

# Nationwide House Energy Rating Scheme\* Certificate



Certificate number: **0004227070-01**

Certificate Date: **24 Sep 2019**

★ Star rating: **4.7**

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: **101182**  
Name: **Daniel.Warda**  
Organisation: **Energi Thermal Assessors Pty Ltd**  
Email: **daniel.warda@hotmail.com**  
Phone: **0452504125**  
Declaration of interest: **None**  
Software: **BERS Pro v4.3.0.2d (3.13)**  
AAO: **ABSA**

## Overview

### Dwelling details

Street: **911 Plttwater Road**  
Suburb: **Collaroy**  
State: **NSW** Postcode: **2097**  
Type: **New Dwelling** NCC Class: **1A**  
NatHERS climate zone: **56**  
Lot/DP number: **10609** Exposure: **Suburban**

### Key construction and insulation materials

(see following pages for details)

Construction: **Fibro Cavity Panel Direct Fix**  
**Corrugated Iron**  
**Suspended Timber Floor**  
Insulation: **R2.0 wall insulation**  
**R4.0 ceiling insulation**  
**R2.5 floor insulation**  
Glazing: **ALM-002-01 A Aluminium B SG Clear**

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

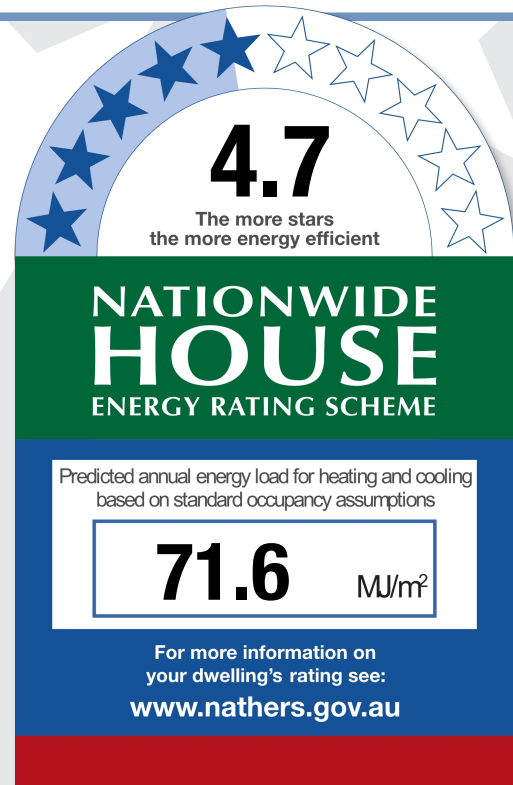
Conditioned: **225.0**  
Unconditioned: **67.0**  
Garage: **44.0**  
TOTAL: **292.0**

### Annual thermal performance loads (MJ/m<sup>2</sup>)

Heating: **45.7**  
Cooling: **25.9**  
TOTAL: **71.6**

### Plan documents

Plan ref/date: **17338**  
Prepared by: **Wincrest - ht**



### Ceiling penetrations

(see following pages for details)

Sealed: **2**  
Unsealed: **0**  
TOTAL:\*\* **2**

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. **If this number is exceeded 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: **Unknown**

### Window selection - default windows only

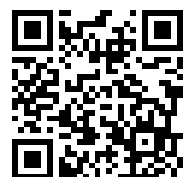
Note on allowable window values:  
Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/- 5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

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

Scan to access this certificate online and confirm this is valid.



# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004227070-01**

Certificate Date:

**24 Sep 2019**

★ Star rating:

**4.7**



## Building features

### Window type and performance value

Window ID	Window type	U-value	SHGC
WID-005-04 A	WID-005-04 A AI Residential Internal Sliding Door SG 638mm Comfort Plus	4.4	0.44
WID-006-04 A	WID-006-04 A AI Residential Sliding Window SG 638mm Comfort Plus	4.5	0.46
ALM-002-01 A	ALM-002-01 A Aluminium B SG Clear	6.7	0.70
ALM-001-01 A	ALM-001-01 A Aluminium A SG Clear	6.7	0.57
ALM-004-01 A	ALM-004-01 A Aluminium B DG Air Fill Clear-Clear	4.8	0.59

### Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Rumpus	WID-005-04 A	n/a	2100	3216	S	No Shading
Rumpus	WID-006-04 A	n/a	600	2050	W	No Shading
Rumpus	WID-006-04 A	n/a	600	2050	W	No Shading
Bath Two	ALM-002-01 A	n/a	600	1210	W	No Shading
Kitchen/Dining/	ALM-001-01 A	n/a	2400	2316	E	No Shading
Kitchen/Dining/	WID-005-04 A	n/a	2400	3576	S	No Shading
Kitchen/Dining/	ALM-004-01 A	n/a	600	2410	W	No Shading
Kitchen/Dining/	ALM-004-01 A	n/a	600	2410	W	No Shading
Kitchen/Dining/	ALM-004-01 A	n/a	600	2410	W	No Shading
Kitchen/Dining/	ALM-004-01 A	n/a	600	2410	W	No Shading
Kitchen/Dining/	ALM-002-01 A	n/a	1457	350	S	No Shading
Kitchen/Dining/	ALM-002-01 A	n/a	2400	4582	N	No Shading
Scullery	ALM-002-01 A	n/a	600	1450	N	No Shading
Laundry/WC	ALM-002-01 A	n/a	857	610	E	No Shading
Laundry/WC	ALM-002-01 A	n/a	857	1210	E	No Shading
Bedroom 4	ALM-002-01 A	n/a	600	1210	E	No Shading
Bedroom 4	WID-005-04 A	n/a	2400	3216	S	No Shading
Bedroom 2	ALM-004-01 A	n/a	1200	2410	N	No Shading
Bedroom 3	ALM-004-01 A	n/a	1200	2410	N	No Shading
WC	ALM-002-01 A	n/a	857	610	W	No Shading
Bath	ALM-002-01 A	n/a	857	610	W	No Shading
Bedroom 1	WID-005-04 A	n/a	2100	2676	S	No Shading
Bedroom 1	ALM-004-01 A	n/a	600	2410	E	No Shading
Living	WID-005-04 A	n/a	2100	2676	S	No Shading
Living	ALM-004-01 A	n/a	600	2410	W	No Shading
Living	ALM-004-01 A	n/a	600	2410	W	No Shading
Living	ALM-002-01 A	n/a	1800	850	E	No Shading

### Roof window and skylight type and performance value

ID	Window type	U-value	SHGC
GEN-04-006a	Single-glazed clear, Timber and Aluminium Frame	0.0	0.00

### Roof window and skylight schedule

Location	ID	Roof window/skylight no.	Area (m²)	Orientation	Outdoor shade	Indoor shade/diffuser
Bath	GEN-04-006a	1	1.1	W	None	No

# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004227070-01**

Certificate Date:

**24 Sep 2019**

★ Star rating:

**4.7**



## Building features continued

Ensuite	GEN-04-006a	1	0.6	E	None	No
---------	-------------	---	-----	---	------	----

## External wall type

ID	Wall type	Insulation	Wall wrap or foil
EW-1	Single Skin Brick	No insulation	No
EW-2	Tilt up Concrete	No insulation	No
EW-3	Brick Veneer	Bulk Insulation R2	No
EW-4	Fibro Cavity Panel Direct Fix	Anti-glare foil with bulk no gap R2	Yes
EW-5	Single Skin Panel	Bulk Insulation R2.6	No

## External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Garage	EW-1	6195	2700	S	No	100
Garage	EW-2	6195	2700	N	No	100
Garage	EW-2	7100	2700	E	No	100
Rumpus	EW-3	4095	2700	S	No	100
Rumpus	EW-3	5495	2700	W	No	100
Bath Two	EW-3	1595	2700	W	No	100
Bath Two	EW-2	4095	2700	N	No	100
Kitchen/Dining/	EW-4	2800	2700	E	No	5800
Kitchen/Dining/	EW-4	3790	2700	E	No	1200
Kitchen/Dining/	EW-4	4595	2700	S	No	2200
Kitchen/Dining/	EW-4	11700	2700	W	No	100
Kitchen/Dining/	EW-4	700	2700	S	No	600
Kitchen/Dining/	EW-4	2700	2700	W	No	500
Kitchen/Dining/	EW-4	5300	2700	N	No	2100
Scullery	EW-4	2790	2700	N	No	4900
Laundry/WC	EW-4	2295	2700	N	No	4900
Laundry/WC	EW-4	3600	2700	E	No	700
Laundry/WC	EW-4	500	2700	S	No	10200
Bedroom 4	EW-4	4695	2700	E	No	1200
Bedroom 4	EW-4	4600	2700	S	No	1700
Bedroom 4	EW-4	500	2700	W	No	4700
Bedroom 2	EW-5	2795	350	E	No	0
Bedroom 2	EW-4	2795	2100	E	No	600
Bedroom 2	EW-4	3795	2450	W	No	600
Bedroom 2	EW-5	4600	200	N	No	0
Bedroom 2	EW-4	4600	2250	N	No	600
Bedroom 3	EW-4	3595	2450	E	No	600
Bedroom 3	EW-5	4195	350	N	No	0
Bedroom 3	EW-4	4195	2100	N	No	600
WC	EW-4	890	2450	W	No	600
Bath	EW-5	1195	300	W	No	0
Bath	EW-4	1195	2150	W	No	600
Bath	EW-4	1200	2450	S	No	9200

# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004227070-01**

Certificate Date:

**24 Sep 2019**

★ Star rating:

**4.7**



## Building features continued

Bath	EW-4	1595	2450	W	No	600
Bedroom 1	EW-4	4100	2450	S	No	600
Bedroom 1	EW-4	1500	2450	W	No	4500
Bedroom 1	EW-4	3995	2450	E	No	600
WIR	EW-4	1690	2450	E	No	600
Ensuite	EW-4	1690	2450	E	No	600
Living	EW-4	3895	2450	S	No	2100
Living	EW-5	5895	300	W	No	0
Living	EW-4	5895	2150	W	No	600
Living	EW-5	395	700	N	No	0
Living	EW-4	395	1750	N	No	3400
Living	EW-4	1090	2450	E	No	600

## Internal wall type

Wall type	Area (m <sup>2</sup> )	Insulation	Wall wrap or foil
IW-1 - Cavity wall, direct fix plasterboard, single gap	19.0	Bulk Insulation, No Air Gap R2	No
IW-2 - Cavity wall, direct fix plasterboard, single gap	185.0	No insulation	No

## Floors

Location	Construction	Area (m <sup>2</sup> )	Sub floor ventilation	Added insulation	Covering
Garage	Waffle pod slab 225 mm 100mm	43.7	None	Waffle Pod 225mm	Bare
Rumpus	Waffle pod slab 225 mm 100mm	22.1	None	Waffle Pod 225mm	Ceramic Tiles 8mm
Bath Two	Waffle pod slab 225 mm 100mm	6.3	None	Waffle Pod 225mm	Ceramic Tiles 8mm
Kitchen/Dining//Gara	AAC Above Plasterboard 75mm	7.6		No Insulation	Ceramic Tiles 8mm
Kitchen/Dining//Rumpus	AAC Above Plasterboard 75mm	15.0		Bulk Insulation R2.5	Ceramic Tiles 8mm
Kitchen/Dining//Bath Two	AAC Above Plasterboard 75mm	6.5		No Insulation	Ceramic Tiles 8mm
Kitchen/Dining/	Suspended AAC (75mm) 75mm	56.7	Enclosed	Bulk Insulation, Gap to Floor R2.5	Ceramic Tiles 8mm
Scullery	Suspended AAC (75mm) 75mm	8.5	Enclosed	Bulk Insulation, Gap to Floor R2.5	Ceramic Tiles 8mm
Laundry/WC	Suspended AAC (75mm) 75mm	8.0	Enclosed	Bulk Insulation, Gap to Floor R2.5	Ceramic Tiles 8mm
PDR/Garage	AAC Above Plasterboard 150mm	5.5		No Insulation	Ceramic Tiles 8mm
Bedroom 4/Garage	AAC Above Plasterboard	15.3		No Insulation	Carpet 10mm

# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004227070-01**

Certificate Date:

**24 Sep 2019**

★ Star rating:

**4.7**



## Building features continued

	150mm				
Bedroom 2/Kitchen/Dining/	AAC Above Plasterboard 19mm	15.9		Bulk Insulation R2.5	Carpet 10mm
Bedroom 3/Scullery	AAC Above Plasterboard 19mm	7.2		Bulk Insulation R2.5	Carpet 10mm
Bedroom 3/Laundry/WC	AAC Above Plasterboard 19mm	6.3		Bulk Insulation R2.5	Carpet 10mm
WC/Kitchen/Dining/	AAC Above Plasterboard 19mm	1.6		Bulk Insulation R2.5	Ceramic Tiles 8mm
Bath/Kitchen/Dining/	AAC Above Plasterboard 19mm	7.4		Bulk Insulation R2.5	Ceramic Tiles 8mm
Bedroom 1/Kitchen/Dining/	AAC Above Plasterboard 19mm	1.1		Bulk Insulation R2.5	Carpet 10mm
Bedroom 1/PDR	AAC Above Plasterboard 19mm	3.7		Bulk Insulation R2.5	Carpet 10mm
Bedroom 1/Bedroom 4	AAC Above Plasterboard 19mm	13.1		Bulk Insulation R2.5	Carpet 10mm
WIR/Kitchen/Dining/	AAC Above Plasterboard 19mm	2.8		Bulk Insulation R2.5	Carpet 10mm
WIR/PDR	AAC Above Plasterboard 19mm	1.2		Bulk Insulation R2.5	Carpet 10mm
WIR/Bedroom 4	AAC Above Plasterboard 19mm	0.7		Bulk Insulation R2.5	Carpet 10mm
Ensuite/Kitchen/Dining/	AAC Above Plasterboard 19mm	6.5		Bulk Insulation R2.5	Ceramic Tiles 8mm
Living/Kitchen/Dining/	AAC Above Plasterboard 19mm	33.3		Bulk Insulation R2.5	Ceramic Tiles 8mm
Living/Scullery	AAC Above Plasterboard 19mm	1.6		Bulk Insulation R2.5	Ceramic Tiles 8mm
Living/PDR	AAC Above Plasterboard 19mm	0.8		Bulk Insulation R2.5	Ceramic Tiles 8mm
Living/Bedroom 4	AAC Above Plasterboard 19mm	0.7		Bulk Insulation R2.5	Ceramic Tiles 8mm

## Ceiling type

Location	Construction	Added insulation	Roof space above
Garage	Concrete	No insulation	Yes
Garage	AAC Above Plasterboard	No Insulation	No
Rumpus	Concrete	Bulk Insulation R4	Yes
Rumpus	AAC Above Plasterboard	Bulk Insulation R2.5	No
Bath Two	AAC Above Plasterboard	No Insulation	No
Kitchen/Dining/	Plasterboard	Bulk Insulation R4	Yes
Kitchen/Dining/	AAC Above Plasterboard	Bulk Insulation R2.5	No
Scullery	AAC Above Plasterboard	Bulk Insulation R2.5	No
Laundry/WC	Plasterboard	Bulk Insulation R4	Yes
Laundry/WC	AAC Above Plasterboard	Bulk Insulation	No

# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004227070-01**

Certificate Date:

**24 Sep 2019**

★ Star rating:

**4.7**



## Building features continued

PDR	AAC Above Plasterboard	R2.5	Bulk Insulation R2.5	No
Bedroom 4	Plasterboard		Bulk Insulation R4	Yes
Bedroom 4	AAC Above Plasterboard		Bulk Insulation R2.5	No
Bedroom 2	Plasterboard		Bulk Insulation R4	Yes
Bedroom 3	Plasterboard		Bulk Insulation R4	Yes
WC	Plasterboard		Bulk Insulation R4	Yes
Bath	Plasterboard		Bulk Insulation R4	Yes
Bedroom 1	Plasterboard		Bulk Insulation R4	Yes
WIR	Plasterboard		Bulk Insulation R4	Yes
Ensuite	Plasterboard		Bulk Insulation R4	Yes
Living	Plasterboard		Bulk Insulation R4	Yes

## Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
PDR	1	Exhaust Fans	300	Sealed
Ensuite	1	Exhaust Fans	300	Sealed

## Ceiling fans

Location	Number	Diameter (mm)
None Present		

## Roof type

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



# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: 0004227070-01

Certificate Date: 24 Sep 2019

★ Star rating: 4.7



## Additional information

## Explanatory notes

### About this report

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

### General Information

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in the report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using the underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance.

The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

### Accredited Assessors

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

### Disclaimer

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

### Contact

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

For more information on energy efficient design and insulation visit [www.yourhome.gov.au](http://www.yourhome.gov.au)