Nationwide House Energy Rating Scheme* Certificate

Certificate number: 0004676466

Certificate Date: 17 Mar 2020



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 v4.4.0.0 (3.21)

BDAV AAO:

Overview

Dwelling details

	24 Baz Retreat Warriewood		
State:	NSW	Postcode:	2102
Туре:	New Dwelling	NCC Class: NatHERS	1A
Lot/DP		climate zone:	56
number:	19/270907	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
	R3.5 ceiling insulation
	No floor insulation
Glazing:	STG-007-01 A Aluminium Sliding
	Window SG 3CIr

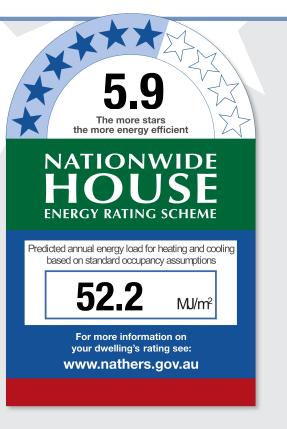
Net floor area (m²)

Conditioned: Unconditioned:	147.0 45.0	performance loads (MJ/m ²)		
Garage:	31.0	Heating:	39.2	
TOTAL:	192.0	Cooling:	13.0	
		TOTAL:	52.2	

Annual thermal

Plan documents

Plan ref/date: 29914083 Prepared by: PG



★ Star rating: 5.9

Ceiling penetration (see following pages for deta	s ma ails) pe	axin net	TE: This total is the num number of ceiling rations allowed to a		
Unsealed:	4 ce ex 0 thi 4 an Lo pe	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: Window selection - default windows only		ow	Scan to access this certificate online and confirm this is valid.		
Note on allowable window values: Only a 5% tolerance to the nominat SHGC window values shown on pa can be used with this rating.					
Note: Only a +/- 5% SHGC tolerand allowed with this rating.	æ is				

If any of windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.



		ating Scheme* Co			<u>*</u>
Certificate number:	0004676466	Certificate Date:	17 Mar 2020	★ Star rating:	5.9 NATION ENERGY RATIN
Building feature	es				
Window type an	d porformanc				
Window type an Window ID		e value		U-value	SHGC
Window ID	Window type	e value Iuminium Sliding Door	SG 5Clr	U-value 6.3	SHGC 0.72
Window ID STG-005-02 A	Window type STG-005-02 A A				
Window ID N STG-005-02 A STG-007-01 A	Window type STG-005-02 A A STG-007-01 A A	luminium Sliding Door	ow SG 3Clr	6.3	0.72

Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
DINING FAMIL	Y STG-005-02 A	n/a	2100	2300	NE	No Shading
DINING FAMIL	Y STG-007-01 A	n/a	600	1400	NW	No Shading
DINING FAMIL	Y STG-002-01 A	n/a	1800	2600	NE	No Shading
DINING FAMIL	Y STG-007-01 A	n/a	1000	2400	NW	No Shading
DINING FAMIL	Y STG-007-01 A	n/a	770	800	NW	No Shading
LAUNDRY	TIM-001-01 W	n/a	900	890	NW	No Shading
POWDER	STG-007-01 A	n/a	1800	800	NW	No Shading
LIVING	STG-002-01 A	n/a	1800	800	SW	No Shading
LIVING	STG-002-01 A	n/a	1800	800	SW	No Shading
ENSUITE	STG-007-01 A	n/a	1000	1200	NW	No Shading
BED 1	STG-007-01 A	n/a	1000	2100	NE	No Shading
BED 2	STG-007-01 A	n/a	1200	1800	SE	No Shading
BED 4	STG-002-01 A	n/a	1300	1800	SW	No Shading
BED 3	STG-002-01 A	n/a	1200	2400	SW	No Shading
UF BATH	STG-007-01 A	n/a	1200	800	NW	No Shading
UF WC	STG-007-01 A	n/a	1200	800	NW	No Shading
UF HALL	STG-007-01 A	n/a	1230	800	NW	No Shading

Roof windo	w and skyligh	nt type and performanc	e value			
ID None Presen	Window	type			U-value	SHGC
	w and skyligh	nt schedule				
Location	ID	Roof window/skylight no.	Area (m ²)	Orientation	Outdoor shade	Indoor shade/diffuser
None Presen	t					

External wal	l type					
ID	Wall type		Insulation		Wa	I wrap or foil
EW-1	Brick Venee	Brick Veneer		n R2	No	
EW-2	Brick Venee	Brick Veneer		No insulation		
EW-3	Single Skin	Single Skin Brick		No insulation		
EW-4	Fibro Cavity Panel Direct Fix		Bulk Insulation	Bulk Insulation R2		
External wal	I schedule					
Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)

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Building features	s continued						
DINING FAMILY K	EW-1	3800	2600	NE	No	31	00
DINING FAMILY K	EW-1	2500	2600	NW	No	44	00
DINING FAMILY K	EW-1	4100	2600	NE	No	60	0
DINING FAMILY K	EW-1	5495	2600	SE	No	10	0
DINING FAMILY K	EW-1	5195	2600	NW	No	10	0
WIP	EW-1	1300	2600	NE	No	10	0
WIP	EW-1	2395	2600	SE	No	10	0
LAUNDRY	EW-1	1790	2600	NW	No	10	0
POWDER	EW-1	1590	2600	NW	No	10	0
LIVING	EW-1	1100	2600	SE	No	18	00
LIVING	EW-1	2700	2600	SW	No	10	0
LIVING	EW-1	3500	2600	NW	No	10	0
LIVING	EW-1	600	2600	NE	No	10	0
ENTRY HALL	EW-1	1490	2600	SW	No	11	00
GARAGE	EW-2	5595	3114	SE	No	10	0
GARAGE	EW-3	5595	3114	SW	No	10	0
ENSUITE	EW-4	1995	2450	NE	No	60	0
ENSUITE	EW-1	3195	2450	NW	No	60	0
BED 1 WIR	EW-4	1890	2450	NE	No	60	0
BED 1	EW-4	3995	2450	NE	No	60	0
BED 1	EW-1	2900	2450	SE	No	60	0
BED 1	EW-4	995	2450	SE	No	60	0
BED 2	EW-4	3290	2450	SE	No	60	0
BED 4	EW-4	3795	2450	SE	No	60	0
BED 4	EW-1	3395	685	SW	No	0	
BED 4	EW-4	3395	1765	SW	No	60	0
BED 3	EW-1	595	685	SW	No	0	
BED 3	EW-4	595	1765	SW	No	17	00
BED 3	EW-1	1100	855	SE	No	0	
BED 3	EW-4	1100	1595	SE	No	46	00
BED 3	EW-1	3900	855	SW	No	0	
BED 3	EW-4	3900	1595	SW	No	60	0
BED 3	EW-4	3195	2450	NW	No	60	0
UF BATH	EW-1	1195	685	NW	No	0	
UF BATH	EW-4	1195	1766	NW	No	60	0
UF BATH	EW-1	895	2450	NW	No	60	0
UF WC	EW-1	1590	2450	NW	No	60	0
UF HALL	EW-1	1990	2450	NW	No	60	0

Internal wall type

Wall type	Area (m ²)	Insulation	Wall wrap or foil
IW-1 - Cavity wall, direct fix plasterboard, single gap	149.0	No insulation	No
IW-2 - Cavity wall, direct fix plasterboard, single gap	29.0	Bulk Insulation, No Air Gap R2	No

* 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: 0004676466

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5.9

Building features continued

Floors					
Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
DINING FAMILY K	Waffle pod slab 300 mm 100mm	49.3	None	Waffle Pod 300mm	20/80 Carpet 10mm/Ceramic
WIP	Waffle pod slab 300 mm 100mm	3.6	None	Waffle Pod 300mm	Ceramic Tiles 8mm
REF	Waffle pod slab 300 mm 100mm	0.6	None	Waffle Pod 300mm	Ceramic Tiles 8mm
LAUNDRY	Waffle pod slab 300 mm 100mm	4.0	None	Waffle Pod 300mm	Ceramic Tiles 8mm
POWDER	Waffle pod slab 300 mm 100mm	2.3	None	Waffle Pod 300mm	Ceramic Tiles 8mm
LIVING	Waffle pod slab 300 mm 100mm	9.2	None	Waffle Pod 300mm	Carpet+Rubber Underlay 18mm
ENTRY HALL	Waffle pod slab 300 mm 100mm	9.1	None	Waffle Pod 300mm	Ceramic Tiles 8mm
GARAGE	Waffle pod slab 225 mm 100mm	30.9	None	Waffle Pod 225mm	Bare
ENSUITE/DINING FAMILY K	Timber Above Plasterboard 19mm	6.2		No Insulation	Ceramic Tiles 8mm
BED 1 WIR/DINING FAMILY K	Timber Above Plasterboard 19mm	4.1		No Insulation	Carpet+Rubber Underlay 18mm
BED 1/DINING FAMILY K	Timber Above Plasterboard 19mm	15.0		No Insulation	Carpet+Rubber Underlay 18mm
BED 2/DINING FAMILY K	Timber Above Plasterboard 19mm	4.6		No Insulation	Carpet+Rubber Underlay 18mm
BED 2/REF	Timber Above Plasterboard 19mm	0.7		No Insulation	Carpet+Rubber Underlay 18mm
BED 2/GARAGE	Timber Above Plasterboard 19mm	8.2		Bulk Insulation R2	Carpet+Rubber Underlay 18mm
BED 4/GARAGE	Timber Above Plasterboard 19mm	12.2		Bulk Insulation R2	Carpet+Rubber Underlay 18mm
BED 3/LIVING	Timber Above Plasterboard 19mm	6.6		No Insulation	Carpet+Rubber Underlay 18mm
BED 3/ENTRY HALL	Timber Above Plasterboard 19mm	3.1		No Insulation	Carpet+Rubber Underlay 18mm
BED 3/GARAGE	Timber Above Plasterboard 19mm	1.8		Bulk Insulation R2	Carpet+Rubber Underlay 18mm
BED 3	Suspended Timber Floor 19mm	1.9	Totally Open	No Insulation	Carpet+Rubber Underlay 18mm
UF BATH/POWDER	Timber Above Plasterboard 19mm	2.4		No Insulation	Ceramic Tiles 8mm
UF BATH/LIVING	Timber Above Plasterboard 19mm	0.6		No Insulation	Ceramic Tiles 8mm
UF BATH/ENTRY HALL	Timber Above Plasterboard 19mm	2.1		No Insulation	Ceramic Tiles 8mm
UF WC/LAUNDRY	Timber Above Plasterboard 19mm	2.5		No Insulation	Ceramic Tiles 8mm
UF HALL/DINING FAMILY K	Timber Above Plasterboard 19mm	8.3		No Insulation	Carpet+Rubber Underlay 18mm
UF HALL/LAUNDRY	Timber Above Plasterboard 19mm	1.1		No Insulation	Carpet+Rubber Underlay 18mm
UF HALL/ENTRY HALL	Timber Above Plasterboard 19mm	4.2		No Insulation	Carpet+Rubber Underlay 18mm

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Building feature	es continued					
UF HALL/GARAGE	Timber Above 19mm	Plasterboard	1.0	Bulk Insulation R2	Carpet+ Underla	Rubber y 18mm

Ceiling type				
Location	Construction	Added insulation	Roof space above Yes	
DINING FAMILY	K Plasterboard	Bulk Insulation R3.5		
DINING FAMILY	K Timber Above Plasterboard	No Insulation	No	
WIP	Plasterboard	Bulk Insulation Yes R3.5		
WIP	Timber Above Plasterboard	No Insulation	No	
REF	Timber Above Plasterboard	No Insulation No		
LAUNDRY	Timber Above Plasterboard	No Insulation No		
POWDER	Timber Above Plasterboard	No Insulation	No	
LIVING	Plasterboard	Bulk Insulation R3.5	Yes	
LIVING	Timber Above Plasterboard	No Insulation	No	
ENTRY HALL	Timber Above Plasterboard	No Insulation	No	
GARAGE	Plasterboard	No insulation	Yes	
GARAGE	Timber Above Plasterboard	Bulk Insulation R2	No	
ENSUITE	Plasterboard	Bulk Insulation R3.5	Yes	
BED 1 WIR	Plasterboard	Bulk Insulation R3.5	Yes	
BED 1	Plasterboard	Bulk Insulation R3.5	Yes	
BED 2	Plasterboard	Bulk Insulation R3.5	Yes	
BED 4	Plasterboard	Bulk Insulation R3.5	Yes	
BED 3	Plasterboard	Bulk Insulation R3.5	Yes	
UF BATH	Plasterboard	Bulk Insulation R3.5	Yes	
UF WC	Plasterboard	Bulk Insulation R3.5	Yes	
UF HALL	Plasterboard	Bulk Insulation R3.5	Yes	

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

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Building fea	tures continued				
Ceiling fans					
Location	Number	Diameter (mm)			
None Present		· · · · ·	-		
Roof type					
Construction				Added insulation	Roof colour
Roof Tiles				Foil, Gap Above, 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