

Nationwide House Energy Rating Scheme* Certificate



Certificate number: **0003755428-01**

Certificate Date: **21 May 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: **20390**

Name: **Fadi Sweis**

Organisation: **Energy Ratings Australia Pty Ltd**

Email: **fsweis@eraservices.com.au**

Phone: **1800 372 669**

Declaration
of interest: **None**

Software: **BERS Pro v4.3.0.2d (3.13)**

AAO: **ABSA**

Overview

Dwelling details

Street: **8 Bilkurra Avenue**

Suburb: **Bilgola Plateau**

State: **NSW**

Postcode: **2107**

Type: **New Dwelling**

NCC Class: **1A**

NatHERS

climate zone: **56**

Lot/DP

number: **12/25461**

Exposure: **Suburban**

Key construction and insulation materials

(see following pages for details)

Construction: **AAC Cavity Panel Direct Fix
Roof Tiles**

Insulation: **Waffle pod slab 300 mm**

R2.0 wall insulation

R4.1 ceiling insulation

No floor insulation

Glazing: **ALM-002-01 A Aluminium B SG Clear**

Net floor area (m²)

Conditioned: **262.0**

Unconditioned: **52.0**

Garage: **35.0**

TOTAL: **315.0**

Annual thermal performance loads (MJ/m²)

Heating: **36.1**

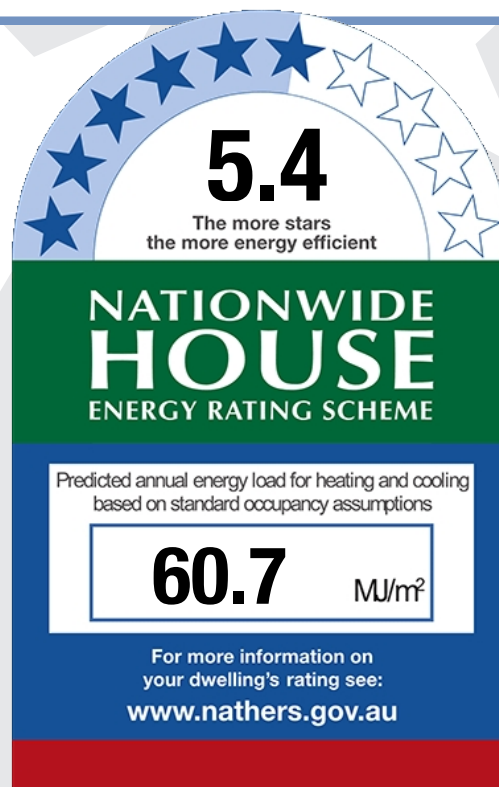
Cooling: **24.6**

TOTAL: **60.7**

Plan documents

Plan ref/date: **700938**

Prepared by: **PG**



Ceiling penetrations

(see following pages for details)

Sealed: **52**

Unsealed: **0**

TOTAL:** **52**

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: **LED**

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
ALM-002-01 A	ALM-002-01 A Aluminium B SG Clear	6.7	0.70
TIM-002-01 W	TIM-002-01 W Timber B SG Clear	5.4	0.63
ALM-001-01 A	ALM-001-01 A Aluminium A SG Clear	6.7	0.57

Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Kitchen/Living	ALM-002-01 A	n/a	1800	1800	SE	No Shading
Kitchen/Living	ALM-002-01 A	n/a	1800	1800	SE	No Shading
Kitchen/Living	ALM-002-01 A	n/a	500	3000	SW	No Shading
Kitchen/Living	ALM-002-01 A	n/a	500	1500	SW	No Shading
Kitchen/Living	ALM-002-01 A	n/a	1800	2700	NE	No Shading
Kitchen/Living	ALM-002-01 A	n/a	2370	3573	SE	No Shading
Kitchen/Living	ALM-002-01 A	n/a	2370	3213	NE	No Shading
Study	ALM-002-01 A	n/a	1800	1800	NE	No Shading
Ldry	TIM-002-01 W	n/a	958	900	SW	No Shading
Study/Guest Bed	ALM-001-01 A	n/a	1800	600	NW	No Shading
Study/Guest Bed	ALM-001-01 A	n/a	1800	1200	NW	No Shading
ENS 2	ALM-002-01 A	n/a	2100	1200	SW	No Shading
Entry/Hallway	TIM-002-01 W	n/a	2155	375	NW	No Shading
Entry/Hallway	TIM-002-01 W	n/a	2155	375	NW	No Shading
Entry/Hallway	ALM-002-01 A	n/a	317	600	SW	No Shading
Bedroom 1	ALM-002-01 A	n/a	2100	2650	NW	No Shading
WIR	ALM-001-01 A	n/a	1500	600	NW	No Shading
ENS 1	ALM-002-01 A	n/a	1200	1500	SW	No Shading
ENS 1	ALM-002-01 A	n/a	1000	600	SW	No Shading
Leisure	ALM-001-01 A	n/a	1500	1800	NW	No Shading
Leisure	ALM-002-01 A	n/a	1200	3600	NE	No Shading
Leisure	ALM-002-01 A	n/a	2083	600	SW	No Shading
Bedroom 2	ALM-002-01 A	n/a	500	2700	SW	No Shading
Bedroom 3	ALM-002-01 A	n/a	1000	1500	SE	No Shading
Bedroom 3	ALM-002-01 A	n/a	500	2700	SW	No Shading
WC	ALM-002-01 A	n/a	500	600	SE	No Shading
Bath	ALM-002-01 A	n/a	1200	1500	NE	No Shading
Bedroom 4	ALM-002-01 A	n/a	1200	2700	NE	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
None Present						

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External wall type

ID	Wall type	Insulation	Wall wrap or foil
EW-1	AAC Cavity Panel Direct Fix	Foil Anti-glare one side and Reflective other of the Bulk Insulation R2	Yes
EW-2	AAC Cavity Panel Direct Fix	No insulation	No
EW-3	Weatherboard Cavity Panel Direct Fix	Foil Anti-glare one side and Reflective other of the Bulk Insulation R2	Yes

External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Kitchen/Living	EW-1	4950	2550	SE	No	700
Kitchen/Living	EW-1	9245	2550	SW	No	50
Kitchen/Living	EW-1	6845	2550	NE	No	50
Kitchen/Living	EW-1	4850	2550	SE	No	4550
Kitchen/Living	EW-1	3850	2550	NE	No	5500
Study	EW-1	2690	2550	NE	No	50
Ldry	EW-1	1745	2550	SW	No	50
Ldry	EW-1	600	2550	NW	No	50
Study/Guest Bed	EW-1	1300	2550	NE	No	2300
Study/Guest Bed	EW-1	4245	2550	SW	No	50
Study/Guest Bed	EW-1	1550	2550	NW	No	50
Study/Guest Bed	EW-1	600	2550	SW	No	50
Study/Guest Bed	EW-1	2050	2550	NW	No	1750
ENS 2	EW-1	600	2550	SE	No	50
ENS 2	EW-1	2695	2550	SW	No	50
Garage 1	EW-2	5695	2655	NW	No	50
Garage 1	EW-2	6250	2655	NE	No	50
Garage 1	EW-2	1800	2655	SE	No	50
Entry/Hallway	EW-1	2290	2550	NW	No	3050
Entry/Hallway	EW-1	2390	2550	SW	No	50
Bedroom 1	EW-3	6145	2400	NE	No	650
Bedroom 1	EW-3	3945	2400	NW	No	400
WIR	EW-3	3695	2400	SW	No	700
WIR	EW-3	1550	2400	NW	No	650
WIR	EW-3	600	2400	SW	No	2250
WIR	EW-3	345	2400	NW	No	400
ENS 1	EW-3	600	2400	SE	No	10250
ENS 1	EW-3	3245	2400	SW	No	700
Leisure	EW-3	1445	2400	NE	No	650
Leisure	EW-3	3950	2400	NW	No	650
Leisure	EW-3	4095	2400	NE	No	650
Leisure	EW-3	2390	2400	SW	No	1300
Bedroom 2	EW-3	3245	2400	SW	No	700
Bedroom 2	EW-3	600	2400	NW	No	10000
Bedroom 3	EW-3	3945	2400	SE	No	700
Bedroom 3	EW-3	3895	2400	SW	No	700
WC	EW-3	1940	2400	SE	No	700
Bath	EW-3	2045	2400	NE	No	650

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Bath	EW-3	3895	2400	SE	No	700
Bedroom 4	EW-3	3340	2400	NE	No	650

Internal wall type

Wall type	Area (m²)	Insulation	Wall wrap or foil
IW-1 - Cavity wall, direct fix plasterboard, single gap	198.0	No insulation	No
IW-2 - Cavity wall, direct fix plasterboard, single gap	26.0	Bulk Insulation, No Air Gap R2	No

Floors

Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Kitchen/Living	Waffle pod slab 300 mm 100mm	78.7	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Study	Waffle pod slab 300 mm 100mm	11.1	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Ldry	Waffle pod slab 300 mm 100mm	7.7	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Study/Guest Bed	Waffle pod slab 300 mm 100mm	15.3	None	Waffle Pod 300mm	Carpet 10mm
ENS 2	Waffle pod slab 300 mm 100mm	9.9	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Garage 1	Waffle pod slab 225 mm 100mm	35.2	None	Waffle Pod 225mm	Bare
Entry/Hallway	Waffle pod slab 300 mm 100mm	25.7	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Bedroom 1/Study/Guest Bed	Timber Above Plasterboard 19mm	7.2		No Insulation	Carpet 10mm
Bedroom 1/ENS 2	Timber Above Plasterboard 19mm	1.7		No Insulation	Carpet 10mm
Bedroom 1/Entry/Hallway	Timber Above Plasterboard 19mm	9.9		No Insulation	Carpet 10mm
Bedroom 1	Suspended Timber Floor 19mm	2.9	Totally Open	No Insulation	Carpet 10mm
WIR/Study/Guest Bed	Timber Above Plasterboard 19mm	7.0		No Insulation	Carpet 10mm
ENS 1/Study/Guest Bed	Timber Above Plasterboard 19mm	1.0		No Insulation	Ceramic Tiles 8mm
ENS 1/ENS 2	Timber Above Plasterboard 19mm	8.3		No Insulation	Ceramic Tiles 8mm
ENS 1/Entry/Hallway	Timber Above Plasterboard 19mm	2.3		No Insulation	Ceramic Tiles 8mm
Leisure/Kitchen/Living	Timber Above Plasterboard 19mm	16.4		No Insulation	Carpet 10mm
Leisure/Study	Timber Above Plasterboard 19mm	11.1		No Insulation	Carpet 10mm
Leisure/Ldry	Timber Above Plasterboard 19mm	1.5		No Insulation	Carpet 10mm
Leisure/Entry/Hallway	Timber Above Plasterboard 19mm	13.6		No Insulation	Carpet 10mm
		6.1		No Insulation	Carpet 10mm

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Bedroom 2/Kitchen/Living	Timber Above Plasterboard 19mm			
Bedroom 2/Ldry	Timber Above Plasterboard 19mm	6.4	No Insulation	Carpet 10mm
Bedroom 3/Kitchen/Living	Timber Above Plasterboard 19mm	13.6	No Insulation	Carpet 10mm
WC/Kitchen/Living	Timber Above Plasterboard 19mm	1.8	No Insulation	Ceramic Tiles 8mm
Bath/Kitchen/Living	Timber Above Plasterboard 19mm	7.7	No Insulation	Ceramic Tiles 8mm
Bedroom 4/Kitchen/Living	Timber Above Plasterboard 19mm	12.6	No Insulation	Carpet 10mm

Ceiling type

Location	Construction	Added insulation	Roof space above
Kitchen/Living	Plasterboard	Bulk Insulation R4.1	Yes
Kitchen/Living	Timber Above Plasterboard	No Insulation	No
Study	Timber Above Plasterboard	No Insulation	No
Ldry	Timber Above Plasterboard	No Insulation	No
Study/Guest Bed	Timber Above Plasterboard	No Insulation	No
ENS 2	Timber Above Plasterboard	No Insulation	No
Garage 1	Plasterboard	No insulation	Yes
Entry/Hallway	Timber Above Plasterboard	No Insulation	No
Bedroom 1	Plasterboard	Bulk Insulation R4.1	Yes
WIR	Plasterboard	Bulk Insulation R4.1	Yes
ENS 1	Plasterboard	Bulk Insulation R4.1	Yes
Leisure	Plasterboard	Bulk Insulation R4.1	Yes
Bedroom 2	Plasterboard	Bulk Insulation R4.1	Yes
Bedroom 3	Plasterboard	Bulk Insulation R4.1	Yes
WC	Plasterboard	Bulk Insulation R4.1	Yes
Bath	Plasterboard	Bulk Insulation R4.1	Yes
Bedroom 4	Plasterboard	Bulk Insulation R4.1	Yes

Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
Kitchen/Living	27	Downlights - LED	150	Sealed
Study	8	Downlights - LED	150	Sealed
ENS 2	2	Exhaust Fans	300	Sealed
ENS 1	1	Exhaust Fans	300	Sealed

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Building features continued

Leisure	14	Downlights - LED	150	Sealed
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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	Medium

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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