

# Nationwide House Energy Rating Scheme\* Certificate



Certificate number: 0001420629

Certificate Date: 21 Apr 2017

★ Star rating: 6.1

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@frysenerywise.com.au

Phone: 02 9899 2825

Declaration of interest: The Assessor has provided design advice to the Applicant

Software: BERS Pro v4.3.0.2 (3.13)

AAO: BDAV

## Overview

### Dwelling details

Street: Unit 1, 10 Iralba Avenue

Suburb: Emu Plains

State: NSW Postcode: 2750

Type: New Dwelling NCC Class: 1A

Lot/DP NatHERS climate zone: 28

number: 60/259229 Exposure: Suburban

### Key construction and insulation materials

(see following pages for details)

Construction: Brick Veneer  
Corrugated Iron  
Waffle pod slab 175 mm

Insulation: R2.0 wall insulation  
R3.5 ceiling insulation  
No floor insulation

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

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

Conditioned: 198

Unconditioned: 32

Garage: 24

TOTAL: 230

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

Heating: 51

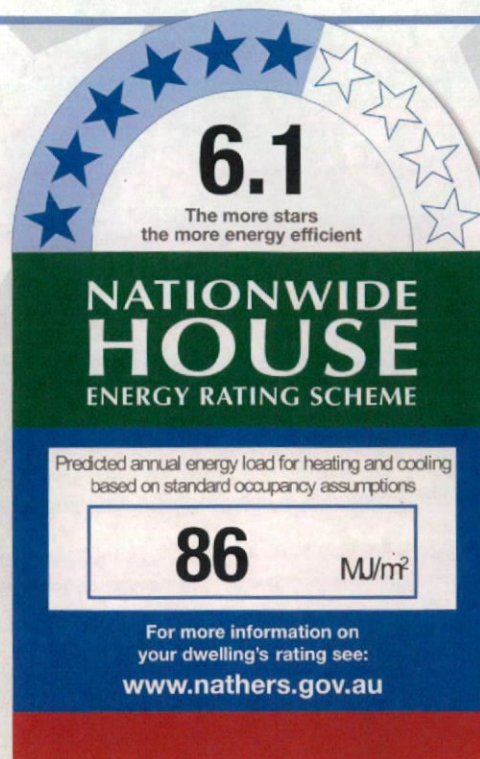
Cooling: 35

TOTAL: 86

### Plan documents

Plan ref/date: 10 Iralba Avenue

Prepared by: SAJ



### 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 daylight 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
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
Lounge	ALM-002-01 A	n/a	2114	610	NW	No Shading
Lounge	ALM-002-01 A	n/a	600	2410	NE	No Shading
Lounge	ALM-002-01 A	n/a	600	2410	NE	No Shading
Kitchen/Living	ALM-002-01 A	n/a	500	2410	NE	No Shading
Kitchen/Living	ALM-002-01 A	n/a	2410	5302	SE	No Shading
Kitchen/Living	ALM-002-01 A	n/a	2050	2170	SE	No Shading
Kitchen/Living	ALM-002-01 A	n/a	2100	2410	NE	No Shading
Lounge	ALM-002-01 A	n/a	2050	610	NW	No Shading
Lounge	ALM-002-01 A	n/a	2050	610	NW	No Shading
Bath	ALM-002-01 A	n/a	860	1570	SE	No Shading
Bedroom 1	ALM-002-01 A	n/a	600	2170	NW	No Shading
Bedroom 1	ALM-002-01 A	n/a	600	2170	NW	No Shading
WIR	ALM-002-01 A	n/a	600	610	NW	No Shading
WIR	ALM-002-01 A	n/a	600	610	NW	No Shading
Ensuite	ALM-002-01 A	n/a	1030	1210	NE	No Shading
Bedroom 2	ALM-002-01 A	n/a	860	2460	NE	No Shading
Bedroom 3	ALM-002-01 A	n/a	860	2460	NE	No Shading
Bedroom 4	ALM-002-01 A	n/a	860	2460	NE	No Shading
TV Room	ALM-002-01 A	n/a	1030	2410	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						

### External wall type

ID	Wall type	Insulation	Wall wrap or foil
EW-1	Cavity Brick	No insulation	No
EW-2	Brick Veneer	Bulk Insulation R2	No
EW-3	Metal Clad Cavity Panel Direct Fix	Bulk Insulation R2	No

### External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Garage 1	EW-1	3195	3710	NW	No	600
Lounge	EW-2	1295	3260	NW	No	2850

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Lounge	EW-2	7190	3260	NE	No	750
WIP	EW-2	2595	2660	NW	No	600
WIP	EW-2	1295	2660	NE	No	750
Kitchen/Living	EW-2	4895	2660	NE	No	750
Kitchen/Living	EW-2	8200	2660	SE	No	4000
Kitchen/Living	EW-2	3495	2660	NE	No	750
Kitchen/Living	EW-2	2600	2660	SE	No	600
Kitchen/Living	EW-3	3300	2660	NE	No	0
Lounge	EW-2	2095	3560	SW	No	2000
Lounge	EW-2	2400	3560	NW	No	750
Lounge	EW-2	2095	3560	NE	No	750
Bath	EW-2	2595	2360	SE	No	600
Bedroom 1	EW-3	3600	2360	NW	No	600
Bedroom 1	EW-3	500	2360	NE	No	2250
WIR	EW-3	1495	2360	NW	No	600
WIR	EW-3	2595	2360	NE	No	750
Ensuite	EW-3	2090	2360	NE	No	750
Bedroom 2	EW-2	3195	2360	NE	No	750
Bedroom 2	EW-2	3795	2360	SE	No	600
Bedroom 3	EW-3	800	2360	NW	No	13300
Bedroom 3	EW-2	2995	2360	NE	No	750
Bedroom 4	EW-3	3290	2360	NE	No	1550
TV Room	EW-3	4695	2360	NE	No	750
TV Room	EW-3	800	2360	SE	No	10100

## Internal wall type

Wall type	Area (m <sup>2</sup> )	Insulation	Wall wrap or foil
IW-1 - Shaft liner party wall multi plaster layers	108	Bulk Insulation both sides of shaft liner R2	No
IW-2 - Cavity wall, direct fix plasterboard, single gap	48	Bulk Insulation, No Air Gap R2	No
IW-3 - Cavity wall, direct fix plasterboard, single gap	140	No insulation	No

## Floors

Location	Construction	Area (m <sup>2</sup> )	Sub floor ventilation	Added insulation	Covering
Garage 1	Waffle pod slab 175 mm	23.8	None	Waffle Pod 175mm	Bare
Laundry	Waffle pod slab 175 mm	4.3	None	Waffle Pod 175mm	Ceramic Tiles 8mm
WC	Waffle pod slab 175 mm	2.1	None	Waffle Pod 175mm	Ceramic Tiles 8mm
Lounge	Waffle pod slab 175 mm	26.0	None	Waffle Pod 175mm	Ceramic Tiles 8mm
WIP	Waffle pod slab 175 mm	3.2	None	Waffle Pod 175mm	Ceramic Tiles 8mm

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Kitchen/Living	Waffle pod slab 175 mm	75.5	None	Waffle Pod 175mm	Ceramic Tiles 8mm
Lounge	Waffle pod slab 175 mm	4.9	None	Waffle Pod 175mm	Ceramic Tiles 8mm
Bath/Kitchen/Living	Timber Above Plasterboard	8.6		No Insulation	Ceramic Tiles 8mm
Bedroom 1/Garage	Timber Above Plasterboard	12.5		No Insulation	Carpet 10mm
Bedroom 1/Lounge	Timber Above Plasterboard	1.5		No Insulation	Carpet 10mm
WIR/Lounge	Timber Above Plasterboard	3.7		No Insulation	Carpet 10mm
Ensuite/Garage 1	Timber Above Plasterboard	2.1		No Insulation	Ceramic Tiles 8mm
Ensuite/Lounge	Timber Above Plasterboard	3.5		No Insulation	Ceramic Tiles 8mm
Bedroom 2/Kitchen/Living	Timber Above Plasterboard	11.8		No Insulation	Carpet 10mm
Bedroom 3/WIP	Timber Above Plasterboard	1.0		No Insulation	Carpet 10mm
Bedroom 3/Kitchen/Living	Timber Above Plasterboard	8.8		No Insulation	Carpet 10mm
Bedroom 4/Kitchen/Living	Timber Above Plasterboard	9.5		No Insulation	Carpet 10mm
TV Room/Garage 1	Timber Above Plasterboard	6.6		No Insulation	Carpet 10mm
TV Room/Laundry	Timber Above Plasterboard	4.5		No Insulation	Carpet 10mm
TV Room/WC	Timber Above Plasterboard	2.3		No Insulation	Carpet 10mm
TV Room/Lounge	Timber Above Plasterboard	2.2		No Insulation	Carpet 10mm
TV Room/Kitchen/Living	Timber Above Plasterboard	9.4		No Insulation	Carpet 10mm
TV Room/Kitchen/Living	Timber Above Plasterboard	10.7		No Insulation	Carpet 10mm

## Ceiling type

Location	Construction	Added insulation	Roof space above
Garage 1	Plasterboard	No insulation	Yes
Garage 1	Timber Above Plasterboard	No Insulation	No
Laundry	Timber Above Plasterboard	No Insulation	No
WC	Timber Above Plasterboard	No Insulation	No
Lounge	Plasterboard	Bulk Insulation R3.5	Yes
Lounge	Timber Above Plasterboard	No Insulation	No
WIP	Plasterboard	Bulk Insulation R3.5	Yes
WIP	Timber Above Plasterboard	No Insulation	No
Kitchen/Living	Plasterboard	Bulk Insulation R3.5	Yes
Kitchen/Living	Timber Above Plasterboard	No Insulation	No
Lounge	Plasterboard	Bulk Insulation R3.5	Yes
Bath	Plasterboard	Bulk Insulation R3.5	Yes

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Bedroom 1	Plasterboard	Bulk Insulation R3.5	Yes
WIR	Plasterboard	Bulk Insulation R3.5	Yes
Ensuite	Plasterboard	Bulk Insulation R3.5	Yes
Bedroom 2	Plasterboard	Bulk Insulation R3.5	Yes
Bedroom 3	Plasterboard	Bulk Insulation R3.5	Yes
Bedroom 4	Plasterboard	Bulk Insulation R3.5	Yes
TV Room	Plasterboard	Bulk Insulation R3.5	Yes
TV Room	Plasterboard	Bulk Insulation R3.5	Yes

### Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
Laundry	1	Exhaust Fans	300	Sealed
WC	1	Exhaust Fans	300	Sealed
Bath	1	Exhaust Fans	300	Sealed
Ensuite	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, Anti-glare Up R1.3	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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