Certificate number: 0003344546

Certificate Date: 13 Nov 2018

★ Star rating: 6.7



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:	20039
Name:	David Howard
Organisation:	Partners Energy Management
Email:	david@partnersenergy.com.au
Phone:	0421381005
Declaration of interest:	The Assessor has provided design advice to the Applicant
Software:	BERS Pro v4.3.0.2c (3.13)

ABSA AAO:

Overview

Dwelling details

	Unit TH01, 25-27 Warriewood rd Warriewood					
State:	NSW	Postcode:	2102			
Туре:	New Dwelling	NCC Class: NatHERS	1A			
Lot/DP		climate zone:	56			
number:	5464	Exposure:	Suburban			

Key construction and insulation materials

(see following pages for details)

Construction:	Fibro Cavity Panel Direct Fix Corrugated Iron
la sul sti su s	Concrete Slab on Ground
Insulation:	R2.5 wall insulation
	R3.5 ceiling insulation
	No floor insulation
Glazing:	ATB-006-03 B AI Thermally Broken B
	DG Argon Fill High Solar Gain low-E

Net floor area (m ²)			Annual the	
Conditioned: 232.0 Unconditioned: 41.0			e loads	
Garage:	41.0		Heating:	17.8
TOTAL:	273.0		Cooling: TOTAL:	25.7 43.6

Plan documents

Warriewood Residential Development Plan ref/date: Prepared by: **VIA Architects**



Ceiling penetrations (see following pages for details					
Sealed:0Unsealed:0TOTAL:**0	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.				
Dringiple downlight type:					
	Scan to access this certificate online and				
Window selection - default windows only Note on allowable window values: Dnly a 5% tolerance to the nominated SHGC window values shown on page can be used with this rating.	Scan to access this certificate online and confirm this is valid.				

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If any of windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.



Certificate Date:

Certificate number: 0003344546

13 Nov 2018

★ Star rating:

6.7

Building features

Window type and performance value

Window ID	Window type				U-value	SHGC
ATB-006-03 B	ATB-006-03 B A low-E -Clear	Gain 2.9	0.51			
Window schee	dule					
Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Studio	ATB-006-03 B	n/a	2700	3500	NE	No Shading
Studio	ATB-006-03 B	n/a	2550	1000	SW	No Shading
Studio	ATB-006-03 B	n/a	2550	1000	NW	No Shading
L2 Living	ATB-006-03 B	n/a	2550	3636	SW	No Shading
L2 Living	ATB-006-03 B	n/a	1400	900	NW	No Shading
Study	ATB-006-03 B	n/a	2550	900	NW	No Shading
Kitchen/Living	ATB-006-03 B	n/a	2400	3178	SW	No Shading
Kitchen/Living	ATB-006-03 B	n/a	2700	2722	NW	No Shading
Kitchen/Living	ATB-006-03 B	n/a	2700	1000	NW	No Shading
Kitchen/Living	ATB-006-03 B	n/a	2700	3200	NE	Vertical Louvres, Horizontal Blades
Ens 1	ATB-006-03 B	n/a	2400	600	SW	No Shading
Bedroom 1	ATB-006-03 B	n/a	2400	3178	SW	No Shading
Bedroom 1	ATB-006-03 B	n/a	2550	1000	NW	No Shading
Bedroom 2	ATB-006-03 B	n/a	2550	1000	NW	No Shading
Bedroom 3	ATB-006-03 B	n/a	2550	2722	NW	No Shading
Bedroom 3	ATB-006-03 B	n/a	2550	1875	NE	No Shading

Roof window and skylight type and performance value								
ID	Window typ	e			U-value	SHGC		
None Present								
Roof window	v and skylight s	chedule						
Location	ID	Roof window/skylight no.	Area (m ²)	Orientation	Outdoor shade	Indoor shade/diffuser		
None Present								

External wall	type					
ID	Wall type		Insulation		1	Wall wrap or foil
EW-1	Fibro Cavity F	Panel Direct Fix	Anti-glare foil	with bulk no gap	R2.5	Yes
EW-2	Concrete bloc	k, lined	Anti-glare foil	with bulk no gap	R1.5	Yes
EW-3	Fibro Cavity F	Panel Direct Fix	Foil, Anti-glare	e one side, Refle	ctive other	Yes
External wall	schedule ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	e Eaves
						<u>(mm)</u>
Studio	EW-1	5900	2700	NE	No	4400
Studio	EW-1	5900	2700	SW	No	0
Studio	EW-1	5000	2700	NW	No	0
L2 Living	EW-1	1800	2550	SW	No	1800

Building features continued L2 Living EW-1 1800 2550 SE No 4400 L2 Living EW-1 3700 2550 SW No 10600 L2 Living EW-1 7295 2550 NW No 0 Ldry EW-2 2795 2550 NE No 0 L2 Bath EW-2 2395 2550 NW No 0 L2 Bath EW-2 2695 2550 NE No 0 Study EW-1 4890 2550 NW No 0 Garage 1 EW-3 5900 3000 SW No 0 Garage 1 EW-3 7300 3000 NW No 0 Garage 1 EW-3 1100 2550 SE No 4200 Garage 1 EW-1 1595 2700 SW No 600 Kitchen/Living EW-1 1595 2550 <th>Certificate number:</th> <th>0003344546</th> <th>Certificate Date:</th> <th></th> <th>13 Nov 2018</th> <th>★ Star rating:</th> <th>6.7 NATIONW HOU ENERCY RATING S</th>	Certificate number:	0003344546	Certificate Date:		13 Nov 2018	★ Star rating:	6.7 NATIONW HOU ENERCY RATING S
L2 Living EW-1 3700 2550 SW No 10600 L2 Living EW-1 7295 2550 NW No 0 Ldry EW-2 2795 2550 NE No 0 L2 Bath EW-2 2395 2550 NW No 0 L2 Bath EW-2 2395 2550 NE No 0 L2 Bath EW-2 2695 2550 NW No 0 Garage 1 EW-3 5900 3000 SW No 0 Garage 1 EW-3 7300 3000 NW No 0 Garage 1 EW-3 4300 2550 NE No 2100 Garage 1 EW-3 1100 2550 SE No 4200 Garage 1 EW-3 1600 2550 NE No 600 Kitchen/Living EW-1 1595 2700 SW No 600	Building featur	es continued					
L2 Living EW-1 7295 2550 NW No 0 Ldry EW-2 2795 2550 NE No 0 L2 Bath EW-2 2395 2550 NW No 0 L2 Bath EW-2 2395 2550 NW No 0 L2 Bath EW-2 2695 2550 NE No 0 Study EW-1 4890 2550 NW No 0 Garage 1 EW-3 5900 3000 SW No 0 Garage 1 EW-3 7300 3000 NW No 0 Garage 1 EW-3 4300 2550 NE No 2100 Garage 1 EW-3 1100 2550 SE No 4200 Garage 1 EW-3 1600 2550 NE No 600 Kitchen/Living EW-1 1595 2700 SW No 0	L2 Living	EW-1	1800	2550	SE	No	4400
LdryEW-227952550NENo0L2 BathEW-223952550NWNo0L2 BathEW-226952550NENo0StudyEW-148902550NWNo0Garage 1EW-359003000SWNo0Garage 1EW-373003000NWNo0Garage 1EW-343002550NENo2100Garage 1EW-311002550SENo4200Garage 1EW-316002550NENo3200WCEW-115952700SWNo600Kitchen/LivingEW-138952700SWNo0Kitchen/LivingEW-115952550SWNo1300Bedroom 1EW-138952550SWNo1300Bedroom 2EW-141902550NWNo0Bedroom 3EW-137952550NWNo0	L2 Living	EW-1	3700	2550	SW	No	10600
L2 BathEW-223952550NWNo0L2 BathEW-226952550NENo0StudyEW-148902550NWNo0Garage 1EW-359003000SWNo0Garage 1EW-373003000NWNo0Garage 1EW-343002550NENo2100Garage 1EW-343002550SENo4200Garage 1EW-311002550SENo4200Garage 1EW-316002550NENo600WCEW-115952700SWNo600Kitchen/LivingEW-138952700SWNo0Kitchen/LivingEW-155002700NENo0Ens 1EW-115952550SWNo1300Bedroom 1EW-138952550SWNo0Bedroom 2EW-141902550NWNo0Bedroom 3EW-137952550NWNo0	L2 Living	EW-1	7295	2550	NW	No	0
L2 Bath EW-2 2695 2550 NE No 0 Study EW-1 4890 2550 NW No 0 Garage 1 EW-3 5900 3000 SW No 0 Garage 1 EW-3 5900 3000 SW No 0 Garage 1 EW-3 7300 3000 NW No 0 Garage 1 EW-3 4300 2550 NE No 2100 Garage 1 EW-3 1100 2550 SE No 4200 Garage 1 EW-3 1600 2550 NE No 3200 WC EW-1 1595 2700 SW No 600 Kitchen/Living EW-1 3895 2700 SW No 0 Kitchen/Living EW-1 1595 2550 SW No 1300 Bedroom 1 EW-1 3895 2550 SW No 1300	Ldry	EW-2	2795	2550	NE	No	0
StudyEW-148902550NWNo0Garage 1EW-359003000SWNo0Garage 1EW-373003000NWNo0Garage 1EW-343002550NENo2100Garage 1EW-311002550SENo4200Garage 1EW-316002550NENo3200WCEW-115952700SWNo600Kitchen/LivingEW-138952700SWNo600Kitchen/LivingEW-1128002700NWNo0Ens 1EW-155002700SWNo1300Bedroom 1EW-138952550SWNo1300Bedroom 2EW-141902550NWNo0Bedroom 3EW-137952550NWNo0	L2 Bath	EW-2	2395	2550	NW	No	0
Garage 1EW-359003000SWNo0Garage 1EW-373003000NWNo0Garage 1EW-343002550NENo2100Garage 1EW-311002550SENo4200Garage 1EW-316002550NENo3200WCEW-115952700SWNo600Kitchen/LivingEW-138952700SWNo600Kitchen/LivingEW-1128002700NWNo0Kitchen/LivingEW-155002700NWNo0Ens 1EW-155002700NENo1300Bedroom 1EW-138952550SWNo1300Bedroom 2EW-141902550NWNo0Bedroom 3EW-137952550NWNo900	L2 Bath	EW-2	2695	2550	NE	No	0
Garage 1EW-373003000NWNo0Garage 1EW-343002550NENo2100Garage 1EW-311002550SENo4200Garage 1EW-316002550NENo3200WCEW-115952700SWNo600Kitchen/LivingEW-138952700SWNo600Kitchen/LivingEW-1128002700NWNo0Kitchen/LivingEW-155002700NWNo0Ens 1EW-155002700SWNo1300Bedroom 1EW-138952550SWNo1300Bedroom 1EW-153952550NWNo0Bedroom 3EW-137952550NWNo0	Study	EW-1	4890	2550	NW	No	0
Garage 1EW-343002550NENo2100Garage 1EW-311002550SENo4200Garage 1EW-316002550NENo3200WCEW-115952700SWNo600Kitchen/LivingEW-138952700SWNo600Kitchen/LivingEW-1128002700NWNo0Kitchen/LivingEW-155002700NENo0Ens 1EW-155002700SWNo1300Bedroom 1EW-138952550SWNo1300Bedroom 2EW-141902550NWNo0Bedroom 3EW-137952550NWNo900	Garage 1	EW-3	5900	3000	SW	No	0
Garage 1 EW-3 1100 2550 SE No 4200 Garage 1 EW-3 1600 2550 NE No 3200 WC EW-1 1595 2700 SW No 600 Kitchen/Living EW-1 3895 2700 SW No 600 Kitchen/Living EW-1 12800 2700 SW No 0 Kitchen/Living EW-1 12800 2700 NW No 0 Kitchen/Living EW-1 12800 2700 NW No 0 Kitchen/Living EW-1 12800 2700 NE No 0 Ens 1 EW-1 5500 2700 NE No 1300 Bedroom 1 EW-1 3895 2550 SW No 1300 Bedroom 1 EW-1 5395 2550 NW No 0 Bedroom 2 EW-1 4190 2550 NW <	Garage 1	EW-3	7300	3000	NW	No	0
Garage 1EW-316002550NENo3200WCEW-115952700SWNo600Kitchen/LivingEW-138952700SWNo600Kitchen/LivingEW-1128002700NWNo0Kitchen/LivingEW-155002700NENo0Ens 1EW-155002700NENo1300Bedroom 1EW-138952550SWNo1300Bedroom 1EW-153952550NWNo0Bedroom 2EW-141902550NWNo0Bedroom 3EW-137952550NWNo900	Garage 1	EW-3	4300	2550	NE	No	2100
WC EW-1 1595 2700 SW No 600 Kitchen/Living EW-1 3895 2700 SW No 600 Kitchen/Living EW-1 3895 2700 SW No 600 Kitchen/Living EW-1 12800 2700 NW No 0 Kitchen/Living EW-1 5500 2700 NE No 0 Ens 1 EW-1 5500 2700 SW No 1300 Bedroom 1 EW-1 3895 2550 SW No 1300 Bedroom 1 EW-1 5395 2550 NW No 0 Bedroom 2 EW-1 4190 2550 NW No 0 Bedroom 3 EW-1 3795 2550 NW No 900	Garage 1	EW-3	1100	2550	SE	No	4200
Kitchen/LivingEW-138952700SWNo600Kitchen/LivingEW-1128002700NWNo0Kitchen/LivingEW-155002700NENo0Ens 1EW-115952550SWNo1300Bedroom 1EW-138952550SWNo1300Bedroom 1EW-153952550NWNo0Bedroom 2EW-141902550NWNo0Bedroom 3EW-137952550NWNo900	Garage 1	EW-3	1600	2550	NE	No	3200
Kitchen/LivingEW-1128002700NWNo0Kitchen/LivingEW-155002700NENo0Ens 1EW-115952550SWNo1300Bedroom 1EW-138952550SWNo1300Bedroom 1EW-153952550NWNo0Bedroom 2EW-141902550NWNo0Bedroom 3EW-137952550NWNo900	WC	EW-1	1595	2700	SW	No	600
Kitchen/LivingEW-155002700NENo0Ens 1EW-115952550SWNo1300Bedroom 1EW-138952550SWNo1300Bedroom 1EW-153952550NWNo0Bedroom 2EW-141902550NWNo0Bedroom 3EW-137952550NWNo900	Kitchen/Living	EW-1	3895	2700	SW	No	600
Ens 1EW-115952550SWNo1300Bedroom 1EW-138952550SWNo1300Bedroom 1EW-153952550NWNo0Bedroom 2EW-141902550NWNo0Bedroom 3EW-137952550NWNo900	Kitchen/Living	EW-1	12800	2700	NW	No	0
Bedroom 1EW-138952550SWNo1300Bedroom 1EW-153952550NWNo0Bedroom 2EW-141902550NWNo0Bedroom 3EW-137952550NWNo900	Kitchen/Living	EW-1	5500	2700	NE	No	0
Bedroom 1EW-153952550NWNo0Bedroom 2EW-141902550NWNo0Bedroom 3EW-137952550NWNo900	Ens 1	EW-1	1595	2550	SW	No	1300
Bedroom 2 EW-1 4190 2550 NW No 0 Bedroom 3 EW-1 3795 2550 NW No 900	Bedroom 1	EW-1	3895	2550	SW	No	1300
Bedroom 3 EW-1 3795 2550 NW No 900	Bedroom 1	EW-1	5395	2550	NW	No	0
	Bedroom 2	EW-1	4190	2550	NW	No	0
Bedroom 3 EW-1 3295 2550 NE No 2000	Bedroom 3	EW-1	3795	2550	NW	No	900
	Bedroom 3	EW-1	3295	2550	NE	No	2000

EW-1

L4 Bath

Wall type	Area (m²)	Insulation	Wall wrap or foil
IW-1 - Brick, plasterboard	133.0	No Insulation	No
IW-2 - Cavity wall, direct fix plasterboard, single gap	145.0	No insulation	No

2550

NE

No

Floors							
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering		
Studio/Garage 1	Timber Above Plasterboard 100mm	29.5		Bulk Insulation R3	Carpet 10mm		
Lift L2 Main	Concrete Slab on Ground 100mm	2.2	None	No Insulation	Ceramic Tiles 8mm		
L2 Living	Concrete Slab on Ground 100mm	47.6	None	No Insulation	Ceramic Tiles 8mm		
Ldry	Concrete Slab on Ground 100mm	3.5	None	No Insulation	Ceramic Tiles 8mm		
L2 Bath	Concrete Slab on Ground 100mm	6.3	None	No Insulation	Ceramic Tiles 8mm		
Study	Concrete Slab on Ground 100mm	15.7	None	No Insulation	Ceramic Tiles 8mm		
Garage 1	Concrete Slab on Ground 100mm	41.3	None	No Insulation	Bare		

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

2195

2000

Certificate number:	0003344546	Certificate Date:		13 Nov 2018	+ 0+	ar rating:	6.7	NATIONWI
	0003344340				× 31		0.7	HOUS ENERGY RATING SCI
Building features	s continued							
L3 Lift/Lift L2 Main	Timber Above F 100mm	Plasterboard	2.2			No Insulation	Bare	
WC/L2 Living	Timber Above F 100mm	Plasterboard	3.3			No Insulation	Ceramic 8mm	: Tiles
Kitchen/Living /L2 Living	Timber Above F 100mm	Plasterboard	38.0			No Insulation	Carpet 1	I0mm
Kitchen/Living /Ldry	Timber Above F 100mm	Plasterboard	3.6			No Insulation	Carpet 1	I0mm
Kitchen/Living /L2 Bath	Timber Above F 100mm	Plasterboard	6.5			No Insulation	Carpet 1	I0mm
Kitchen/Living /Study	Timber Above F 100mm	Plasterboard	16.1			No Insulation	Carpet 1	I0mm
Ens 1/WC	Timber Above F 19mm	Plasterboard	3.4			No Insulation	Carpet 1	I0mm
Ens 1	Suspended Tim	ber Floor 19mm	0.9	Totally O	pen	Bulk Insulation, Gap to Floor R2.5	Bare	
L4 Lift/L3 Lift	Timber Above F 100mm	Plasterboard	2.2			No Insulation	Bare	
Bedroom 1/Kitchen/Living	Timber Above F 100mm	Plasterboard	17.1			No Insulation	Carpet 1	I0mm
Bedroom 1	Suspended Tim	ber Floor 100mm	2.3	Totally O	pen	Bulk Insulation, Gap to Floor R2.5	Carpet 1	10mm
Bedroom 2/Kitchen/Living	Timber Above F 100mm	Plasterboard	12.6			No Insulation	Carpet 1	I0mm
Bedroom 3/Kitchen/Living	Timber Above F 100mm	Plasterboard	12.2			No Insulation	Carpet 1	I0mm
L4 Bath/Kitchen/Living	Timber Above F 100mm	Plasterboard	5.5			No Insulation	Ceramic 8mm	Tiles
Upstairs/Kitchen/Li ving	Timber Above F 19mm	Plasterboard	15.2			No Insulation	Carpet 1	I0mm

Ceiling type			
Location	Construction	Added insulation	Roof space above
Studio	Plasterboard	Bulk Insulation R3.5	Yes
Lift L2 Main	Plasterboard	Bulk Insulation R3	No
Lift L2 Main	Timber Above Plasterboard	No Insulation	No
L2 Living	Plasterboard	Bulk Insulation R3.5	No
L2 Living	Timber Above Plasterboard	No Insulation	No
Ldry	Plasterboard	Bulk Insulation R3	No
Ldry	Timber Above Plasterboard	No Insulation	No
L2 Bath	Plasterboard	Bulk Insulation R3	No
L2 Bath	Timber Above Plasterboard	No Insulation	No
Study	Plasterboard	Bulk Insulation	No

Nationwide Ho	use Energy R	ating Scheme* Co	ertificate			A TOTAL O
Certificate number:	0003344546	Certificate Date:	13 Nov 2018	★ Star rating:	6.7	NATIONWIDE HOUSE ENERGY RATING SCHEME
Building feature	es continued					
				R3		
Study	Timber Above	Plasterboard		No Insulation	No	
Garage 1	Plasterboard			No insulation	No	
Garage 1	Timber Above	Plasterboard		Bulk Insulation R3	No	
L3 Lift	Timber Above	Plasterboard		No Insulation	No	
WC	Timber Above	Plasterboard		No Insulation	No	
Kitchen/Living	Timber Above	Plasterboard		No Insulation	No	
Ens 1	Plasterboard			Bulk Insulation R3.5	Yes	
L4 Lift	Plasterboard			Bulk Insulation R3	Yes	
Bedroom 1	Plasterboard			Bulk Insulation R3.5	Yes	
Bedroom 2	Plasterboard			Bulk Insulation R3.5	Yes	
Bedroom 3	Plasterboard			Bulk Insulation R3.5	Yes	
L4 Bath	Plasterboard			Bulk Insulation R3.5	Yes	
Upstairs	Plasterboard			Bulk Insulation R3	Yes	

Ceiling penetrations							
Location	Number	Туре	Diameter (mm) Sealed/unsealed				
None Present							

Location Number Diameter (mm)	
None Present	

Roof type	
Construction	Added Roof colou insulation
Corrugated Iron	Bulk, Reflective Medium Side Down, Anti- glare Up R1.3
Waterproofing Membrane	No Insulation, Medium Only an Air Gap

Certificate number: 0003344546

Certificate Date: 13 N

13 Nov 2018



Additional information

If carpet noted as floor covering it may be replaced with any type.

Due to non current Window Library the glazing descriptiosn may not match actual products. Only the U and SHGC values should be considered NOT the glazing descriptions.

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

Certificate number: 0003344587

Certificate Date: 13 Nov 2018

★ Star rating: 6.2



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:	20039
Name:	David Howard
Organisation:	Partners Energy Management
Email:	david@partnersenergy.com.au
Phone:	0421381005
Declaration of interest:	The Assessor has provided design advice to the Applicant
Software:	BERS Pro v4.3.0.2c (3.13)

ABSA AAO:

Overview

Dwelling details

	Unit TH02, 25-27 Warriewood rd Warriewood					
State:	NSW	Postcode:	2102			
Туре:	New Dwelling	NCC Class: NatHERS	1A			
Lot/DP		climate zone:	56			
number:	5464	Exposure:	Suburban			

Key construction and insulation materials

(see following pages for details)

Construction:	Fibro Cavity Panel Direct Fix Corrugated Iron
la sul sti su s	Concrete Slab on Ground
Insulation:	R2.5 wall insulation
	R3.5 ceiling insulation
	No floor insulation
Glazing:	ATB-006-03 B AI Thermally Broken B
	DG Argon Fill High Solar Gain low-E

Net floor area (m ²)		Annual thermal		
Conditioned: Unconditioned:	232.0	performanc (MJ/m ²)	e loads	
Garage:	41.0 41.0	Heating:	29.5	
TOTAL:	273.0	Cooling: TOTAL:	19.8 49.3	

Plan documents

Warriewood Residential Development Plan ref/date: Prepared by: **VIA Architects**



Ceiling penetration (see following pages for deta	i S r ails) p	naxir	TE: This total is the num number of ceiling trations allowed to a	
Unsealed:	0 0 0 t 0 2 1	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:	Unki	now	<i>i</i> n	
	у		Scan to access this certificate online and confirm this is valid.	
default windows onl Note on allowable window values: Only a 5% tolerance to the nominal SHGC window values shown on pa	ted		certificate online and	
Window selection - default windows onl Note on allowable window values: Only a 5% tolerance to the nominal SHGC window values shown on pa can be used with this rating. Note: Only a +/- 5% SHGC tolerand allowed with this rating.	ted age 2		certificate online and	

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.

Certificate Date:

Certificate number: 0003344587

13 Nov 2018

★ Star rating:

6.2

Building features

Window type and performance value

Window ID	Window type				U-value	SHGC
ATB-006-03 B	ATB-006-03 B A low-E -Clear	I Thermally Brok	en B DG Argon F	Fill High Solar (Gain 2.9	0.51
Window schee	dule					
Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Studio	ATB-006-03 B	n/a	2550	1000	SE	No Shading
Studio	ATB-006-03 B	n/a	2550	1000	SW	No Shading
Studio	ATB-006-03 B	n/a	2700	3500	NE	No Shading
L2 Living	ATB-006-03 B	n/a	1400	900	SE	No Shading
L2 Living	ATB-006-03 B	n/a	2550	3636	SW	No Shading
Study	ATB-006-03 B	n/a	2550	900	SE	No Shading
Kitchen/Living	ATB-006-03 B	n/a	2700	3200	NE	Vertical Louvres, Horizontal Blades
Kitchen/Living	ATB-006-03 B	n/a	2700	2722	SE	No Shading
Kitchen/Living	ATB-006-03 B	n/a	2700	1000	SE	No Shading
Kitchen/Living	ATB-006-03 B	n/a	2400	3178	SW	No Shading
Ens 1	ATB-006-03 B	n/a	2400	600	SW	No Shading
Bedroom 1	ATB-006-03 B	n/a	2550	1000	SE	No Shading
Bedroom 1	ATB-006-03 B	n/a	2400	3178	SW	No Shading
Bedroom 2	ATB-006-03 B	n/a	2550	1000	SE	No Shading
Bedroom 3	ATB-006-03 B	n/a	2550	1875	NE	No Shading
Bedroom 3	ATB-006-03 B	n/a	2550	2722	SE	No Shading

Roof window and skylight type and performance value ID Window type **U-value** SHGC None Present Roof window and skylight schedule Location ID Roof **Orientation Outdoor shade Indoor** Area (m²) window/skylight shade/diffuser no. None Present

External wall type Wall type Insulation ID Wall wrap or foil EW-1 Fibro Cavity Panel Direct Fix Anti-glare foil with bulk no gap R2.5 Yes EW-2 Concrete block, lined Anti-glare foil with bulk no gap R1.5 Yes EW-3 Fibro Cavity Panel Direct Fix Foil, Anti-glare one side, Reflective other Yes **External wall schedule** Location ID Width (mm) Height (mm) Orientation **Fixed Shade Eaves** (mm) Studio **EW-1** 5000 2700 SE No 0 Studio **EW-1** 5900 2700 SW No 0 Studio **EW-1** 5900 2700 NE No 4400 L2 Living **EW-1** 7295 2550 SE No 0

Certificate number	0003344587	Certificate Date:		13 Nov 2018	★ Star rating:	6.2	NATIONWII HOUS ENERGY RATING SCH
Building featur	es continued						
L2 Living	EW-1	3700	2550	SW	No	10	600
L2 Living	EW-1	1800	2550	NW	No	44	00
L2 Living	EW-1	1800	2550	SW	No	18	00
Ldry	EW-2	2795	2550	NE	No	0	
L2 Bath	EW-2	2695	2550	NE	No	0	
L2 Bath	EW-2	2395	2550	SE	No	0	
Study	EW-1	4890	2550	SE	No	0	
Garage 1	EW-3	1600	2550	NE	No	32	00
Garage 1	EW-3	1100	2550	NW	No	42	00
Garage 1	EW-3	4300	2550	NE	No	21	00
Garage 1	EW-3	7300	3000	SE	No	0	
Garage 1	EW-3	5900	3000	SW	No	0	
WC	EW-1	1595	2700	SW	No	60	0
Kitchen/Living	EW-1	5500	2700	NE	No	0	
Kitchen/Living	EW-1	12800	2700	SE	No	0	
Kitchen/Living	EW-1	3895	2700	SW	No	60	0
Ens 1	EW-1	1595	2550	SW	No	13	00
Bedroom 1	EW-1	5395	2550	SE	No	0	
Bedroom 1	EW-1	3895	2550	SW	No	13	00
Bedroom 2	EW-1	4190	2550	SE	No	0	
Bedroom 3	EW-1	3295	2550	NE	No	20	00
Bedroom 3	EW-1	3795	2550	SE	No	90	0

L4 Bath

EW-1

2195

Wall type	Area (m ²)	Insulation	Wall wrap or foil
IW-1 - Brick, plasterboard	133.0	No Insulation	No
IW-2 - Cavity wall, direct fix plasterboard, single gap	145.0	No insulation	No

2550

NE

No

2000

Floors					
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Studio/Garage 1	Timber Above Plasterboard 100mm	29.5		Bulk Insulation R3	Carpet 10mm
Lift L2 Main	Concrete Slab on Ground 100mm	2.2	None	No Insulation	Carpet 10mm
L2 Living	Concrete Slab on Ground 100mm	47.6	None	No Insulation	Carpet 10mm
Ldry	Concrete Slab on Ground 100mm	3.5	None	No Insulation	Carpet 10mm
L2 Bath	Concrete Slab on Ground 100mm	6.3	None	No Insulation	Carpet 10mm
Study	Concrete Slab on Ground 100mm	15.7	None	No Insulation	Carpet 10mm
Garage 1	Concrete Slab on Ground 100mm	41.3	None	No Insulation	Bare

Certificate number:	0003344587	Certificate Date:		13 Nov 2018	★ Sta	r rating:	6.2	
Quilding footuro	c continued							ENERGY RATING SCH
Building feature								
L3 Lift/Lift L2 Main	Timber Above 100mm	Plasterboard	2.2			No Insulation	Bare	
WC/L2 Living	Timber Above 100mm	Plasterboard	3.3			No Insulation	Carpet	10mm
Kitchen/Living /L2 Living	Timber Above 100mm	Plasterboard	38.0			No Insulation	Carpet	10mm
Kitchen/Living /Ldry	Timber Above 100mm	Plasterboard	3.6			No Insulation	Carpet	10mm
Kitchen/Living /L2 Bath	Timber Above 100mm	Plasterboard	6.5			No Insulation	Carpet	10mm
Kitchen/Living /Study	Timber Above 100mm	Plasterboard	16.1			No Insulation	Carpet	10mm
Ens 1/WC	Timber Above	Plasterboard	3.4			No Insulation	Carpet	10mm
Ens 1	Suspended Tin	nber Floor 19mm	0.9	Totally O		Bulk Insulation, Gap to Floor R2.5	Carpet	10mm
L4 Lift/L3 Lift	Timber Above 100mm	Plasterboard	2.2			No Insulation	Bare	
Bedroom 1/Kitchen/Living	Timber Above 100mm	Plasterboard	17.1			No Insulation	Carpet	10mm
Bedroom 1	Suspended Tin	nber Floor 100mm	2.3	Totally O		Bulk Insulation, Gap to Floor R2.5	Carpet	10mm
Bedroom 2/Kitchen/Living	Timber Above 100mm	Plasterboard	12.6			No Insulation	Carpet	10mm
Bedroom 3/Kitchen/Living	Timber Above 100mm	Plasterboard	12.2			No Insulation	Carpet	10mm
L4 Bath/Kitchen/Living	Timber Above 100mm	Plasterboard	5.5			No Insulation	Carpet	10mm
Upstairs/Kitchen/Li ving	Timber Above	Plasterboard	15.1			No Insulation	Carpet	10mm

Ceiling type			
Location	Construction	Added insulation	Roof space above
Studio	Plasterboard	Bulk Insulation R3.5	Yes
Lift L2 Main	Plasterboard	Bulk Insulation R3	No
Lift L2 Main	Timber Above Plasterboard	No Insulation	No
L2 Living	Plasterboard	Bulk Insulation R3.5	No
L2 Living	Timber Above Plasterboard	No Insulation	No
Ldry	Plasterboard	Bulk Insulation R3	No
Ldry	Timber Above Plasterboard	No Insulation	No
L2 Bath	Plasterboard	Bulk Insulation R3	No
L2 Bath	Timber Above Plasterboard	No Insulation	No
Study	Plasterboard	Bulk Insulation	No

Nationwide House Energy Rating Scheme* Certificate						and the second s
Certificate number	: 0003344587	Certificate Date:	13 Nov 2018	★ Star rating:	6.2	NATIONWIDE HOUSE ENERGY RATING SCHEME
Building featur	es continued					
				R3		
Study	Timber Above	Plasterboard		No Insulation	No	
Garage 1	Plasterboard			No insulation	No	
Garage 1	Timber Above	Plasterboard		Bulk Insulation R3	No	
L3 Lift	Timber Above	Plasterboard		No Insulation	No	
WC	Timber Above	Plasterboard		No Insulation	No	
Kitchen/Living	Timber Above	Plasterboard		No Insulation	No	
Ens 1	Plasterboard			Bulk Insulation R3.5	Yes	
L4 Lift	Plasterboard			Bulk Insulation R3.5	Yes	
Bedroom 1	Plasterboard			Bulk Insulation R3.5	Yes	
Bedroom 2	Plasterboard			Bulk Insulation R3.5	Yes	
Bedroom 3	Plasterboard			Bulk Insulation R3.5	Yes	
L4 Bath	Plasterboard			Bulk Insulation R3.5	Yes	
Upstairs	Plasterboard			Bulk Insulation R3.5	Yes	

Ceiling penetrations						
Location	Number	Туре	Diameter (mm) Sealed/unsealed			
None Present						

Ceiling fans		
Location	Number	Diameter (mm)
None Present		

Roof type				
Construction	Added Roof colour insulation			
Corrugated Iron	Bulk, Reflective Medium Side Down, Anti- glare Up R1.3			
Waterproofing Membrane	No Insulation, Medium Only an Air Gap			

Certificate number: 0003344587

Certificate Date: 13 N

13 Nov 2018 **★** Star rating: 6.2



Additional information

If carpet noted as floor covering it may be replaced with any type.

Due to non current Window Library the glazing descriptiosn may not match actual products. Only the U and SHGC values should be considered NOT the glazing descriptions.

Explanatory notes

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Contact

For more information on the Nationwide House Energy Rating Scheme (NatHERS), visit www.nathers.gov.au

Certificate number: 0003344579

Certificate Date: 13 Nov 2018

★ Star rating: 6.4



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:	20039
Name:	David Howard
Organisation:	Partners Energy Management
Email:	david@partnersenergy.com.au
Phone:	0421381005
Declaration of interest:	The Assessor has provided design advice to the Applicant
Software:	BERS Pro v4.3.0.2c (3.13)

ABSA AAO:

Overview

Dwelling details

Street: Suburb:	Unit TH03, 25-27 V Warriewood	Varriewood r	d
State:	NSW	Postcode:	2102
Туре:	New Dwelling	NCC Class: NatHERS	1A
Lot/DP		climate zone:	56
number:	5464	Exposure:	Suburban

Key construction and insulation materials

(see following pages for details)

Construction:	Fibro Cavity Panel Direct Fix Waterproofing Membrane
	Concrete Slab on Ground
Insulation:	R2.5 wall insulation
	R3.5 ceiling insulation
	No floor insulation
Glazing:	ATB-006-03 B AI Thermally Broken B
-	DG Argon Fill High Solar Gain low-E

Net floor area (m ²)		Annual thermal	
Conditioned: Unconditioned:	226.0 41.0	performanc (MJ/m ²)	e loads
Garage:	41.0	Heating:	20.4
TOTAL:	267.0	Cooling: TOTAL:	25.2 45.6

Plan documents

Warriewood Residential Development Plan ref/date: Prepared by: **VIA Architects**



Ceiling penetration (see following pages for de	1S tails)	naximum n enetrations	is total is the umber of ceiling s allowed to a
Sealed: Unsealed: TOTAL:**	0 0 0	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 requir Loss of ceiling insulation for the penetrations listed has been taken into account with the ratin	
Principle downlight type:	Unk	nown	
Window selection - default windows on	ly	certi	n to access this ficate online and irm this is valid.
Only a 5% tolerance to the nomina SHGC window values shown on p	ated		
Note on allowable window values: Only a 5% tolerance to the nomina SHGC window values shown on p can be used with this rating. Note: Only a +/- 5% SHGC tolerar allowed with this rating.	ated bage 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.



Certificate Date:

Certificate number: 0003344579

13 Nov 2018

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★ Star rating:
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6.4

Building features

Window type and performance value

Window ID	Window type				U-value	SHGC
ATB-006-03 B	ATB-006-03 B A low-E -Clear	Al Thermally Brok	en B DG Argon F	Fill High Solar (Gain 2.9	0.51
Window schee	dule					
Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Studio	ATB-006-03 B	n/a	2700	3500	NE	No Shading
Studio	ATB-006-03 B	n/a	2550	1000	SW	No Shading
Studio	ATB-006-03 B	n/a	2550	1000	NW	No Shading
L2 Living	ATB-006-03 B	n/a	2550	3636	SW	No Shading
L2 Living	ATB-006-03 B	n/a	1400	900	NW	No Shading
Study	ATB-006-03 B	n/a	2550	900	NW	No Shading
Kitchen/Living	ATB-006-03 B	n/a	2400	3178	SW	No Shading
Kitchen/Living	ATB-006-03 B	n/a	2700	2722	NW	No Shading
Kitchen/Living	ATB-006-03 B	n/a	2700	1000	NW	No Shading
Kitchen/Living	ATB-006-03 B	n/a	2700	3200	NE	Vertical Louvres, Horizontal Blades
Ens 1	ATB-006-03 B	n/a	2400	600	SW	No Shading
Bedroom 1	ATB-006-03 B	n/a	2400	3178	SW	No Shading
Bedroom 1	ATB-006-03 B	n/a	2550	1000	NW	No Shading
Bedroom 2	ATB-006-03 B	n/a	2550	1000	NW	No Shading
Bedroom 3	ATB-006-03 B	n/a	2550	2722	NW	No Shading
Bedroom 3	ATB-006-03 B	n/a	2550	1875	NE	No Shading

Roof window and skylight type and performance value							
ID	Window type				U-value	SHGC	
None Present							
Roof windov	v and skylight sc	hedule					
Location	ID	Roof window/skylight no.	Area (m²)	Orientation	Outdoor shade	Indoor shade/diffuser	
None Present							

External wall	type					
ID	Wall type		Insulation		N	all wrap or foil
EW-1	Fibro Cavity I	Panel Direct Fix	Anti-glare foil	with bulk no gap	R2.5 Y	′es
EW-2	Concrete block, lined		Anti-glare foil	with bulk no gap	R1.5 Y	′es
EW-3	Fibro Cavity	Panel Direct Fix	Foil, Anti-glare	e one side, Refle	ctive other Y	′es
External wall	schedule					
Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Studio	EW-1	5900	2700	NE	No	4400
Studio	EW-1	5900	2700	SW	No	0
Studio	EW-1	5000	2700	NW	No	0
Lift L2 Main	EW-1	1595	2700	SW	No	4000

Certificate number	: 0003344579	Certificate Date	:	13 Nov 2018	★ Star rating:	6.4 NATIONW HOU ENERGY RATING S
Building featur	es continued					
L2 Living	EW-1	1800	2550	SE	No	4200
L2 Living	EW-1	3900	2550	SW	No	10600
L2 Living	EW-1	7295	2550	NW	No	0
Ldry	EW-2	2795	2550	NE	No	0
L2 Bath	EW-2	2395	2550	NW	No	0
L2 Bath	EW-2	2695	2550	NE	No	0
Study	EW-1	4890	2550	NW	No	0
Garage 1	EW-3	5900	3000	SW	No	0
Garage 1	EW-3	7300	3000	NW	No	0
Garage 1	EW-3	4300	2550	NE	No	2100
Garage 1	EW-3	1100	2550	SE	No	4200
Garage 1	EW-3	1600	2550	NE	No	3200
WC	EW-1	2195	2700	SE	No	2600
WC	EW-1	1595	2700	SW	No	600
Kitchen/Living	EW-1	3895	2700	SW	No	600
Kitchen/Living	EW-1	12800	2700	NW	No	0
Kitchen/Living	EW-1	5500	2700	NE	No	0
Ens 1	EW-1	1595	2550	SW	No	1900
Bedroom 1	EW-1	3895	2550	SW	No	1900
Bedroom 1	EW-1	4795	2550	NW	No	0
Bedroom 2	EW-1	4190	2550	NW	No	0
Bedroom 3	EW-1	3795	2550	NW	No	900
Bedroom 3	EW-1	3295	2550	NE	No	2000

EW-1

2195

L4 Bath

Wall type	Area (m ²)	Insulation	Wall wrap or foil
IW-1 - Brick, plasterboard	126.0	No Insulation	No
IW-2 - Cavity wall, direct fix plasterboard, single gap	139.0	No insulation	No

2550

NE

No

2000

Floors							
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering		
Studio/Garage 1	Timber Above Plasterboard 100mm	29.5		Bulk Insulation R3	Carpet 10mm		
Lift L2 Main	Concrete Slab on Ground 100mm	2.3	None	No Insulation	Ceramic Tiles 8mm		
L2 Living	Concrete Slab on Ground 100mm	44.5	None	No Insulation	Ceramic Tiles 8mm		
Ldry	Concrete Slab on Ground 100mm	3.5	None	No Insulation	Ceramic Tiles 8mm		
L2 Bath	Concrete Slab on Ground 100mm	6.3	None	No Insulation	Ceramic Tiles 8mm		
Study	Concrete Slab on Ground 100mm	15.7	None	No Insulation	Ceramic Tiles 8mm		

Certificate number: 0003344579

Certificate Date: 13 Nov 2018

★ Star rating:



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Building features continu	led
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Garage 1	Concrete Slab on Ground 100mm	41.3	None	No Insulation	Bare
L3 Lift/Lift L2 Main	Timber Above Plasterboard 100mm	2.2		No Insulation	Bare
WC	Suspended Timber Floor 19mm	3.3	Totally Open	Bulk Insulation in Contact with Floor R2.5	
Kitchen/Living /L2 Living	Timber Above Plasterboard 100mm	38.0		No Insulation	Carpet 10mm
Kitchen/Living /Ldry	Timber Above Plasterboard 100mm	3.6		No Insulation	Carpet 10mm
Kitchen/Living /L2 Bath	Timber Above Plasterboard 100mm	6.5		No Insulation	Carpet 10mm
Kitchen/Living /Study	Timber Above Plasterboard 100mm	16.1		No Insulation	Carpet 10mm
Ens 1/WC	Timber Above Plasterboard 19mm	3.3		No Insulation	Carpet 10mm
L4 Lift/L3 Lift	Timber Above Plasterboard 100mm	2.2		No Insulation	Bare
Bedroom 1/Kitchen/Living	Timber Above Plasterboard 100mm	17.0		No Insulation	Carpet 10mm
Bedroom 2/Kitchen/Living	Timber Above Plasterboard 100mm	12.6		No Insulation	Carpet 10mm
Bedroom 3/Kitchen/Living	Timber Above Plasterboard 100mm	12.2		No Insulation	Carpet 10mm
L4 Bath/Kitchen/Living	Timber Above Plasterboard 100mm	5.5		No Insulation	Ceramic Tiles 8mm
Upstairs/Kitchen/Li ving	Timber Above Plasterboard 19mm	15.2		No Insulation	Carpet 10mm

Ceiling type

Location	Construction	Added insulation	Roof space above
Studio	Plasterboard	Bulk Insulation R3.5	No
Lift L2 Main	Plasterboard	Bulk Insulation R3	No
Lift L2 Main	Timber Above Plasterboard	No Insulation	No
L2 Living	Plasterboard	Bulk Insulation R3.5	No
L2 Living	Timber Above Plasterboard	No Insulation	No
Ldry	Plasterboard	Bulk Insulation R3	No
Ldry	Timber Above Plasterboard	No Insulation	No
L2 Bath	Plasterboard	Bulk Insulation R3	No
L2 Bath	Timber Above Plasterboard	No Insulation	No
Study	Plasterboard	Bulk Insulation R3	No
Study	Timber Above Plasterboard	No Insulation	No
Garage 1	Plasterboard	No insulation	No
Garage 1	Timber Above Plasterboard	Bulk Insulation R3	No

Certificate number:	0003344579	Certificate Date:	13 Nov 2018	★ Star rating:	6.4	NATIONW
						ENERGY RATING SO
uilding feature	es continued					
L3 Lift	Timber Above	Plasterboard		No Insulation	No	
WC	Timber Above	Plasterboard		No Insulation	No	
Kitchen/Living	Timber Above	Plasterboard		No Insulation	No	
Ens 1	Plasterboard			Bulk Insulation R3.5	Yes	
L4 Lift	Plasterboard			Bulk Insulation R3	Yes	
Bedroom 1	Plasterboard			Bulk Insulation R3.5	Yes	
Bedroom 2	Plasterboard			Bulk Insulation R3.5	Yes	
Bedroom 3	Plasterboard			Bulk Insulation R3.5	Yes	
L4 Bath	Plasterboard			Bulk Insulation R3.5	Yes	
Upstairs	Plasterboard			Bulk Insulation R3	Yes	

Ceiling penetrations					
Location	Number	Туре	Diameter (mm) Sealed/unsealed		
None Present					

Ceiling fans			
Location	Number	Diameter (mm)	
None Present			

Roof type	
Construction	Added Roof col insulation
Waterproofing Membrane	No Insulation, Medium Only an Air Gap
Corrugated Iron	Bulk, Reflective Medium Side Down, Anti- glare Up R1.3

Certificate number: 0003344579

Certificate Date: 13 No

13 Nov 2018



Additional information

If carpet noted as floor covering it may be replaced with any type.

Due to non current Window Library the glazing descriptiosn may not match actual products. Only the U and SHGC values should be considered NOT the glazing descriptions.

Explanatory notes

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★ Star rating: 6.4

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Certificate number: 0003344603

Certificate Date: 13 Nov 2018

★ Star rating: 6.1



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:	20039
Name:	David Howard
Organisation:	Partners Energy Management
Email:	david@partnersenergy.com.au
Phone:	0421381005
Declaration of interest:	The Assessor has provided design advice to the Applicant
Software:	BERS Pro v4.3.0.2c (3.13)

ABSA AAO:

Overview

Dwelling details

Street: Suburb:	Unit TH04, 25-27 V Warriewood	Varriewood r	d
State:	NSW	Postcode:	2102
Туре:	New Dwelling	NCC Class: NatHERS	1A
Lot/DP		climate zone:	56
number:	5464	Exposure:	Suburban

Key construction and insulation materials

(see following pages for details)

Construction:	Fibro Cavity Panel Direct Fix Corrugated Iron
la sul sti su s	Concrete Slab on Ground
Insulation:	R2.5 wall insulation
	R3.5 ceiling insulation
	No floor insulation
Glazing:	ATB-006-03 B AI Thermally Broken B
	DG Argon Fill High Solar Gain low-E

Net floor area	Net floor area (m ²)		Annual the	
Conditioned: Unconditioned:	198.0 43.0		performanc (MJ/m ²)	e loads
Garage:	39.0		Heating:	29.3
TOTAL:	240.0		Cooling: TOTAL:	20.6 49.9

Plan documents

Warriewood Residential Development Plan ref/date: Prepared by: **VIA Architects**



Ceiling penetration (see following pages for det		maxir	TE: This total is the num number of ceiling rations allowed to a
Sealed: Unsealed: TOTAL:**	0 0 0	certifie exceed this of and a Loss penet	g (under a roof) for this cate. If this number is ded in construction then certificate IS NOT VALID a new certificate is required. of ceiling insulation for the trations listed has been into account with the rating.
Principle downlight type:	Unl	know	'n
Principle downlight type: Window selection - default windows on Note on allowable window values: only a 5% tolerance to the nomina SHGC window values shown on p	ly ated		Scan to access this certificate online and confirm this is valid.

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.



Certificate Date:

Certificate number: 0003344603

13 Nov 2018

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★ Star rating:
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Building features

Window type and performance value

Window ID	Window type				U-value	SHGC	
ATB-006-03 B	ATB-006-03 B A low-E -Clear	ATB-006-03 B AI Thermally Broken B DG Argon Fill High Solar Gain low-E -Clear					
Window schee	dule						
Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade	
Studio	ATB-006-03 B	n/a	2550	1000	SE	No Shading	
Studio	ATB-006-03 B	n/a	2550	1000	SW	No Shading	
Studio	ATB-006-03 B	n/a	2700	3500	NE	No Shading	
L2 Living	ATB-006-03 B	n/a	1400	900	SE	No Shading	
L2 Living	ATB-006-03 B	n/a	2550	3636	SW	No Shading	
Study	ATB-006-03 B	n/a	2550	900	SE	No Shading	
Kitchen/Living	ATB-006-03 B	n/a	2700	3200	NE	Vertical Louvres, Horizontal Blades	
Kitchen/Living	ATB-006-03 B	n/a	2700	2722	SE	No Shading	
Kitchen/Living	ATB-006-03 B	n/a	2700	1000	SE	No Shading	
Kitchen/Living	ATB-006-03 B	n/a	2400	3178	SW	No Shading	
Bath	ATB-006-03 B	n/a	2550	1000	SW	No Shading	
Bedroom 1	ATB-006-03 B	n/a	2550	1000	SE	No Shading	
Bedroom 1	ATB-006-03 B	n/a	2550	600	SW	No Shading	
Bedroom 2	ATB-006-03 B	n/a	2550	1000	SE	No Shading	
Bedroom 3	ATB-006-03 B	n/a	2550	1875	NE	No Shading	
Bedroom 3	ATB-006-03 B	n/a	2550	2722	SE	No Shading	

ID	Window type			U-value	SHGC
None Present					
Roof window	and skylight sch	edule			

External wa	ll type					
ID	Wall type		Insulation			Wall wrap or foi
EW-1	Fibro Cavity P	anel Direct Fix	Direct Fix Anti-glare foil with bulk no gap R2.5			Yes
EW-2	Concrete bloc	k, lined	Anti-glare foil	Anti-glare foil with bulk no gap R1.5		
EW-3	Fibro Cavity P	anel Direct Fix	Foil, Anti-glare one side, Reflective other			Yes
External wa	II schedule					
Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Sha	de Eaves (mm)
Studio	EW-1	4904	2700	SE	No	0
Studio	EW-1	5794	2700	SW	No	0
Studio	EW-1	5794	2700	NE	No	4322
L2 Living	EW-2	2995	2550	NE	No	0

Certificate number	r: 0003344603	Certificate Date:		13 Nov 2018	★ Star rating:	6.1 NATIONWI
Building featur	es continued					
L2 Living	EW-1	5995	2550	SE	No	0
L2 Living	EW-1	3900	2550	SW	No	13550
L2 Living	EW-1	2000	2550	NW	No	4200
L2 Living	EW-1	1600	2550	SW	No	2000
L2 Bath	EW-2	2495	2550	NE	No	0
L2 Bath	EW-2	1695	2550	SE	No	0
Study	EW-1	3690	2550	SE	No	0
Garage 1	EW-3	1523	2550	NE	No	2173
Garage 1	EW-3	854	2550	NW	No	1630
Garage 1	EW-3	4272	2550	NE	No	1337
Garage 1	EW-3	6964	3000	SE	No	0
Garage 1	EW-3	5887	3000	SW	No	0
WC	EW-1	895	2700	SW	No	2000
Kitchen/Living	EW-1	5500	2700	NE	No	0
Kitchen/Living	EW-1	11400	2700	SE	No	0
Kitchen/Living	EW-1	4595	2700	SW	No	2000
Bath	EW-1	1795	2550	SW	No	50
Bedroom 1	EW-1	3795	2550	SE	No	0
Bedroom 1	EW-1	3695	2550	SW	No	25
Bedroom 2	EW-1	4190	2550	SE	No	0
Bedroom 3	EW-1	3295	2550	NE	No	2000
Bedroom 3	EW-1	3795	2550	SE	No	900
Ens	EW-1	2195	2550	NE	No	2000

Wall type	Area (m ²)	Insulation	Wall wrap or foil
IW-1 - Brick, plasterboard	116.0	No Insulation	No
IW-2 - Cavity wall, direct fix plasterboard, single gap	101.0	No insulation	No

Floors					
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Studio/Garage 1	Timber Above Plasterboard 100mm	28.4		Bulk Insulation R3	Carpet 10mm
L2 Living	Concrete Slab on Ground 100mm	42.2	None	No Insulation	Carpet 10mm
L2 Bath	Concrete Slab on Ground 100mm	4.1	None	No Insulation	Carpet 10mm
Study	Concrete Slab on Ground 100mm	12.1	None	No Insulation	Carpet 10mm
Garage 1	Concrete Slab on Ground 100mm	39.4	None	No Insulation	Bare
WC	Concrete Slab on Ground 100mm	1.7	None	No Insulation	Carpet 10mm
Kitchen/Living /L2 Living	Timber Above Plasterboard 100mm	42.6		No Insulation	Carpet 10mm

Certificate Date:

Certificate number: 0003344603

13 Nov 2018

★ Star rating:



6.1

Building	features	continued	
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Kitchen/Living /L2 Bath	Timber Above Plasterboard 100mm	4.2		No Insulation	Carpet 10mm
Kitchen/Living /Study	Timber Above Plasterboard 100mm	12.6		No Insulation	Carpet 10mm
Kitchen/Living	Concrete Slab on Ground 100mm	1.4	None	No Insulation	Carpet 10mm
Bath/WC	Timber Above Plasterboard 100mm	1.7		No Insulation	Bare
Bath/Kitchen/Living	Timber Above Plasterboard 100mm	3.1		No Insulation	Bare
Bath	Concrete Slab on Ground 100mm	0.7	None	Bulk Insulation, Gap to Floor R2.5	Carpet 10mm
Bedroom 1/Kitchen/Living	Timber Above Plasterboard 100mm	11.4		No Insulation	Carpet 10mm
Bedroom 1	Suspended Timber Floor 100mm	1.4	Totally Open	Bulk Insulation, Gap to Floor R2.5	Carpet 10mm
Bedroom 2/Kitchen/Living	Timber Above Plasterboard 100mm	12.6		No Insulation	Carpet 10mm
Bedroom 3/Kitchen/Living	Timber Above Plasterboard 19mm	12.2		No Insulation	Carpet 10mm
Ens/Kitchen/Living	Timber Above Plasterboard 100mm	5.5		No Insulation	Carpet 10mm
Upstairs/Kitchen/Li ving	Timber Above Plasterboard 100mm	14.0		No Insulation	Carpet 10mm

Ceiling type

Location	Construction	Added insulation	Roof space above
Studio	Plasterboard	Bulk Insulation R3.5	Yes
L2 Living	Plasterboard	Bulk Insulation R3.5	No
L2 Living	Timber Above Plasterboard	No Insulation	No
L2 Bath	Plasterboard	Bulk Insulation R3	No
L2 Bath	Timber Above Plasterboard	No Insulation	No
Study	Plasterboard	Bulk Insulation R3	No
Study	Timber Above Plasterboard	No Insulation	No
Garage 1	Plasterboard	No insulation	No
Garage 1	Timber Above Plasterboard	Bulk Insulation R3	No
WC	Timber Above Plasterboard	No Insulation	No
Kitchen/Living	Timber Above Plasterboard	No Insulation	No
Bath	Plasterboard	Bulk Insulation R3.5	Yes
Bedroom 1	Plasterboard	Bulk Insulation R3.5	Yes
Bedroom 2	Plasterboard		Yes

Nationwide House Energy Rating Scheme* Certificate					A A A A A A A A A A A A A A A A A A A	
Certificate numb	er: 0003344603	Certificate Date:	13 Nov 2018	★ Star rating:	6.1	NATIONWIDE HOUSE ENERGY RATING SCHEME
Building featu	ires continued					
				Bulk Insulation R3.5		
Bedroom 3	Plasterboard			Bulk Insulation R3.5	Yes	
Ens	Plasterboard			Bulk Insulation R3.5	Yes	
Upstairs	Plasterboard			Bulk Insulation R3.5	Yes	

Diameter (mm)	Sealed/unsealed
	Diameter (mm)

Ceiling fans		
Location	Number	Diameter (mm)
None Present		

Roof type				
Construction	Added Roof colou insulation			
Corrugated Iron	Bulk, Reflective Medium Side Down, Anti- glare Up R1.3			
Waterproofing Membrane	No Insulation, Medium Only an Air Gap			

Certificate number: 0003344603

Certificate Date: 13 N

13 Nov 2018



Additional information

If carpet noted as floor covering it may be replaced with any type.

Due to non current Window Library the glazing descriptiosn may not match actual products. Only the U and SHGC values should be considered NOT the glazing descriptions.

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).

★ Star rating: 6.1

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

Certificate number: 0003344637

Certificate Date: 13 Nov 2018

★ Star rating: 6.9



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:	20039
Name:	David Howard
Organisation:	Partners Energy Management
Email:	david@partnersenergy.com.au
Phone:	0421381005
Declaration of interest:	The Assessor has provided design advice to the Applicant
Software:	BERS Pro v4.3.0.2c (3.13)

ABSA AAO:

Overview

Dwelling details

	Unit TH05, 25-27 W Warriewood	Varriewood r	d
State:	NSW	Postcode:	2102
Туре:	New Dwelling	NCC Class: NatHERS	1A
Lot/DP		climate zone:	56
number:	5464	Exposure:	Suburban

Key construction and insulation materials

(see following pages for details)

Construction:	Fibro Cavity Panel Direct Fix Corrugated Iron
la sul sti su s	Concrete Slab on Ground
Insulation:	R2.5 wall insulation
	R3.5 ceiling insulation
	No floor insulation
Glazing:	ATB-006-03 B AI Thermally Broken B
	DG Argon Fill High Solar Gain low-E

Net floor area (m ²)		Annual thermal	
Conditioned: Unconditioned:	198.0 43.0	performanc (MJ/m ²)	e loads
Garage:	43.0 39.0	Heating:	18.1
TOTAL:	240.0	Cooling: TOTAL:	23.0 41.1

Plan documents

Plan ref/date: Warriewood Residential Development Prepared by: **VIA Architects**

The more stars the more energy efficient NATIONWIDE **ENERGY RATING SCHEME** Predicted annual energy load for heating and cooling based on standard occupancy assumptions MJ/m² For more information on your dwelling's rating see: www.nathers.gov.au

• •	(see following pages for details)		TE: This total is the mum number of ceiling trations allowed to a	
Sealed: Unsealed: TOTAL:**	0 0 0	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	: Unl	know	/n	
Window selection - default windows or			Scan to access this certificate online and confirm this is valid.	
Note on allowable window values Only a 5% tolerance to the nomir SHGC window values shown on can be used with this rating.	nated			
Note: Only a +/- 5% SHGC tolera allowed with this rating.	ince is			
NB: This tolerance ONLY applies to SHGC, the U-value can alway be lower but not higher than the values stated on page 2.				
If any of windows selected are outside the 5% tolerance then				

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

confirm compliance.

Certificate Date:

Certificate number: 0003344637

13 Nov 2018

★ Star rating:

6.9

Building features

Window type and performance value

Window ID	Window type				U-value	SHGC	
ATB-006-03 B	ATB-006-03 B A low-E -Clear	ATB-006-03 B AI Thermally Broken B DG Argon Fill High Solar Gain					
Window schee	dule						
Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade	
Studio	ATB-006-03 B	n/a	2700	3500	E	No Shading	
Studio	ATB-006-03 B	n/a	2550	1000	W	No Shading	
Studio	ATB-006-03 B	n/a	2550	1000	N	No Shading	
L2 Living	ATB-006-03 B	n/a	2550	3636	W	No Shading	
L2 Living	ATB-006-03 B	n/a	1400	900	N	No Shading	
Study	ATB-006-03 B	n/a	2550	900	Ν	No Shading	
Kitchen/Living	ATB-006-03 B	n/a	2400	3178	W	No Shading	
Kitchen/Living	ATB-006-03 B	n/a	2700	2722	Ν	No Shading	
Kitchen/Living	ATB-006-03 B	n/a	2700	1000	Ν	No Shading	
Kitchen/Living	ATB-006-03 B	n/a	2700	3200	E	Vertical Louvres, Horizontal Blades	
Bath	ATB-006-03 B	n/a	2550	1000	W	No Shading	
Bedroom 1	ATB-006-03 B	n/a	2550	600	W	No Shading	
Bedroom 1	ATB-006-03 B	n/a	2550	1000	Ν	No Shading	
Bedroom 2	ATB-006-03 B	n/a	2550	1000	Ν	No Shading	
Bedroom 3	ATB-006-03 B	n/a	2550	2722	Ν	No Shading	
Bedroom 3	ATB-006-03 B	n/a	2550	1875	E	No Shading	

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

External wa	ll type					
ID	Wall type		Insulation		N	Nall wrap or foil
EW-1	Fibro Cavity P	anel Direct Fix	Anti-glare foil	with bulk no gap	R2.5	Yes
EW-2	Concrete bloc	k, lined	Anti-glare foil	with bulk no gap	R1.5	Yes
EW-3	Fibro Cavity P	anel Direct Fix	Foil, Anti-glare	e one side, Refle	ctive other	Yes
External wa	Il schedule					
Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Studio	EW-1	5794	2700	E	No	4322
Studio	EW-1	5794	2700	W	No	0
Studio	EW-1	4904	2700	Ν	No	0
L2 Living	EW-1	1600	2550	W	No	2000

Certificate number	r: 0003344637	Certificate Date:		13 Nov 2018	★ Star rating:	6.9 NATIONV HOUS
Building featur	es continued					
L2 Living	EW-1	2000	2550	S	No	4200
L2 Living	EW-1	3900	2550	W	No	13550
L2 Living	EW-1	5995	2550	N	No	0
L2 Living	EW-2	2995	2550	E	No	0
L2 Bath	EW-2	1695	2550	N	No	0
L2 Bath	EW-2	2495	2550	E	No	0
Study	EW-1	3690	2550	N	No	0
Garage 1	EW-3	5887	3000	W	No	0
Garage 1	EW-3	6964	3000	N	No	0
Garage 1	EW-3	4272	2550	E	No	1337
Garage 1	EW-3	854	2550	S	No	1630
Garage 1	EW-3	1523	2550	SE	No	2173
WC	EW-1	895	2700	W	No	2000
Kitchen/Living	EW-1	4595	2700	W	No	2000
Kitchen/Living	EW-1	11400	2700	N	No	0
Kitchen/Living	EW-1	5500	2700	E	No	0
Bath	EW-1	1795	2550	W	No	50
Bedroom 1	EW-1	3695	2550	W	No	25
Bedroom 1	EW-1	3795	2550	N	No	0
Bedroom 2	EW-1	4190	2550	N	No	0
Bedroom 3	EW-1	3795	2550	N	No	900
Bedroom 3	EW-1	3295	2550	E	No	2000

EW-1

Ens

Wall type	Area (m ²)	Insulation	Wall wrap or foil
IW-1 - Brick, plasterboard	116.0	No Insulation	No
IW-2 - Cavity wall, direct fix plasterboard, single gap	101.0	No insulation	No

2550

2195

Е

No

Floors					
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Studio/Garage 1	Timber Above Plasterboard 100mm	28.4		Bulk Insulation R3	Carpet 10mm
L2 Living	Concrete Slab on Ground 100mm	42.2	None	No Insulation	Carpet 10mm
L2 Bath	Concrete Slab on Ground 100mm	4.1	None	No Insulation	Carpet 10mm
Study	Concrete Slab on Ground 100mm	12.1	None	No Insulation	Carpet 10mm
Garage 1	Concrete Slab on Ground 100mm	39.4	None	No Insulation	Bare
WC	Concrete Slab on Ground 100mm	1.7	None	No Insulation	Carpet 10mm
Kitchen/Living /L2 Living	Timber Above Plasterboard 100mm	42.6		No Insulation	Carpet 10mm

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

2000

Certificate Date:

Certificate number: 0003344637

13 Nov 2018

★ Star rating:



6.9

Build	ina f	features	continued	

Kitchen/Living /L2 Bath	Timber Above Plasterboard 100mm	4.2		No Insulation	Carpet 10mm
Kitchen/Living /Study	Timber Above Plasterboard 100mm	12.6		No Insulation	Carpet 10mm
Kitchen/Living	Concrete Slab on Ground 100mm	1.4	None	No Insulation	Carpet 10mm
Bath/WC	Timber Above Plasterboard 100mm	1.7		No Insulation	Bare
Bath/Kitchen/Living	Timber Above Plasterboard 100mm	3.1		No Insulation	Bare
Bath	Concrete Slab on Ground 100mm	0.7	None	Bulk Insulation, Gap to Floor R2.5	Carpet 10mm
Bedroom 1/Kitchen/Living	Timber Above Plasterboard 100mm	11.4		No Insulation	Carpet 10mm
Bedroom 1	Suspended Timber Floor 100mm	1.4	Totally Open	Bulk Insulation, Gap to Floor R2.5	Carpet 10mm
Bedroom 2/Kitchen/Living	Timber Above Plasterboard 100mm	12.6		No Insulation	Carpet 10mm
Bedroom 3/Kitchen/Living	Timber Above Plasterboard 19mm	12.2		No Insulation	Carpet 10mm
Ens/Kitchen/Living	Timber Above Plasterboard 100mm	5.5		No Insulation	Carpet 10mm
Upstairs/Kitchen/Li ving	Timber Above Plasterboard 100mm	14.1		No Insulation	Carpet 10mm

Ceiling type

Location	Construction	Added insulation	Roof space above
Studio	Plasterboard	Bulk Insulation R3.5	Yes
L2 Living	Plasterboard	Bulk Insulation R3.5	No
L2 Living	Timber Above Plasterboard	No Insulation	No
L2 Bath	Plasterboard	Bulk Insulation R3	No
L2 Bath	Timber Above Plasterboard	No Insulation	No
Study	Plasterboard	Bulk Insulation R3	No
Study	Timber Above Plasterboard	No Insulation	No
Garage 1	Plasterboard	No insulation	No
Garage 1	Timber Above Plasterboard	Bulk Insulation R3	No
WC	Timber Above Plasterboard	No Insulation	No
Kitchen/Living	Timber Above Plasterboard	No Insulation	No
Bath	Plasterboard	Bulk Insulation R3.5	Yes
Bedroom 1	Plasterboard	Bulk Insulation R3.5	Yes
Bedroom 2	Plasterboard		Yes

Nationwide House Energy Rating Scheme* Certificate						A A A A A A A A A A A A A A A A A A A
Certificate numbe	r: 0003344637	Certificate Date:	13 Nov 2018	★ Star rating:	6.9	NATIONWIDE HOUSE ENERGY RATING SCHEME
Building featu	res continued					
				Bulk Insulation R3.5		
Bedroom 3	Plasterboard			Bulk Insulation R3.5	Yes	
Ens	Plasterboard			Bulk Insulation R3.5	Yes	
Upstairs	Plasterboard			Bulk Insulation R3.5	Yes	

Ceiling penetrations						
Location	Number	Туре	Diameter (mm) Sealed/unsealed			
None Present						

Ceiling fans		
Location	Number	Diameter (mm)
None Present		

Roof type	
Construction	Added Roof colour insulation
Corrugated Iron	Bulk, Reflective Medium Side Down, Anti- glare Up R1.3
Waterproofing Membrane	No Insulation, Medium Only an Air Gap

Certificate number: 0003344637

Certificate Date: 13 N

13 Nov 2018 **★** Star rating: 6.9



Additional information

If carpet noted as floor covering it may be replaced with any type.

Due to non current Window Library the glazing descriptiosn may not match actual products. Only the U and SHGC values should be considered NOT the glazing descriptions.

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).

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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

Certificate number: 0003344629

Certificate Date: 13 Nov 2018

★ Star rating: 5.8



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:	20039
Name:	David Howard
Organisation:	Partners Energy Management
Email:	david@partnersenergy.com.au
Phone:	0421381005
Declaration of interest:	The Assessor has provided design advice to the Applicant
Software:	BERS Pro v4.3.0.2c (3.13)

ABSA AAO:

Overview

Dwelling details

Street: Suburb:	Unit TH06, 25-27 V Warriewood	Varriewood r	d
State:	NSW	Postcode:	2102
Туре:	New Dwelling	NCC Class: NatHERS	1A
Lot/DP		climate zone:	56
number:	5464	Exposure:	Suburban

Key construction and insulation materials

(see following pages for details)

Construction:	Fibro Cavity Panel Direct Fix Corrugated Iron
	Concrete Slab on Ground
Insulation:	R2.5 wall insulation
	R3.5 ceiling insulation
	R2.5 floor insulation
Glazing:	ATB-006-03 B AI Thermally Broken B
	DG Argon Fill High Solar Gain low-E

performar (MJ/m ²)	nce loads
Heating:	32.2
	22.6 54.8

Plan documents

Warriewood Residential Development Plan ref/date: Prepared by: **VIA Architects**



Ceiling penetration (see following pages for deta	S ails)	· · · · · · · · · · · · · · · · · · ·		
Unsealed:	0 0 0	 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:	Unk	now	'n	
Window selection - default windows only	у		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.	ce 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.



Certificate Date:

Certificate number: 0003344629

13 Nov 2018

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★ Star rating:
```

5.8

Building features

Window type and performance value

Window ID	Window type				U-value	SHGC
ATB-006-03 B	ATB-006-03 B A low-E -Clear	A Thermally Brok	en B DG Argon F	Fill High Solar (Gain 2.9	0.51
Window schee	dule					
Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Studio	ATB-006-03 B	n/a	2550	1000	S	No Shading
Studio	ATB-006-03 B	n/a	2550	1000	W	No Shading
Studio	ATB-006-03 B	n/a	2700	3500	E	No Shading
L2 Living	ATB-006-03 B	n/a	1400	900	S	No Shading
L2 Living	ATB-006-03 B	n/a	2550	3636	W	No Shading
Study	ATB-006-03 B	n/a	2550	900	S	No Shading
Kitchen/Living	ATB-006-03 B	n/a	2700	3200	E	Vertical Louvres, Horizontal Blades
Kitchen/Living	ATB-006-03 B	n/a	2700	2722	S	No Shading
Kitchen/Living	ATB-006-03 B	n/a	2700	1000	S	No Shading
Kitchen/Living	ATB-006-03 B	n/a	2400	3178	W	No Shading
Bath	ATB-006-03 B	n/a	2550	1000	W	No Shading
Bedroom 1	ATB-006-03 B	n/a	2550	1000	S	No Shading
Bedroom 1	ATB-006-03 B	n/a	2550	600	W	No Shading
Bedroom 2	ATB-006-03 B	n/a	2550	1000	S	No Shading
Bedroom 3	ATB-006-03 B	n/a	2550	1875	E	No Shading
Bedroom 3	ATB-006-03 B	n/a	2550	2722	S	No Shading

Roof window and skylight type and performance value ID Window type **U-value** SHGC None Present Roof window and skylight schedule Location ID Roof **Orientation Outdoor shade Indoor** Area (m²) window/skylight shade/diffuser no. None Present

External wall type Wall type Insulation ID Wall wrap or foil EW-1 Fibro Cavity Panel Direct Fix Anti-glare foil with bulk no gap R2.5 Yes EW-2 Concrete block, lined Anti-glare foil with bulk no gap R1.5 Yes EW-3 Fibro Cavity Panel Direct Fix Foil, Anti-glare one side, Reflective other Yes **External wall schedule** Location ID Width (mm) Height (mm) Orientation **Fixed Shade Eaves** (mm) Studio **EW-1** 4904 2700 S No 0 Studio **EW-1** 5794 2700 W No 0 Studio **EW-1** 5794 2700 Е No 4322 L2 Living EW-2 2995 2550 Е No 0

Certificate number:	0003344629	Certificate Date:		13 Nov 2018	★ Star rating:	5.8	NATIONWI HOUS ENERGY RATING SCE
Building feature	es continued						
L2 Living	EW-1	5995	2550	S	No	0	
L2 Living	EW-1	3900	2550	W	No	135	550
L2 Living	EW-1	2000	2550	Ν	No	420	00
L2 Living	EW-1	1600	2550	W	No	200	00
L2 Bath	EW-2	2495	2550	E	No	0	
L2 Bath	EW-2	1695	2550	S	No	0	
Study	EW-1	3690	2550	S	No	0	
Garage 1	EW-3	1523	2550	NE	No	310)2
Garage 1	EW-3	854	2550	N	No	159	98
Garage 1	EW-3	4272	2550	E	No	223	38
Garage 1	EW-3	6964	3000	S	No	0	
Garage 1	EW-3	5887	3000	W	No	0	
WC	EW-1	895	2700	W	No	17(00
Kitchen/Living	EW-1	5500	2700	E	No	0	
Kitchen/Living	EW-1	11400	2700	S	No	0	
Kitchen/Living	EW-1	4595	2700	W	No	17(00
Bath	EW-1	1795	2550	W	No	50	
Bedroom 1	EW-1	3795	2550	S	No	0	
Bedroom 1	EW-1	3695	2550	W	No	25	
Bedroom 2	EW-1	4190	2550	S	No	0	
Bedroom 3	EW-1	3295	2550	E	No	200	00
Bedroom 3	EW-1	3795	2550	S	No	900)

EW-1

2195

Ens

Wall type	Area (m ²)	Insulation	Wall wrap or foi	
IW-1 - Brick, plasterboard	116.0	No Insulation	No	
IW-2 - Cavity wall, direct fix plasterboard, single gap	101.0	No insulation	No	

2550

Е

No

2000

Floors						
Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering	
Studio/Garage 1	Timber Above Plasterboard 100mm	28.4		Bulk Insulation R3	Carpet 10mm	
L2 Living	Concrete Slab on Ground 100mm	42.2	None	No Insulation	Carpet 10mm	
L2 Bath	Concrete Slab on Ground 100mm	4.1	None	No Insulation	Ceramic Tiles 8mm	
Study	Concrete Slab on Ground 100mm	12.1	None	No Insulation	Carpet 10mm	
Garage 1	Concrete Slab on Ground 100mm	39.4	None	No Insulation	Bare	
WC	Suspended Timber Floor 19mm	1.7	Very Open	Bulk Insulation in Contact with Floor R2.5		
		42.6		No Insulation	Carpet 10mm	

Certificate number: 0003344629

Certificate Date: 13 Nov 2018

★ Star rating:



5.8

<u> </u>					
Kitchen/Living /L2 Living	Timber Above Plasterboard 19mm				
Kitchen/Living /L2 Bath	Timber Above Plasterboard 19mm	4.2		No Insulation	Carpet 10mm
Kitchen/Living /Study	Timber Above Plasterboard 19mm	12.6		No Insulation	Carpet 10mm
Kitchen/Living	Suspended Timber Floor 19mm	1.4	Very Open	Bulk Insulation in Contact with Floor R2.5	Carpet 10mm
Bath/WC	Timber Above Plasterboard 100mm	1.7		No Insulation	Bare
Bath/Kitchen/Living	Timber Above Plasterboard 100mm	3.1		No Insulation	Bare
Bath	Concrete Slab on Ground 100mm	0.7	None	Bulk Insulation, Gap to Floor R2.5	Carpet 10mm
Bedroom 1/Kitchen/Living	Timber Above Plasterboard 100mm	11.4		No Insulation	Carpet 10mm
Bedroom 1	Suspended Timber Floor 100mm	1.4	Totally Open	Bulk Insulation, Gap to Floor R2.5	Carpet 10mm
Bedroom 2/Kitchen/Living	Timber Above Plasterboard 100mm	12.6		No Insulation	Carpet 10mm
Bedroom 3/Kitchen/Living	Timber Above Plasterboard 19mm	12.2		No Insulation	Carpet 10mm
Ens/Kitchen/Living	Timber Above Plasterboard 100mm	5.5		No Insulation	Carpet 10mm
Upstairs/Kitchen/Li ving	Timber Above Plasterboard 100mm	14.0		No Insulation	Carpet 10mm

Ceiling type

Location	Construction	Added insulation	Roof space above	
Studio	Plasterboard	Bulk Insulation R3.5	Yes	
L2 Living	Plasterboard	Bulk Insulation R3.5	No	
L2 Living	Timber Above Plasterboard	No Insulation	No	
L2 Bath	Plasterboard	Bulk Insulation R3	No	
L2 Bath	Timber Above Plasterboard	No Insulation	No	
Study	Plasterboard	Bulk Insulation R3	No	
Study	Timber Above Plasterboard	No Insulation	No	
Garage 1	Plasterboard	No insulation	No	
Garage 1	Timber Above Plasterboard Bulk Insulation R3		No	
WC	Timber Above Plasterboard	No Insulation	No	
Kitchen/Living	Timber Above Plasterboard	No Insulation	No	
Bath	Plasterboard	Bulk Insulation R3.5	Yes	
Bedroom 1	Plasterboard	Bulk Insulation	Yes	

Nationwide Ho	use Energy Ra	ating Scheme* Co	ertificate			CALCULATION OF THE OWNER
Certificate number	0003344629	Certificate Date:	13 Nov 2018	★ Star rating:	5.8	NATIONWIDE HOUSE ENERGY RATING SCHEME
Building featur	es continued					
				R3.5		
Bedroom 2	Plasterboard			Bulk Insulation R3.5	Yes	
Bedroom 3	Plasterboard			Bulk Insulation R3.5	Yes	
Ens	Plasterboard			Bulk Insulation R3.5	Yes	
Upstairs	Plasterboard			Bulk Insulation R3.5	Yes	

Ceiling penetrations			
Number	Туре	Diameter (mm) Sealed/unsealed	

Ceiling fans			
Location	Number	Diameter (mm)	
None Present			

Roof type			
Construction	Added Roof insulation	colour	
Corrugated Iron	Bulk, Reflective Medi Side Down, Anti- glare Up R1.3	um	
Waterproofing Membrane	No Insulation, Medi Only an Air Gap	um	

Certificate number: 0003344629

Certificate Date: 13 N

13 Nov 2018 **★** Star rating: 5.8



Additional information

If carpet noted as floor covering it may be replaced with any type.

Due to non current Window Library the glazing descriptiosn may not match actual products. Only the U and SHGC values should be considered NOT the glazing descriptions.

Explanatory notes

About this report

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Contact

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Certificate number: 0003344660

Certificate Date: 13 Nov 2018

★ Star rating: 6.9



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Assessor details

Accreditation number:	20039
Name:	David Howard
Organisation:	Partners Energy Management
Email:	david@partnersenergy.com.au
Phone:	0421381005
Declaration of interest:	The Assessor has provided design advice to the Applicant
Software:	BERS Pro v4.3.0.2c (3.13)

ABSA AAO:

Overview

Dwelling details

Street: Suburb:	Unit TH07, 25-27 V Warriewood	Varriewood r	d
State:	NSW	Postcode:	2102
Туре:	New Dwelling	NCC Class: NatHERS	1A
Lot/DP		climate zone:	56
number:	5464	Exposure:	Suburban

Key construction and insulation materials

(see following pages for details)

Construction:	Fibro Cavity Panel Direct Fix Corrugated Iron
la sul sti su s	Concrete Slab on Ground
Insulation:	R2.5 wall insulation
	R3.5 ceiling insulation
	No floor insulation
Glazing:	ATB-006-03 B AI Thermally Broken B
	DG Argon Fill High Solar Gain low-E

Net floor area (m ²)		rmal
198.0	(MJ/m ²)	e loads
43.0 39.0	Heating:	18.1
240.0	Ű	23.0 41.1
	198.0 43.0 39.0	198.0 performand (MJ/m²) 43.0 Heating:

Plan documents

Plan ref/date: Warriewood Residential Development Prepared by: **VIA Architects**

The more stars the more energy efficient NATIONWIDE **ENERGY RATING SCHEME** Predicted annual energy load for heating and cooling based on standard occupancy assumptions MJ/m² For more information on your dwelling's rating see: www.nathers.gov.au

Ceiling penetration (see following pages for de		maxin penet	TE: This total is the num number of ceiling rations allowed to a	
Sealed: Unsealed: TOTAL:**	0 0 0	 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:	Unk	know	n	
Window selection - default windows on	ly		Scan to access this certificate online and confirm this is valid.	
Note on allowable window values: Only a 5% tolerance to the nomina SHGC window values shown on p can be used with this rating.	ated			
Note: Only a +/- 5% SHGC tolerar allowed with this rating.	nce is		■私会■	
NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.	i			
If any of windows selected are outside the 5% tolerance then				

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

confirm compliance.

Certificate Date:

Certificate number: 0003344660

13 Nov 2018

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★ Star rating:
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6.9

Building features

Window type and performance value

Window ID	Window type				U-value	SHGC
ATB-006-03 B	ATB-006-03 B A low-E -Clear	Al Thermally Brok	en B DG Argon F	ill High Solar (Gain 2.9	0.51
Window schee	dule					
Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Studio	ATB-006-03 B	n/a	2700	3500	E	No Shading
Studio	ATB-006-03 B	n/a	2550	1000	W	No Shading
Studio	ATB-006-03 B	n/a	2550	1000	N	No Shading
L2 Living	ATB-006-03 B	n/a	2550	3636	W	No Shading
L2 Living	ATB-006-03 B	n/a	1400	900	N	No Shading
Study	ATB-006-03 B	n/a	2550	900	Ν	No Shading
Kitchen/Living	ATB-006-03 B	n/a	2400	3178	W	No Shading
Kitchen/Living	ATB-006-03 B	n/a	2700	2722	N	No Shading
Kitchen/Living	ATB-006-03 B	n/a	2700	1000	N	No Shading
Kitchen/Living	ATB-006-03 B	n/a	2700	3200	E	Vertical Louvres, Horizontal Blades
Bath	ATB-006-03 B	n/a	2550	1000	W	No Shading
Bedroom 1	ATB-006-03 B	n/a	2550	600	W	No Shading
Bedroom 1	ATB-006-03 B	n/a	2550	1000	Ν	No Shading
Bedroom 2	ATB-006-03 B	n/a	2550	1000	Ν	No Shading
Bedroom 3	ATB-006-03 B	n/a	2550	2722	Ν	No Shading
Bedroom 3	ATB-006-03 B	n/a	2550	1875	E	No Shading

ID	Window	type			U-value	SHGC
None Presen	t					
Roof windo	w and skyligh	nt schedule				
Location	ID	Roof	Area (m²)	Orientation	Outdoor shade	Indoor

External wall	type					
ID	Wall type		Insulation			Wall wrap or foil
EW-1	Fibro Cavity F	Panel Direct Fix	Anti-glare foil	with bulk no gap	R2.5	Yes
EW-2	Concrete block, lined		Anti-glare foil with bulk no gap R1.5			Yes
EW-3	Fibro Cavity F	Panel Direct Fix	Foil, Anti-glare	e one side, Refle	ctive other	Yes
External wall	schedule ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	e Eaves
						(mm)
Studio	EW-1	5794	2700	E	No	4322
Studio	EW-1	5794	2700	W	No	0
Studio	EW-1	4904	2700	N	No	0
L2 Living	EW-1	1600	2550	W	No	2000

L2 Living E L2 Living E L2 Living E L2 Bath E L2 Bath E Study E Garage 1 E Garage 1 E Garage 1 E Garage 1 E	continued EW-1 EW-1 EW-1 EW-2 EW-2	2000 3900 5995 2995	2550 2550 2550	S W	No	4200
L2 Living E L2 Living E L2 Living E L2 Bath E L2 Bath E Study E Garage 1 E Garage 1 E Garage 1 E Garage 1 E	EW-1 EW-1 EW-2	3900 5995	2550			
L2 Living E L2 Living E L2 Bath E L2 Bath E Study E Garage 1 E Garage 1 E Garage 1 E Garage 1 E	EW-1 EW-2	5995		W	No	12550
L2 Living E L2 Bath E L2 Bath E Study E Garage 1 E Garage 1 E Garage 1 E Garage 1 E	EW-2		2550		INU	13550
L2 Bath E L2 Bath E Study E Garage 1 E Garage 1 E Garage 1 E Garage 1 E		2995	2000	N	No	0
L2 BathEStudyEGarage 1EGarage 1EGarage 1EGarage 1EGarage 1E	EW-2	2000	2550	E	No	0
StudyEGarage 1EGarage 1EGarage 1EGarage 1EGarage 1E		1695	2550	N	No	0
Garage 1 E Garage 1 E Garage 1 E Garage 1 E	EW-2	2495	2550	E	No	0
Garage 1 E Garage 1 E Garage 1 E	EW-1	3690	2550	Ν	No	0
Garage 1 E Garage 1 E	EW-3	5887	3000	W	No	0
Garage 1 E	EW-3	6964	3000	Ν	No	0
	EW-3	4272	2550	E	No	1337
Garage 1 E	EW-3	854	2550	S	No	1630
	EW-3	1523	2550	SE	No	2173
WC E	EW-1	895	2700	W	No	2000
Kitchen/Living E	EW-1	4595	2700	W	No	2000
Kitchen/Living E	EW-1	11400	2700	Ν	No	0
Kitchen/Living E	EW-1	5500	2700	E	No	0
Bath E	EW-1	1795	2550	W	No	50
Bedroom 1 E	EW-1	3695	2550	W	No	25
Bedroom 1 E	EW-1	3795	2550	Ν	No	0
Bedroom 2 E	EW-1	4190	2550	Ν	No	0
Bedroom 3 E	EW-1	3795	2550	Ν	No	900
Bedroom 3 E	EW-1	3295	2550	E	No	2000

Internal wall type

EW-1

2195

Ens

Wall type	Area (m²)	Insulation	Wall wrap or foil
IW-1 - Brick, plasterboard	116.0	No Insulation	No
IW-2 - Cavity wall, direct fix plasterboard, single gap	101.0	No insulation	No

2550

Е

No

2000

Floors					
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Studio/Garage 1	Timber Above Plasterboard 100mm	28.4		Bulk Insulation R3	Carpet 10mm
L2 Living	Concrete Slab on Ground 100mm	42.2	None	No Insulation	Carpet 10mm
L2 Bath	Concrete Slab on Ground 100mm	4.1	None	No Insulation	Carpet 10mm
Study	Concrete Slab on Ground 100mm	12.1	None	No Insulation	Carpet 10mm
Garage 1	Concrete Slab on Ground 100mm	39.4	None	No Insulation	Bare
WC	Concrete Slab on Ground 100mm	1.7	None	No Insulation	Carpet 10mm
Kitchen/Living /L2 Living	Timber Above Plasterboard 100mm	42.6		No Insulation	Carpet 10mm

Certificate Date:

Certificate number: 0003344660

13 Nov 2018

★ Star rating:



6.9

Building	features	continued

Kitchen/Living /L2 Bath	Timber Above Plasterboard 100mm	4.2		No Insulation	Carpet 10mm
Kitchen/Living /Study	Timber Above Plasterboard 100mm	12.6		No Insulation	Carpet 10mm
Kitchen/Living	Concrete Slab on Ground 100mm	1.4	None	No Insulation	Carpet 10mm
Bath/WC	Timber Above Plasterboard 100mm	1.7		No Insulation	Bare
Bath/Kitchen/Living	Timber Above Plasterboard 100mm	3.1		No Insulation	Bare
Bath	Concrete Slab on Ground 100mm	0.7	None	Bulk Insulation, Gap to Floor R2.5	Carpet 10mm
Bedroom 1/Kitchen/Living	Timber Above Plasterboard 100mm	11.4		No Insulation	Carpet 10mm
Bedroom 1	Suspended Timber Floor 100mm	1.4	Totally Open	Bulk Insulation, Gap to Floor R2.5	Carpet 10mm
Bedroom 2/Kitchen/Living	Timber Above Plasterboard 100mm	12.6		No Insulation	Carpet 10mm
Bedroom 3/Kitchen/Living	Timber Above Plasterboard 19mm	12.2		No Insulation	Carpet 10mm
Ens/Kitchen/Living	Timber Above Plasterboard 100mm	5.5		No Insulation	Carpet 10mm
Upstairs/Kitchen/Li ving	Timber Above Plasterboard 100mm	14.1		No Insulation	Carpet 10mm

Ceiling type

Location	Construction	Added insulation	Roof space above
Studio	Plasterboard	Bulk Insulation R3.5	Yes
L2 Living	Plasterboard	Bulk Insulation R3.5	No
L2 Living	Timber Above Plasterboard	No Insulation	No
L2 Bath	Plasterboard	Bulk Insulation R3	No
L2 Bath	Timber Above Plasterboard	No Insulation	No
Study	Plasterboard	Bulk Insulation R3	No
Study	Timber Above Plasterboard	No Insulation	No
Garage 1	Plasterboard	No insulation	No
Garage 1	Timber Above Plasterboard	Bulk Insulation R3	No
WC	Timber Above Plasterboard	No Insulation	No
Kitchen/Living	Timber Above Plasterboard	No Insulation	No
Bath	Plasterboard	Bulk Insulation R3.5	Yes
Bedroom 1	Plasterboard	Bulk Insulation R3.5	Yes
Bedroom 2	Plasterboard		Yes

Nationwide House Energy Rating Scheme* Certificate						
Certificate number	er: 0003344660	Certificate Date:	13 Nov 2018	★ Star rating:	6.9	NATIONWIDE HOUSE ENERGY RATING SCHEME
Building featu	ires continued					
				Bulk Insulation R3.5		
Bedroom 3	Plasterboard			Bulk Insulation R3.5	Yes	
Ens	Plasterboard			Bulk Insulation R3.5	Yes	
Upstairs	Plasterboard			Bulk Insulation R3.5	Yes	

Ceiling penetrations						
Location	Number	Туре	Diameter (mm) Sealed/unsealed			
None Present						

Ceiling fans			
Location	Number	Diameter (mm)	
None Present			

Roof type					
Construction	Added Roof colour insulation				
Corrugated Iron	Bulk, Reflective Medium Side Down, Anti- glare Up R1.3				
Waterproofing Membrane	No Insulation, Medium Only an Air Gap				

Certificate number: 0003344660

Certificate Date: 13 N

13 Nov 2018





Additional information

If carpet noted as floor covering it may be replaced with any type.

Due to non current Window Library the glazing descriptiosn may not match actual products. Only the U and SHGC values should be considered NOT the glazing descriptions.

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.

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Contact

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Certificate number: 0003344645

Certificate Date: 13 Nov 2018

★ Star rating: 5.8



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:	20039
Name:	David Howard
Organisation:	Partners Energy Management
Email:	david@partnersenergy.com.au
Phone:	0421381005
Declaration of interest:	The Assessor has provided design advice to the Applicant
Software:	BERS Pro v4.3.0.2c (3.13)

ABSA AAO:

Overview

Dwelling details

	Unit TH08, 25-27 Warriewood rd Warriewood					
State:	NSW	Postcode:	2102			
Туре:	New Dwelling	NCC Class: NatHERS	1A			
Lot/DP		climate zone:	56			
number:	5464	Exposure:	Suburban			

Key construction and insulation materials

(see following pages for details)

Construction:	Fibro Cavity Panel Direct Fix Corrugated Iron
	Concrete Slab on Ground
Insulation:	R2.5 wall insulation
	R3.5 ceiling insulation
	R2.5 floor insulation
Glazing:	ATB-006-03 B AI Thermally Broken B
, in the second s	DG Argon Fill High Solar Gain low-E

Net floor area (m ²)		Annual thermal		
Conditioned: Unconditioned:	198.0 43.0		performanc (MJ/m ²)	e loads
Garage:	43.0 39.0		Heating:	32.2
TOTAL:	240.0		Cooling: TOTAL:	22.6 54.8

Plan documents

Warriewood Residential Development Plan ref/date: Prepared by: **VIA Architects**



Ceiling penetration (see following pages for deta	i s m ails) pe	kimum nur etrations a	total is the mber of ceiling allowed to a	
Unsealed:	0 ce ex 0 th 0 ar 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:	Unkn	wn		
Window selection - default windows only	у	certific	to access this cate online and	
	ted	certific		

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.



Certificate Date:

Certificate number: 0003344645

13 Nov 2018

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★ Star rating:
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5.8

Building features

Window type and performance value

Window ID	Window type				U-value	SHGC
ATB-006-03 B	ATB-006-03 B A low-E -Clear	Al Thermally Brok	en B DG Argon F	Fill High Solar (Gain 2.9	0.51
Window schee	dule					
Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Studio	ATB-006-03 B	n/a	2550	1000	S	No Shading
Studio	ATB-006-03 B	n/a	2550	1000	W	No Shading
Studio	ATB-006-03 B	n/a	2700	3500	E	No Shading
L2 Living	ATB-006-03 B	n/a	1400	900	S	No Shading
L2 Living	ATB-006-03 B	n/a	2550	3636	W	No Shading
Study	ATB-006-03 B	n/a	2550	900	S	No Shading
Kitchen/Living	ATB-006-03 B	n/a	2700	3200	E	Vertical Louvres, Horizontal Blades
Kitchen/Living	ATB-006-03 B	n/a	2700	2722	S	No Shading
Kitchen/Living	ATB-006-03 B	n/a	2700	1000	S	No Shading
Kitchen/Living	ATB-006-03 B	n/a	2400	3178	W	No Shading
Bath	ATB-006-03 B	n/a	2550	1000	W	No Shading
Bedroom 1	ATB-006-03 B	n/a	2550	1000	S	No Shading
Bedroom 1	ATB-006-03 B	n/a	2550	600	W	No Shading
Bedroom 2	ATB-006-03 B	n/a	2550	1000	S	No Shading
Bedroom 3	ATB-006-03 B	n/a	2550	1875	E	No Shading
Bedroom 3	ATB-006-03 B	n/a	2550	2722	S	No Shading

Roof window and skylight type and performance value ID Window type **U-value** SHGC None Present Roof window and skylight schedule Location ID Roof **Orientation Outdoor shade Indoor** Area (m²) window/skylight shade/diffuser no. None Present

External wall type Wall type Insulation ID Wall wrap or foil EW-1 Fibro Cavity Panel Direct Fix Anti-glare foil with bulk no gap R2.5 Yes EW-2 Concrete block, lined Anti-glare foil with bulk no gap R1.5 Yes EW-3 Fibro Cavity Panel Direct Fix Foil, Anti-glare one side, Reflective other Yes **External wall schedule** Location ID Width (mm) Height (mm) Orientation **Fixed Shade Eaves** (mm) Studio **EW-1** 4904 2700 S No 0 Studio **EW-1** 5794 2700 W No 0 Studio **EW-1** 5794 2700 Е No 4322 L2 Living EW-2 2995 2550 Е No 0

Building features continued L2 Living EW-1 5995 2550 S No 0 L2 Living EW-1 3900 2550 W No 1355 L2 Living EW-1 2000 2550 N No 4200 L2 Living EW-1 1600 2550 N No 2000 L2 Bath EW-2 2495 2550 E No 0 L2 Bath EW-2 1695 2550 S No 0 Study EW-1 3690 2550 S No 0 Garage 1 EW-3 1523 2550 NE No 3102 Garage 1 EW-3 854 2550 NE No 2238 Garage 1 EW-3 4272 2550 E No 2238 Garage 1 EW-3 5887 3000 W No 0 WC EW-1 895 2700 <	Certificate number:	0003344645	Certificate Date:		13 Nov 2018	★ Star rating:	5.8	NATIONW HOUS ENERGY RATING SC
L2 Living EW-1 3900 2550 W No 1355 L2 Living EW-1 2000 2550 N No 4200 L2 Living EW-1 1600 2550 W No 2000 L2 Bath EW-2 2495 2550 E No 0 L2 Bath EW-2 1695 2550 S No 0 Study EW-1 3690 2550 S No 0 Garage 1 EW-3 1523 2550 NE No 3102 Garage 1 EW-3 854 2550 N No 1598 Garage 1 EW-3 4272 2550 E No 2238 Garage 1 EW-3 6964 3000 S No 0 WC EW-1 895 2700 W No 1700 Kitchen/Living EW-1 11400 2700 S No 0 Kitchen/Living EW-1 1795 2550 W No 50	Building feature	es continued						
L2 Living EW-1 2000 2550 N No 4200 L2 Living EW-1 1600 2550 W No 2000 L2 Bath EW-2 2495 2550 E No 0 L2 Bath EW-2 1695 2550 S No 0 Study EW-1 3690 2550 S No 0 Garage 1 EW-3 1523 2550 N No 1598 Garage 1 EW-3 854 2550 N No 1598 Garage 1 EW-3 4272 2550 E No 2238 Garage 1 EW-3 5887 3000 S No 0 WC EW-1 895 2700 W No 1700 Kitchen/Living EW-1 1400 2700 S No 0 Kitchen/Living EW-1 1795 2550 W No 50 </td <td>L2 Living</td> <td>EW-1</td> <td>5995</td> <td>2550</td> <td>S</td> <td>No</td> <td>0</td> <td></td>	L2 Living	EW-1	5995	2550	S	No	0	
L2 Living EW-1 1600 2550 W No 2000 L2 Bath EW-2 2495 2550 E No 0 L2 Bath EW-2 1695 2550 S No 0 Study EW-1 3690 2550 S No 0 Garage 1 EW-3 1523 2550 N No 3102 Garage 1 EW-3 854 2550 N No 1598 Garage 1 EW-3 4272 2550 E No 2238 Garage 1 EW-3 6964 3000 S No 0 Garage 1 EW-3 5887 3000 W No 0 WC EW-1 895 2700 W No 1700 Kitchen/Living EW-1 11400 2700 S No 0 Kitchen/Living EW-1 1795 2550 W No 50	L2 Living	EW-1	3900	2550	W	No	13	550
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Study EW-1 3690 2550 S No 0 Garage 1 EW-3 1523 2550 NE No 3102 Garage 1 EW-3 854 2550 N No 1598 Garage 1 EW-3 4272 2550 E No 2238 Garage 1 EW-3 6964 3000 S No 0 Garage 1 EW-3 6964 3000 S No 0 Garage 1 EW-3 5887 3000 W No 0 Garage 1 EW-1 895 2700 W No 0 WC EW-1 5500 2700 E No 0 Kitchen/Living EW-1 11400 2700 S No 0 Kitchen/Living EW-1 1795 2550 W No 50 Bath EW-1 3795 2550 S No 0 <tr< td=""><td>L2 Bath</td><td>EW-2</td><td>2495</td><td>2550</td><td>E</td><td>No</td><td>0</td><td></td></tr<>	L2 Bath	EW-2	2495	2550	E	No	0	
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Garage 1 EW-3 6964 3000 S No 0 Garage 1 EW-3 5887 3000 W No 0 WC EW-1 895 2700 W No 1700 Kitchen/Living EW-1 5500 2700 E No 0 Kitchen/Living EW-1 11400 2700 S No 0 Kitchen/Living EW-1 11400 2700 S No 0 Kitchen/Living EW-1 1795 2550 W No 1700 Bath EW-1 1795 2550 S No 0 Bedroom 1 EW-1 3795 2550 S No 0 Bedroom 2 EW-1 4190 2550 S No 0 Bedroom 3 EW-1 3295 2550 E No 2000	Garage 1	EW-3	854	2550	N	No	15	98
Garage 1 EW-3 5887 3000 W No 0 WC EW-1 895 2700 W No 1700 Kitchen/Living EW-1 5500 2700 E No 0 Kitchen/Living EW-1 11400 2700 S No 0 Kitchen/Living EW-1 11400 2700 S No 0 Kitchen/Living EW-1 1795 2550 W No 1700 Bath EW-1 3795 2550 S No 0 Bedroom 1 EW-1 3695 2550 W No 25 Bedroom 2 EW-1 4190 2550 S No 0 Bedroom 3 EW-1 3295 2550 E No 2000	Garage 1	EW-3	4272	2550	E	No	22	38
WC EW-1 895 2700 W No 1700 Kitchen/Living EW-1 5500 2700 E No 0 Kitchen/Living EW-1 11400 2700 S No 0 Kitchen/Living EW-1 11400 2700 S No 0 Kitchen/Living EW-1 4595 2700 W No 1700 Bath EW-1 4595 2700 W No 50 Bedroom 1 EW-1 3795 2550 W No 0 Bedroom 1 EW-1 3695 2550 S No 0 Bedroom 2 EW-1 4190 2550 S No 0 Bedroom 3 EW-1 3295 2550 E No 2000	Garage 1	EW-3	6964	3000	S	No	0	
Kitchen/Living EW-1 5500 2700 E No 0 Kitchen/Living EW-1 11400 2700 S No 0 Kitchen/Living EW-1 11400 2700 S No 0 Kitchen/Living EW-1 4595 2700 W No 1700 Bath EW-1 1795 2550 W No 50 Bedroom 1 EW-1 3795 2550 S No 0 Bedroom 1 EW-1 3695 2550 S No 0 Bedroom 2 EW-1 4190 2550 S No 0 Bedroom 3 EW-1 3295 2550 E No 2000	Garage 1	EW-3	5887	3000	W	No	0	
Kitchen/LivingEW-1114002700SNo0Kitchen/LivingEW-145952700WNo1700BathEW-117952550WNo50Bedroom 1EW-137952550SNo0Bedroom 1EW-136952550WNo25Bedroom 2EW-141902550SNo0Bedroom 3EW-132952550ENo2000	WC	EW-1	895	2700	W	No	17	00
Kitchen/LivingEW-145952700WNo1700BathEW-117952550WNo50Bedroom 1EW-137952550SNo0Bedroom 1EW-136952550WNo25Bedroom 2EW-141902550SNo0Bedroom 3EW-132952550ENo2000	Kitchen/Living	EW-1	5500	2700	E	No	0	
BathEW-117952550WNo50Bedroom 1EW-137952550SNo0Bedroom 1EW-136952550WNo25Bedroom 2EW-141902550SNo0Bedroom 3EW-132952550ENo2000	Kitchen/Living	EW-1	11400	2700	S	No	0	
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Bedroom 1EW-136952550WNo25Bedroom 2EW-141902550SNo0Bedroom 3EW-132952550ENo2000	Bath	EW-1	1795	2550	W	No	50	
Bedroom 2 EW-1 4190 2550 S No 0 Bedroom 3 EW-1 3295 2550 E No 2000	Bedroom 1	EW-1	3795	2550	S	No	0	
Bedroom 3 EW-1 3295 2550 E No 2000	Bedroom 1	EW-1	3695	2550	W	No	25	
	Bedroom 2	EW-1	4190	2550	S	No	0	
Bedroom 3 EW-1 3795 2550 S No 900	Bedroom 3	EW-1	3295	2550	E	No	20	00
	Bedroom 3	EW-1	3795	2550	S	No	90	0

Internal wall type

Ens

EW-1

Wall type	Area (m ²)	Insulation	Wall wrap or foil
IW-1 - Brick, plasterboard	116.0	No Insulation	No
IW-2 - Cavity wall, direct fix plasterboard, single gap	101.0	No insulation	No

2550

2195

Е

No

Floors					
Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Studio/Garage 1	Timber Above Plasterboard 100mm	28.4		Bulk Insulation R3	Carpet 10mm
L2 Living	Concrete Slab on Ground 100mm	42.2	None	No Insulation	Carpet 10mm
L2 Bath	Concrete Slab on Ground 100mm	4.1	None	No Insulation	Ceramic Tiles 8mm
Study	Concrete Slab on Ground 100mm	12.1	None	No Insulation	Carpet 10mm
Garage 1	Concrete Slab on Ground 100mm	39.4	None	No Insulation	Bare
WC	Suspended Timber Floor 19mm	1.7	Very Open	Bulk Insulation in Contact with Floor R2.5	
		42.6		No Insulation	Carpet 10mm

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

2000

Certificate number: 0003344645

Certificate Date: 13 Nov 2018

★ Star rating:



5.8

Kitchen/Living /L2 Living	Timber Above Plasterboard 19mm				
Kitchen/Living /L2 Bath	Timber Above Plasterboard 19mm	4.2		No Insulation	Carpet 10mm
Kitchen/Living /Study	Timber Above Plasterboard 19mm	12.6		No Insulation	Carpet 10mm
Kitchen/Living	Suspended Timber Floor 19mm	1.4	Very Open	Bulk Insulation in Contact with Floor R2.5	Carpet 10mm
Bath/WC	Timber Above Plasterboard 100mm	1.7		No Insulation	Bare
Bath/Kitchen/Living	Timber Above Plasterboard 100mm	3.1		No Insulation	Bare
Bath	Concrete Slab on Ground 100mm	0.7	None	Bulk Insulation, Gap to Floor R2.5	Carpet 10mm
Bedroom 1/Kitchen/Living	Timber Above Plasterboard 100mm	11.4		No Insulation	Carpet 10mm
Bedroom 1	Suspended Timber Floor 100mm	1.4	Totally Open	Bulk Insulation, Gap to Floor R2.5	Carpet 10mm
Bedroom 2/Kitchen/Living	Timber Above Plasterboard 100mm	12.6		No Insulation	Carpet 10mm
Bedroom 3/Kitchen/Living	Timber Above Plasterboard 19mm	12.2		No Insulation	Carpet 10mm
Ens/Kitchen/Living	Timber Above Plasterboard 100mm	5.5		No Insulation	Carpet 10mm
Upstairs/Kitchen/Li ving	Timber Above Plasterboard 100mm	14.0		No Insulation	Carpet 10mm

Ceiling type

Location	Construction	Added insulation	Roof space above
Studio	Plasterboard	Bulk Insulation R3.5	Yes
L2 Living	Plasterboard	Bulk Insulation R3.5	No
L2 Living	Timber Above Plasterboard	No Insulation	No
L2 Bath	Plasterboard	Bulk Insulation R3	No
L2 Bath	Timber Above Plasterboard	No Insulation	No
Study	Plasterboard	Bulk Insulation R3	No
Study	Timber Above Plasterboard	No Insulation	No
Garage 1	Plasterboard	No insulation	No
Garage 1	Timber Above Plasterboard	Bulk Insulation R3	No
WC	Timber Above Plasterboard	No Insulation	No
Kitchen/Living	Timber Above Plasterboard	No Insulation	No
Bath	Plasterboard	Bulk Insulation R3.5	Yes
Bedroom 1	Plasterboard	Bulk Insulation	Yes

Nationwide House Energy Rating Scheme* Certificate						
Certificate numbe	er: 0003344645	Certificate Date:	13 Nov 2018	★ Star rating:	5.8	NATIONWIDE HOUSE ENERCY RATING SCHEME
Building featu	res continued					
				R3.5		
Bedroom 2	Plasterboard			Bulk Insulation R3.5	Yes	
Bedroom 3	Plasterboard			Bulk Insulation R3.5	Yes	
Ens	Plasterboard			Bulk Insulation R3.5	Yes	
Upstairs	Plasterboard			Bulk Insulation R3.5	Yes	

Ceiling penetrations							
Number	Туре	Diameter (mm) Sealed/unsealed					

Ceiling fans			
Location	Number	Diameter (mm)	
None Present			

Roof type		
Construction	Added Roof insulation	colour
Corrugated Iron	Bulk, Reflective Medi Side Down, Anti- glare Up R1.3	um
Waterproofing Membrane	No Insulation, Medi Only an Air Gap	um

Certificate number: 0003344645

Certificate Date: 13 N

13 Nov 2018





Additional information

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Due to non current Window Library the glazing descriptiosn may not match actual products. Only the U and SHGC values should be considered NOT the glazing descriptions.

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Contact

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Certificate number: 0003344652

Certificate Date: 13 Nov 2018

★ Star rating: 6.9



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:	20039
Name:	David Howard
Organisation:	Partners Energy Management
Email:	david@partnersenergy.com.au
Phone:	0421381005
Declaration of interest:	The Assessor has provided design advice to the Applicant
Software:	BERS Pro v4.3.0.2c (3.13)

ABSA AAO:

Overview

Dwelling details

	Unit TH09, 25-27 V Warriewood	Varriewood r	d
State:	NSW	Postcode:	2102
Туре:	New Dwelling	NCC Class: NatHERS	1A
Lot/DP		climate zone:	56
number:	5464	Exposure:	Suburban

Key construction and insulation materials

(see following pages for details)

Construction:	Fibro Cavity Panel Direct Fix Corrugated Iron
la sul sti su s	Concrete Slab on Ground
Insulation:	R2.5 wall insulation
	R3.5 ceiling insulation
	No floor insulation
Glazing:	ATB-006-03 B AI Thermally Broken B
	DG Argon Fill High Solar Gain low-E

Net floor area (m ²)		Annual ther	
Conditioned: Unconditioned:	198.0 43.0	performanc (MJ/m ²)	e loads
Garage:	39.0	Heating:	18.1
TOTAL:	240.0	Cooling: TOTAL:	23.0 41.1

Plan documents

Warriewood Residential Development Plan ref/date: Prepared by: **VIA Architects**



Ceiling penetrations(see following pages for details)Sealed:0Unsealed:0TOTAL:**0	**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. nown		
Principle downlight type: Un	known		
Window selection - default windows only	Scan to access this certificate online and confirm this is valid.		
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.

Certificate Date:

Certificate number: 0003344652

13 Nov 2018

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★ Star rating:
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6.9

Building features

Window type and performance value

Window ID	Window type				U-value	SHGC
ATB-006-03 B	ATB-006-03 B A low-E -Clear	Al Thermally Brok	en B DG Argon F	ill High Solar (Gain 2.9	0.51
Window schee	dule					
Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Studio	ATB-006-03 B	n/a	2700	3500	E	No Shading
Studio	ATB-006-03 B	n/a	2550	1000	W	No Shading
Studio	ATB-006-03 B	n/a	2550	1000	Ν	No Shading
L2 Living	ATB-006-03 B	n/a	2550	3636	W	No Shading
L2 Living	ATB-006-03 B	n/a	1400	900	Ν	No Shading
Study	ATB-006-03 B	n/a	2550	900	Ν	No Shading
Kitchen/Living	ATB-006-03 B	n/a	2400	3178	W	No Shading
Kitchen/Living	ATB-006-03 B	n/a	2700	2722	Ν	No Shading
Kitchen/Living	ATB-006-03 B	n/a	2700	1000	Ν	No Shading
Kitchen/Living	ATB-006-03 B	n/a	2700	3200	E	Vertical Louvres, Horizontal Blades
Bath	ATB-006-03 B	n/a	2550	1000	W	No Shading
Bedroom 1	ATB-006-03 B	n/a	2550	600	W	No Shading
Bedroom 1	ATB-006-03 B	n/a	2550	1000	Ν	No Shading
Bedroom 2	ATB-006-03 B	n/a	2550	1000	Ν	No Shading
Bedroom 3	ATB-006-03 B	n/a	2550	2722	Ν	No Shading
Bedroom 3	ATB-006-03 B	n/a	2550	1875	E	No Shading

Roof window	v and skylight ty	/pe and performanc	e value			
ID	Window typ	e			U-value	SHGC
None Present						
Roof window	v and skylight s	chedule				
Location	ID	Roof window/skylight no.	Area (m ²)	Orientation	Outdoor shade	Indoor shade/diffuser
None Present						

External wall	type					
ID	Wall type		Insulation			Wall wrap or foil
EW-1	Fibro Cavity F	Panel Direct Fix	Anti-glare foil	with bulk no gap	R2.5	Yes
EW-2	Concrete bloc	k, lined	Anti-glare foil	with bulk no gap	R1.5	Yes
EW-3	Fibro Cavity F	Panel Direct Fix	Foil, Anti-glare	e one side, Refle	ctive other	Yes
External wall	schedule					
Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	e Eaves (mm)
Studio	EW-1	5794	2700	E	No	4322
Studio	EW-1	5794	2700	W	No	0
Studio	EW-1	4904	2700	Ν	No	0
L2 Living	EW-1	1600	2550	W	No	2000

Certificate number	r: 0003344652	Certificate Date:	:	13 Nov 2018	★ Star rating:	6.9 NATION HOU
Building featur	res continued					
L2 Living	EW-1	2000	2550	S	No	4200
L2 Living	EW-1	3900	2550	W	No	13550
L2 Living	EW-1	5995	2550	N	No	0
L2 Living	EW-2	2995	2550	E	No	0
L2 Bath	EW-2	1695	2550	N	No	0
L2 Bath	EW-2	2495	2550	E	No	0
Study	EW-1	3690	2550	Ν	No	0
Garage 1	EW-3	5887	3000	W	No	0
Garage 1	EW-3	6964	3000	Ν	No	0
Garage 1	EW-3	4272	2550	E	No	1337
Garage 1	EW-3	854	2550	S	No	1630
Garage 1	EW-3	1523	2550	SE	No	2173
WC	EW-1	895	2700	W	No	2000
Kitchen/Living	EW-1	4595	2700	W	No	2000
Kitchen/Living	EW-1	11400	2700	N	No	0
Kitchen/Living	EW-1	5500	2700	E	No	0
Bath	EW-1	1795	2550	W	No	50
Bedroom 1	EW-1	3695	2550	W	No	25
Bedroom 1	EW-1	3795	2550	N	No	0
Bedroom 2	EW-1	4190	2550	N	No	0
Bedroom 3	EW-1	3795	2550	N	No	900

Internal wall type

EW-1

EW-1

3295

2195

Bedroom 3

Ens

Wall type	Area (m ²)	Insulation	Wall wrap or foil
IW-1 - Brick, plasterboard	116.0	No Insulation	No
IW-2 - Cavity wall, direct fix plasterboard, single gap	101.0	No insulation	No

2550

2550

Е

Е

No

No

2000

2000

Floors					
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Studio/Garage 1	Timber Above Plasterboard 100mm	28.4		Bulk Insulation R3	Carpet 10mm
L2 Living	Concrete Slab on Ground 100mm	42.2	None	No Insulation	Carpet 10mm
L2 Bath	Concrete Slab on Ground 100mm	4.1	None	No Insulation	Carpet 10mm
Study	Concrete Slab on Ground 100mm	12.1	None	No Insulation	Carpet 10mm
Garage 1	Concrete Slab on Ground 100mm	39.4	None	No Insulation	Bare
WC	Concrete Slab on Ground 100mm	1.7	None	No Insulation	Carpet 10mm
Kitchen/Living /L2 Living	Timber Above Plasterboard 100mm	42.6		No Insulation	Carpet 10mm

Certificate Date:

Certificate number: 0003344652

13 Nov 2018

★ Star rating:



6.9

Build	ina f	features	continued	

Kitchen/Living /L2 Bath	Timber Above Plasterboard 100mm	4.2		No Insulation	Carpet 10mm
Kitchen/Living /Study	Timber Above Plasterboard 100mm	12.6		No Insulation	Carpet 10mm
Kitchen/Living	Concrete Slab on Ground 100mm	1.4	None	No Insulation	Carpet 10mm
Bath/WC	Timber Above Plasterboard 100mm	1.7		No Insulation	Bare
Bath/Kitchen/Living	Timber Above Plasterboard 100mm	3.1		No Insulation	Bare
Bath	Concrete Slab on Ground 100mm	0.7	None	Bulk Insulation, Gap to Floor R2.5	Carpet 10mm
Bedroom 1/Kitchen/Living	Timber Above Plasterboard 100mm	11.4		No Insulation	Carpet 10mm
Bedroom 1	Suspended Timber Floor 100mm	1.4	Totally Open	Bulk Insulation, Gap to Floor R2.5	Carpet 10mm
Bedroom 2/Kitchen/Living	Timber Above Plasterboard 100mm	12.6		No Insulation	Carpet 10mm
Bedroom 3/Kitchen/Living	Timber Above Plasterboard 19mm	12.2		No Insulation	Carpet 10mm
Ens/Kitchen/Living	Timber Above Plasterboard 100mm	5.5		No Insulation	Carpet 10mm
Upstairs/Kitchen/Li ving	Timber Above Plasterboard 100mm	14.1		No Insulation	Carpet 10mm

Ceiling type

Location	Construction	Added insulation	Roof space above
Studio	Plasterboard	Bulk Insulation R3.5	Yes
L2 Living	Plasterboard	Bulk Insulation R3.5	No
L2 Living	Timber Above Plasterboard	No Insulation	No
L2 Bath	Plasterboard	Bulk Insulation R3	No
L2 Bath	Timber Above Plasterboard	No Insulation	No
Study	Plasterboard	Bulk Insulation R3	No
Study	Timber Above Plasterboard	No Insulation	No
Garage 1	Plasterboard	No insulation	No
Garage 1	Timber Above Plasterboard	Bulk Insulation R3	No
WC	Timber Above Plasterboard	No Insulation	No
Kitchen/Living	Timber Above Plasterboard	No Insulation	No
Bath	Plasterboard	Bulk Insulation R3.5	Yes
Bedroom 1	Plasterboard	Bulk Insulation R3.5	Yes
Bedroom 2	Plasterboard		Yes

Nationwide House Energy Rating Scheme* Certificate						******
Certificate numbe	er: 0003344652	Certificate Date:	13 Nov 2018	★ Star rating:	6.9	NATIONWIDE HOUSE ENERGY RATING SCHEM
Building featu	res continued					
				Bulk Insulation R3.5		
Bedroom 3	Plasterboard			Bulk Insulation R3.5	Yes	
Ens	Plasterboard			Bulk Insulation R3.5	Yes	
Upstairs	Plasterboard			Bulk Insulation R3.5	Yes	

Ceiling penetrations						
Location	Number	Туре	Diameter (mm) Sealed/unsealed			
None Present						

Ceiling fans			
Location	Number	Diameter (mm)	
None Present			

Roof type				
Construction	Added Roof cold insulation	our		
Corrugated Iron	Bulk, Reflective Medium Side Down, Anti- glare Up R1.3			
Waterproofing Membrane	No Insulation, Medium Only an Air Gap			

Certificate number: 0003344652

Certificate Date: 13 N

13 Nov 2018



Additional information

If carpet noted as floor covering it may be replaced with any type.

Due to non current Window Library the glazing descriptiosn may not match actual products. Only the U and SHGC values should be considered NOT the glazing descriptions.

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).

★ Star rating: 6.9

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

Certificate number: 0003344694

Certificate Date: 13 Nov 2018

★ Star rating: 5.8



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:	20039
Name:	David Howard
Organisation:	Partners Energy Management
Email:	david@partnersenergy.com.au
Phone:	0421381005
Declaration of interest:	The Assessor has provided design advice to the Applicant
Software:	BERS Pro v4.3.0.2c (3.13)

ABSA AAO:

Overview

Dwelling details

	Unit TH10, 25-27 Warriewood rd Warriewood					
State:	NSW	Postcode:	2102			
Туре:	New Dwelling	NCC Class: NatHERS	1A			
Lot/DP		climate zone:	56			
number:	5464	Exposure:	Suburban			

Key construction and insulation materials

(see following pages for details)

Construction:	Fibro Cavity Panel Direct Fix Corrugated Iron
	Concrete Slab on Ground
Insulation:	R2.5 wall insulation
	R3.5 ceiling insulation
	R2.5 floor insulation
Glazing:	ATB-006-03 B AI Thermally Broken B
	DG Argon Fill High Solar Gain low-E

Net floor area (m ²)		Annual thermal	
Conditioned: Unconditioned:	198.0	performanc (MJ/m ²)	e loads
Garage:	43.0 39.0	Heating:	32.2
TOTAL:	240.0	Cooling: TOTAL:	22.6 54.8

Plan documents

Warriewood Residential Development Plan ref/date: Prepared by: **VIA Architects**



Ceiling penetrat (see following pages for		maxir	TE: This total is the num number of ceiling trations allowed to a
Sealed: Unsealed: TOTAL:**	0 0 0	certifi excee this c and a Loss penet	g (under a roof) for this cate. If this number is ded in construction then certificate IS NOT VALID a new certificate is required. of ceiling insulation for the trations listed has been i into account with the rating.
Principle downlight ty	vpe [.] Unl	know	'n
Principle downlight ty Window selection default windows	n -	know	Scan to access this certificate online and confirm this is valid.

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.



Certificate Date:

Certificate number: 0003344694

13 Nov 2018

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★ Star rating:
```

5.8

Building features

Window type and performance value

Window ID	Window type				U-value	SHGC
ATB-006-03 B	ATB-006-03 B A low-E -Clear	Al Thermally Brok	en B DG Argon F	Fill High Solar (Gain 2.9	0.51
Window schee	dule					
Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Studio	ATB-006-03 B	n/a	2550	1000	S	No Shading
Studio	ATB-006-03 B	n/a	2550	1000	W	No Shading
Studio	ATB-006-03 B	n/a	2700	3500	E	No Shading
L2 Living	ATB-006-03 B	n/a	1400	900	S	No Shading
L2 Living	ATB-006-03 B	n/a	2550	3636	W	No Shading
Study	ATB-006-03 B	n/a	2550	900	S	No Shading
Kitchen/Living	ATB-006-03 B	n/a	2700	3200	E	Vertical Louvres, Horizontal Blades
Kitchen/Living	ATB-006-03 B	n/a	2700	2722	S	No Shading
Kitchen/Living	ATB-006-03 B	n/a	2700	1000	S	No Shading
Kitchen/Living	ATB-006-03 B	n/a	2400	3178	W	No Shading
Bath	ATB-006-03 B	n/a	2550	1000	W	No Shading
Bedroom 1	ATB-006-03 B	n/a	2550	1000	S	No Shading
Bedroom 1	ATB-006-03 B	n/a	2550	600	W	No Shading
Bedroom 2	ATB-006-03 B	n/a	2550	1000	S	No Shading
Bedroom 3	ATB-006-03 B	n/a	2550	1875	E	No Shading
Bedroom 3	ATB-006-03 B	n/a	2550	2722	S	No Shading

Roof window and skylight type and performance value ID Window type **U-value** SHGC None Present Roof window and skylight schedule Location ID Roof **Orientation Outdoor shade Indoor** Area (m²) window/skylight shade/diffuser no. None Present

External wall type Insulation ID Wall type Wall wrap or foil EW-1 Fibro Cavity Panel Direct Fix Anti-glare foil with bulk no gap R2.5 Yes EW-2 Concrete block, lined Anti-glare foil with bulk no gap R1.5 Yes EW-3 Fibro Cavity Panel Direct Fix Foil, Anti-glare one side, Reflective other Yes **External wall schedule** Location ID Width (mm) Height (mm) Orientation **Fixed Shade Eaves** (mm) Studio **EW-1** 4904 2700 S No 0 Studio **EW-1** 5794 2700 W No 0 Studio **EW-1** 5794 2700 Е No 4322 L2 Living EW-2 2995 2550 Е No 0

Certificate number	: 0003344694	Certificate Date:		13 Nov 2018	★ Star rating:	5.8	NATIONW HOU ENERGY RATING SE
Building featur	es continued						
L2 Living	EW-1	5995	2550	S	No	0	
L2 Living	EW-1	3900	2550	W	No	135	50
L2 Living	EW-1	2000	2550	N	No	420	0
L2 Living	EW-1	1600	2550	W	No	200	0
L2 Bath	EW-2	2495	2550	E	No	0	
L2 Bath	EW-2	1695	2550	S	No	0	
Study	EW-1	3690	2550	S	No	0	
Garage 1	EW-3	1523	2550	NE	No	310)2
Garage 1	EW-3	854	2550	N	No	159	8
Garage 1	EW-3	4272	2550	E	No	223	8
Garage 1	EW-3	6964	3000	S	No	0	
Garage 1	EW-3	5887	3000	W	No	0	
WC	EW-1	895	2700	W	No	170	0
Kitchen/Living	EW-1	5500	2700	E	No	0	
Kitchen/Living	EW-1	11400	2700	S	No	0	
Kitchen/Living	EW-1	4595	2700	W	No	170	0
Bath	EW-1	1795	2550	W	No	50	
Bedroom 1	EW-1	3795	2550	S	No	0	
Bedroom 1	EW-1	3695	2550	W	No	25	
Bedroom 2	EW-1	4190	2550	S	No	0	
Bedroom 3	EW-1	3295	2550	E	No	200	0
Bedroom 3	EW-1	3795	2550	S	No	900)

Internal wall type

Ens

EW-1

2195

Wall type	Area (m ²)	Insulation	Wall wrap or foil
IW-1 - Brick, plasterboard	116.0	No Insulation	No
IW-2 - Cavity wall, direct fix plasterboard, single gap	101.0	No insulation	No

2550

Е

No

2000

Floors					
Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Studio/Garage 1	Timber Above Plasterboard 100mm	28.4		Bulk Insulation R3	Carpet 10mm
L2 Living	Concrete Slab on Ground 100mm	42.2	None	No Insulation	Carpet 10mm
L2 Bath	Concrete Slab on Ground 100mm	4.1	None	No Insulation	Ceramic Tiles 8mm
Study	Concrete Slab on Ground 100mm	12.1	None	No Insulation	Carpet 10mm
Garage 1	Concrete Slab on Ground 100mm	39.4	None	No Insulation	Bare
WC	Suspended Timber Floor 19mm	1.7	Very Open	Bulk Insulation in Contact with Floor R2.5	
		42.6		No Insulation	Carpet 10mm

Certificate number: 0003344694

Certificate Date: 13 Nov 2018

★ Star rating:



5.8

Building features continued

Kitchen/Living /L2 Living	Timber Above Plasterboard 19mm				
Kitchen/Living /L2 Bath	Timber Above Plasterboard 19mm	4.2		No Insulation	Carpet 10mm
Kitchen/Living /Study	Timber Above Plasterboard 19mm	12.6		No Insulation	Carpet 10mm
Kitchen/Living	Suspended Timber Floor 19mm	1.4	Very Open	Bulk Insulation in Contact with Floor R2.5	Carpet 10mm
Bath/WC	Timber Above Plasterboard 100mm	1.7		No Insulation	Bare
Bath/Kitchen/Living	Timber Above Plasterboard 100mm	3.1		No Insulation	Bare
Bath	Concrete Slab on Ground 100mm	0.7	None	Bulk Insulation, Gap to Floor R2.5	Carpet 10mm
Bedroom 1/Kitchen/Living	Timber Above Plasterboard 100mm	11.4		No Insulation	Carpet 10mm
Bedroom 1	Suspended Timber Floor 100mm	1.4	Totally Open	Bulk Insulation, Gap to Floor R2.5	Carpet 10mm
Bedroom 2/Kitchen/Living	Timber Above Plasterboard 100mm	12.6		No Insulation	Carpet 10mm
Bedroom 3/Kitchen/Living	Timber Above Plasterboard 19mm	12.2		No Insulation	Carpet 10mm
Ens/Kitchen/Living	Timber Above Plasterboard 100mm	5.5		No Insulation	Carpet 10mm
Upstairs/Kitchen/Li ving	Timber Above Plasterboard 100mm	14.0		No Insulation	Carpet 10mm

Ceiling type

Location	Construction	Added insulation	Roof space above
Studio	Plasterboard	Bulk Insulation R3.5	Yes
L2 Living	Plasterboard	Bulk Insulation R3.5	No
L2 Living	Timber Above Plasterboard	No Insulation	No
L2 Bath	Plasterboard	Bulk Insulation R3	No
L2 Bath	Timber Above Plasterboard	No Insulation	No
Study	Plasterboard	Bulk Insulation R3	No
Study	Timber Above Plasterboard	No Insulation	No
Garage 1	Plasterboard	No insulation	No
Garage 1	Timber Above Plasterboard	Bulk Insulation R3	No
WC	Timber Above Plasterboard	No Insulation	No
Kitchen/Living	Timber Above Plasterboard	No Insulation	No
Bath	Plasterboard	Bulk Insulation R3.5	Yes
Bedroom 1	Plasterboard	Bulk Insulation	Yes

Nationwide He	ouse Energy R	ating Scheme* Co	ertificate			CALCULATION OF THE PARTY OF THE
Certificate numbe	er: 0003344694	Certificate Date:	13 Nov 2018	★ Star rating:	5.8	NATIONWIDE HOUSE ENERGY RATING SCHEME
Building featu	res continued					
				R3.5		
Bedroom 2	Plasterboard			Bulk Insulation R3.5	Yes	
Bedroom 3	Plasterboard			Bulk Insulation R3.5	Yes	
Ens	Plasterboard			Bulk Insulation R3.5	Yes	
Upstairs	Plasterboard			Bulk Insulation R3.5	Yes	

ations		
Number	Туре	Diameter (mm) Sealed/unsealed

Ceiling fans			
Location	Number	Diameter (mm)	
None Present			

Roof type		
Construction	Added Roof insulation	colour
Corrugated Iron	Bulk, Reflective Medi Side Down, Anti- glare Up R1.3	um
Waterproofing Membrane	No Insulation, Medi Only an Air Gap	um

Certificate number: 0003344694

Certificate Date: 13 N

13 Nov 2018



Additional information

If carpet noted as floor covering it may be replaced with any type.

Due to non current Window Library the glazing descriptiosn may not match actual products. Only the U and SHGC values should be considered NOT the glazing descriptions.

Explanatory notes

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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.

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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

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★ Star rating: 5.8

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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

Certificate number: 0003344678

Certificate Date: 13 Nov 2018

★ Star rating: 4.9



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:	20039
Name:	David Howard
Organisation:	Partners Energy Management
Email:	david@partnersenergy.com.au
Phone:	0421381005
Declaration of interest:	The Assessor has provided design advice to the Applicant
Software:	BERS Pro v4.3.0.2c (3.13)

ABSA AAO:

Overview

Dwelling details

Street: Suburb:	Unit TH11, 25-27 V Warriewood	Varriewood r	d
State:	NSW	Postcode:	2102
Туре:	New Dwelling	NCC Class: NatHERS	1A
Lot/DP		climate zone:	56
number:	5464	Exposure:	Suburban

Key construction and insulation materials

(see following pages for details)

Construction:	Fibro Cavity Panel Direct Fix Corrugated Iron
la sul sti su s	Concrete Slab on Ground
Insulation:	R2.5 wall insulation
	R3.5 ceiling insulation
	No floor insulation
Glazing:	ATB-006-03 B AI Thermally Broken B
	DG Argon Fill High Solar Gain low-E

Net floor area (m²) Annual thermal performance loads Conditioned: 200.0 (MJ/m^2) Unconditioned: 46.0 Heating: Garage: 40.7 41.0 Cooling: 25.9 TOTAL: 246.0 TOTAL: 66.6

Plan documents

Warriewood Residential Development Plan ref/date: Prepared by: **VIA Architects**



Ceiling penetrations (see following pages for deta	ma Is) per	ixir net	TE: This total is the num number of ceiling rations allowed to a
Sealed: 0 Unsealed: 0 TOTAL:** 0	cer exe thi an Los per	tifi ceo s c d a ss net	g (under a roof) for this cate. If this number is ded in construction then sertificate IS NOT VALID new certificate is required. of ceiling insulation for the rations listed has been into account with the rating.
Principle downlight type:	Jnkno	w	'n
Window selection - default windows only	,		Scan to access this certificate online and confirm this is valid.
Note on allowable window values: Only a 5% tolerance to the nominate SHGC window values shown on pag can be used with this rating.			
Note: Only a +/- 5% SHGC tolerance allowed with this rating.	is		
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

confirm compliance.

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

Certificate Date:

Certificate number: 0003344678

13 Nov 2018

★ Star rating:

4.9

Building features

Studio

Window type and performance value

ATB-006-03 B

n/a

Window type	and performanc	e value				
Window ID	Window type				U-value	SHGC
ATB-006-03 B	ATB-006-03 B A low-E -Clear	A Thermally Brok	en B DG Argon I	Fill High Solar	Gain 2.9	0.51
ATB-006-04 B	ATB-006-04 B A low-E -Clear	A Thermally Brok	en B DG Argon I	Fill Low Solar (Gain 3.0	0.26
Window sche	dule					
Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Living	ATB-006-03 B	n/a	2550	1000	S	No Shading
Living	ATB-006-03 B	n/a	2550	3636	W	No Shading
Living	ATB-006-04 B	n/a	2550	1000	N	No Shading
Study	ATB-006-03 B	n/a	1400	1000	S	No Shading
Kitchen/Living	ATB-006-04 B	n/a	2550	1000	Ν	No Shading
Kitchen/Living	ATB-006-03 B	n/a	2700	3100	E	Vertical Louvres, Horizontal Blades
Kitchen/Living	ATB-006-03 B	n/a	2700	2700	S	No Shading
Kitchen/Living	ATB-006-03 B	n/a	2550	1000	S	No Shading
Kitchen/Living	ATB-006-03 B	n/a	2400	3100	W	Vertical Louvres, Horizontal Blades
Bath	ATB-006-03 B	n/a	750	1000	W	No Shading
Bedroom 1	ATB-006-03 B	n/a	2550	1000	S	No Shading
Bedroom 1	ATB-006-03 B	n/a	2550	600	W	No Shading
Bedroom 2	ATB-006-03 B	n/a	1400	900	S	No Shading
Bedroom 3	ATB-006-03 B	n/a	2550	1875	E	No Shading
Bedroom 3	ATB-006-03 B	n/a	2550	2700	S	No Shading
Ens	ATB-006-04 B	n/a	850	1025	Ν	No Shading
Upstairs	ATB-006-04 B	n/a	2400	1000	Ν	No Shading
Studio	ATB-006-04 B	n/a	2550	1000	Ν	No Shading
Studio	ATB-006-03 B	n/a	2550	3500	E	No Shading

Roof window and skylight type and performance value						
ID	Window type			_	U-value	SHGC
None Presen	it					
Roof windo	w and skylight sch	edule				
Location	ID	Roof window/skylight	Area (m²)	Orientation	Outdoor shade	Indoor shade/diffuser
		no.				

2550

1000

SW

No Shading

ID	Wall type	Insulation	Wall wrap or foil
EW-1	Concrete block, lined	Anti-glare foil with bulk no gap R1.5	Yes
EW-2	Fibro Cavity Panel Direct Fix	Anti-glare foil with bulk no gap R2.5	Yes

Nationwide House Energy R	ating Scheme* Co	ertificate			
Certificate number: 0003344678	Certificate Date:	13 Nov 2018	★ Star rating:	4.9	NATIONWIDE HOUSE

Building features continued

Building leatu						
Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Living	EW-1	2995	2550	E	No	0
Living	EW-2	5995	2550	S	No	0
Living	EW-2	3900	2550	W	No	2000
Living	EW-2	2000	2550	Ν	No	1600
Living	EW-2	1600	2550	W	No	4000
Living	EW-2	9400	2700	Ν	No	0
Grd Bath	EW-1	2495	2550	E	No	0
Grd Bath	EW-1	1695	2550	S	No	0
Study	EW-2	3690	1200	S	No	0
Study	EW-1	3690	1350	S	No	0
WC	EW-2	895	2700	W	No	400
WC	EW-2	1995	2700	Ν	No	0
Kitchen/Living	EW-2	9395	2700	Ν	No	0
Kitchen/Living	EW-2	5500	2700	E	No	1400
Kitchen/Living	EW-2	11400	2700	S	No	600
Kitchen/Living	EW-2	4595	2700	W	No	400
Bath	EW-2	3195	2550	Ν	No	0
Bath	EW-2	1795	2550	W	No	0
Bedroom 1	EW-2	3795	2550	S	No	25
Bedroom 1	EW-2	3695	2550	W	No	0
Bedroom 2	EW-2	4190	2550	S	No	50
Bedroom 3	EW-2	3295	2550	E	No	1400
Bedroom 3	EW-2	3795	2550	S	No	75
Ens	EW-2	2595	2550	Ν	No	0
Ens	EW-2	2195	2550	E	No	1400
Upstairs	EW-2	5990	2550	Ν	No	0
Garage 1	EW-2	5738	2550	SW	No	25
Garage 1	EW-2	6277	2550	Ν	No	0
Garage 1	EW-2	1616	2550	E	No	3208
Garage 1	EW-2	949	2550	N	No	1636
Garage 1	EW-2	4254	2550	NE	No	2206
Garage 1	EW-2	7280	2550	S	No	0
Studio WC	EW-2	1388	2550	W	No	25
Studio WC	EW-2	2595	2550	SE	No	25
Studio	EW-2	5070	2550	N	No	0
Studio	EW-2	5794	2550	E	No	4267
Studio	EW-2	2372	2550	S	No	56
Studio	EW-2	4433	2550	SW	No	25

Internal wall type			
Wall type	Area (m²)	Insulation	Wall wrap or foil
IW-1 - Cavity wall, direct fix plasterboard, single gap	111.0	No insulation	No

Certificate Date:

Certificate number: 0003344678

13 Nov 2018

★ Star rating:

NATIONWIDE

4.9

Building features continued

Floors					
Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Living	Concrete Slab on Ground 100mm	42.2	None	No Insulation	Ceramic Tiles 8mm
Grd Bath	Concrete Slab on Ground 100mm	4.1	None	No Insulation	Ceramic Tiles 8mm
Study	Concrete Slab on Ground 100mm	12.1	None	No Insulation	Ceramic Tiles 8mm
WC	Suspended Timber Floor 19mm	1.7	Very Open	Bulk Insulation in Contact with Floor R2.5	
Kitchen/Living /Living	Timber Above Plasterboard 19mm	42.6		No Insulation	Carpet 10mm
Kitchen/Living /Grd Bath	Timber Above Plasterboard 19mm	4.2		No Insulation	Carpet 10mm
Kitchen/Living /Study	Timber Above Plasterboard 19mm	12.6		No Insulation	Carpet 10mm
Kitchen/Living	Suspended Timber Floor 19mm	1.4	Very Open	Bulk Insulation in Contact with Floor R2.5	Carpet 10mm
Bath/WC	Timber Above Plasterboard 19mm	1.7		No Insulation	Ceramic Tiles 8mm
Bath/Kitchen/Living	Timber Above Plasterboard 19mm	3.1		No Insulation	Ceramic Tiles 8mm
Bath	Suspended Timber Floor 19mm	0.7	Totally Open	Bulk Insulation, Gap to Floor R2.5	Ceramic Tiles 8mm
Bedroom 1/Kitchen/Living	Timber Above Plasterboard 100mm	11.4		No Insulation	Carpet 10mm
Bedroom 1	Suspended Timber Floor 100mm	1.4	Totally Open	Bulk Insulation, Gap to Floor R2.5	Carpet 10mm
Bedroom 2/Kitchen/Living	Timber Above Plasterboard 100mm	12.6		No Insulation	Carpet 10mm
Bedroom 3/Kitchen/Living	Timber Above Plasterboard 100mm	12.2		No Insulation	Carpet 10mm
Ens/Kitchen/Living	Timber Above Plasterboard 100mm	5.5		No Insulation	Ceramic Tiles 8mm
Upstairs/Kitchen/Li ving	Timber Above Plasterboard 19mm	14.0		No Insulation	Carpet 10mm
Garage 1	Concrete Slab on Ground 100mm	40.6	None	No Insulation	Bare
Studio WC/Garage	Timber Above Plasterboard 100mm	3.1		Bulk Insulation R3	Ceramic Tiles 8mm
Studio/Garage 1	Timber Above Plasterboard 100mm	25.4		Bulk Insulation R3	Carpet 10mm

Ceiling type			
Location	Construction	Added insulation	Roof space above
Living	Plasterboard	Bulk Insulation R3.5	No

Nationwide Hou	use Energy R	ating Scheme* Ce	ertificate			
Certificate number:	0003344678	Certificate Date:	13 Nov 2018	★ Star rating:	4.9	NATIONWID HOUS ENERGY RATING SCHEM
Building feature	es continued					
Living	Timber Above	Plasterboard		No Insulation	No	
Grd Bath	Plasterboard			Bulk Insulation R3	No	
Grd Bath	Timber Above	Plasterboard		No Insulation	No	
Study	Plasterboard			Bulk Insulation R3	No	
Study	Timber Above	Plasterboard		No Insulation	No	
WC	Timber Above	Plasterboard		No Insulation	No	
Kitchen/Living	Timber Above	Plasterboard		No Insulation	No	
Bath	Plasterboard			Bulk Insulation R3.5	Yes	
Bedroom 1	Plasterboard			Bulk Insulation R3.5	Yes	
Bedroom 2	Plasterboard			Bulk Insulation R3.5	Yes	
Bedroom 3	Plasterboard			Bulk Insulation R3.5	Yes	
Ens	Plasterboard			Bulk Insulation R3.5	Yes	
Upstairs	Plasterboard			Bulk Insulation R3.5	Yes	
Garage 1	Plasterboard			No insulation	No	
Garage 1	Timber Above	Plasterboard		Bulk Insulation R3	No	
Studio WC	Plasterboard			Bulk Insulation R3.5	Yes	
Studio	Plasterboard			Bulk Insulation R3.5	Yes	

Ceiling penet	rations		
Location	Number	Туре	Diameter (mm) Sealed/unsealed
None Present			

Ceiling fans			
Location	Number	Diameter (mm)	
None Present			

Roof type			
Construction	Added Roof colour insulation		
Waterproofing Membrane	No Insulation, Medium Only an Air Gap		
Corrugated Iron	Bulk, Reflective Medium Side Down, Anti- glare Up R1.3		

^{*} 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: 0003344678

Certificate Date: 13 N

13 Nov 2018



Additional information

If carpet noted as floor covering it may be replaced with any type.

Due to non current Window Library the glazing descriptiosn may not match actual products. Only the U and SHGC values should be considered NOT the glazing descriptions.

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.

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Contact

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Certificate number: 0003344702

Certificate Date: 13 Nov 2018

★ Star rating: 5.1



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Assessor details

Accreditation number:	20039
Name:	David Howard
Organisation:	Partners Energy Management
Email:	david@partnersenergy.com.au
Phone:	0421381005
Declaration of interest:	The Assessor has provided design advice to the Applicant
Software:	BERS Pro v4.3.0.2c (3.13)

ABSA AAO:

Overview

Dwelling details

Street: Suburb:	Unit TH12, 25-27 V Warriewood	Varriewood r	d
State:	NSW	Postcode:	2102
Туре:	New Dwelling	NCC Class: NatHERS	1A
Lot/DP		climate zone:	56
number:	5464	Exposure:	Suburban

Key construction and insulation materials

(see following pages for details)

Construction:	Fibro Cavity Panel Direct Fix Corrugated Iron
Insulation:	Concrete Slab on Ground R2.5 wall insulation
	R3.0 ceiling insulation No floor insulation
Glazing:	ATB-005-04 B AI Thermally Broken A
	DG Argon Fill Low Solar Gain low-E

Net floor area (m²) Annual thermal performance loads Conditioned: 194.0 (MJ/m^2) **Unconditioned:** 58.0

	00.0		
Garage:	41.0	Heating:	39.2
TOTAL:	252.0	Cooling:	25.2
		TOTAL:	64.4

Plan documents

Warriewood Residential Development Plan ref/date: Prepared by: **VIA Architects**



Ceiling penetrations (see following pages for detail	ls) penetrations allowed to a		
Sealed: 0 Unsealed: 0 TOTAL:** 0	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: U	Inknown Scan to access this		
default windows only	certificate online and confirm this is valid.		
Only a 5% tolerance to the nominate SHGC window values shown on pag			
Note on allowable window values: Only a 5% tolerance to the nominate SHGC window values shown on pag can be used with this rating. Note: Only a +/- 5% SHGC tolerance allowed with this rating.	e 2		

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.



Certificate Date:

Certificate number: 0003344702

13 Nov 2018

★ Star rating:

5.1

Building features

Window ID	Window type				U-value	SHGC
ATB-005-04 B	ATB-005-04 B A low-E -Clear	Gain 3.0	0.27			
Window schee	dule					
Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Bath/Ldry	ATB-005-04 B	n/a	2550	1345	N	No Shading
Downstairs	ATB-005-04 B	n/a	2100	2100	W	No Shading
Pantry	ATB-005-04 B	n/a	1500	1000	E	No Shading
WC	ATB-005-04 B	n/a	1500	1100	E	No Shading
Kitchen/Living	ATB-005-04 B	n/a	1500	2913	S	No Shading
Kitchen/Living	ATB-005-04 B	n/a	1500	1942	S	No Shading
Kitchen/Living	ATB-005-04 B	n/a	1500	2400	W	No Shading
Kitchen/Living	ATB-005-04 B	n/a	2700	4900	W	Vertical Louvres, Horizontal Blades
Kitchen/Living	ATB-005-04 B	n/a	2700	3100	N	No Shading
Kitchen/Living	ATB-005-04 B	n/a	2550	1345	Ν	No Shading
Kitchen/Living	ATB-005-04 B	n/a	2550	1100	E	No Shading
Kitchen/Living	ATB-005-04 B	n/a	2550	1100	E	No Shading
Ens	ATB-005-04 B	n/a	1000	1200	E	No Shading
Bedroom 1	ATB-005-04 B	n/a	2700	4900	W	No Shading
Bedroom 1	ATB-005-04 B	n/a	2700	3100	Ν	No Shading
Bedroom 2	ATB-005-04 B	n/a	2550	1345	N	No Shading
Bedroom 3	ATB-005-04 B	n/a	2700	900	E	No Shading
Bedroom 3	ATB-005-04 B	n/a	2700	900	E	No Shading
Upstairs	ATB-005-04 B	n/a	1000	2200	E	No Shading
Upstairs	ATB-005-04 B	n/a	2700	900	E	No Shading

ID	Window type				U-value	SHGC
None Present						
Roof window a	nd skylight sch	edule				
Location	ID	Roof	Area (m ²)	Orientation	Outdoor shade	Indoor shade/diffuser

External wa	ll type						
ID	Wall type		Insulation			Wall wrap or foil	
EW-1	Fibro Cavity F	Fibro Cavity Panel Direct Fix		Anti-glare foil with bulk no gap R2.5			
EW-2	Concrete bloc	Concrete block, lined		Anti-glare foil with bulk no gap R1.5			
External wa	III schedule						
Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)	
Garage 1	EW-1	6100	2550	W	No	0	

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

Nationwide Ho	use Energy R	ating Scheme*	Certif	icate		
Certificate number	: 0003344702	Certificate Date:	: 1	3 Nov 2018	★ Star rating:	5.1 NATION HOU ENERGY FAIL
Building featur	es continued					
Garage 1	EW-1	5600	2550	N	No	0
Garage 1	EW-1	5800	2550	S	No	0
Bath/Ldry	EW-1	1895	2550	W	No	0
Bath/Ldry	EW-1	3895	2550	Ν	No	0
Downstairs	EW-2	2095	2550	Ν	No	0
Downstairs	EW-2	10900	2550	E	No	2600
Downstairs	EW-1	5800	2550	S	No	0
Downstairs	EW-1	2895	2550	W	No	1400
Pantry	EW-1	2195	2700	S	No	0
Pantry	EW-1	3095	2700	E	No	1500
WC	EW-1	2290	2700	E	No	1500
Kitchen/Living	EW-1	4995	2700	S	No	0
Kitchen/Living	EW-1	2900	2700	W	No	0
Kitchen/Living	EW-1	2300	2700	S	No	0
Kitchen/Living	EW-1	4900	2700	W	No	2300
Kitchen/Living	EW-1	3500	2700	N	No	1400
Kitchen/Living	EW-1	3100	2700	W	No	0
Kitchen/Living	EW-1	6000	2700	N	No	0
Kitchen/Living	EW-1	5495	2700	E	No	1500
Ens	EW-1	3095	2700	S	No	0
Ens	EW-1	2095	2700	E	No	0
WIR	EW-1	2895	2700	W	No	0
WIR	EW-1	4095	2700	S	No	0
Bedroom 1	EW-1	4900	2700	W	No	1700
Bedroom 1	EW-1	3500	2700	Ν	No	1300
Bedroom 1	EW-1	2300	2700	S	No	0
Bedroom 2	EW-1	3095	2700	W	No	0
Bedroom 2	EW-1	3895	2700	Ν	No	0
Bedroom 3	EW-1	3390	2700	E	No	0
Upstairs	EW-1	2095	2700	Ν	No	0
Upstairs	EW-1	5395	2700	E	No	0

Internal wall type					
Wall type	Area (m ²)	Insulation	Wall wrap or foil		
IW-1 - Cavity wall, direct fix plasterboard, single gap	21.0	Bulk Insulation, No Air Gap R2	No		
IW-2 - Cavity wall, direct fix plasterboard, single gap	118.0	No insulation	No		

Floors							
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering		
Garage 1	Concrete Slab on Ground 100mm	41.1	None	No Insulation	Bare		
Bath/Ldry	Concrete Slab on Ground 100mm	12.1	None	No Insulation	Ceramic Tiles 8mm		

Certificate number: 0003344702

Certificate Date: 13 Nov 2018

★ Star rating:



5.1

Downstairs	Concrete Slab on Ground 100mm	44.4	None	No Insulation	Ceramic Tiles 8mm
Pantry/Downstairs	Timber Above Plasterboard 100mm	6.6		No Insulation	Carpet 10mm
WC/Downstairs	Timber Above Plasterboard 100mm	4.8		No Insulation	Carpet 10mm
Kitchen/Living /Garage 1	Timber Above Plasterboard 19mm	24.4		Bulk Insulation R2.5	Carpet 10mm
Kitchen/Living /Bath/Ldry	Timber Above Plasterboard 19mm	12.5		No Insulation	Carpet 10mm
Kitchen/Living /Downstairs	Timber Above Plasterboard 19mm	32.9		No Insulation	Carpet 10mm
Kitchen/Living	Suspended Timber Floor 19mm	4.0	Very Open	Bulk Insulation in Contact with Floor R2.5	Carpet 10mm
Ens/Pantry	Timber Above Plasterboard 100mm	4.5		No Insulation	Carpet 10mm
Ens/Kitchen/Living	Timber Above Plasterboard 100mm	1.8		No Insulation	Carpet 10mm
WIR/Kitchen/Living	Timber Above Plasterboard 100mm	11.0		No Insulation	Carpet 10mm
Bedroom 1/Kitchen/Living	Timber Above Plasterboard 100mm	21.7		No Insulation	Carpet 10mm
Bedroom 2/Kitchen/Living	Timber Above Plasterboard 100mm	11.8		No Insulation	Carpet 10mm
Bedroom 3/Pantry	Timber Above Plasterboard 100mm	2.1		No Insulation	Carpet 10mm
Bedroom 3/WC	Timber Above Plasterboard 100mm	4.9		No Insulation	Carpet 10mm
Bedroom 3/Kitchen/Living	Timber Above Plasterboard 100mm	3.1		No Insulation	Carpet 10mm
Bath/Kitchen/Living	Timber Above Plasterboard 100mm	5.1		No Insulation	Carpet 10mm
Upstairs/Kitchen/Li ving	Timber Above Plasterboard 100mm	17.4		No Insulation	Carpet 10mm

Ceiling type				
Location	Construction	Added insulation	Roof space above	
Garage 1	Plasterboard	No insulation	No	
Garage 1	Timber Above Plasterboard	Bulk Insulation R2.5	No	
Bath/Ldry	Timber Above Plasterboard	No Insulation	No	
Downstairs	Timber Above Plasterboard	No Insulation	No	
Pantry	Timber Above Plasterboard	No Insulation	No	
WC	Timber Above Plasterboard	No Insulation	No	
Kitchen/Living	Timber Above Plasterboard	No Insulation	No	
Ens	Plasterboard	Bulk Insulation R3.5	Yes	
WIR	Plasterboard	Bulk Insulation R3.5	Yes	
Bedroom 1	Plasterboard	Bulk Insulation	Yes	

Nationwide Hou	use Energy Ra	ating Scheme* Co	ertificate			A TATA O
Certificate number:	0003344702	Certificate Date:	13 Nov 2018	★ Star rating:	5.1	NATIONWIDE HOUSE ENERGY RATING SCHEME
Building feature	es continued					
				R3.5		
Bedroom 2	Plasterboard			Bulk Insulation R3.5	Yes	
Bedroom 3	Plasterboard			Bulk Insulation R3.5	Yes	
Bath	Plasterboard			Bulk Insulation R3.5	Yes	
Upstairs	Plasterboard			Bulk Insulation R3.5	Yes	

Ceiling penetrations			
Location	Number	Туре	Diameter (mm) Sealed/unsealed
None Present	t		

Ceiling fans			
Location	Number	Diameter (mm)	
None Present			

Roof type			
Construction	Added Roof colour insulation		
Waterproofing Membrane	No Insulation, Medium Only an Air Gap		
Corrugated Iron	Bulk, Reflective Medium Side Down, Anti- glare Up R1.3		

Certificate number: 0003344702

Certificate Date: 13 N

13 Nov 2018

★ Star rating: 5.1



Additional information

If carpet noted as floor covering it may be replaced with any type.

Due to non current Window Library the glazing descriptiosn may not match actual products. Only the U and SHGC values should be considered NOT the glazing descriptions.

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