

# Nationwide House Energy Rating Scheme\* Certificate



Certificate number: 0001072578

Certificate Date: 09 Dec 2016

★ Star rating: 4.9

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: 20753  
Name: Christina Silman  
Organisation: Silman Building Pty Ltd  
Email: chris@silmanbuilding.com.au  
Phone: 0417487743  
Declaration of interest: None  
Software: BERS Pro v4.3.0.1 (3.13)  
AAO: ABSA

## Overview

### Dwelling details

Street: 138 Roscrea Drive  
Suburb: MULGOA  
State: NSW Postcode: 2745  
Type: New Dwelling NCC Class: 1A  
NatHERS climate zone: 28  
Lot/DP number: 501/1176385 Exposure: Open

### Key construction and insulation materials

(see following pages for details)

Construction: Brick Veneer  
Corrugated Iron  
Suspended Timber Floor  
Insulation: R1.8 wall insulation  
R4.1 ceiling insulation  
R2.0 floor insulation  
Glazing: ALM-001-01 A Aluminium A SG Clear

### Net floor area (m<sup>2</sup>)

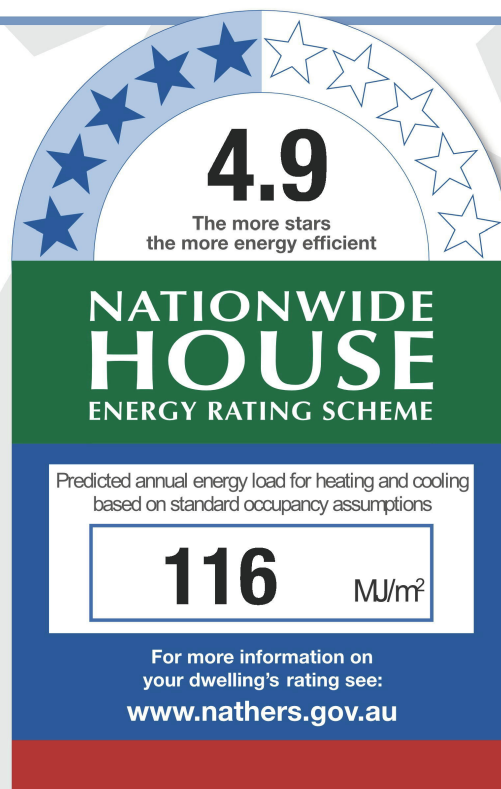
Conditioned: 480  
Unconditioned: 27  
Garage: 0  
TOTAL: 506

### Annual thermal performance loads (MJ/m<sup>2</sup>)

Heating: 68  
Cooling: 48  
TOTAL: 116

### Plan documents

Plan ref/date: A0008  
Prepared by: JR



### Ceiling penetrations

(see following pages for details)

Sealed: 136  
Unsealed: 0  
TOTAL:\*\* 136

\*\*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-001-01 A	ALM-001-01 A Aluminium A SG Clear	6.70	0.57
ALM-002-01 A	ALM-002-01 A Aluminium B SG Clear	6.70	0.70

### Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Master WIR	ALM-001-01 A	n/a	1400	1200	N	No Shading
Master Ensuite	ALM-002-01 A	n/a	2400	900	N	No Shading
Master Ensuite	ALM-002-01 A	n/a	2400	900	N	No Shading
Master Ensuite	ALM-001-01 A	n/a	2400	1800	N	No Shading
Laundry	ALM-001-01 A	n/a	2400	900	N	No Shading
Master Bed	ALM-001-01 A	n/a	2400	1700	S	No Shading
Master Bed	ALM-001-01 A	n/a	2400	1700	S	No Shading
Master Bed	ALM-002-01 A	n/a	2000	1200	W	No Shading
Master Bed	ALM-002-01 A	n/a	2000	1200	W	No Shading
Theatre	ALM-002-01 A	n/a	2000	2700	S	No Shading
Lounge	ALM-001-01 A	n/a	2400	1700	S	No Shading
Study	ALM-001-01 A	n/a	2400	1700	S	No Shading
Foyer/Hall	ALM-001-01 A	n/a	2400	1700	S	No Shading
Foyer/Hall	ALM-002-01 A	n/a	2400	900	S	No Shading
Foyer/Hall	ALM-002-01 A	n/a	2400	900	S	No Shading
Bed 2	ALM-001-01 A	n/a	2400	1700	E	No Shading
Bed 2	ALM-002-01 A	n/a	2000	2700	S	No Shading
Childs Retreat	ALM-002-01 A	n/a	2000	1200	E	No Shading
Childs Retreat	ALM-002-01 A	n/a	2000	1200	E	No Shading
Childs Retreat	ALM-001-01 A	n/a	2400	1700	S	No Shading
Childs Retreat	ALM-001-01 A	n/a	2400	1700	S	No Shading
Bed 4	ALM-002-01 A	n/a	2000	2700	E	No Shading
Bed 4	ALM-001-01 A	n/a	2400	1700	S	No Shading
Bath	ALM-001-01 A	n/a	1400	1800	N	No Shading
Bed 3	ALM-001-01 A	n/a	1400	2400	N	No Shading
Kit/Fam/Dine	ALM-002-01 A	n/a	2000	2700	N	No Shading
Kit/Fam/Dine	ALM-002-01 A	n/a	2000	2700	N	No Shading
Kit/Fam/Dine	ALM-002-01 A	n/a	2400	4800	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 <sup>2</sup> )	Orientation	Outdoor shade	Indoor shade/diffuser
None Present						

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## Building features continued

### External wall type

ID	Wall type	Insulation	Wall wrap or foil
EW-1	Brick Veneer	Foil, Anti-glare one side + Bulk Insulation R1.8	Yes
EW-2	Fibro Cavity Panel Direct Fix	Foil, Anti-glare one side + Bulk Insulation R1.8	Yes
EW-3	Brick Veneer	Foil, Anti-glare one side + Bulk Insulation R1.3	Yes

### External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Master WIR	EW-1	3595	3040	N	No	450
Master WIR	EW-1	2500	3040	S	No	400
Master WIR	EW-1	5700	3040	W	No	350
Master Ensuite	EW-1	4090	3040	N	No	450
Laundry	EW-1	3140	3040	N	No	450
Master Bed	EW-2	6045	3040	S	No	325
Master Bed	EW-2	6795	3040	W	No	300
Theatre	EW-1	2500	3040	E	No	350
Theatre	EW-1	5050	3040	S	No	300
Theatre	EW-1	2450	3040	W	No	300
Lounge	EW-2	4140	3040	S	No	300
Study	EW-2	4190	3040	S	No	300
Foyer/Hall	EW-2	4645	3040	S	No	300
Bed 2	EW-1	2500	3040	W	No	300
Bed 2	EW-1	2500	3040	E	No	300
Bed 2	EW-1	5000	3040	S	No	300
Childs Retreat	EW-2	4395	3040	E	No	300
Childs Retreat	EW-2	6045	3040	S	No	300
WIR 4	EW-2	2340	3040	E	No	300
Bed 4	EW-1	4245	3040	N	No	450
Bed 4	EW-1	5650	3040	E	No	300
Bed 4	EW-1	2550	3040	S	No	300
Bath	EW-1	2940	3040	N	No	450
Bed 3	EW-1	4340	3040	N	No	450
Kit/Fam/Dine	EW-1	645	3040	N	No	2200
Kit/Fam/Dine	EW-2	1700	3040	W	No	450
Kit/Fam/Dine	EW-2	17150	3040	N	No	475
Kit/Fam/Dine	EW-2	1750	3040	E	No	450

### Internal wall type

Wall type	Area (m <sup>2</sup> )	Insulation	Wall wrap or foil
IW-1 - Cavity wall, direct fix plasterboard, single gap	474	No insulation	No

### Floors

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

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## Building features continued

Location	Construction	Area (m <sup>2</sup> )	Sub floor ventilation	Added insulation	Covering
Master WIR	Suspended Timber Floor	20.2	Enclosed	Bulk Insulation in Contact with Floor R2	Cork Tiles or Parquetry 8mm
Master Ensuite	Suspended Timber Floor	25.5	Enclosed	Bulk Insulation in Contact with Floor R2	Ceramic Tiles 8mm
Laundry	Suspended Timber Floor	13.9	Enclosed	Bulk Insulation in Contact with Floor R2	Ceramic Tiles 8mm
Master Bed	Suspended Timber Floor	41.1	Enclosed	Bulk Insulation in Contact with Floor R2	Cork Tiles or Parquetry 8mm
Theatre	Suspended Timber Floor	35.0	Enclosed	Bulk Insulation in Contact with Floor R2	Cork Tiles or Parquetry 8mm
Lounge	Suspended Timber Floor	18.3	Enclosed	Bulk Insulation in Contact with Floor R2	Cork Tiles or Parquetry 8mm
Study	Suspended Timber Floor	18.5	Enclosed	Bulk Insulation in Contact with Floor R2	Cork Tiles or Parquetry 8mm
Foyer/Hall	Suspended Timber Floor	54.4	Enclosed	Bulk Insulation in Contact with Floor R2	Cork Tiles or Parquetry 8mm
Bed 2	Suspended Timber Floor	25.1	Enclosed	Bulk Insulation in Contact with Floor R2	Cork Tiles or Parquetry 8mm
WIR 2	Suspended Timber Floor	3.8	Enclosed	Bulk Insulation in Contact with Floor R2	Cork Tiles or Parquetry 8mm
Ensuite 2	Suspended Timber Floor	4.9	Enclosed	Bulk Insulation in Contact with Floor R2	Ceramic Tiles 8mm
Childs Retreat	Suspended Timber Floor	38.6	Enclosed	Bulk Insulation in Contact with Floor R2	Cork Tiles or Parquetry 8mm
WIL	Suspended Timber Floor	2.4	Enclosed	Bulk Insulation in Contact with Floor R2	Cork Tiles or Parquetry 8mm
WIR 4	Suspended Timber Floor	4.8	Enclosed	Bulk Insulation in Contact with Floor R2	Cork Tiles or Parquetry 8mm
Bed 4	Suspended Timber Floor	24.7	Enclosed	Bulk Insulation in Contact with Floor R2	Cork Tiles or Parquetry 8mm
Bath	Suspended Timber Floor	12.9	Enclosed	Bulk Insulation in Contact with Floor R2	Ceramic Tiles 8mm
Bed 3	Suspended Timber Floor	19.2	Enclosed	Bulk Insulation in Contact with Floor R2	Cork Tiles or Parquetry 8mm
WIR 4	Suspended Timber Floor	3.6	Enclosed	Bulk Insulation in Contact with Floor R2	Cork Tiles or Parquetry 8mm
PDR	Suspended Timber Floor	5.1	Enclosed	Bulk Insulation in Contact with Floor R2	Ceramic Tiles 8mm
Butlers Pantry	Suspended Timber Floor	10.3	Enclosed		

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## Building features continued

Kit/Fam/Dine	Suspended Timber Floor	124.1	Enclosed	Bulk Insulation in Contact with Floor R2	Cork Tiles or Parquetry 8mm
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## Ceiling type

Location	Construction	Added insulation	Roof space above
Master WIR	Plasterboard	Bulk Insulation R4.1	Yes
Master Ensuite	Plasterboard	Bulk Insulation R4.1	Yes
Laundry	Plasterboard	Bulk Insulation R4.1	Yes
Master Bed	Plasterboard	Bulk Insulation R4.1	Yes
Theatre	Plasterboard	Bulk Insulation R4.1	Yes
Lounge	Plasterboard	Bulk Insulation R4.1	Yes
Study	Plasterboard	Bulk Insulation R4.1	Yes
Foyer/Hall	Plasterboard	Bulk Insulation R4.1	Yes
Bed 2	Plasterboard	Bulk Insulation R4.1	Yes
WIR 2	Plasterboard	Bulk Insulation R4.1	Yes
Ensuite 2	Plasterboard	Bulk Insulation R4.1	Yes
Childs Retreat	Plasterboard	Bulk Insulation R4.1	Yes
WIL	Plasterboard	Bulk Insulation R4.1	Yes
WIR 4	Plasterboard	Bulk Insulation R4.1	Yes
Bed 4	Plasterboard	Bulk Insulation R4.1	Yes
Bath	Plasterboard	Bulk Insulation R4.1	Yes
Bed 3	Plasterboard	Bulk Insulation R4.1	Yes
WIR 4	Plasterboard	Bulk Insulation R4.1	Yes
PDR	Plasterboard	Bulk Insulation R4.1	Yes
Butlers Pantry	Plasterboard	Bulk Insulation R4.1	Yes
Kit/Fam/Dine	Plasterboard	Bulk Insulation R4.1	Yes



## Building features continued

### Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
Master WIR	6	Downlights - LED	150	Sealed
Master Ensuite	6	Downlights - LED	150	Sealed
Master Ensuite	1	Exhaust Fans	300	Sealed
Laundry	4	Downlights - LED	150	Sealed
Master Bed	12	Downlights - LED	150	Sealed
Theatre	12	Downlights - LED	150	Sealed
Lounge	6	Downlights - LED	150	Sealed
Study	6	Downlights - LED	150	Sealed
Foyer/Hall	14	Downlights - LED	150	Sealed
Bed 2	6	Downlights - LED	150	Sealed
WIR 2	1	Downlights - LED	150	Sealed
Ensuite 2	1	Exhaust Fans	300	Sealed
Childs Retreat	8	Downlights - LED	150	Sealed
WIL	1	Downlights - LED	150	Sealed
WIR 4	1	Downlights - LED	150	Sealed
Bed 4	6	Downlights - LED	150	Sealed
Bath	2	Downlights - LED	150	Sealed
Bath	1	Exhaust Fans	300	Sealed
Bed 3	6	Downlights - LED	150	Sealed
WIR 4	1	Downlights - LED	150	Sealed
PDR	1	Downlights - LED	150	Sealed
PDR	1	Exhaust Fans	200	Sealed
Butlers Pantry	4	Downlights - LED	150	Sealed
Kit/Fam/Dine	28	Downlights - LED	150	Sealed
Kit/Fam/Dine	1	Exhaust Fans	200	Sealed

### 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	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](http://www.nathers.gov.au)

For more information on energy efficient design and insulation visit [www.yourhome.gov.au](http://www.yourhome.gov.au)

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For more details see [www.nathers.gov.au](http://www.nathers.gov.au)