

Nationwide House Energy Rating Scheme* Certificate



Certificate number: **0002116291**

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 A, 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**

Corrugated Iron

Waffle pod slab 300 mm

Insulation:

R2.5 wall insulation

R4.0 ceiling insulation

No floor insulation

Glazing:

BRD-001-20 A ESS Sliding Window (52mm) SG 4mmEnTec(SP10)

Net floor area (m²)

Conditioned: **273.0**

Unconditioned: **46.0**

Garage: **31.0**

TOTAL: **319.0**

Annual thermal performance loads (MJ/m²)

Heating: **55.0**

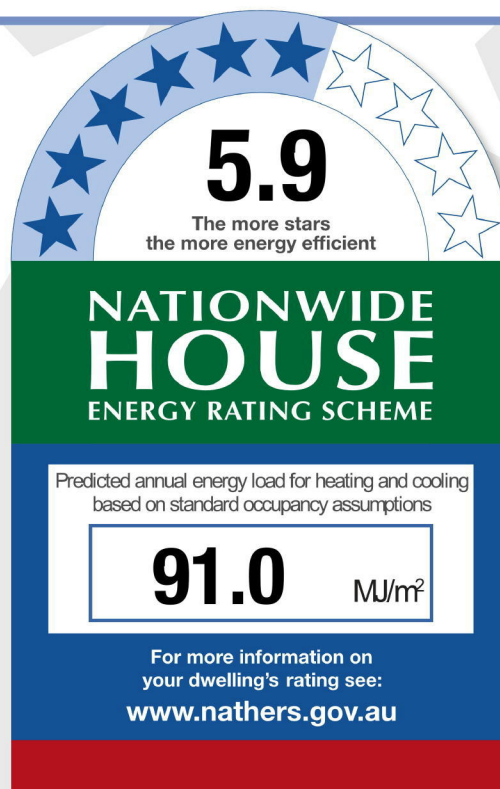
Cooling: **36.0**

TOTAL: **91.0**

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-001-20 A	BRD-001-20 A ESS Sliding Window (52mm) SG 4mmEnTec(SP10)	4.6	0.67
BRD-026-24 A	BRD-026-24 A ESS Awning Window (52mm) SG 4SP10	5.0	0.54
BRD-033-01 A	BRD-033-01 A ESS Sliding Door (80mm) SG 4Clr	6.2	0.74
BRD-033-13 A	BRD-033-13 A ESS Sliding Door (80mm) SG 4SP10	4.3	0.63
BRD-063-16 A	BRD-063-16 A SIG Fixed Lite (67mm) SG 4SP10	4.1	0.66
BRD-041-01 A	BRD-041-01 A SIG Fixed Lite Externally Glazed (125mm) SG 4Clr	6.2	0.74
BRD-001-01 A	BRD-001-01 A ESS Sliding Window (52mm) SG 3Clr	6.4	0.76

Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Living	BRD-001-20 A	n/a	1800	900	SW	No Shading
Living	BRD-001-20 A	n/a	1800	900	SW	No Shading
Living	BRD-026-24 A	n/a	600	3000	NW	No Shading
Living	BRD-026-24 A	n/a	600	3000	NW	No Shading
Guest Bed	BRD-001-20 A	n/a	1200	3000	SW	No Shading
Laundry	BRD-033-01 A	n/a	2400	1500	SW	No Shading
Kitchen/Living	BRD-001-20 A	n/a	1800	900	NE	No Shading
Kitchen/Living	BRD-001-20 A	n/a	1800	900	NE	No Shading
Kitchen/Living	BRD-001-20 A	n/a	1800	2400	SE	No Shading
Kitchen/Living	BRD-001-20 A	n/a	1800	2400	SE	No Shading
Kitchen/Living	BRD-033-13 A	n/a	2000	3000	SE	No Shading
Kitchen/Living	BRD-063-16 A	n/a	700	3500	SW	No Shading
Bedroom 1	BRD-041-01 A	n/a	600	3000	NW	No Shading
Bedroom 1	BRD-041-01 A	n/a	600	3000	NW	No Shading
Bedroom 2	BRD-033-13 A	n/a	2340	2500	NW	No Shading
Bedroom 2	BRD-001-20 A	n/a	1800	900	NE	No Shading
Bedroom 2	BRD-001-20 A	n/a	1800	900	NE	No Shading
Ensuite 1	BRD-001-01 A	n/a	900	900	SW	No Shading
Bath	BRD-001-01 A	n/a	900	900	SW	No Shading
Bedroom 3	BRD-001-01 A	n/a	1200	1800	SW	No Shading
Bedroom 4	BRD-001-01 A	n/a	1200	1800	SE	No Shading
Upper Living	BRD-063-16 A	n/a	700	1500	NE	No Shading
Upper Living	BRD-033-13 A	n/a	2340	2500	NE	No Shading
Upper Living	BRD-001-20 A	n/a	900	3000	SE	No Shading
Upper Living	BRD-033-13 A	n/a	2340	1500	NW	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	Cavity Brick	No insulation	No
EW-2	Brick Veneer	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	400	4361	NW	No	2000
Garage 1	EW-1	5200	4360	NW	No	100
Garage 1	EW-2	5700	4360	NE	No	100
Garage 1	EW-2	500	4360	SE	No	100
Garage 1	EW-2	800	4360	SW	No	6900
Living	EW-3	5000	3510	SW	No	100
Living	EW-3	4400	3510	NW	No	100
Living	EW-3	300	3511	NW	No	1000
Living	EW-3	1800	3510	NE	No	2500
Living	EW-3	500	3510	SE	No	100
Guest Bed	EW-3	3990	3510	SW	No	100
Laundry	EW-3	2195	2660	SW	No	100
Laundry	EW-3	500	2660	NW	No	100
Rumpus	EW-3	295	2661	NE	No	1100
Rumpus	EW-3	3595	2660	NE	No	2600
Kitchen/Living	EW-3	4395	2660	NE	No	100
Kitchen/Living	EW-3	10900	2660	SE	No	3500
Kitchen/Living	EW-3	6095	2660	SW	No	100
Entry/Stairs	EW-3	2295	3510	NE	No	100
Entry/Stairs	EW-3	1000	3510	SE	No	3900
Entry/Stairs	EW-3	2090	3510	NW	No	2800
Bedroom 1	EW-3	3395	2660	NW	No	600
Bedroom 1	EW-3	1800	2660	NE	No	7200
WIR F	EW-3	2395	2660	SW	No	600
WIR F	EW-3	1295	2660	NW	No	600
WIR M	EW-3	500	2660	SE	No	8300
WIR M	EW-3	2595	2660	SW	No	600
Bedroom 2	EW-4	895	2661	NW	No	3400
Bedroom 2	EW-4	3600	2660	NW	No	2000
Bedroom 2	EW-4	4895	2660	NE	No	700
Ensuite 1	EW-3	1690	2660	SW	No	600
Bath	EW-3	2290	2660	SW	No	600
Bedroom 3	EW-4	1900	2660	SE	No	600
Bedroom 3	EW-3	3700	2660	SW	No	600
Bedroom 3	EW-3	500	2660	NW	No	9600
Bedroom 4	EW-4	3595	2660	NE	No	600
Bedroom 4	EW-4	4700	2660	SE	No	600

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Bedroom 4	EW-4	3595	2660	SW	No	600
Upper Living	EW-4	700	2660	NW	No	6900
Upper Living	EW-4	2300	2660	NE	No	700
Upper Living	EW-3	1000	2660	SE	No	4300
Upper Living	EW-3	3700	2660	NE	No	2900
Upper Living	EW-3	4300	2660	SE	No	600
Upper Living	EW-3	1990	2660	NW	No	3400

Internal wall type

Wall type	Area (m ²)	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	247.0	No insulation	No

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Garage 1	Waffle pod slab 300 mm 100mm	31.5	None	Waffle Pod 300mm	Bare
Living	Waffle pod slab 300 mm 100mm	23.2	None	Waffle Pod 300mm	Carpet 10mm
Guest Bed	Waffle pod slab 300 mm 100mm	16.2	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Bath	Waffle pod slab 300 mm 100mm	4.7	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Laundry	Waffle pod slab 300 mm 100mm	5.0	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Rumpus	Waffle pod slab 300 mm 100mm	23.4	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Kitchen/Living	Waffle pod slab 300 mm 100mm	55.4	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Entry/Stairs	Waffle pod slab 300 mm 100mm	25.8	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Bedroom 1/Living	Timber Above Plasterboard 19mm	16.5		No Insulation	Carpet 10mm
WIR F/Living	Timber Above Plasterboard 19mm	3.0		No Insulation	Carpet 10mm
WIR M/Living	Timber Above Plasterboard 19mm	3.2		No Insulation	Carpet 10mm
Bedroom 2/Garage	Timber Above Plasterboard 19mm	21.1		No Insulation	Carpet 10mm
Ensuite 1/Guest Bed	Timber Above Plasterboard 19mm	6.7		No Insulation	Ceramic Tiles 8mm
Bath/Guest Bed	Timber Above Plasterboard 19mm	9.2		No Insulation	Ceramic Tiles 8mm
Bedroom 3/Bath	Timber Above Plasterboard 19mm	4.9		No Insulation	Carpet 10mm
Bedroom 3/Laundry	Timber Above Plasterboard 19mm	5.1		No Insulation	Carpet 10mm

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Bedroom 3/Kitchen/Living	Timber Above Plasterboard 19mm	6.9	No Insulation	Carpet 10mm
Bedroom 4/Kitchen/Living	Timber Above Plasterboard 19mm	16.3	No Insulation	Carpet 10mm
Upper Living/Rumpus	Timber Above Plasterboard 19mm	22.6	No Insulation	Carpet 10mm
Upper Living/Entry/Stairs	Timber Above Plasterboard 19mm	16.3	No Insulation	Carpet 10mm
Upper Living/Entry/Stairs	Timber Above Plasterboard 19mm	9.3	No Insulation	Carpet 10mm

Ceiling type

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

Ceiling penetrations

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Building features continued

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

Ceiling fans

Location	Number	Diameter (mm)
None Present		

Roof type

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