# Nationwide House Energy Rating Scheme\* Certificate

#### Certificate number: 0004183539

Certificate Date: 04 Sep 2019

★ Star rating: 5.1



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:	20390
Name:	Fadi Sweis
Organisation:	Energy Ratings Australia Pty Ltd
Email:	fsweis@eraservices.com.au
Phone:	1800 372 669
Declaration of interest:	None
Software:	BERS Pro v4.3.0.2d (3.13)
AAO:	ABSA

# **Overview**

## **Dwelling details**

Street: Suburb:	Bubalo Street Warriewood		
State:	NSW	Postcode:	2102
Туре:	New Dwelling	NCC Class: NatHERS	1A
Lot/DP		climate zone:	56
number:	14/-	Exposure:	Suburban

# Key construction and insulation materials

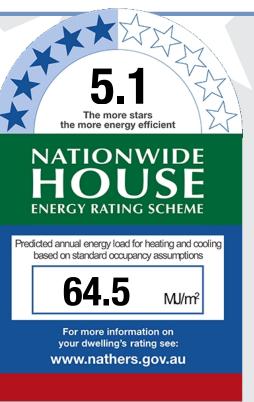
(see following pages for details)

Construction:	Weatherboard Cavity Panel Direct Fix
	Corrugated Iron
	Suspended Timber Floor
Insulation:	R2.5 wall insulation
	R4.1 ceiling insulation
	No floor insulation
Glazing:	ALM-001-01 A Aluminium A SG Clear

Net floor area	Net floor area (m <sup>2</sup> )		Annual thermal		
Conditioned: Unconditioned:	140.0 24.0		performanc (MJ/m <sup>2</sup> )	e loads	
Garage: TOTAL:	24.0 18.0 164.0		Heating: Cooling:	40.2 24.3	
	10110		TOTAL:	64.5	

#### **Plan documents**

Plan ref/date: A009185 Prepared by: DH



Ceiling penetra (see following pages for		maximu penetra	E: This total is the um number of ceiling ations allowed to a	
Sealed: Unsealed: TOTAL:**	2 0 2	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 t	ype: Unl	nown	1	
Window selectio	n -		Scan to access this	
		C	certificate online and confirm this is valid.	
default windows Note on allowable window va Only a 5% tolerance to the n SHGC window values show	only alues: cominated	C	certificate online and	
<b>default windows</b> Note on allowable window va Only a 5% tolerance to the n SHGC window values shown can be used with this rating. Note: Only a +/- 5% SHGC to allowed with this rating.	only alues: nominated n on page 2	C	certificate online and	

outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

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Certificate number	0004183539	Certificate Date	e: 04 Sep	2019 \star	Star rating:	5.1 NATIONWI
						ENERGY RATING SC
Building featur	es					
Window type ar	nd performanc	e value				
Window ID	Window type				U-value	SHGC
ALM-001-01 A	ALM-001-01 A A	luminium A SG CI	ear		6.7	0.57
BRD-063-07 A	BRD-063-07 A S	SIG Fixed Lite (67n	nm) SG 4ET		4.1	0.66
BRD-001-13 A	BRD-001-13 A E	SS Sliding Window	w (52mm) SG 4	IEA	4.6	0.63
ALM-002-01 A	ALM-002-01 A A	luminium B SG CI	ear		6.7	0.70
ALS-030-24 A	ALS-030-24 A 92mm Carinya Classic Awning Window SG 6ET 5.1					0.53
TIM-002-01 W	TIM-002-01 W Timber B SG Clear 5.4					0.63
AIR-020-03 W	AIR-020-03 W C	edar Double Hung	Window SG 5	Clr	4.7	0.61
Window schedu	ule					
Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Ldry	ALM-001-01 A	n/a	2100	820	NE	No Shading
Kitchen/Living	BRD-063-07 A	n/a	686	3300	NE	No Shading
Kitchen/Living	BRD-001-13 A	n/a	2300	3600	SE	No Shading
Kitchen/Living	BRD-063-07 A	n/a	2040	820	SE	No Shading
Kitchen/Living	ALM-002-01 A	n/a	2040	350	SE	No Shading
Study	ALS-030-24 A	n/a	2000	1200	NW	No Shading
Entry	BRD-063-07 A	n/a	2200	1300	SW	No Shading
Entry	TIM-002-01 W	n/a	2040	750	NW	No Shading
Bedroom 1	AIR-020-03 W	n/a	1200	2200	NW	No Shading
WIR	ALM-001-01 A	n/a	1200	700	NW	No Shading
WC (Ens)	ALM-001-01 A	n/a	1000	700	NE	No Shading
ENS	ALM-001-01 A	n/a	1000	700	NE	No Shading
Media	AIR-020-03 W	n/a	1200	2100	NE	No Shading
Media	BRD-063-07 A	n/a	600	2400	SW	No Shading
Bedroom 2	AIR-020-03 W	n/a	1200	1800	NE	No Shading
Bedroom 3	AIR-020-03 W	n/a	1200	1800	NE	No Shading
WC	ALM-001-01 A	n/a	800	600	SW	No Shading
Bath	BRD-063-07 A	n/a	1600	1400	SW	No Shading

ID	Window t	уре			U-value	SHGC
None Present						
Roof windov	v and skylight	schedule				
Location	ID	Roof window/skylight	Area (m <sup>2</sup> )	Orientation	Outdoor shade	Indoor shade/diffuser

External w	External wall type					
ID	Wall type	Insulation	Wall wrap or foil			
EW-1	Brick Veneer	No insulation	No			
EW-2	Brick Veneer	Bulk Insulation R2.5	No			
EW-3	Cavity Brick	No insulation	No			

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# **Building features continued**

Fix

EW-4

Weatherboard Cavity Panel Direct Bulk Insulation R2.5

_ocation	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Garage 1	EW-1	6045	2675	NE	No	50
Garage 1	EW-2	500	2600	SW	No	2050
Garage 1	EW-3	3050	2675	NW	No	688
Ldry	EW-2	1690	2600	NE	No	50
Kitchen/Living	EW-2	8095	2600	NE	No	50
Kitchen/Living	EW-2	4450	2600	SE	No	50
Kitchen/Living	EW-2	2700	2600	SW	No	1650
Kitchen/Living	EW-2	1600	2600	SE	No	2750
Kitchen/Living	EW-2	5795	2600	SW	No	50
PWD	EW-2	2040	2600	SW	No	50
Study	EW-2	800	2600	SE	No	50
Study	EW-2	2500	2600	SW	No	50
Study	EW-2	1800	2600	NW	No	50
Entry	EW-2	2295	2600	SW	No	50
Entry	EW-2	1995	2600	NW	No	1163
Bedroom 1	EW-4	4895	2450	SW	No	600
Bedroom 1	EW-4	3595	2450	NW	No	650
WIR	EW-4	1445	2450	NW	No	650
WIR	EW-4	2245	2450	NE	No	600
WC (Ens)	EW-4	1140	2450	NE	No	600
ENS	EW-4	1490	2450	NE	No	600
Media	EW-4	3390	2450	NE	No	600
Media	EW-4	6790	2450	SW	No	600
Bedroom 2	EW-4	3895	2450	NE	No	600
Bedroom 2	EW-4	2945	2450	SE	No	650
Bedroom 3	EW-4	4240	2450	NE	No	600
WC	EW-4	1590	2450	SW	No	600
Bath	EW-4	2095	2450	SE	No	650
Bath	EW-4	3145	2450	SW	No	600

# Internal wall type

Wall type	Area (m²)	Insulation	Wall wrap or foil
IW-1 - Cavity wall, direct fix plasterboard, single gap	22.0	Bulk Insulation, No Air Gap R2.5	No
IW-2 - Cavity wall, direct fix plasterboard, single gap	122.0	No insulation	No

Floors					
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Garage 1	Waffle pod slab 225 mm 100mm	18.1	None		Bare

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No

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# **Building features continued**

				Waffle Pod 225mm	
Ldry	Waffle pod slab 300 mm 100mm	4.4	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Kitchen/Living	Waffle pod slab 300 mm 100mm	49.7	None	Waffle Pod 300mm	Ceramic Tiles 8mm
PWD	Waffle pod slab 300 mm 100mm	2.1	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Study	Waffle pod slab 300 mm 100mm	6.4	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Entry	Waffle pod slab 300 mm 100mm	7.1	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Bedroom 1/Garage	Timber Above Plasterboard 19mm	4.4		No Insulation	Carpet 10mm
Bedroom 1/Study	Timber Above Plasterboard 19mm	1.2		No Insulation	Carpet 10mm
Bedroom 1/Entry	Timber Above Plasterboard 19mm	5.6		No Insulation	Carpet 10mm
Bedroom 1	Suspended Timber Floor 19mm	3.1	Totally Open	No Insulation	Carpet 10mm
WIR/Garage 1	Timber Above Plasterboard 19mm	2.3		No Insulation	Carpet 10mm
WIR	Suspended Timber Floor 19mm	0.8	Totally Open	No Insulation	Carpet 10mm
WC (Ens)/Garage 1	Timber Above Plasterboard 19mm	1.5		No Insulation	Ceramic Tiles 8mm
ENS /Garage 1	Timber Above Plasterboard 19mm	4.2		No Insulation	Ceramic Tiles 8mm
ENS /Entry	Timber Above Plasterboard 19mm	0.6		No Insulation	Ceramic Tiles 8mm
Media/Garage 1	Timber Above Plasterboard 19mm	5.2		No Insulation	Carpet 10mm
Media/Ldry	Timber Above Plasterboard 19mm	4.5		No Insulation	Carpet 10mm
Media/Kitchen/Livi ng	Timber Above Plasterboard 19mm	14.1		No Insulation	Carpet 10mm
Media/Study	Timber Above Plasterboard 19mm	0.8		No Insulation	Carpet 10mm
Media/Entry	Timber Above Plasterboard 19mm	1.1		No Insulation	Carpet 10mm
Bedroom 2/Kitchen/Living	Timber Above Plasterboard 19mm	11.2		No Insulation	Carpet 10mm
Bedroom 3/Kitchen/Living	Timber Above Plasterboard 19mm	12.0		No Insulation	Carpet 10mm
WC/Kitchen/Living	Timber Above Plasterboard 19mm	1.4		No Insulation	Ceramic Tiles 8mm
Bath/Kitchen/Living	Timber Above Plasterboard 19mm	4.2		No Insulation	Ceramic Tiles 8mm
Bath	Suspended Timber Floor 19mm	1.6	Totally Open	No Insulation	Ceramic Tiles 8mm

Ceiling type			
Location	Construction	Added insulation	Roof space above
Garage 1	Timber Above Plasterboard	No Insulation	No
Ldry	Timber Above Plasterboard	No Insulation	No

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Building feature	es continued					
Kitchen/Living	Plasterboard			Bulk Insulation R4.1	Yes	
Kitchen/Living	Timber Above	Plasterboard		No Insulation	No	
PWD	Plasterboard			Bulk Insulation R4.1	Yes	
Study	Plasterboard			Bulk Insulation R4.1	Yes	
Study	Timber Above	Plasterboard		No Insulation	No	
Entry	Timber Above	Plasterboard		No Insulation	No	
Bedroom 1	Plasterboard			Bulk Insulation R4.1	Yes	
WIR	Plasterboard			Bulk Insulation R4.1	Yes	
WC (Ens)	Plasterboard			Bulk Insulation R4.1	Yes	
ENS	Plasterboard			Bulk Insulation R4.1	Yes	
Media	Plasterboard			Bulk Insulation R4.1	Yes	
Bedroom 2	Plasterboard			Bulk Insulation R4.1	Yes	
Bedroom 3	Plasterboard			Bulk Insulation R4.1	Yes	
WC	Plasterboard			Bulk Insulation R4.1	Yes	
Bath	Plasterboard			Bulk Insulation R4.1	Yes	

#### **Ceiling penetrations** Location Number Туре Diameter (mm) Sealed/unsealed Exhaust Fans PWD 300 Sealed 1 Bath 1 **Exhaust Fans** 300 Sealed

Ceiling fans			
Location	Number	Diameter (mm)	
None Present			

Roof type				
Construction	Added Roof colour insulation			
Corrugated Iron	No Insulation, Medium Only an Air Gap			
Corrugated Iron	Foil, Gap Above, Medium Reflective Side Down, Anti-glare Up			
Roof Tiles	Foil, Gap Above, Medium			

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Building features continued					
			Reflective Side Down, Anti-glare 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