

Nationwide House Energy Rating Scheme* Certificate



Certificate number: **0004128880-01**

Certificate Date: **04 Oct 2019**

★ Star rating: **5.3**

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: **20753**

Name: **.Christina Silman**

Organisation: **Silman Building Pty Ltd**

Email: **chris@silmanbuilding.com.au**

Phone: **0417487743**

Declaration of interest: **None**

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

AAO: **ABSA**

Overview

Dwelling details

Street: **51 Amourin St**

Suburb: **NORTH MANLY**

State: **NSW**

Postcode: **2100**

Type: **New Dwelling**

NCC Class: **1A**

NatHERS

climate zone: **56**

Lot/DP

number: **5/5/F/DP2154**

Exposure: **Suburban**

Key construction and insulation materials

(see following pages for details)

Construction: **Brick Veneer**

Roof Tiles

Waffle pod slab 225 mm

Insulation:

R2.5 wall insulation

R4.0 ceiling insulation

No floor insulation

Glazing:

ALM-002-03 A Aluminium B SG High

Solar Gain Low-E

Net floor area (m²)

Conditioned: **151.0**

Unconditioned: **46.0**

Garage: **31.0**

TOTAL: **196.0**

Annual thermal performance loads (MJ/m²)

Heating: **39.3**

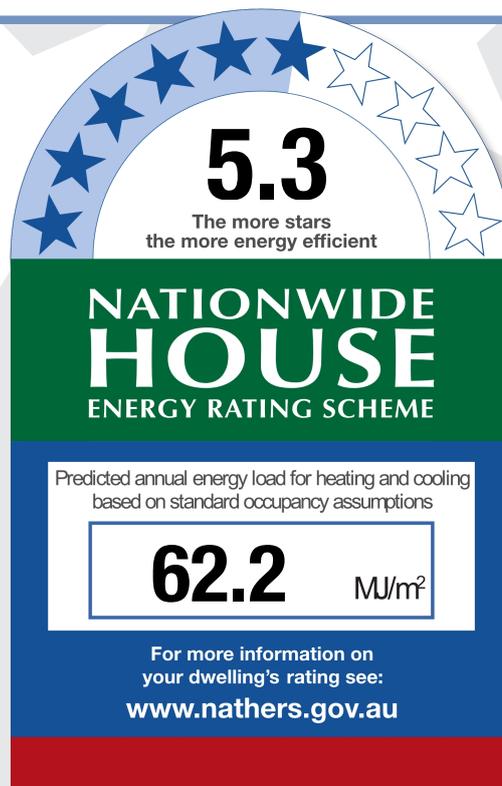
Cooling: **23.0**

TOTAL: **62.2**

Plan documents

Plan ref/date: **0023885**

Prepared by: **AN Design**



Ceiling penetrations

(see following pages for details)

Sealed: **4**

Unsealed: **0**

TOTAL:** **4**

****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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Window type and performance value

Window ID	Window type	U-value	SHGC
ALM-002-03 A	ALM-002-03 A Aluminium B SG High Solar Gain Low-E	5.4	0.58
ALM-002-01 A	ALM-002-01 A Aluminium B SG Clear	6.7	0.70
TIM-001-01 W	TIM-001-01 W Timber A SG Clear	5.4	0.56
ALM-001-03 A	ALM-001-03 A Aluminium A SG High Solar Gain Low-E	5.4	0.49

Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Kit/Live/Dine	ALM-002-03 A	n/a	2100	2300	S	No Shading
Kit/Live/Dine	ALM-002-03 A	n/a	1800	1800	S	No Shading
Kit/Live/Dine	ALM-002-03 A	n/a	600	2100	W	No Shading
Kit/Live/Dine	ALM-002-03 A	n/a	1800	1800	W	No Shading
Kit/Live/Dine	ALM-002-03 A	n/a	600	1500	E	No Shading
Multi	ALM-002-03 A	n/a	1800	1800	W	No Shading
PR	ALM-002-01 A	n/a	1800	600	E	No Shading
Laundry	TIM-001-01 W	n/a	2100	820	W	No Shading
Hall/Stairs	ALM-002-03 A	n/a	600	1500	E	No Shading
Hall/Stairs	ALM-001-03 A	n/a	1800	600	N	No Shading
Bed 4	ALM-002-03 A	n/a	700	1800	S	No Shading
Bed 3	ALM-002-03 A	n/a	700	1800	S	No Shading
Bed 2	ALM-002-03 A	n/a	1000	1200	W	No Shading
Bath	ALM-002-01 A	n/a	1200	600	E	No Shading
Ensuite	ALM-002-01 A	n/a	1000	600	W	No Shading
WIR	ALM-001-03 A	n/a	1800	700	N	No Shading
Bed 1	ALM-001-03 A	n/a	1800	700	N	No Shading
Bed 1	ALM-001-03 A	n/a	1800	700	N	No Shading
Bed 1	ALM-001-03 A	n/a	2100	820	N	No Shading
Upper hall/stai	ALM-002-03 A	n/a	1200	600	N	No Shading
Upper hall/stai	ALM-002-03 A	n/a	1200	1200	E	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 R2.5	No
EW-2	Single Skin Brick	No insulation	No
EW-3	Fibro Cavity Panel Direct Fix	Bulk Insulation R2.5	No

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External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Kit/Live/Dine	EW-1	6550	2550	S	No	600
Kit/Live/Dine	EW-1	6345	2550	W	No	600
Kit/Live/Dine	EW-1	6345	2550	E	No	600
Pantry	EW-1	1690	2550	E	No	50
Multi	EW-1	3390	2550	W	No	50
PR	EW-1	2845	2550	E	No	50
Laundry	EW-1	1690	2550	W	No	50
Hall/Stairs	EW-1	7095	2550	E	No	50
Hall/Stairs	EW-1	1000	2550	W	No	2800
Hall/Stairs	EW-1	2350	2550	N	No	1150
Garage	EW-2	1400	2550	S	No	50
Garage	EW-2	5550	2550	W	No	50
Garage	EW-2	5595	2550	N	No	50
Bed 4	EW-3	3245	2400	S	No	600
Bed 4	EW-1	4045	2400	E	No	600
Bed 3	EW-3	3295	2400	S	No	600
Bed 3	EW-1	3995	2400	W	No	600
Bed 2	EW-1	2795	2400	W	No	600
Bed 2	EW-3	1245	2400	W	No	600
Bath	EW-1	3490	2400	E	No	600
Ensuite	EW-3	2440	2400	W	No	600
WIR	EW-3	1850	2400	W	No	600
WIR	EW-3	1495	2400	N	No	600
Bed 1	EW-1	1000	2400	W	No	2100
Bed 1	EW-3	2450	2400	N	No	600
Bed 1	EW-1	1545	2400	N	No	1750
Upper hall/stai	EW-1	1045	2400	N	No	1750
Upper hall/stai	EW-1	5795	2400	E	No	600

Internal wall type

Wall type	Area (m ²)	Insulation	Wall wrap or foil
IW-1 - Cavity wall, direct fix plasterboard, single gap	153.0	No insulation	No
IW-2 - Cavity wall, direct fix plasterboard, single gap	25.0	Bulk Insulation, No Air Gap R2.5	No

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Kit/Live/Dine	Waffle pod slab 225 mm 100mm	41.3	None	Waffle Pod 225mm	Ceramic Tiles 8mm
Pantry	Waffle pod slab 225 mm 100mm	2.1	None	Waffle Pod 225mm	Ceramic Tiles 8mm

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Multi	Waffle pod slab 225 mm 100mm	13.1	None	Waffle Pod 225mm	Carpet+Rubber Underlay 18mm
PR	Waffle pod slab 225 mm 100mm	3.6	None	Waffle Pod 225mm	Ceramic Tiles 8mm
Laundry	Waffle pod slab 225 mm 100mm	4.5	None	Waffle Pod 225mm	Ceramic Tiles 8mm
Hall/Stairs	Waffle pod slab 225 mm 100mm	23.3	None	Waffle Pod 225mm	Ceramic Tiles 8mm
Garage	Waffle pod slab 225 mm 100mm	30.6	None	Waffle Pod 225mm	Bare
Bed 4/Kit/Live/Dine	Timber Above Plasterboard 20mm	5.4		No Insulation	Carpet+Rubber Underlay 18mm
Bed 4/Pantry	Timber Above Plasterboard 20mm	2.2		No Insulation	Carpet+Rubber Underlay 18mm
Bed 4/Multi	Timber Above Plasterboard 20mm	1.2		No Insulation	Carpet+Rubber Underlay 18mm
Bed 4/PR	Timber Above Plasterboard 20mm	0.9		No Insulation	Carpet+Rubber Underlay 18mm
Bed 4/Hall/Stairs	Timber Above Plasterboard 20mm	2.3		No Insulation	Carpet+Rubber Underlay 18mm
Bed 3/Kit/Live/Dine	Timber Above Plasterboard 20mm	5.5		No Insulation	Carpet+Rubber Underlay 18mm
Bed 3/Multi	Timber Above Plasterboard 20mm	8.0		No Insulation	Carpet+Rubber Underlay 18mm
Bed 2/Multi	Timber Above Plasterboard 20mm	2.9		No Insulation	Carpet+Rubber Underlay 18mm
Bed 2/Laundry	Timber Above Plasterboard 20mm	4.7		No Insulation	Carpet+Rubber Underlay 18mm
Bed 2/Hall/Stairs	Timber Above Plasterboard 20mm	0.7		No Insulation	Carpet+Rubber Underlay 18mm
Bed 2/Garage	Timber Above Plasterboard 20mm	4.0		No Insulation	Carpet+Rubber Underlay 18mm
Bath/PR	Timber Above Plasterboard 20mm	2.8		No Insulation	Ceramic Tiles 8mm
Bath/Hall/Stairs	Timber Above Plasterboard 20mm	4.2		No Insulation	Ceramic Tiles 8mm
Ensuite/Garage	Timber Above Plasterboard 20mm	5.2		No Insulation	Ceramic Tiles 8mm
WIR/Garage	Timber Above Plasterboard 20mm	2.6		No Insulation	Carpet+Rubber Underlay 18mm
Bed 1/Hall/Stairs	Timber Above Plasterboard 19mm	5.3		No Insulation	Carpet+Rubber Underlay 18mm
Bed 1/Garage	Timber Above Plasterboard 19mm	8.4		No Insulation	Carpet+Rubber Underlay 18mm
Bed 1	Suspended Timber Floor 19mm	2.6	Totally Open	Bulk Insulation in Contact with Floor R4	Carpet+Rubber Underlay 18mm
Upper hall/stai/Multi	Timber Above Plasterboard 20mm	1.1		No Insulation	Carpet+Rubber Underlay 18mm
Upper hall/stai/Hall/Stairs	Timber Above Plasterboard 20mm	10.5		No Insulation	Carpet+Rubber Underlay 18mm
Upper hall/stai/Garage	Timber Above Plasterboard 20mm	2.0		No Insulation	Carpet+Rubber Underlay 18mm

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Ceiling type

Location	Construction	Added insulation	Roof space above
Kit/Live/Dine	Plasterboard	Bulk Insulation R4	Yes
Kit/Live/Dine	Timber Above Plasterboard	No Insulation	No
Pantry	Timber Above Plasterboard	No Insulation	No
Multi	Timber Above Plasterboard	No Insulation	No
PR	Timber Above Plasterboard	No Insulation	No
Laundry	Timber Above Plasterboard	No Insulation	No
Hall/Stairs	Timber Above Plasterboard	No Insulation	No
Garage	Plasterboard	No insulation	Yes
Garage	Timber Above Plasterboard	No Insulation	No
Bed 4	Plasterboard	Bulk Insulation R4	Yes
Bed 3	Plasterboard	Bulk Insulation R4	Yes
Bed 2	Plasterboard	Bulk Insulation R4	Yes
Bath	Plasterboard	Bulk Insulation R4	Yes
Ensuite	Plasterboard	Bulk Insulation R4	Yes
WIR	Plasterboard	Bulk Insulation R4	Yes
Bed 1	Plasterboard	Bulk Insulation R4	Yes
Upper hall/stai	Plasterboard	Bulk Insulation R4	Yes

Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
Kit/Live/Dine	1	Exhaust Fans	150	Sealed
PR	1	Exhaust Fans	150	Sealed
Bath	1	Exhaust Fans	150	Sealed
Ensuite	1	Exhaust Fans	150	Sealed

Ceiling fans

Location	Number	Diameter (mm)
None Present		

Roof type

Construction	Added insulation	Roof colour
Roof Tiles	Foil, Gap Above, Reflective Side	Dark

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	Down, Anti-glare Up
Roof Tiles	Foil, Gap Above, Dark Reflective Side Down, Anti-glare Up
Corrugated Iron	Foil, Gap Above, Dark Reflective Side Down, Anti-glare Up

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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