

Nationwide House Energy Rating Scheme* Certificate



Certificate number: **0004615894**

Certificate Date: **24 Feb 2020**

★ 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 v4.3.0.2f (3.13)**

AAO: **BDAV**

Overview

Dwelling details

Street: **129 Wyadra Avenue**

Suburb: **North Manly**

State: **NSW**

Postcode: **2100**

Type: **New Dwelling**

NCC Class: **1A**

NatHERS

climate zone: **56**

Lot/DP

number: **A/291221**

Exposure: **Suburban**

Key construction and insulation materials

(see following pages for details)

Construction: **Brick Veneer**

Roof Tiles

Suspended Timber Floor

Insulation:

R2.2 wall insulation

R5.0 ceiling insulation

R2.2 floor insulation

Glazing:

STG-007-01 A Aluminium Sliding

Window SG 3Clr

Net floor area (m²)

Conditioned: **177.0**

Unconditioned: **35.0**

Garage: **25.0**

TOTAL: **213.0**

Annual thermal performance loads (MJ/m²)

Heating: **39.6**

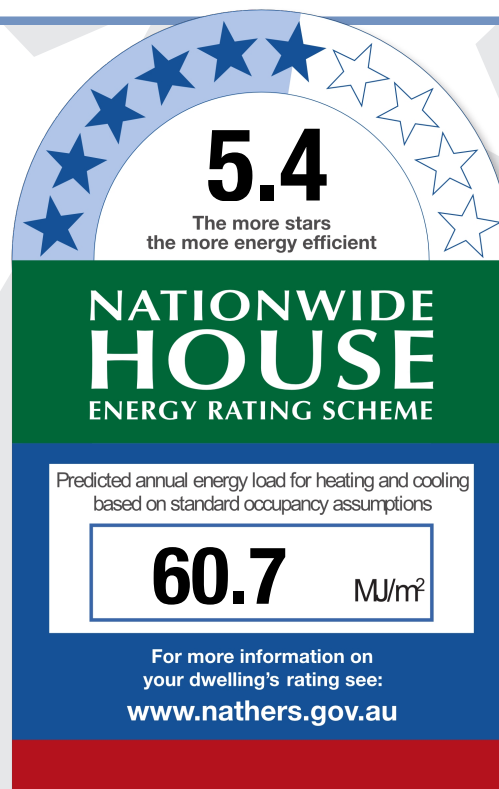
Cooling: **21.1**

TOTAL: **60.7**

Plan documents

Plan ref/date: **29913993**

Prepared by: **PG**



Ceiling penetrations

(see following pages for details)

Sealed: **3**

Unsealed: **0**

TOTAL:** **3**

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
STG-007-01 A	STG-007-01 A Aluminium Sliding Window SG 3Clr	6.3	0.73
STG-002-01 A	STG-002-01 A Aluminium Awning Window SG 3Clr	6.5	0.65
STG-005-02 A	STG-005-02 A Aluminium Sliding Door SG 5Clr	6.3	0.72

Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Entry	STG-007-01 A	n/a	697	800	W	No Shading
Study	STG-002-01 A	n/a	2000	600	S	No Shading
Study	STG-002-01 A	n/a	2000	600	S	No Shading
Study	STG-007-01 A	n/a	600	1810	W	No Shading
Kitchen/Family	STG-007-01 A	n/a	514	2170	W	No Shading
Kitchen/Family	STG-005-02 A	n/a	2400	3200	N	No Shading
Kitchen/Family	STG-005-02 A	n/a	2400	2300	E	No Shading
Kitchen/Family	STG-005-02 A	n/a	2400	2300	N	No Shading
Kitchen/Family	STG-007-01 A	n/a	514	2170	E	No Shading
Bed 4	STG-007-01 A	n/a	1200	1500	N	No Shading
Bed 2	STG-007-01 A	n/a	1200	1500	N	No Shading
Bath	STG-007-01 A	n/a	1200	800	E	No Shading
Bed 3	STG-007-01 A	n/a	1200	1500	E	No Shading
Ensuite	STG-002-01 A	n/a	800	600	E	No Shading
Ensuite	STG-002-01 A	n/a	1200	1500	S	No Shading
Bed 1	STG-005-02 A	n/a	2100	820	S	No Shading
Bed 1	STG-002-01 A	n/a	2100	590	S	No Shading
Bed 1	STG-002-01 A	n/a	2100	590	S	No Shading
Leisure	STG-007-01 A	n/a	600	3000	W	No Shading
Leisure	STG-007-01 A	n/a	1303	800	W	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						

External wall type

ID	Wall type	Insulation	Wall wrap or foil
EW-1	Brick Veneer	No insulation	No
EW-2	Single Skin Brick	No insulation	No
EW-3	Brick Veneer	Bulk Insulation R2.2	No
EW-4	Fibro Cavity Panel Direct Fix	Bulk Insulation R2.2	No

External wall schedule

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Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Garage	EW-1	600	2825	N	No	100
Garage	EW-1	6000	2825	E	No	100
Garage	EW-2	4295	2825	S	No	100
Entry	EW-3	1590	2750	S	No	2700
Entry	EW-3	2290	3075	W	No	100
Study	EW-3	1100	2750	E	No	2200
Study	EW-3	1600	2750	S	No	1600
Study	EW-3	1200	2750	S	No	100
Study	EW-3	3495	2750	W	No	100
Powder	EW-3	1595	2750	W	No	100
Powder	EW-3	600	2750	N	No	100
Kitchen/Family	EW-3	8495	2750	W	No	100
Kitchen/Family	EW-3	4100	2750	N	No	100
Kitchen/Family	EW-3	3100	2750	E	No	3500
Kitchen/Family	EW-3	3400	2750	N	No	3200
Kitchen/Family	EW-3	3895	2750	E	No	100
Laundry	EW-3	1790	2750	E	No	100
Bed 4	EW-3	4095	795	W	No	0
Bed 4	EW-4	4095	1655	W	No	700
Bed 4	EW-3	2995	795	N	No	0
Bed 4	EW-4	2995	1655	N	No	700
WIR	EW-3	1190	795	N	No	0
WIR	EW-4	1190	1655	N	No	700
Bed 2	EW-3	3295	795	N	No	0
Bed 2	EW-4	3295	1655	N	No	700
Bed 2	EW-3	3495	795	E	No	0
Bed 2	EW-4	3495	1655	E	No	700
Bath	EW-3	3090	795	E	No	0
Bath	EW-4	3090	1655	E	No	700
Bed 3	EW-3	2195	795	E	No	0
Bed 3	EW-4	2195	1656	E	No	700
Bed 3	EW-4	1995	2450	E	No	700
WIR	EW-4	2190	2450	E	No	700
Ensuite	EW-4	1795	2450	E	No	700
Ensuite	EW-3	3295	795	S	No	0
Ensuite	EW-4	3295	1655	S	No	700
Bed 1	EW-3	1100	795	E	No	0
Bed 1	EW-4	1100	1655	E	No	4000
Bed 1	EW-3	700	795	S	No	0
Bed 1	EW-4	700	1655	S	No	2000
Bed 1	EW-4	2100	2451	S	No	2000
Bed 1	EW-3	1400	795	S	No	0
Bed 1	EW-4	1400	1655	S	No	2000
Bed 1	EW-4	3695	2450	W	No	700
WIL	EW-4	1390	2450	W	No	700
Leisure	EW-3	6690	795	W	No	0
Leisure	EW-4	6690	1655	W	No	700

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Internal wall type

Wall type	Area (m²)	Insulation	Wall wrap or foil
IW-1 - Cavity wall, direct fix plasterboard, single gap	56.0	Bulk Insulation, No Air Gap R2.2	No
IW-2 - Cavity wall, direct fix plasterboard, single gap	146.0	No insulation	No

Floors

Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Garage	Waffle pod slab 175 mm 100mm	25.4	None	Waffle Pod 175mm	Bare
Entry	Waffle pod slab 225 mm 100mm	19.2	None	Waffle Pod 225mm	Carpet+Rubber Underlay 18mm
Study	Waffle pod slab 225 mm 100mm	9.6	None	Waffle Pod 225mm	Carpet+Rubber Underlay 18mm
Powder	Waffle pod slab 225 mm 100mm	3.7	None	Waffle Pod 225mm	Ceramic Tiles 8mm
Kitchen/Family	Waffle pod slab 225 mm 100mm	45.2	None	Waffle Pod 225mm	80/20 Carpet 10mm/Ceramic
Laundry	Waffle pod slab 225 mm 100mm	3.9	None	Waffle Pod 225mm	Ceramic Tiles 8mm
Bed 4/Kitchen/Family	Timber Above Plasterboard 100mm	12.0		No Insulation	Carpet+Rubber Underlay 18mm
WIR/Kitchen/Family	Timber Above Plasterboard 19mm	2.4		No Insulation	Carpet+Rubber Underlay 18mm
Bed 2/Kitchen/Family	Timber Above Plasterboard 19mm	1.3		No Insulation	Carpet+Rubber Underlay 18mm
Bed 2	Suspended Timber Floor 19mm	10.0	Open	Bulk Insulation in Contact with Floor R2.2	Carpet+Rubber Underlay 18mm
Bath/Kitchen/Family	Timber Above Plasterboard 19mm	6.1		No Insulation	Ceramic Tiles 8mm
Bed 3/Garage	Timber Above Plasterboard 19mm	6.4		Bulk Insulation R2.2	Carpet+Rubber Underlay 18mm
Bed 3/Entry	Timber Above Plasterboard 19mm	1.5		No Insulation	Carpet+Rubber Underlay 18mm
Bed 3/Kitchen/Family	Timber Above Plasterboard 19mm	0.8		No Insulation	Carpet+Rubber Underlay 18mm
Bed 3/Laundry	Timber Above Plasterboard 19mm	4.0		No Insulation	Carpet+Rubber Underlay 18mm
WIR/Garage	Timber Above Plasterboard 19mm	6.9		Bulk Insulation R2.2	Carpet+Rubber Underlay 18mm
Ensuite/Garage	Timber Above Plasterboard 19mm	5.7		Bulk Insulation R2.2	Ceramic Tiles 8mm
Bed 1/Garage	Timber Above Plasterboard 19mm	1.2		Bulk Insulation R2.2	Carpet+Rubber Underlay 18mm
Bed 1/Entry	Timber Above Plasterboard 19mm	4.5		No Insulation	Carpet+Rubber Underlay 18mm

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Bed 1/Study	Timber Above Plasterboard 19mm	7.5		No Insulation	Carpet+Rubber Underlay 18mm
Bed 1	Suspended Timber Floor 19mm	2.2	Open	Bulk Insulation in Contact with Floor R2.2	Carpet+Rubber Underlay 18mm
WIL/Entry	Timber Above Plasterboard 19mm	1.4		No Insulation	Carpet+Rubber Underlay 18mm
WIL/Powder	Timber Above Plasterboard 19mm	2.4		No Insulation	Carpet+Rubber Underlay 18mm
Leisure/Garage	Timber Above Plasterboard 19mm	1.1		Bulk Insulation R2.2	Carpet+Rubber Underlay 18mm
Leisure/Entry	Timber Above Plasterboard 19mm	11.9		No Insulation	Carpet+Rubber Underlay 18mm
Leisure/Kitchen/Family	Timber Above Plasterboard 19mm	17.2		No Insulation	Carpet+Rubber Underlay 18mm
WC/Kitchen/Family	Timber Above Plasterboard 19mm	2.1		No Insulation	Ceramic Tiles 8mm
Hallway/Kitchen/Family	Timber Above Plasterboard 19mm	1.6		No Insulation	Carpet+Rubber Underlay 18mm

Ceiling type

Location	Construction	Added insulation	Roof space above
Garage	Plasterboard	No insulation	Yes
Garage	Timber Above Plasterboard	Bulk Insulation R2.2	No
Entry	Timber Above Plasterboard	No Insulation	No
Study	Plasterboard	Bulk Insulation R5	Yes
Study	Timber Above Plasterboard	No Insulation	No
Powder	Plasterboard	Bulk Insulation R5	Yes
Powder	Timber Above Plasterboard	No Insulation	No
Kitchen/Family	Timber Above Plasterboard	No Insulation	No
Laundry	Timber Above Plasterboard	No Insulation	No
Bed 4	Plasterboard	Bulk Insulation R5	Yes
WIR	Plasterboard	Bulk Insulation R5	Yes
Bed 2	Plasterboard	Bulk Insulation R5	Yes
Bath	Plasterboard	Bulk Insulation R5	Yes
Bed 3	Plasterboard	Bulk Insulation R5	Yes
WIR	Plasterboard	Bulk Insulation R5	Yes
Ensuite	Plasterboard	Bulk Insulation R5	Yes
Bed 1	Plasterboard	Bulk Insulation R5	Yes
WIL	Plasterboard	Bulk Insulation	Yes

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Leisure	Plasterboard	R5	Bulk Insulation	Yes
WC	Plasterboard	R5	Bulk Insulation	Yes
Hallway	Plasterboard	R5	Bulk Insulation	Yes

Ceiling penetrations

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

Ceiling fans

Location	Number	Diameter (mm)
None Present		

Roof type

Construction	Added insulation	Roof colour
Roof Tiles	Foil, Gap Above, Reflective Side Down, Anti-glare Up	Dark
Roof Tiles	Foil, Gap Above, Reflective Side Down, Anti-glare Up	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