Certificate number: 0004440376 Certificate Date: 09 Dec 2019 ★ Star rating: **5.4** 

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 v4.3.0.2f (3.13) Software:

**BDAV** AAO:

### Overview

#### **Dwelling details**

Street: 73 Lorikeet Grove

Suburb: Warriewood

State: Postcode: 2102 **NSW** NCC Class: **New Dwelling 1A** Type:

**NatHERS** 

climate zone: 56 Lot/DP

number: 3/270907 Exposure: Suburban

#### Key construction and insulation materials

(see following pages for details)

Construction: Brick Veneer

**Roof Tiles** 

Suspended Timber Floor

Insulation: **R2.2 wall insulation** 

> R5.0 ceiling insulation No floor insulation

STG-007-01 A Aluminium Sliding Glazing:

Window SG 3CIr

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

Conditioned: 166.0 Unconditioned: 44.0 Garage: 30.0 TOTAL: 210.0

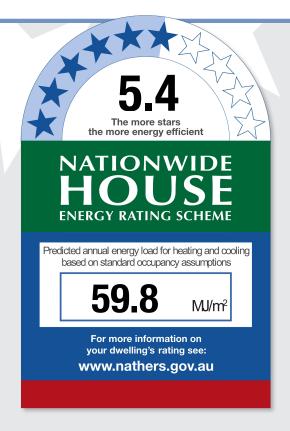
### **Annual thermal** performance loads (MJ/m<sup>2</sup>)

Heating: 38.8 Cooling: 21.0 TOTAL: 59.8

#### Plan documents

Plan ref/date: 29913970

Prepared by:



#### Ceiling penetrations

(see following pages for details)

Sealed: Unsealed:

TOTAL:\*\*

\*\*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.



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# **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 5Clr	6.3	0.72			

#### Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Living	STG-002-01 A	n/a	2000	800	SW	No Shading
Living	STG-002-01 A	n/a	2000	800	SW	No Shading
Powder	STG-007-01 A	n/a	2000	800	NW	No Shading
Kitchen/Family	STG-007-01 A	n/a	697	800	NW	No Shading
Kitchen/Family	STG-007-01 A	n/a	2000	800	NW	No Shading
Kitchen/Family	STG-007-01 A	n/a	2000	800	NW	No Shading
Kitchen/Family	STG-005-02 A	n/a	2400	2700	NE	No Shading
Kitchen/Family	STG-005-02 A	n/a	2400	2700	NE	No Shading
Kitchen/Family	STG-007-01 A	n/a	500	2600	SE	No Shading
Kitchen/Family	STG-007-01 A	n/a	600	550	NE	No Shading
Leisure	STG-007-01 A	n/a	1200	2100	NE	No Shading
Leisure	STG-007-01 A	n/a	1303	800	NW	No Shading
Bed 2	STG-007-01 A	n/a	1200	1800	SE	No Shading
Bath	STG-007-01 A	n/a	1000	800	SE	No Shading
Bed 3	STG-007-01 A	n/a	1200	1500	SE	No Shading
Bed 4	STG-002-01 A	n/a	1200	2400	SW	No Shading
Bed 1	STG-002-01 A	n/a	2100	790	SW	No Shading
Bed 1	STG-002-01 A	n/a	2100	790	SW	No Shading
Bed 1	STG-005-02 A	n/a	2100	820	SW	No Shading
Ensuite	STG-002-01 A	n/a	1000	600	NW	No Shading

ID	Window type				U-value	SHGC
None Present						
Roof window	and skylight sch	edule				
Location	ID	Roof window/skylight	Area (m²)	Orientation	Outdoor shade	Indoor shade/diffuser

ID	Wall type	Insulation	Wall wrap or foil
EW-1	Brick Veneer	No insulation	No
EW-2	Single Skin Brick	No insulation	No
EW-3	Brick Veneer	Bulk Insulation R2.2	No
EW-4	Fibro Cavity Panel Direct Fix	Bulk Insulation R2.2	No

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# **Building features continued**

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Garage	EW-1	5495	3264	SE	No	100
Garage	EW-2	5200	3264	SW	No	100
Garage	EW-3	395	2750	SW	No	2700
Entry	EW-3	1590	2750	SW	No	2600
Living	EW-3	2000	2750	SW	No	1500
Living	EW-3	1500	2750	SW	No	100
Living	EW-3	3700	2750	NW	No	100
Living	EW-3	1000	2750	NE	No	100
Living	EW-3	1100	2750	SE	No	2000
Powder	EW-3	1590	2750	NW	No	100
Laundry	EW-3	1790	2750	NW	No	100
Kitchen/Family	EW-3	2095	3075	NW	No	100
Kitchen/Family	EW-3	3700	2750	NW	No	100
Kitchen/Family	EW-3	8500	2750	NE	No	3000
Kitchen/Family	EW-3	3800	2750	SE	No	100
Kitchen/Family	EW-3	1200	2750	NE	No	100
Kitchen/Family	EW-3	2495	2750	SE	No	100
Leisure	EW-3	2400	795	NE	No	0
Leisure	EW-4	2400	1656	NE	No	700
Leisure	EW-4	1495	2450	NE	No	700
Leisure	EW-3	5795	795	NW	No	0
Leisure	EW-4	5795	1655	NW	No	700
Bed 2	EW-4	2195	2450	NE	No	700
Bed 2	EW-3	2400	795	NE	No	0
Bed 2	EW-4	2400	1655	NE	No	700
Bed 2	EW-3	3195	795	SE	No	0
Bed 2	EW-4	3195	1655	SE	No	700
Bath	EW-3	595	795	SE	No	0
Bath	EW-4	595	1656	SE	No	700
Bath	EW-4	1895	2450	SE	No	700
Bed 3	EW-4	2990	2450	SE	No	700
Bed 4	EW-4	3095	2450	SE	No	700
Bed 4	EW-3	4195	795	SW	No	0
Bed 4	EW-4	4195	1655	SW	No	700
Bed 1	EW-3	1100	795	SE	No	0
Bed 1	EW-4	1100	1655	SE	No	4900
Bed 1	EW-3	600	795	SW	No	0
Bed 1	EW-4	600	1656	SW	No	2100
Bed 1	EW-4	2500	2450	SW	No	2100
Bed 1	EW-3	1200	795	SW	No	0
Bed 1	EW-4	1200	1656	SW	No	2100
Bed 1	EW-4	3695	2450	NW	No	700
						0
Ensuite	EW-3	3390	795	NW	No	
Ensuite	EW-4	3390	1655	NW	No	700

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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	71.0	Bulk Insulation, No Air Gap R2.2	No	
IW-2 - Cavity wall, direct fix plasterboard, single gap	14.0	Bulk Insulation, No Air Gap R1.7	No	
IW-3 - Cavity wall, direct fix plasterboard, single gap	93.0	No insulation	No	

Location	Construction	Area (m²)	Sub floor	Added	Covering
			ventilation	insulation	
Garage	Waffle pod slab 225 mm 100mm	30.3	None	Waffle Pod 225mm	Bare
Entry	Waffle pod slab 300 mm 100mm	10.0	None	Waffle Pod 300mm	Carpet+Rubber Underlay 18mm
Living	Waffle pod slab 300 mm 100mm	12.7	None	Waffle Pod 300mm	Carpet+Rubber Underlay 18mm
Powder	Waffle pod slab 300 mm 100mm	2.3	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Laundry	Waffle pod slab 300 mm 100mm	4.5	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Kitchen/Family	Waffle pod slab 300 mm 100mm	54.0	None	Waffle Pod 300mm	80/20 Carpet 10mm/Ceramic
Leisure/Kitchen/Fa mily	Timber Above Plasterboard 100mm	24.4		No Insulation	Carpet+Rubber Underlay 18mm
Bed 2/Kitchen/Family	Timber Above Plasterboard 19mm	14.4		No Insulation	Carpet+Rubber Underlay 18mm
Bath/Kitchen/Family	Timber Above Plasterboard 19mm	6.9		No Insulation	Ceramic Tiles 8mm
Bed 3/Garage	Timber Above Plasterboard 19mm	7.8		Bulk Insulation R2.2	Carpet+Rubber Underlay 18mm
Bed 3/Kitchen/Family	Timber Above Plasterboard 19mm	1.9		No Insulation	Carpet+Rubber Underlay 18mm
Bed 4/Garage	Timber Above Plasterboard 19mm	12.7		Bulk Insulation R2.2	Carpet+Rubber Underlay 18mm
Bed 1/Garage	Timber Above Plasterboard 19mm	0.5		Bulk Insulation R2.2	Carpet+Rubber Underlay 18mm
Bed 1/Entry	Timber Above Plasterboard 19mm	6.9		No Insulation	Carpet+Rubber Underlay 18mm
Bed 1/Living	Timber Above Plasterboard 19mm	9.0		No Insulation	Carpet+Rubber Underlay 18mm
Bed 1/Laundry	Timber Above Plasterboard 19mm	1.7		No Insulation	Carpet+Rubber Underlay 18mm
Bed 1	Suspended Timber Floor 19mm	1.9	Open		Carpet+Rubber Underlay 18mm
Ensuite/Powder	Timber Above Plasterboard 19mm	2.4		No Insulation	Ceramic Tiles 8mm
Ensuite/Laundry	Timber Above Plasterboard 19mm	2.9		No Insulation	Ceramic Tiles 8mm
Passage/Garage	Timber Above Plasterboard 19mm	2.2		Bulk Insulation R2.2	Carpet+Rubber Underlay 18mm
Passage/Entry		3.1		No Insulation	

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# **Building features continued**

Timber Above Plasterboard 19mm			Carpet+Rubber Underlay 18mm
WC/Kitchen/Family Timber Above Plasterboard 19mm	2.0	No Insulation	Ceramic Tiles 8mm

Ceiling type				
Location	Construction	Added insulation	Roof space above	
Garage	Plasterboard	No insulation	Yes	
Garage	Garage Timber Above Plasterboard		No	
Entry	Timber Above Plasterboard	No Insulation	No	
Living	g Plasterboard		Yes	
Living	Timber Above Plasterboard	No Insulation	No	
Powder	Timber Above Plasterboard	No Insulation	No	
Laundry	Timber Above Plasterboard	No Insulation	No	
Kitchen/Family	Plasterboard	Bulk Insulation R5	Yes	
Kitchen/Family	Timber Above Plasterboard	No Insulation	No	
Leisure	Plasterboard	Bulk Insulation R5	Yes	
Bed 2	Plasterboard	Bulk Insulation R5	Yes	
Bath	Plasterboard	Bulk Insulation R5	Yes	
Bed 3	Plasterboard	Bulk Insulation R5	Yes	
Bed 4	Plasterboard	Bulk Insulation R5	Yes	
Bed 1	Plasterboard	Bulk Insulation R5	Yes	
Ensuite	Plasterboard	Bulk Insulation R5	Yes	
Passage	Plasterboard	Bulk Insulation R5	Yes	
WC	Plasterboard	Bulk Insulation R5	Yes	

Ceiling penetrations				
Location	Number	Туре	Diameter (mm) Se	aled/unsealed
Powder	1	Exhaust Fans	0 S	ealed
Doth	4	Exhaust Fons	200 C	l - d

Powder	1	Exhaust Fans	0	Sealed	
Bath	1	Exhaust Fans	300	Sealed	
Ensuite	1	Exhaust Fans	300	Sealed	
WC	1	Exhaust Fans	300	Sealed	

# **Ceiling fans**

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# **Building features continued**

Location	Number	Diameter (mm)
None Present		

Roof type		
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

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