100
Kitchen/Living	EW-3	4500	2660	SE	No	3800
Kitchen/Living	EW-3	4495	2660	SW	No	600
Bedroom 2	EW-3	4095	2660	NE	No	600
Bedroom 2	EW-3	400	2660	NW	No	7200
Bedroom 3	EW-3	4000	2661	NW	No	600
Bedroom 3	EW-3	4300	2660	NE	No	600
Bedroom 3	EW-3	400	2660	SE	No	10900
Bedroom 3	EW-3	3300	2660	SW	No	5500
Bedroom 4	EW-4	4595	2660	SW	No	600
Bedroom 4	EW-3	2600	2660	NW	No	2200
Bedroom 4	EW-3	895	2661	NW	No	4600
Bedroom 1	EW-3	3895	2660	NE	No	600
Bedroom 1	EW-4	5400	2660	SE	No	600
Bedroom 1	EW-4	2200	2660	SW	No	1400
Ensuite 1	EW-4	1195	2661	SE	No	2800

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Ensuite 1	EW-4	2300	2660	SE	No	600
Ensuite 1	EW-4	1695	2660	SW	No	600
Bath	EW-4	2790	2660	SW	No	600
Upper Hall	EW-3	1390	2660	NW	No	4600
Upper Hall	EW-3	2290	2660	NE	No	600

Internal wall type

Wall type	Area (m ²)	Insulation	Wall wrap or foil
IW-1 - Cavity wall, direct fix plasterboard, single gap	31.0	Bulk Insulation, No Air Gap R2	No
IW-2 - Cavity wall, direct fix plasterboard, single gap	196.0	No insulation	No

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Garage 1	Waffle pod slab 300 mm 100mm	32.7	None	Waffle Pod 300mm	Bare
Guest	Waffle pod slab 300 mm 100mm	13.8	None	Waffle Pod 300mm	Carpet 10mm
Living	Waffle pod slab 300 mm 100mm	16.9	None	Waffle Pod 300mm	Carpet 10mm
PWD	Waffle pod slab 300 mm 100mm	4.1	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Entry/Stairs	Waffle pod slab 300 mm 100mm	25.6	None	Waffle Pod 300mm	20/80 Carpet 10mm/Ceramic
Laundry	Waffle pod slab 300 mm 100mm	2.7	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Kitchen/Living	Waffle pod slab 300 mm 100mm	57.0	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Bedroom 2/PWD	Timber Above Plasterboard 100mm	4.3		No Insulation	Carpet 10mm
Bedroom 2/Laundry	Timber Above Plasterboard 100mm	2.9		No Insulation	Carpet 10mm
Bedroom 2/Kitchen/Living	Timber Above Plasterboard 100mm	7.5		No Insulation	Carpet 10mm
Bedroom 3/Living	Timber Above Plasterboard 19mm	17.0		No Insulation	Carpet 10mm
Bedroom 4/Guest	Timber Above Plasterboard 19mm	4.6		No Insulation	Carpet 10mm
Bedroom 4/Entry/Stairs	Timber Above Plasterboard 19mm	7.4		No Insulation	Carpet 10mm
Bedroom 4/Kitchen/Living	Timber Above Plasterboard 19mm	3.6		No Insulation	Carpet 10mm
Bedroom 1/Kitchen/Living	Timber Above Plasterboard 19mm	19.6		No Insulation	Carpet 10mm
Bedroom 1	Suspended Timber Floor 19mm	1.2	Open	Bulk Insulation in Contact with Floor R2	Carpet 10mm
Ensuite 1/Kitchen/Living	Timber Above Plasterboard 19mm	2.1		No Insulation	Ceramic Tiles 8mm

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Ensuite 1	Suspended Timber Floor 19mm	3.6	Open	Bulk Insulation in Contact with Floor R2	Ceramic Tiles 8mm
Bath/Kitchen/Living	Timber Above Plasterboard 19mm	9.4		No Insulation	Ceramic Tiles 8mm
Upper Hall/Entry/Stairs	Timber Above Plasterboard 19mm	14.2		No Insulation	Carpet 10mm
Upper Hall/Kitchen/Living	Timber Above Plasterboard 19mm	4.7		No Insulation	Carpet 10mm

Ceiling type

Location	Construction	Added insulation	Roof space above
Garage 1	Plasterboard	No insulation	Yes
Guest	Plasterboard	Bulk Insulation R4	Yes
Guest	Timber Above Plasterboard	No Insulation	No
Living	Timber Above Plasterboard	No Insulation	No
PWD	Timber Above Plasterboard	No Insulation	No
Entry/Stairs	Plasterboard	Bulk Insulation R4	Yes
Entry/Stairs	Timber Above Plasterboard	No Insulation	No
Laundry	Timber Above Plasterboard	No Insulation	No
Kitchen/Living	Plasterboard	Bulk Insulation R4	Yes
Kitchen/Living	Timber Above Plasterboard	No Insulation	No
Bedroom 2	Plasterboard	Bulk Insulation R4	Yes
Bedroom 3	Plasterboard	Bulk Insulation R4	Yes
Bedroom 4	Plasterboard	Bulk Insulation R4	Yes
Bedroom 1	Plasterboard	Bulk Insulation R4	Yes
Ensuite 1	Plasterboard	Bulk Insulation R4	Yes
Bath	Plasterboard	Bulk Insulation R4	Yes
Upper Hall	Plasterboard	Bulk Insulation R4	Yes

Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
None Present				

Ceiling fans

Location	Number	Diameter (mm)
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None Present

Roof type

Construction	Added insulation	Roof colour
Roof Tiles	Bulk, Reflective Side Down, Anti-glare Up R1.3	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

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