Certificate number: 0002482768-01

Certificate Date: 02 Nov 2018 ★ 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

number: 20390

Name: Fadi Sweis

Organisation: Energy Ratings Australia Pty Ltd

Email: fsweis@eraservices.com.au

Phone: 1800 372 669

Declaration None

of interest:

BERS Pro v4.3.0.2d (3.13) Software:

AAO: **ABSA** 

## Overview

### **Dwelling details**

Street: Warriewood Road

Suburb: Warriewood

State: **NSW New Dwelling** Type:

Postcode: 2102 NCC Class: **1A** 

**NatHERS** 

climate zone: 56 Lot/DP

number: 1/Unreg Exposure: Suburban

# Key construction and insulation materials

(see following pages for details)

Construction: Brick Veneer

Corrugated Iron

Waffle pod slab 300 mm

Insulation: R2.5 wall insulation

R4.1 ceiling insulation

No floor insulation

BRD-063-07 A SIG Fixed Lite (67mm) Glazing:

SG 4ET

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

Conditioned: 124.0 Unconditioned: 43.0 Garage: 30.0 TOTAL: 167.0

# **Annual thermal** performance loads

(MJ/m<sup>2</sup>)

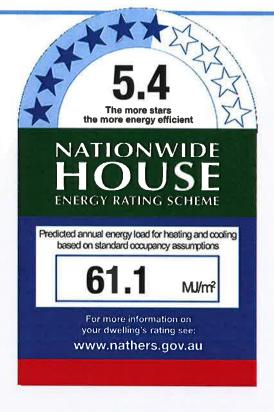
Heating: 35.5 Cooling: 25.6

TOTAL:

### Plan documents

A007713 Plan ref/date:

Prepared by:



# Ceiling penetrations

(see following pages for details)

Sealed:

Unsealed: 0

TOTAL:\*\* 23

\*\*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: 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.



61.1

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

Certificate number: 0002482768-01 Certificate Date:

02 Nov 2018

★ Star rating:



# **Building features**

Window type and	l performance value
-----------------	---------------------

Window ID	Window type	U-value	SHGC
ALM-001-01 A	ALM-001-01 A Aluminium A SG Clear	6.7	0.57
BRD-063-07 A	BRD-063-07 A SIG Fixed Lite (67mm) SG 4ET	4.1	0.66
BRD-001-13 A	BRD-001-13 A ESS Sliding Window (52mm) SG 4EA	4.6	0.63
AIR-020-03 W	AIR-020-03 W Cedar Double Hung Window SG 5Clr	4.7	0.61
ALM-002-01 A	ALM-002-01 A Aluminium B SG Clear	6.7	0.70
STG-002-18 A	STG-002-18 A Aluminium Awning Window SG 638CPCIr	4.9	0.52
ALS-030-24 A	ALS-030-24 A 92mm Carinya Classic Awning Window SG 6ET	5.1	0.53

### Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Laundry	ALM-001-01 A	n/a	2100	820	SE	No Shading
Powder	BRD-063-07 A	n/a	1800	300	SW	No Shading
Kitchen/Living	BRD-063-07 A	n/a	2000	1400	NW	No Shading
Kitchen/Living	BRD-001-13 A	n/a	2400	2600	SW	No Shading
Kitchen/Living	AIR-020-03 W	n/a	2300	2100	SW	No Shading
Kitchen/Living	BRD-001-13 A	n/a	2000	2100	NW	No Shading
Kitchen/Living	BRD-063-07 A	n/a	686	2800	NW	No Shading
Kitchen/Living	BRD-063-07 A	n/a	2000	2100	NE	No Shading
Bedroom 1	ALM-001-01 A	n/a	1500	2100	NE	No Shading
Bedroom 2	ALM-002-01 A	n/a	1200	1500	SW	No Shading
Bedroom 3	ALM-002-01 A	n/a	600	2100	SE	No Shading
Ensuite	ALM-002-01 A	n/a	300	1600	SE	No Shading
Bathroom	ALM-002-01 A	n/a	1200	1500	SW	No Shading
Bathroom	ALM-002-01 A	n/a	900	600	NW	No Shading
Study/Hallway	STG-002-18 A	n/a	900	2100	NW	No Shading
Study/Hallway	ALS-030-24 A	n/a	429	1570	NW	No Shading
Study/Hallway	BRD-063-07 A	n/a	429	1570	NW	No Shading
Study/Hallway	ALS-030-24 A	n/a	429	1570	NE	No Shading
Study/Hallway	BRD-063-07 A	n/a	429	1570	NE	No Shading

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	t				

# External wall type

ID			
עו	Wall type	Insulation	Wall wrap or foil
EW-1	Cavity Brick	No insulation	No
EW-2	Brick Veneer	No insulation	No

<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

Certificate number: 0002482768-01 Certificate Date:

02 Nov 2018

★ Star rating:



# **Building features continued**

EW-3	Brick Veneer	Bulk Insulation R2.5	No
EW-4	Weatherboard Cavity Panel Direct	Bulk Insulation R2.5	No

Weatherboard Cavity Panel Direct Bulk Insulation R2.5

No

# External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Garage 1	EW-1	5495	2675	NE	No	1200
Garage 1	EW-2	5495	2675	SE	No	50
Laundry	EW-3	2640	2600	SE	No	50
Powder	EW-3	1995	2600	SE	No	50
Powder	EW-3	1545	2600	SW	No	50
Kitchen/Living	EW-3	1050	2600	NW	No	50
Kitchen/Living	EW-3	1500	2600	NE	No	2000
Kitchen/Living	EW-3	1950	2600	NW	No	1550
Kitchen/Living	EW-3	1445	2600	NE	No	1200
Kitchen/Living	EW-3	9895	2600	SW	No	50
Kitchen/Living	EW-3	7150	2600	NW	No	50
Kitchen/Living	EW-3	3000	2600	NE	No	50
Bedroom 1	EW-4	3595	2450	SE	No	50
Bedroom 1	EW-4	1150	2450	NW	No	50
Bedroom 1	EW-4	3950	2450	NE	No	50
Bedroom 2	EW-4	3245	2450	SW	No	50
Bedroom 2	EW-4	3045	2450	SE	No	50
Bedroom 3	EW-4	2990	2450	SE	No	50
Ensuite	EW-4	1645	2450	SE	No	50
Ensuite	EW-4	700	2450	SW	No	50
WIR 2	EW-4	1140	2450	SW	No	50
Bathroom	EW-4	1945	2450	SW	No	50
Bathroom	EW-3	4645	2450	NW	No	50
Study/Hallway	EW-3	3745	2450	NW	No	50
Study/Hallway	EW-4	1750	2450	NW	No	50
Study/Hallway	EW-4	3095	2450	NE	No	50

Internal wall type			
Wall type	Area (m²)	Insulation	Wall wrap or foil
IW-1 - Cavity wall, direct fix plasterboard, single gap	29.0	Bulk Insulation, No Air Gap R2.5	No
IW-2 - Cavity wall, direct fix plasterboard, single gap	92.0	No insulation	No

Floors					
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Garage 1	Waffle pod slab 225 mm 100mm	29.8	None	Waffle Pod 225mm	Bare
Laundry	Waffle pod slab 300 mm 100mm	6.0	None	Waffle Pod	Ceramic Tiles

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

Certificate number: 0002482768-01

Certificate Date:

02 Nov 2018

★ Star rating:

5.4



#### **Building features continued** 300mm 8mm Powder Waffle pod slab 300 mm 100mm 2,9 None Waffle Pod **Ceramic Tiles** 300mm 8mm Kitchen/Living Waffle pod slab 300 mm 100mm 64.0 None Waffle Pod **Ceramic Tiles** 300mm 8mm Bedroom 1/Garage Timber Above Plasterboard 9.5 No Insulation Carpet 10mm 100mm Bedroom 1 Suspended Timber Floor 100mm 4.4 **Totally Open** No Insulation Carpet 10mm **Bedroom Timber Above Plasterboard** 9.4 No Insulation Carpet 10mm 2/Kitchen/Living 19mm Bedroom 3/Garage Timber Above Plasterboard 4.3 No Insulation Carpet 10mm 19mm **Bedroom** Timber Above Plasterboard 8.0 No Insulation Carpet 10mm 3/Laundry 19mm Bedroom Timber Above Plasterboard 4.2 No Insulation Carpet 10mm 3/Kitchen/Living 19mm Timber Above Plasterboard Ensuite/Garage 1 3.9 No Insulation **Ceramic Tiles** 19mm 8<sub>mm</sub> WIR 1/Garage 1 Timber Above Plasterboard 2.0 No Insulation Carpet 10mm 19mm **WIR Timber Above Plasterboard** 2.0 No Insulation Carpet 10mm 2/Kitchen/Living 19mm Bathroom/Kitchen/ **Timber Above Plasterboard** 7.2 No Insulation **Ceramic Tiles** Living 19mm 8<sub>mm</sub> **Timber Above Plasterboard** Study/Hallway/Gar 0.8 No Insulation Carpet 10mm age 1 19mm Study/Hallway/Kitc **Timber Above Plasterboard** 17.4 No Insulation Carpet 10mm hen/Living 19mm Study/Hallway Suspended Timber Floor 19mm 2.8 **Totally Open** 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	Plasterboard	Bulk Insulation R4.1	Yes
Laundry	Timber Above Plasterboard	No Insulation	No
Powder	Plasterboard	Bulk Insulation R4.1	Yes
Kitchen/Living	Plasterboard	Bulk Insulation R4.1	Yes
Kitchen/Living	Timber Above Plasterboard	No Insulation	No
Bedroom 1	Plasterboard	Bulk Insulation R4.1	Yes
Bedroom 2	Plasterboard	Bulk Insulation R4.1	Yes
Bedroom 3	Plasterboard	Bulk Insulation R4.1	Yes
Ensuite	Plasterboard	Bulk Insulation R4.1	Yes
WIR 1	Plasterboard	Bulk Insulation R4.1	Yes

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

Certificate number: 0002482768-01 Certificate Date:

02 Nov 2018

★ Star rating:



# **Building features continued**

WIR 2	Plasterboard	Bulk Insulation R4.1	Yes
Bathroom	Plasterboard	Bulk Insulation R4.1	Yes
Study/Hallway	Plasterboard	Bulk Insulation R4.1	Yes

Location	Number	Type	Diameter (mm)	Sealed/unsealed
Powder	1	Exhaust Fans	300	Sealed
Kitchen/Living	20	Downlights - LED	150	Sealed
Ensuite	1	Exhaust Fans	300	Sealed
Bathroom	1	Exhaust Fans	300	Sealed

Ceiling fans			
Location	Number	Diameter (mm)	
None Present			

Construction	Added Roof colour insulation  Bulk, Reflective Medium Side Down, Antiglare Up R1.3	
Corrugated Iron		
Corrugated Iron	Bulk, Reflective Medium Side Down, Anti- glare Up R1.3	

Certificate number: 0002482768-01

**Certificate Date:** 

02 Nov 2018

★Star rating: 5.4



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