Nationwide House Energy Rating Scheme* Certificate

Certificate number: 0002163392

Certificate Date: 15 Nov 2017

★ Star rating: 4.6

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:	lan 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 v4.3.0.2a (3.13)

BDAV AAO:

Overview

Dwelling details

	OConnell Lane		
Suburb:	Caddens		
State:	NSW	Postcode:	2747
Type:	New Dwelling	NCC Class:	1 A
.)po.		NatHERS	
Lot/DP		climate zone:	28
number:	3/0	Exposure:	Suburban

Key construction and insulation materials

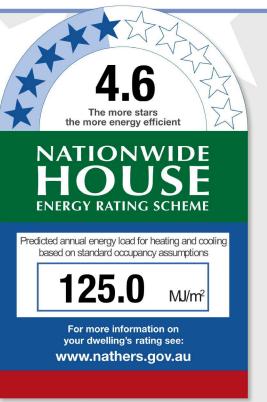
(see following pages for details)

Construction:	Brick Veneer Roof Tiles
Insulation:	Waffle pod slab 225 mm R2.0 wall insulation
	R3.5 ceiling insulation No floor insulation
Glazing:	TND-001-01 A Trend Al Sliding Window SG 3CIr

Net floor area (m ²)		Annual the	
Conditioned: Unconditioned:	175.0 42.0	performan (MJ/m²)	ce loads
Garage: TOTAL:	30.0 217.0	Heating: Cooling: TOTAL:	58.0 68.0 125.0

Plan documents

160504 Plan ref/date: Prepared by: RA



Ceiling penetrations(see following pages for details)Sealed:1Unsealed:0TOTAL:**	**NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded 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: Unl Window selection - default windows only	Scan to access this certificate online and
Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 an be used with this rating.	confirm this is valid.
Note: Only a +/- 5% SHGC tolerance is allowed with this rating.	
NB: This tolerance ONLY applies to SHGC, the U-value can always	and the second se

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.

values stated on page 2.



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Nationwide House Energy Rating Scheme* Certificate						
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Building features

Window type and performance value

Window ID	Window type	U-value	SHGC
TND-002-02 A	TND-002-02 A Trend Al Awning Window SG 4CIr	6.5	0.65
TND-001-01 A	TND-001-01 A Trend Al Sliding Window SG 3Clr	6.4	0.73

Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
HOME OFFICE	TND-002-02 A	n/a	2055	850	W	No Shading
HOME OFFICE	TND-002-02 A	n/a	2055	850	W	No Shading
LOUNGE	TND-001-01 A	n/a	2055	2650	Ν	No Shading
DINING KITCHEN	TND-001-01 A	n/a	340	960	Ν	No Shading
DINING KITCHEN	TND-001-01 A	n/a	2055	2390	Ν	No Shading
DINING KITCHEN	TND-001-01 A	n/a	2140	3530	E	No Shading
DINING KITCHEN	TND-001-01 A	n/a	2055	1870	Ν	No Shading
DINING KITCHEN	TND-001-01 A	n/a	2055	2700	E	No Shading
DINING KITCHEN	TND-001-01 A	n/a	600	2650	S	No Shading
MASTER SUITE	TND-002-02 A	n/a	1200	610	W	No Shading
MASTER SUITE	TND-002-02 A	n/a	1200	610	W	No Shading
MASTER SUITE	TND-002-02 A	n/a	1200	610	W	No Shading
MASTER SUITE	TND-002-02 A	n/a	1800	850	W	No Shading
MASTER SUITE	TND-002-02 A	n/a	1800	850	W	No Shading
ENSUITE	TND-002-02 A	n/a	1030	850	Ν	No Shading
WC	TND-002-02 A	n/a	1030	730	Ν	No Shading
BATH	TND-002-02 A	n/a	1200	850	Ν	No Shading
BED 4	TND-001-01 A	n/a	1030	1810	S	No Shading
UPPER LOUNGE	TND-001-01 A	n/a	2120	960	Ν	No Shading
UPPER LOUNGE	TND-001-01 A	n/a	600	2190	S	No Shading
BED 2	TND-001-01 A	n/a	943	2190	Е	No Shading
BED 3	TND-001-01 A	n/a	943	2190	E	No Shading

Roof window and skylight type and performance value ID Window type U-value SHGC None Present Roof window and skylight schedule ID Roof window/skylight no. Area (m²) Orientation Outdoor shade Indoor shade/diffuser None Present None Present Vindow/skylight no. Indoor shade Indoor shade/diffuser

External wall type

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4.6

Building features continued

ID	Wall type		Insulation		Wa	II wrap or foil
EW-1	Brick Veneer		Bulk Insulation	n R2	No	1
EW-2	Brick Veneer		No insulation		No	l
EW-3	Cavity Brick		No insulation		No	1
EW-4	Weatherboard Ca Fix	avity Panel Direct	Bulk Insulation	ו R2	No	
EW-5	Fibro Cavity Pane	el Direct Fix	Bulk Insulation	n R2	No	(
External wall so	chedule					
Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
HOME OFFICE	EW-1	2895	2400	Ν	No	100
HOME OFFICE	EW-1	1100	2400	S	No	1550
HOME OFFICE	EW-1	2800	2400	W	No	100
LOUNGE	EW-1	3790	2400	Ν	No	100
ENTRY	EW-1	1540	2250	W	No	2300
LAUNDRY	EW-1	1545	2400	Ν	No	100
LAUNDRY	EW-1	450	2400	E	No	100
DINING KITCHEN	N EW-1	2345	2400	Ν	No	100
DINING KITCHEN	N EW-1	450	2400	W	No	100
DINING KITCHEN	N EW-1	3350	2400	Ν	No	100
DINING KITCHEN		4000	2400	E	No	4150
DINING KITCHEN		2600	2400	N	No	4600
DINING KITCHEN		4100	2400	E	No	600
DINING KITCHEN		9845	2400	S	No	100
GARAGE	EW-2	1700	2485	E	No	100
GARAGE	EW-2	5600	2485	S	No	100
GARAGE	EW-3	5445	2485	W	No	100
MASTER SUITE	EW-1	3245	2400	N	No	600
MASTER SUITE	EW-4	1645	2400	S	No	600
MASTER SUITE	EW-4	3750	2400	W	No	600
MASTER SUITE	EW-4	1700	2400	S	No	600
MASTER SUITE	EW-1	900	2400	S	No	600
MASTER SUITE	EW-1	4350	2400	W	No	600
ENSUITE	EW-1	1790	2400	N	No	600
WC	EW-1	1040	2400	N	No	600
BATH	EW-1	2145	2400	N	No	600
BATH	EW-1	450	2400	E	No	6300
BED 4	EW-1	595	2400	S	No	600
BED 4	EW-4	2545	2400	S	No	600
UPPER LOUNGE		2340	2400	N	No	1050
UPPER LOUNGE		3190	2400	S	No	600
BED 2	EW-1	450	2400	W	No	11200
BED 2	EW-1	3350	2400	N	No	600
BED 2	EW-1	3850	2400	E	No	600
BED 2 BED 2	EW-5	195	2400	E	No	600
BED 3	EW-5	4045	2400	E	No	600
BED 3	EW-1	3345	2400	S	No	600
DED 3		0040	2400	3	INU	000

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Building features continued

Internal wall type					
Wall type	Area (m²)	Insulation	Wall wrap or foil		
IW-1 - Cavity wall, direct fix plasterboard, single gap	155.0	No insulation	No		
IW-2 - Cavity wall, direct fix plasterboard, single gap	24.0	Bulk Insulation, No Air Gap R2	No		

Floors					
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
HOME OFFICE	Waffle pod slab 225 mm 100mm	7.9	None	Waffle Pod 225mm	Carpet 10mm
LOUNGE	Waffle pod slab 225 mm 100mm	15.7	None	Waffle Pod 225mm	Carpet 10mm
ENTRY	Waffle pod slab 225 mm 100mm	2.9	None	Waffle Pod 225mm	Carpet 10mm
LAUNDRY	Waffle pod slab 225 mm 100mm	4.3	None	Waffle Pod 225mm	Ceramic Tiles 8mm
POWDER	Waffle pod slab 225 mm 100mm	2.8	None	Waffle Pod 225mm	Ceramic Tiles 8mm
DINING KITCHEN	Waffle pod slab 225 mm 100mm	57.1	None	Waffle Pod 225mm	80/20 Carpet 10mm/Ceramic
DINING KITCHEN	Waffle pod slab 225 mm 100mm	2.6	None	Waffle Pod 225mm	Carpet 10mm
GARAGE	Waffle pod slab 225 mm 100mm	30.1	None	Waffle Pod 225mm	Bare
MASTER SUITE/HOME OFFICE	Timber Above Plasterboard 100mm	8.0		No Insulation	Carpet 10mm
MASTER SUITE/LOUNGE	Timber Above Plasterboard 100mm	2.7		No Insulation	Carpet 10mm
MASTER SUITE/ENTRY	Timber Above Plasterboard 100mm	3.0		No Insulation	Carpet 10mm
MASTER SUITE/GARAGE	Timber Above Plasterboard 100mm	6.1		No Insulation	Carpet 10mm
MASTER SUITE	Suspended Timber Floor 100mm	1.7	Open	No Insulation	Carpet 10mm
ENSUITE/LOUNGE	Timber Above Plasterboard	4.2		No Insulation	Ceramic Tiles 8mm
WC/LOUNGE	Timber Above Plasterboard 100mm	1.7		No Insulation	Ceramic Tiles 8mm
BATH/LOUNGE	Timber Above Plasterboard 100mm	1.6		No Insulation	Ceramic Tiles 8mm
BATH/LAUNDRY	Timber Above Plasterboard 100mm	4.1		No Insulation	Ceramic Tiles 8mm
BED 4/LOUNGE	Timber Above Plasterboard 100mm	0.9		No Insulation	Carpet 10mm
BED 4/POWDER	Timber Above Plasterboard 100mm	1.2		No Insulation	Carpet 10mm
BED 4/DINING KITCHEN	Timber Above Plasterboard 100mm	1.4		No Insulation	Carpet 10mm
BED 4/GARAGE	Timber Above Plasterboard 100mm	8.8		No Insulation	Carpet 10mm
UPPER LOUNGE/LOUNGE	Timber Above Plasterboard 100mm	4.0		No Insulation	Carpet 10mm

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Dunung	reatures	s continued

UPPER LOUNGE/DINING KITCHEN	Timber Above Plasterboard 100mm	0.6	No Insulation	Carpet 10mm
UPPER LOUNGE/POWDEF	Timber Above Plasterboard R 100mm	1.8	No Insulation	Carpet 10mm
UPPER LOUNGE/DINING KITCHEN	Timber Above Plasterboard 100mm	17.7	No Insulation	Carpet 10mm
UPPER LOUNGE/DINING KITCHEN	Timber Above Plasterboard 100mm	2.1	No Insulation	Carpet 10mm
BED 2/DINING KITCHEN	Timber Above Plasterboard 100mm	13.3	No Insulation	Carpet 10mm
BED 3/DINING KITCHEN	Timber Above Plasterboard 100mm	13.2	No Insulation	Carpet 10mm

Ceiling type Location Construction Added **Roof space** insulation above HOME OFFICE **Timber Above Plasterboard** No Insulation No **Timber Above Plasterboard** No LOUNGE No Insulation ENTRY **Timber Above Plasterboard** No Insulation No **Timber Above Plasterboard** LAUNDRY No Insulation No **Timber Above Plasterboard** POWDER No Insulation No **DINING KITCHEN** Plasterboard **Bulk Insulation** Yes R3.5 **DINING KITCHEN Timber Above Plasterboard** No Insulation No **Timber Above Plasterboard DINING KITCHEN** No Insulation No GARAGE Plasterboard Yes No insulation GARAGE **Timber Above Plasterboard** No Insulation No MASTER SUITE Plasterboard **Bulk Insulation** Yes R3.5 **ENSUITE** Plasterboard **Bulk Insulation** Yes R3.5 WC Plasterboard **Bulk Insulation** Yes R3.5 BATH Plasterboard **Bulk Insulation** Yes R3.5 BED 4 Plasterboard **Bulk Insulation** Yes R3.5 UPPER LOUNGE Plasterboard **Bulk Insulation** Yes R3.5 UPPER LOUNGE Plasterboard **Bulk Insulation** Yes R3.5 BED 2 Plasterboard **Bulk Insulation** Yes R3.5 BED 3 Plasterboard **Bulk Insulation** Yes R3.5

Ceiling penetrations

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				A Otal Tating.	
Building featu	ures continue	d			
Location	Number	Туре		Diameter (mm)	Sealed/unsealed
POWDER	1	Exhaust Fans		300	Sealed
Ceiling fans					
Location	Number	Diameter (n	nm)		
None Present					
Roof type					
Construction				Added insulation	Roof colour
Roof Tiles				Foil, Gap Ab Reflective Si	ove, Dark
				Down, Anti-g	
				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

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