

Nationwide House Energy Rating Scheme* Certificate



Certificate number: **0004249330**

Certificate Date: **03 Oct 2019**

★ 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: **259 West Wilchard Road**

Suburb: **Castlereagh**

State: **NSW**

Postcode: **2749**

Type: **New Dwelling**

NCC Class: **1A**

NatHERS

climate zone: **28**

Lot/DP

number: **1/1181666**

Exposure: **Open**

Key construction and insulation materials

(see following pages for details)

Construction: **Brick Veneer**

Corrugated Iron

Concrete Slab on Ground

Insulation:

R2.7 wall insulation

R6.0 ceiling insulation

No floor insulation

Glazing:

VAN-004-08 A SERIES 525 LOUVRE

WINDOW SG 6ET

Net floor area (m²)

Conditioned: **445.0**

Unconditioned: **162.0**

Garage: **124.0**

TOTAL: **607.0**

Annual thermal performance loads (MJ/m²)

Heating: **55.3**

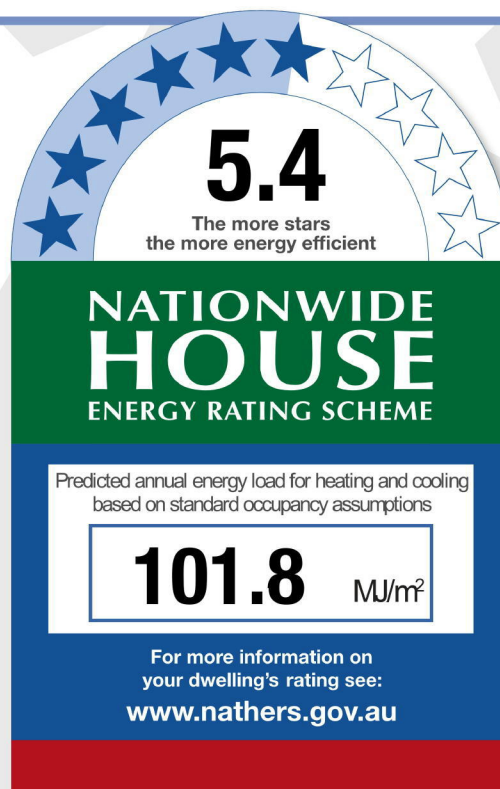
Cooling: **46.6**

TOTAL: **101.8**

Plan documents

Plan ref/date: **1707**

Prepared by: **Distinct Innovations**



Ceiling penetrations

(see following pages for details)

Sealed: **6**

Unsealed: **0**

TOTAL:** **6**

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
VAN-004-08 A	VAN-004-08 A SERIES 525 LOUVRE WINDOW SG 6ET	4.5	0.54
VAN-002-33 A	VAN-002-33 A 613 Magnum Al Double Hung DG 638CPClr/8/4	4.2	0.43
AWS-003-11 A	AWS-003-11 A 502/504 Al Sliding Window DG 638CPClr/8/4	3.8	0.48
AWS-001-01 A	AWS-001-01 A 502/504 Al Sliding Window SG 3Clr	6.4	0.73
AWS-035-41 B	AWS-035-41 B 726 Thermal Heart Awning Window DG 638CPClr/12/6	3.0	0.39
AWS-037-27 B	AWS-037-27 B 731 Thermal Heart Sliding Door DG 638CPClr/12/6	2.7	0.45
AWS-067-13 A	AWS-067-13 A RES SERIES 516 FIXED WINDOW DG 5_LightBridge_ClrPrvSI_638-10-4	2.2	0.39
AWS-005-01 A	AWS-005-01 A 514 Al Double Hung Window SG 3Clr	6.2	0.74

Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Robe 4	VAN-004-08 A	n/a	2100	600	E	No Shading
Bed 4	VAN-002-33 A	n/a	2100	2400	N	No Shading
Bed 4	VAN-002-33 A	n/a	2100	1800	E	No Shading
Robe 3	VAN-004-08 A	n/a	2100	600	S	No Shading
Bed 3	AWS-003-11 A	n/a	1200	1800	S	No Shading
Bath	AWS-001-01 A	n/a	1200	2000	S	No Shading
Bed 2	AWS-003-11 A	n/a	1200	1800	S	No Shading
Robe 2	VAN-004-08 A	n/a	2100	600	S	No Shading
Ensuite	AWS-035-41 B	n/a	1200	1200	S	No Shading
Guest	AWS-037-27 B	n/a	2700	3300	W	No Shading
Theatre	AWS-037-27 B	n/a	2700	3300	W	No Shading
Rumpus	AWS-067-13 A	n/a	2400	3800	N	No Shading
Rumpus	VAN-004-08 A	n/a	300	3800	N	No Shading
Robe 6	VAN-004-08 A	n/a	2100	600	N	No Shading
Bed 6	AWS-003-11 A	n/a	1200	1800	N	No Shading
Bath 2	AWS-001-01 A	n/a	1200	1800	N	No Shading
Bed 5	AWS-003-11 A	n/a	1200	1800	N	No Shading
Robe 5	VAN-004-08 A	n/a	2100	600	N	No Shading
Kitchen Living	AWS-037-27 B	n/a	2700	6500	W	No Shading
Kitchen Living	VAN-004-08 A	n/a	300	6800	N	No Shading
Kitchen Living	AWS-067-13 A	n/a	2400	6800	N	No Shading
Kitchen Living	AWS-067-13 A	n/a	500	4600	E	No Shading
Kitchen Living	VAN-002-33 A	n/a	2700	900	S	No Shading
Kitchen Living	VAN-002-33 A	n/a	2700	900	S	No Shading
Kitchen Living	VAN-002-33 A	n/a	2700	900	S	No Shading
Kitchen Living	AWS-037-27 B	n/a	2700	3000	E	No Shading
Kitchen Living	VAN-004-08 A	n/a	300	3000	W	No Shading
Kitchen Living	AWS-067-13 A	n/a	2400	3000	W	No Shading
Butler	AWS-067-13 A	n/a	500	2000	E	No Shading
Foyer Hall	AWS-067-13 A	n/a	2400	4700	W	No Shading
Foyer Hall	VAN-004-08 A	n/a	300	4700	W	No Shading
Foyer Hall	AWS-067-13 A	n/a	2400	6800	S	No Shading
Foyer Hall	VAN-004-08 A	n/a	300	6800	S	No Shading
Foyer Hall	AWS-067-13 A	n/a	2700	900	N	No Shading

* Nationwide House Energy Rating Scheme (NatHERS) is an initiative of the Australian, state and territory governments. For more details see www.nathers.gov.au

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Master Bed	AWS-037-27 B	n/a	2700	6000	W	No Shading
Master Bed	VAN-002-33 A	n/a	2700	600	N	No Shading
Master Bed	VAN-002-33 A	n/a	2700	600	N	No Shading
Master Bed	AWS-067-13 A	n/a	2700	2400	S	No Shading
Ensuite	VAN-002-33 A	n/a	2700	600	N	No Shading
PDR	AWS-005-01 A	n/a	2700	600	N	No Shading
Study	VAN-002-33 A	n/a	2700	2000	N	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	Bulk Insulation R2.7	No
EW-2	Brick Veneer	No insulation	No
EW-3	Single Skin Brick	No insulation	No

External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Robe 4	EW-1	4095	3000	S	No	600
Robe 4	EW-1	1695	3000	E	No	600
Bed 4	EW-1	2500	3000	N	No	600
Bed 4	EW-1	4095	3000	E	No	600
Robe 3	EW-1	1690	3000	S	No	600
Bed 3	EW-1	3590	3000	S	No	600
Bath	EW-1	2390	3000	S	No	600
Bed 2	EW-1	3790	3000	S	No	600
Robe 2	EW-1	1590	3000	S	No	600
Laundry	EW-1	2790	3000	S	No	600
Linen	EW-1	1590	3000	S	No	600
Ensuite	EW-1	1590	3000	S	No	600
Robe	EW-1	3495	3000	S	No	600
Robe	EW-1	1595	3000	W	No	2100
Guest	EW-1	3490	3000	W	No	2100
Theatre	EW-1	5195	3000	W	No	2100
Theatre	EW-1	5095	3000	N	No	600
Rumpus	EW-1	4190	3000	N	No	600
Robe 6	EW-1	1690	3000	N	No	600

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Bed 6	EW-1	3690	3000	N	No	600
Bath 2	EW-1	2190	3000	N	No	600
Bed 5	EW-1	3690	3000	N	No	600
Robe 5	EW-1	1595	3000	N	No	600
Robe 5	EW-1	4495	3000	E	No	600
Kitchen Living	EW-1	7400	3000	W	No	5100
Kitchen Living	EW-1	7200	3000	N	No	600
Kitchen Living	EW-1	6995	3000	E	No	600
Kitchen Living	EW-1	7200	3000	S	No	600
Kitchen Living	EW-1	3495	3000	E	No	600
Kitchen Living	EW-1	3495	3000	W	No	600
Kitchen Living	EW-1	5800	3000	S	No	100
Butler	EW-1	2990	3000	E	No	600
Foyer Hall	EW-1	5295	3000	W	No	600
Foyer Hall	EW-1	10595	3000	S	No	100
Foyer Hall	EW-1	2895	3000	N	No	9300
Master Bed	EW-1	6100	3000	W	No	1400
Master Bed	EW-1	4595	3000	N	No	1200
Master Bed	EW-1	4595	3000	S	No	100
Dressing	EW-1	2090	3000	N	No	1200
Ensuite	EW-1	2495	3000	N	No	1200
Ensuite	EW-1	1000	3000	E	No	19200
PDR	EW-1	1790	3000	N	No	600
Study	EW-1	3895	3000	N	No	600
Study	EW-1	3695	3000	E	No	13500
Garage	EW-2	8100	3170	W	No	19200
Garage	EW-3	6600	3170	N	No	1200
Garage	EW-2	1000	3170	E	No	100
Garage	EW-3	3900	3170	N	No	100
Garage	EW-2	11200	3170	E	No	100
Garage	EW-3	5300	3170	S	No	100

Internal wall type

Wall type	Area (m ²)	Insulation	Wall wrap or foil
IW-1 - Cavity wall, direct fix plasterboard, single gap	365.0	No insulation	No
IW-2 - Cavity wall, direct fix plasterboard, single gap	159.0	Bulk Insulation, No Air Gap R2.7	No

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Robe 4	Concrete Slab on Ground 100mm	6.7	None	No Insulation	Carpet+Rubber Underlay 18mm
Bed 4	Concrete Slab on Ground 100mm	16.4	None	No Insulation	Carpet+Rubber Underlay 18mm

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Robe 3	Concrete Slab on Ground 100mm	7.2	None	No Insulation	Carpet+Rubber Underlay 18mm
Bed 3	Concrete Slab on Ground 100mm	15.6	None	No Insulation	Carpet+Rubber Underlay 18mm
Bath	Concrete Slab on Ground 100mm	10.3	None	No Insulation	Ceramic Tiles 8mm
Bed 2	Concrete Slab on Ground 100mm	16.5	None	No Insulation	Carpet+Rubber Underlay 18mm
Robe 2	Concrete Slab on Ground 100mm	6.7	None	No Insulation	Carpet+Rubber Underlay 18mm
Laundry	Concrete Slab on Ground 100mm	12.1	None	No Insulation	Ceramic Tiles 8mm
Linen	Concrete Slab on Ground 100mm	5.7	None	No Insulation	Carpet+Rubber Underlay 18mm
Ensuite	Concrete Slab on Ground 100mm	5.7	None	No Insulation	Ceramic Tiles 8mm
Robe	Concrete Slab on Ground 100mm	5.1	None	No Insulation	Carpet+Rubber Underlay 18mm
Guest	Concrete Slab on Ground 100mm	12.0	None	No Insulation	Carpet+Rubber Underlay 18mm
Theatre	Concrete Slab on Ground 100mm	26.1	None	No Insulation	Carpet+Rubber Underlay 18mm
Rumpus	Concrete Slab on Ground 100mm	18.3	None	No Insulation	Carpet+Rubber Underlay 18mm
Hall	Concrete Slab on Ground 100mm	32.6	None	No Insulation	Carpet+Rubber Underlay 18mm
Robe 6	Concrete Slab on Ground 100mm	7.2	None	No Insulation	Carpet+Rubber Underlay 18mm
Bed 6	Concrete Slab on Ground 100mm	16.1	None	No Insulation	Carpet+Rubber Underlay 18mm
Bath 2	Concrete Slab on Ground 100mm	9.4	None	No Insulation	Ceramic Tiles 8mm
Bed 5	Concrete Slab on Ground 100mm	16.1	None	No Insulation	Carpet+Rubber Underlay 18mm
Robe 5	Concrete Slab on Ground 100mm	6.9	None	No Insulation	Carpet+Rubber Underlay 18mm
Kitchen Living	Concrete Slab on Ground 100mm	120.0	None	No Insulation	80/20 Carpet 10mm/Ceramic
Butler	Concrete Slab on Ground 100mm	10.3	None	No Insulation	Ceramic Tiles 8mm
Foyer Hall	Concrete Slab on Ground 100mm	31.3	None	No Insulation	Carpet+Rubber Underlay 18mm
Master Bed	Concrete Slab on Ground 100mm	27.8	None	No Insulation	Carpet+Rubber Underlay 18mm
Dressing	Concrete Slab on Ground 100mm	9.4	None	No Insulation	Carpet+Rubber Underlay 18mm
Ensuite	Concrete Slab on Ground 100mm	11.3	None	No Insulation	Ceramic Tiles 8mm
PDR	Concrete Slab on Ground 100mm	6.2	None	No Insulation	Ceramic Tiles 8mm
Study	Concrete Slab on Ground 100mm	14.1	None	No Insulation	Carpet+Rubber Underlay 18mm
Garage	Concrete Slab on Ground 100mm	123.8	None	No Insulation	Bare

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Ceiling type

Location	Construction	Added insulation	Roof space above
Robe 4	Plasterboard	Bulk Insulation R6	Yes
Bed 4	Plasterboard	Bulk Insulation R6	Yes
Robe 3	Plasterboard	Bulk Insulation R6	Yes
Bed 3	Plasterboard	Bulk Insulation R6	Yes
Bath	Plasterboard	Bulk Insulation R6	Yes
Bed 2	Plasterboard	Bulk Insulation R6	Yes
Robe 2	Plasterboard	Bulk Insulation R6	Yes
Laundry	Plasterboard	Bulk Insulation R6	Yes
Linen	Plasterboard	Bulk Insulation R6	Yes
Ensuite	Plasterboard	Bulk Insulation R6	Yes
Robe	Plasterboard	Bulk Insulation R6	Yes
Guest	Plasterboard	Bulk Insulation R6	Yes
Theatre	Plasterboard	Bulk Insulation R6	Yes
Rumpus	Plasterboard	Bulk Insulation R6	Yes
Hall	Plasterboard	Bulk Insulation R6	Yes
Robe 6	Plasterboard	Bulk Insulation R6	Yes
Bed 6	Plasterboard	Bulk Insulation R6	Yes
Bath 2	Plasterboard	Bulk Insulation R6	Yes
Bed 5	Plasterboard	Bulk Insulation R6	Yes
Robe 5	Plasterboard	Bulk Insulation R6	Yes
Kitchen Living	Plasterboard	Bulk Insulation R6	Yes
Butler	Plasterboard	Bulk Insulation R6	Yes
Foyer Hall	Plasterboard	Bulk Insulation R6	Yes
Master Bed	Plasterboard	Bulk Insulation R6	Yes
Dressing	Plasterboard	Bulk Insulation R6	Yes
Ensuite	Plasterboard	Bulk Insulation R6	Yes
PDR	Plasterboard	Bulk Insulation	Yes

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Building features continued

Study	Plasterboard	R6	Bulk Insulation	Yes
Garage	Plasterboard	R6	No insulation	Yes

Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
Bath	1	Exhaust Fans	300	Sealed
Laundry	1	Exhaust Fans	300	Sealed
Ensuite	1	Exhaust Fans	300	Sealed
Bath 2	1	Exhaust Fans	300	Sealed
Ensuite	1	Exhaust Fans	300	Sealed
PDR	1	Exhaust Fans	300	Sealed

Ceiling fans

Location	Number	Diameter (mm)
None Present		

Roof type

Construction	Added insulation	Roof colour
Corrugated Iron	Bulk, Reflective Side Down, No Air Gap Above 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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