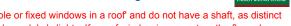
Certificate number: 0003790334 Certificate Date: 18 Apr 2019 ★ Star rating: 6.2



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

VIC/BDAV/12/1441 number:

Name: Ian Fry

Organisation: Frys Energywise

Email: comply@frysenergywise.com.au

Phone: 02 9899 2825

Declaration The Assessor has provided design

of interest: advice to the Applicant BERS Pro v4.3.0.2d (3.13) Software:

BDAV AAO:

Overview

Dwelling details

Street: 19 Malbara Crescent

Suburb: Frenchs Forest

State: Postcode: 2086 **NSW** NCC Class: **New Dwelling 1A** Type:

NatHERS

climate zone: 56 Lot/DP

number: 18/227585 Exposure: Suburban

Key construction and insulation materials

(see following pages for details)

Construction: Brick Veneer

Roof Tiles

Suspended Timber Floor

Insulation: **R2.0** wall insulation

> R4.0 ceiling insulation No floor insulation

STG-007-01 A Aluminium Sliding Glazing:

Window SG 3CIr

Net floor area (m²)

Conditioned: 244.0 Unconditioned: 56.0 Garage: 37.0 TOTAL: 300.0

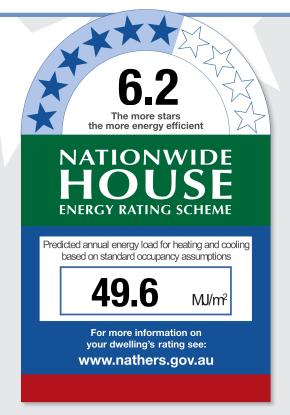
Annual thermal performance loads (MJ/m²)

Heating: 27.8 Cooling: 21.8 TOTAL: 49.6

Plan documents

Coelho Dos Santos 29913405 Plan ref/date:

Prepared by: JS



Ceiling penetrations

(see following pages for details)

Sealed:

TOTAL:**

Unsealed:

**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: Unknown

0

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.



Certificate number: 0003790334 Certificate Date: 18 Apr 2019 ★ Star rating: 6.2



Building features

Window type and performance value						
Window ID	Window type	U-value	SHGC			
STG-002-01 A	STG-002-01 A Aluminium Awning Window SG 3Clr	6.5	0.65			
STG-007-01 A	STG-007-01 A Aluminium Sliding Window SG 3Clr	6.3	0.73			
STG-005-02 A	STG-005-02 A Aluminium Sliding Door SG 5CIr	6.3	0.72			

Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Guest	STG-002-01 A	n/a	2000	2400	N	No Shading
PDR	STG-002-01 A	n/a	1000	600	E	No Shading
Home Theatre	STG-007-01 A	n/a	600	1800	E	No Shading
Home Theatre	STG-007-01 A	n/a	600	1800	Е	No Shading
WIP	STG-007-01 A	n/a	600	1800	W	No Shading
Kitchen/Living	STG-007-01 A	n/a	1000	800	Е	No Shading
Kitchen/Living	STG-005-02 A	n/a	2400	3600	S	No Shading
Kitchen/Living	STG-005-02 A	n/a	2400	3600	S	No Shading
Kitchen/Living	STG-007-01 A	n/a	2000	2200	W	No Shading
Bedroom 2	STG-002-01 A	n/a	1200	800	N	No Shading
Bedroom 2	STG-002-01 A	n/a	1200	2400	N	No Shading
Bedroom 3	STG-002-01 A	n/a	800	2400	N	No Shading
Bath	STG-007-01 A	n/a	1200	1500	E	No Shading
Bedroom 4	STG-007-01 A	n/a	1200	1500	Е	No Shading
Ensuite 1	STG-007-01 A	n/a	1200	1800	W	No Shading
Bedroom 1	STG-007-01 A	n/a	1000	2600	S	No Shading
Leisure	STG-007-01 A	n/a	1000	800	Е	No Shading
Leisure	STG-007-01 A	n/a	600	1800	Е	No Shading
Leisure	STG-007-01 A	n/a	600	1800	Е	No Shading

ID	Window	type			U-value	SHGC
None Presen	it					
Roof windo	w and skyligh	nt schedule				
Location	ID	Roof window/skylight	Area (m²)	Orientation	Outdoor shade	Indoor shade/diffuser

External wa	III type					
ID	Wall type		Insulation		Wa	ll wrap or foil
EW-1	Single Skin B	Brick	No insulation		No	
EW-2	Brick Veneer		No insulation		No	
EW-3	Brick Veneer		Bulk Insulation	n R2	No	
EW-4	Fibro Cavity I	Panel Direct Fix	Bulk Insulation	n R2	No	
External wa	II schedule					
Location	<u>I</u> D	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves

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Building features continued

						(mm)
Garage 1	EW-1	6700	2825	N	No	100
Garage 1	EW-2	1000	2825	Е	No	5300
Garage 1	EW-2	2500	2825	S	No	100
Garage 1	EW-2	5600	2825	W	No	100
Guest	EW-3	3500	2750	N	No	100
Guest	EW-3	3495	2750	Е	No	100
Guest	EW-3	2000	2750	W	No	8500
PDR	EW-3	1890	2750	Е	No	100
Laundry	EW-3	1990	2750	W	No	100
Home Theatre	EW-3	4690	2750	Е	No	100
WIP	EW-3	2390	2750	W	No	100
Kitchen/Living	EW-3	1690	2750	N	No	2100
Kitchen/Living	EW-3	7195	2750	Е	No	100
Kitchen/Living	EW-3	9400	2750	S	No	100
Kitchen/Living	EW-3	6295	2750	W	No	100
Bedroom 2	EW-4	2200	1595	Е	No	0
Bedroom 2	EW-3	2200	855	Е	No	600
Bedroom 2	EW-3	1095	2450	Е	No	600
Bedroom 2	EW-4	3995	2450	W	No	600
Bedroom 2	EW-4	5200	1595	N	No	0
Bedroom 2	EW-3	5200	855	N	No	600
Bedroom 3	EW-4	4195	2450	N	No	600
Bedroom 3	EW-3	1595	2450	W	No	600
Bedroom 3	EW-4	2500	2450	W	No	600
Bath	EW-3	3090	2450	Е	No	600
Bedroom 4	EW-3	3690	2450	Е	No	600
Ensuite 1	EW-3	3290	2450	W	No	600
Bedroom 1	EW-3	1395	2450	S	No	600
Bedroom 1	EW-3	5695	2450	W	No	600
Bedroom 1	EW-3	3990	2450	S	No	600
Leisure	EW-3	7195	2450	Е	No	600
Leisure	EW-3	3995	2450	S	No	600
Upper Hall	EW-4	195	2450	W	No	4800

Wall type	Area (m²)	Insulation	Wall wrap or foil
IW-1 - Cavity wall, direct fix plasterboard, single gap	24.0	Bulk Insulation, No Air Gap R2	No
IW-2 - Cavity wall, direct fix plasterboard, single gap	191.0	No insulation	No
IW-3 - Cavity wall, direct fix plasterboard, single gap	32.0	Bulk Insulation, No Air Gap R1.7	No

Floors

Certificate number: 0003790334 Certificate Date:

18 Apr 2019

★ Star rating:



Building features continued

Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Garage 1	Waffle pod slab 175 mm 100mm	37.1	None	Waffle Pod 175mm	Bare
Guest	Waffle pod slab 225 mm 100mm	12.0	None	Waffle Pod 225mm	Carpet+Rubber Underlay 18mm
PDR	Waffle pod slab 225 mm 100mm	4.3	None	Waffle Pod 225mm	Ceramic Tiles 8mm
Laundry	Waffle pod slab 225 mm 100mm	7.9	None	Waffle Pod 225mm	Ceramic Tiles 8mm
Home Theatre	Waffle pod slab 225 mm 100mm	15.9	None	Waffle Pod 225mm	Carpet+Rubber Underlay 18mn
WIP	Waffle pod slab 225 mm 100mm	8.8	None	Waffle Pod 225mm	Ceramic Tiles 8mm
Kitchen/Living	Waffle pod slab 225 mm 100mm	14.4	None	Waffle Pod 225mm	Ceramic Tiles 8mm
Kitchen/Living	Waffle pod slab 225 mm 100mm	64.8	None	Waffle Pod 225mm	Ceramic Tiles 8mm
Bedroom 2/Guest	Timber Above Plasterboard 19mm	11.6		No Insulation	Carpet+Rubber Underlay 18mm
Bedroom 2/Kitchen/Living	Timber Above Plasterboard 19mm	3.9		No Insulation	Carpet+Rubber Underlay 18mn
Bedroom 2	Suspended Timber Floor 19mm	3.4	Open	No Insulation	Carpet+Rubber Underlay 18mn
Bedroom 3/Garage	Timber Above Plasterboard 19mm	9.9		No Insulation	Carpet+Rubber Underlay 18mn
Bedroom 3/Laundry	Timber Above Plasterboard 19mm	7.0		No Insulation	Carpet+Rubber Underlay 18mn
Bath/PDR	Timber Above Plasterboard 19mm	4.0		No Insulation	Ceramic Tiles 8mm
Bath/Home Theatre	Timber Above Plasterboard 19mm	2.1		No Insulation	Ceramic Tiles 8mm
WC/Kitchen/Living	Timber Above Plasterboard 19mm	2.0		No Insulation	Ceramic Tiles 8mm
Bedroom 4/Home Theatre	Timber Above Plasterboard 19mm	12.5		No Insulation	Carpet+Rubber Underlay 18mn
Bedroom 4/Kitchen/Living	Timber Above Plasterboard 19mm	1.8		No Insulation	Carpet+Rubber Underlay 18mm
Ensuite 1/Laundry	Timber Above Plasterboard 19mm	1.0		No Insulation	Ceramic Tiles 8mm
Ensuite 1/WIP	Timber Above Plasterboard 19mm	7.3		No Insulation	Ceramic Tiles 8mm
Ensuite 1/Kitchen/Living	Timber Above Plasterboard 19mm	3.1		No Insulation	Ceramic Tiles 8mm
Bedroom 1/Kitchen/Living	Timber Above Plasterboard 19mm	9.8		No Insulation	Carpet+Rubber Underlay 18mn
Bedroom 1/Kitchen/Living	Timber Above Plasterboard 19mm	19.9		No Insulation	Carpet+Rubber Underlay 18mn
Leisure/Kitchen/Living	Timber Above Plasterboard 19mm	28.3		No Insulation	Carpet+Rubber Underlay 18mm
Upper Hall/Home Theatre	Timber Above Plasterboard 19mm	1.2		No Insulation	Carpet+Rubber Underlay 18mn
Upper Hall/WIP	Timber Above Plasterboard 19mm	1.7		No Insulation	Carpet+Rubber Underlay 18mn
Upper Hall/Kitchen/Living	Timber Above Plasterboard 19mm	6.7		No Insulation	Carpet+Rubber Underlay 18mn

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Building features continued

Upper Timber Above Plasterboard 2.2 No Insulation Carpet+Rubber Hall/Kitchen/Living 19mm

Location	Construction	Added insulation	Roof space above
Garage 1	Plasterboard	No insulation	Yes
Garage 1	Timber Above Plasterboard	No Insulation	No
Guest	Timber Above Plasterboard	No Insulation	No
PDR	Timber Above Plasterboard	No Insulation	No
Laundry	Timber Above Plasterboard	No Insulation	No
Home Theatre	Timber Above Plasterboard	No Insulation	No
WIP	Timber Above Plasterboard	No Insulation	No
Kitchen/Living	Timber Above Plasterboard	No Insulation	No
Kitchen/Living	Timber Above Plasterboard	No Insulation	No
Bedroom 2	Plasterboard	Bulk Insulation R4	Yes
Bedroom 3	Plasterboard	Bulk Insulation R4	Yes
Bath	Plasterboard	Bulk Insulation R4	Yes
WC	Plasterboard	Bulk Insulation R4	Yes
Bedroom 4	Plasterboard	Bulk Insulation R4	Yes
Ensuite 1	Plasterboard	Bulk Insulation R4	Yes
Bedroom 1	Plasterboard	Bulk Insulation R4	Yes
Bedroom 1	Plasterboard	Bulk Insulation R4	Yes
Leisure	Plasterboard	Bulk Insulation R4	Yes
Upper Hall	Plasterboard	Bulk Insulation R4	Yes

Ceiling penetrations					
Location	Number	Туре	Diameter (mm)	Sealed/unsealed	
WC	1	Exhaust Fans	300	Sealed	

Ceiling fans			
Location	Number	Diameter (mm)	
None Present			

Roof type

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Building features continued

Construction	Added Roof colour insulation
Roof Tiles	Foil, Gap Above, Dark Reflective Side Down, Anti-glare Up



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

^{*} Nationwide House Energy Rating Scheme (NatHERS) is an initiative of the Australian, state and territory governments. For more details see www.nathers.gov.au