## Nationwide House Energy Rating Scheme\* Certificate

Certificate number: 0004376752

Certificate Date: 19 Nov 2019



## Assessor details

Accreditation number:	101512
Name:	Abbas Chatrfirouzeh
Organisation:	SYMEC Group Pty. Ltd. T/As SDS Engineering
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Declaration of interest:	None
Software:	BERS Pro v4.4.0.0 (3.21)
AAO:	ABSA

## **Overview**

### **Dwelling details**

	41 Warriewood Ro Warriewood	ad	
State:	NSW	Postcode:	2102
Туре:	New Dwelling	NCC Class: NatHERS	1A
Lot/DP		climate zone:	56
number:	32/5464	Exposure:	Suburban

## Key construction and insulation materials

(see following pages for details)

Construction:	Metal Clad Cavity Panel Direct Fix Roof Tiles
	Suspended Timber Floor
Insulation:	R2.0 wall insulation
	R3.0 ceiling insulation
	R1.5 floor insulation
Glazing:	BRD-001-01 A ESS Sliding Window
	(52mm) SG 3Clr

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

Conditioned: Unconditioned:	195.0 33.0	performance loads (MJ/m <sup>2</sup> )		
Garage:	16.0	Heating:	38.8	
TOTAL:	228.0	Cooling:	22.9	
		TOTAL:	61.7	

Annual thermal

## **Plan documents**

Plan ref/date: N195509 REV F Prepared by: **NEW SOUTH HOMES PTY LTD** 



Ceiling penetrat (see following pages for		maxi	TE: This total is the mum number of ceiling trations allowed to a
Sealed: Unsealed: TOTAL:**	62 0 62	<ul> <li>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.</li> </ul>	
Principle downlight ty	pe: LEI	C	
Window selection default windows			Scan to access this certificate online and
	·,		confirm this is valid.
Note on allowable window value Only a 5% tolerance to the no SHGC window values shown can be used with this rating.	ues: minated		confirm this is valid.
Note on allowable window val Only a 5% tolerance to the no SHGC window values shown	ues: minated on page 2		confirm this is valid.
Note on allowable window values of the normal structure of the normal shown shown can be used with this rating. Note: Only a +/- 5% SHGC tol	ues: minated on page 2 erance is vilies vays		confirm this is valid.

outside the 5% tolerance then this

confirm compliance.

certificate is no longer valid and the dwelling will need to be rerated to

hationwide H	ouse Energy F	ating Scheme	e <sup>*</sup> Certificate			
Certificate numbe	er: 0004376752	Certificate Dat	e: <b>19 Nov</b>	<b>2019</b> ★	Star rating:	5.3 NATIONWI HOUS ENERGY RATING SCI
Building featu	ires					
Window type a	and performand	e value				
Window ID	Window type				U-value	SHGC
BRD-081-16 A	BRD-081-16 A \$	Signature Awning	Window 100 SC	G 4Clr	6.9	0.64
BRD-001-01 A	BRD-001-01 A B	ESS Sliding Windo	ow (52mm) SG 3	3Clr	6.4	0.76
BRD-033-01 A	BRD-033-01 A B	ESS Sliding Door	(80mm) SG 4Cl	r	6.2	0.74
BRD-041-01 A	BRD-041-01 A S	SIG Fixed Lite Ext	ernally Glazed (	125mm) SG	4Clr 6.2	0.74
Window schee	dule					
Location	Window ID	Window no.	Height (mm)	Width (mm)	) Orientation	Outdoor shade
ENTRY	BRD-081-16 A	n/a	1370	850	SE	No Shading
PWD	BRD-001-01 A	n/a	772	730	SW	No Shading
LDRY	BRD-081-16 A	n/a	772	850	SW	No Shading
PTRY	BRD-001-01 A	n/a	600	1210	SW	No Shading
KIT/FAM/DIN	BRD-001-01 A	n/a	600	1810	SW	No Shading
KIT/FAM/DIN	BRD-001-01 A	n/a	1200	2170	SW	No Shading
KIT/FAM/DIN	BRD-033-01 A	n/a	2100	4304	NW	No Shading
KIT/FAM/DIN	BRD-001-01 A	n/a	1800	850	NE	No Shading
KIT/FAM/DIN	BRD-001-01 A	n/a	1800	850	NE	No Shading
KIT/FAM/DIN	BRD-001-01 A	n/a	857	1810	NE	No Shading
STUDY	BRD-001-01 A	n/a	857	1810	NE	No Shading
BED4	BRD-001-01 A	n/a	1200	1810	SE	No Shading
BED3	BRD-001-01 A	n/a	1029	1810	NE	No Shading
BED2	BRD-001-01 A	n/a	1029	1810	NE	No Shading
BED1	BRD-001-01 A	n/a	1029	3010	NW	No Shading
BED1	BRD-001-01 A	n/a	600	1570	NE	No Shading
ENS BED1	BRD-001-01 A	n/a	1029	730	SW	No Shading
ENS BED1	BRD-041-01 A	n/a	170	1690	SW	No Shading
ENS BED1	BRD-001-01 A	n/a	343	850	NW	No Shading
BED5	BRD-001-01 A	n/a	1029	1570	SW	No Shading
BATH HALLWAY	BRD-001-01 A	n/a	1029	730	SW	No Shading
· · · · · · · · · · · · · · · · · · ·						

Roof window and skylight type and performance value						
ID	Window	type			U-value	SHGC
None Presen	t					
Roof windo	w and skylig	nt schedule				
Location	ID	Roof window/skylight no.	Area (m²)	Orientation	Outdoor shade	Indoor shade/diffuser
None Presen	t					

1029

1200

1200

1200

1200

n/a

n/a

n/a

n/a

n/a

730

850

850

2410

1810

SW

SW

SE

SE

SW

No Shading

No Shading

No Shading

No Shading

No Shading

PWD HALLWAY BRD-001-01 A

BRD-001-01 A

BRD-001-01 A

BRD-041-01 A

BRD-001-01 A

MEDIA

HALLWAY

HALLWAY

HALLWAY

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## **Building features continued**

External wall t	уре						
ID	Wall type		Insulation	Insulation			
EW-1	Brick Veneer		Bulk Insulation R1.5		Nc	No	
EW-2	Single Skin Panel		Bulk Insulation	n <b>R</b> 2	No	)	
EW-3	Metal Clad Cavity Panel Direct Fix		Bulk Insulation	n <b>R</b> 2	Nc	)	
External wall s	chedule						
Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)	
ENTRY	EW-1	3200	2600	SE	No	1400	
ENTRY	EW-1	3295	2600	SW	No	450	
ENTRY	EW-1	195	2600	SE	No	2400	
ENTRY	EW-1	1000	2600	NE	No	3500	
PWD	EW-1	1590	2600	SW	No	450	
LDRY	EW-1	2890	2600	SW	No	450	
PTRY	EW-1	2190	2600	SW	No	450	
KIT/FAM/DIN	EW-1	8495	2600	SW	No	450	
KIT/FAM/DIN	EW-1	6400	2600	NW	No	3750	
KIT/FAM/DIN	EW-1	8495	2600	NE	No	0	
STUDY	EW-1	3390	2600	NE	No	0	
GARAGE	EW-1	5595	2600	NE	No	0	
GARAGE	EW-1	2995	2600	SE	No	2400	
BED4	EW-2	3195	900	SE	No	0	
BED4	EW-3	3195	1550	SE	No	500	
BED4	EW-3	3745	2450	NE	No	500	
BED3	EW-3	4690	2450	NE	No	500	
WIR BED2	EW-3	1490	2450	NE	No	500	
BED2	EW-3	4740	2450	NE	No	500	
BED1	EW-2	4495	650	NW	No	0	
BED1	EW-3	4495	1800	NW	No	500	
BED1	EW-3	4795	2450	NE	No	500	
ENS BED1	EW-3	4095	2450	SW	No	500	
ENS BED1	EW-3	1595	2450	NW	No	500	
HIS	EW-3	1790	2450	SW	No	500	
BED5	EW-3	2890	2450	SW	No	500	
BATH HALLWAY		3390	2450	SW	No	500	
PWD HALLWAY	EW-3	990	2450	SW	No	500	
MEDIA	EW-3	3990	2450	SW	No	500	
HALLWAY	EW-3	1000	2450	NE	No	400	
HALLWAY	EW-2	2900	550	SE	No	0	
HALLWAY	EW-3	2900	1900	SE	No	500	
HALLWAY	EW-3	3295	2450	SW	No	500	

Internal wall type			
Wall type	Area (m <sup>2</sup> )	Insulation	Wall wrap or foil
IW-1 - Cavity wall, direct fix plasterboard, single gap	226.0	No insulation	No

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Building features continued					
IW-2 - Cavity wall, direct fix plasterboard, single gap	22.0 E	Bulk Insulation, Air Gap R	:1	No	

Floors					
Location	Construction	Area (m <sup>2</sup> )	Sub floor ventilation	Added insulation	Covering
ENTRY	Waffle pod slab 300 mm 100mm	15.5	None	Waffle Pod 300mm	Vinyl 3mm
PWD	Waffle pod slab 300 mm 100mm	4.0	None	Waffle Pod 300mm	Ceramic Tiles 8mm
LDRY	Waffle pod slab 300 mm 100mm	5.5	None	Waffle Pod 300mm	Ceramic Tiles 8mm
PTRY	Waffle pod slab 300 mm 100mm	4.6	None	Waffle Pod 300mm	Ceramic Tiles 8mm
KIT/FAM/DIN	Waffle pod slab 300 mm 100mm	54.7	None	Waffle Pod 300mm	Vinyl 3mm
STUDY	Waffle pod slab 300 mm 100mm	6.8	None	Waffle Pod 300mm	Vinyl 3mm
KIT/FAM/DIN	Waffle pod slab 300 mm 100mm	4.6	None	Waffle Pod 300mm	Vinyl 3mm
GARAGE	Waffle pod slab 300 mm 100mm	16.4	None	Waffle Pod 300mm	Bare
BED4/ENTRY	Timber Above Plasterboard 19mm	0.8		No Insulation	Carpet 10mm
BED4/GARAGE	Timber Above Plasterboard 19mm	11.9		No Insulation	Carpet 10mm
BED3/STUDY	Timber Above Plasterboard 19mm	5.8		No Insulation	Carpet 10mm
BED3/KIT/FAM/DIN	Timber Above Plasterboard 19mm	2.8		No Insulation	Carpet 10mm
BED3/GARAGE	Timber Above Plasterboard 19mm	4.4		No Insulation	Carpet 10mm
WIR BED3/KIT/FAM/DIN	Timber Above Plasterboard 19mm	1.2		No Insulation	Carpet 10mm
WIR BED3/KIT/FAM/DIN	Timber Above Plasterboard 19mm	0.5		No Insulation	Carpet 10mm
WIR BED2/KIT/FAM/DIN	Timber Above Plasterboard 19mm	1.5		No Insulation	Carpet 10mm
WIR BED2/STUDY	Timber Above Plasterboard 19mm	0.9		No Insulation	Carpet 10mm
BED2/KIT/FAM/DIN	Timber Above Plasterboard 19mm	13.2		No Insulation	Carpet 10mm
BED1/KIT/FAM/DIN	Timber Above Plasterboard 19mm	13.5		No Insulation	Carpet 10mm
BED1	Suspended Timber Floor 19mm	8.7	Totally Open	Bulk Insulation in Contact with Floor R1.5	Carpet 10mm
HERS/KIT/FAM/DIN	Timber Above Plasterboard 19mm	2.6		No Insulation	Carpet 10mm
ENS BED1/KIT/FAM/DIN	Timber Above Plasterboard 19mm	3.2		No Insulation	Ceramic Tiles 8mm
ENS BED1	Suspended Timber Floor 19mm	3.1	Totally Open	Bulk Insulation in Contact with Floor R1.5	

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★ Star rating:



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<u> </u>				
HIS/KIT/FAM/DIN	Timber Above Plasterboard 19mm	3.0	No Insulation	Carpet 10mm
BED5/KIT/FAM/DIN	Timber Above Plasterboard 19mm	4.9	No Insulation	Carpet 10mm
BATH HALLWAY/PTRY	Timber Above Plasterboard 19mm	2.6	No Insulation	Ceramic Tiles 8mm
BATH HALLWAY/KIT/FA M/DIN	Timber Above Plasterboard 19mm	3.2	No Insulation	Ceramic Tiles 8mm
PWD HALLWAY/LDRY	Timber Above Plasterboard 19mm	0.8	No Insulation	Ceramic Tiles 8mm
PWD HALLWAY/PTRY	Timber Above Plasterboard 19mm	0.8	No Insulation	Ceramic Tiles 8mm
MEDIA/PWD	Timber Above Plasterboard 19mm	2.6	No Insulation	Carpet 10mm
MEDIA/LDRY	Timber Above Plasterboard 19mm	3.9	No Insulation	Carpet 10mm
HALLWAY/ENTRY	Timber Above Plasterboard 19mm	12.7	No Insulation	Carpet 10mm
HALLWAY/PWD	Timber Above Plasterboard 19mm	1.0	No Insulation	Carpet 10mm
HALLWAY/PTRY	Timber Above Plasterboard 19mm	0.6	No Insulation	Carpet 10mm
HALLWAY/KIT/FA M/DIN	Timber Above Plasterboard 19mm	3.4	No Insulation	Carpet 10mm
HALLWAY/KIT/FA M/DIN	Timber Above Plasterboard 19mm	1.5	No Insulation	Carpet 10mm

Ceiling type				
Location	Construction	Added insulation	Roof space above	
ENTRY	Plasterboard	Bulk Insulation R3	Yes	
ENTRY	Timber Above Plasterboard	No Insulation	No	
PWD	Timber Above Plasterboard	No Insulation	No	
LDRY	Plasterboard	Bulk Insulation R3	Yes	
LDRY	Timber Above Plasterboard	No Insulation	No	
PTRY	Plasterboard	Bulk Insulation R3	Yes	
PTRY	Timber Above Plasterboard	No Insulation	No	
KIT/FAM/DIN	Plasterboard	Bulk Insulation R3	Yes	
KIT/FAM/DIN	Timber Above Plasterboard	No Insulation	No	
STUDY	Timber Above Plasterboard	No Insulation	No	
KIT/FAM/DIN	Timber Above Plasterboard	No Insulation	No	
GARAGE	Timber Above Plasterboard	No Insulation	No	
BED4	Plasterboard	Bulk Insulation R3	Yes	
BED3	Plasterboard	Bulk Insulation R3	Yes	
WIR BED3	Plasterboard	Bulk Insulation R3	Yes	

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uilding feature	s continued					
WIR BED2	Plasterboard			Bulk Insulation R3	Yes	
BED2	Plasterboard			Bulk Insulation R3	Yes	
BED1	Plasterboard			Bulk Insulation R3	Yes	
HERS	Plasterboard			Bulk Insulation R3	Yes	
ENS BED1	Plasterboard			Bulk Insulation R3	Yes	
HIS	Plasterboard			Bulk Insulation R3	Yes	
BED5	Plasterboard			Bulk Insulation R3	Yes	
BATH HALLWAY	Plasterboard			Bulk Insulation R3	Yes	
PWD HALLWAY	Plasterboard			Bulk Insulation R3	Yes	
MEDIA	Plasterboard			Bulk Insulation R3	Yes	
HALLWAY	Plasterboard			Bulk Insulation R3	Yes	

## **Ceiling penetrations**

Location	Number	Туре	Diameter (mm)	Sealed/unsealed
ENTRY	6	Downlights - LED	150	Sealed
PWD	1	Downlights - LED	150	Sealed
PWD	1	Exhaust Fans	300	Sealed
LDRY	2	Downlights - LED	150	Sealed
LDRY	1	Exhaust Fans	300	Sealed
PTRY	2	Downlights - LED	150	Sealed
KIT/FAM/DIN	12	Downlights - LED	150	Sealed
KIT/FAM/DIN	1	Exhaust Fans	300	Sealed
STUDY	2	Downlights - LED	150	Sealed
KIT/FAM/DIN	2	Downlights - LED	150	Sealed
BED4	2	Downlights - LED	150	Sealed
BED3	3	Downlights - LED	150	Sealed
WIR BED3	1	Downlights - LED	150	Sealed
WIR BED2	1	Downlights - LED	150	Sealed
BED2	2	Downlights - LED	150	Sealed
BED1	4	Downlights - LED	150	Sealed
HERS	1	Downlights - LED	150	Sealed
ENS BED1	2	Downlights - LED	150	Sealed
ENS BED1	1	Exhaust Fans	300	Sealed
HIS	1	Downlights - LED	150	Sealed
BED5	2	Downlights - LED	150	Sealed
BATH HALLWAY	2	Downlights - LED	150	Sealed
BATH	1	Exhaust Fans	300	Sealed

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Nationwide Hou	use Energy R	ating Scheme* Ce	ertificate			A A A A A A A A A A A A A A A A A A A
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Building feature	es continued					
HALLWAY						
PWD HALLWAY	1	Downlights - LED		150	Sealed	
PWD HALLWAY	1	Exhaust Fans		150	Sealed	
MEDIA	2	Downlights - LED		150	Sealed	
HALLWAY	5	Downlights - LED		150	Sealed	

Ceiling fans			
Location	Number	Diameter (mm)	
None Present			

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

# Nationwide House Energy Rating Scheme\* Certificate

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🗙 Star rating: 5.3



## **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