

# Nationwide House Energy Rating Scheme\* Certificate



Certificate number: **0004327904**

Certificate Date: **01 Nov 2019**

★ 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: **20731**  
Name: **Brad Hoad**  
Organisation: **Thermal Performance**  
Email: **brad@thermalperformance.com.au**  
Phone: **0458-221-211**  
Declaration of interest: **None**  
Software: **BERS Pro v4.3.0.2d (3.13)**  
AAO: **ABSA**

## Overview

### Dwelling details

Street: **18 Clyde Road**  
Suburb: **DEE WHY**  
State: **NSW** Postcode: **2099**  
Type: **New Dwelling** NCC Class: **1A**  
NatHERS climate zone: **56**  
Lot/DP number: **1/516585** Exposure: **Suburban**

### Key construction and insulation materials

(see following pages for details)

Construction: **Cavity Brick**  
**Corrugated Iron**  
**Concrete Slab on Ground**  
Insulation: **R1.0 wall insulation**  
**R3.5 ceiling insulation**  
**No floor insulation**  
Glazing: **BRZ-003-01 A 52mm Altair Louvre**  
**Window System SG 6Clr**

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

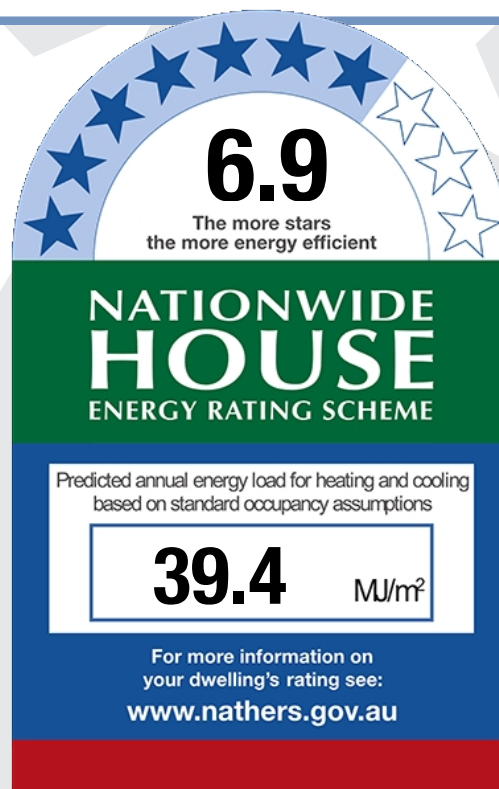
Conditioned: **159.0**  
Unconditioned: **47.0**  
Garage: **35.0**  
TOTAL: **205.0**

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

Heating: **26.7**  
Cooling: **12.7**  
TOTAL: **39.4**

### Plan documents

Plan ref/date: **Moran**  
Prepared by: **AJH 3D Design**



### Ceiling penetrations

(see following pages for details)

Sealed: **51**  
Unsealed: **0**  
TOTAL:\*\* **51**

\*\*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: **LED**

### 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.



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## Building features

### Window type and performance value

Window ID	Window type	U-value	SHGC
WID-006-01 A	WID-006-01 A AI Residential Sliding Window SG 3mm Clear	6.4	0.76
BRZ-003-01 A	BRZ-003-01 A 52mm Altair Louvre Window System SG 6Clr	6.0	0.67
WID-004-01 A	WID-004-01 A AI Residential Entry Frame / Door SG 4Clr	5.9	0.60
WID-001-01 A	WID-001-01 A AI Residential Awning Window SG 3mm Clear	6.5	0.63
WID-002-01 A	WID-002-01 A AI Residential Bi fold Door SG 4mm Clear	6.2	0.62

### Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Bedroom 1	WID-006-01 A	n/a	1275	1800	W	No Shading
Bath gf	BRZ-003-01 A	n/a	850	850	W	No Shading
Laundry	WID-004-01 A	n/a	2100	900	S	No Shading
Kitchen/Living	BRZ-003-01 A	n/a	860	1690	N	Horizontal Vegetation
Kitchen/Living	BRZ-003-01 A	n/a	860	1690	N	Horizontal Vegetation
Kitchen/Living	WID-001-01 A	n/a	1800	600	E	No Shading
Kitchen/Living	WID-002-01 A	n/a	2100	2800	E	No Shading
Entry/Stairs	WID-006-01 A	n/a	2100	300	N	No Shading
Bedroom 2	WID-002-01 A	n/a	2100	3200	E	No Shading
Bedroom 3	WID-006-01 A	n/a	1275	1800	W	No Shading
Bath ff	BRZ-003-01 A	n/a	850	850	W	No Shading
Ensuite b4	BRZ-003-01 A	n/a	850	850	W	No Shading
Bedroom 4	WID-006-01 A	n/a	850	1800	W	No Shading
Bedroom 4	BRZ-003-01 A	n/a	860	1690	N	Horizontal Vegetation
Living/Stairs	BRZ-003-01 A	n/a	860	1690	N	Horizontal Vegetation
Living/Stairs	WID-002-01 A	n/a	2100	3200	E	No Shading
Living/Stairs	BRZ-003-01 A	n/a	860	1190	N	Horizontal Vegetation
Stairs to terra	WID-004-01 A	n/a	2100	900	E	No Shading
Ensuite b2	BRZ-003-01 A	n/a	860	1190	N	Horizontal Vegetation

### Roof window and skylight type and performance value

ID	Window type	U-value	SHGC
None Present			

### Roof window and skylight schedule

Location	ID	Roof window/skylight no.	Area (m²)	Orientation	Outdoor shade	Indoor shade/diffuser
None Present						

### External wall type

ID	Wall type	Insulation	Wall wrap or foil
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## Building features continued

EW-1	Single Skin Brick	No insulation	No
EW-2	Cavity Brick	Foil Anti-glare one side and Reflective other of the Bulk Insulation R1	Yes
EW-3	Cavity Brick	No insulation	No

## External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Garage	EW-1	5645	3490	N	No	0
Garage	EW-1	5700	3490	E	No	400
Bedroom 1	EW-2	2595	2700	W	No	0
Bath gf	EW-2	1590	2700	W	No	0
Laundry	EW-2	1700	2700	S	No	0
Laundry	EW-2	1495	2700	W	No	0
Kitchen/Living	EW-2	4695	2700	W	No	0
Kitchen/Living	EW-2	6600	2700	N	No	0
Kitchen/Living	EW-2	4695	2700	E	No	2600
Entry/Stairs	EW-2	2540	2700	N	No	4700
Bedroom 2	EW-2	1490	2700	N	No	0
Bedroom 2	EW-2	3795	2700	E	No	2000
Bedroom 3	EW-2	2795	2700	W	No	0
Bath ff	EW-2	1390	2700	W	No	0
Ensuite b4	EW-2	2795	2700	W	No	0
Ensuite b4	EW-2	1695	2700	S	No	0
Bedroom 4	EW-2	3395	2700	W	No	0
Bedroom 4	EW-2	3595	2700	N	No	300
Living/Stairs	EW-2	2995	2700	N	No	300
Living/Stairs	EW-2	4700	2700	E	No	2600
Living/Stairs	EW-2	2595	2700	N	No	5000
Stairs to terra	EW-2	4100	2500	W	No	400
Stairs to terra	EW-2	1900	2200	N	No	600
Stairs to terra	EW-2	4100	2500	E	No	400
Ensuite b2	EW-2	2695	2700	N	No	0
Ensuite b2	EW-2	1895	2700	E	No	2000

## Internal wall type

Wall type	Area (m²)	Insulation	Wall wrap or foil
IW-1 - Cavity wall, direct fix plasterboard, single gap	11.0	Bulk Insulation, No Air Gap R2	No
IW-2 - Cavity Brick	7.0	No insulation	No
IW-3 - Cavity brick, plasterboard	23.0	No Insulation	No
IW-4 - Cavity wall, direct fix plasterboard, single gap	135.0	No insulation	No
IW-5 - Cavity brick, plasterboard	54.0	Bulk Insulation in the centre R1	No

## Floors

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## Building features continued

Location	Construction	Area (m <sup>2</sup> )	Sub floor ventilation	Added insulation	Covering
Garage	Concrete Slab on Ground 100mm	35.2	None	No Insulation	Bare
Bedroom 1	Concrete Slab on Ground 100mm	10.6	None	No Insulation	Carpet 10mm
Bath gf	Concrete Slab on Ground 100mm	4.3	None	No Insulation	Ceramic Tiles 8mm
Laundry	Concrete Slab on Ground 100mm	3.1	None	No Insulation	Ceramic Tiles 8mm
Kitchen/Living	Concrete Slab on Ground 100mm	36.9	None	No Insulation	Cork Tiles or Parquetry 8mm
Entry/Stairs	Concrete Slab on Ground 100mm	16.3	None	No Insulation	Cork Tiles or Parquetry 8mm
Bedroom 2/Garage	Concrete Above Plasterboard 19mm	18.3		No Insulation	Carpet 10mm
Bedroom 3/Bedroom 1	Concrete Above Plasterboard 19mm	10.6		No Insulation	Carpet 10mm
Bedroom 3/Bath gf	Concrete Above Plasterboard 19mm	0.6		No Insulation	Carpet 10mm
Bath ff/Bath gf	Concrete Above Plasterboard 19mm	3.7		No Insulation	Ceramic Tiles 8mm
Ensuite b4/Laundry	Concrete Above Plasterboard 19mm	2.4		No Insulation	Ceramic Tiles 8mm
Ensuite b4/Kitchen/Living	Concrete Above Plasterboard 19mm	2.1		No Insulation	Ceramic Tiles 8mm
Bedroom 4/Kitchen/Living	Concrete Above Plasterboard 19mm	11.4		No Insulation	Carpet 10mm
Living/Stairs/Garage	Concrete Above Plasterboard 19mm	3.0		No Insulation	Cork Tiles or Parquetry 8mm
Living/Stairs/Laundry	Concrete Above Plasterboard 19mm	0.7		No Insulation	Cork Tiles or Parquetry 8mm
Living/Stairs/Kitchen/Living	Concrete Above Plasterboard 19mm	22.9		No Insulation	Cork Tiles or Parquetry 8mm
Living/Stairs/Entry/Stairs	Concrete Above Plasterboard 19mm	16.2		No Insulation	Cork Tiles or Parquetry 8mm
Stairs to terra/Living/Stairs	Concrete Above Plasterboard 100mm	7.8		No Insulation	Cork Tiles or Parquetry 8mm
Ensuite b2/Garage	Concrete Above Plasterboard 19mm	4.9		No Insulation	Ceramic Tiles 8mm

## Ceiling type

Location	Construction	Added insulation	Roof space above
Garage	Plasterboard	No insulation	Yes
Garage	Concrete Above Plasterboard	No Insulation	No
Bedroom 1	Concrete Above Plasterboard	No Insulation	No
Bath gf	Concrete Above Plasterboard	No Insulation	No
Laundry	Concrete Above Plasterboard	No Insulation	No
Kitchen/Living	Concrete Above Plasterboard	No Insulation	No
Entry/Stairs	Concrete Above Plasterboard	No Insulation	No
Bedroom 2	Plasterboard	Bulk Insulation	Yes

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Bedroom 3	Plasterboard	R3.5	
		Bulk Insulation R3.5	Yes
Bath ff	Plasterboard	Bulk Insulation R3.5	Yes
Ensuite b4	Plasterboard	Bulk Insulation R3.5	Yes
Bedroom 4	Plasterboard	Bulk Insulation R3.5	Yes
Living/Stairs	Plasterboard	Bulk Insulation R3.5	Yes
Living/Stairs	Concrete Above Plasterboard	No Insulation	No
Stairs to terra	Plasterboard	Bulk Insulation R3.5	Yes
Ensuite b2	Plasterboard	Bulk Insulation R3.5	Yes

## Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
Bedroom 1	2	Downlights - LED	150	Sealed
Bath gf	2	Downlights - LED	150	Sealed
Bath gf	1	Exhaust Fans	300	Sealed
Laundry	1	Downlights - LED	150	Sealed
Kitchen/Living	12	Downlights - LED	150	Sealed
Entry/Stairs	3	Downlights - LED	150	Sealed
Bedroom 2	5	Downlights - LED	150	Sealed
Bedroom 3	2	Downlights - LED	150	Sealed
Bath ff	2	Downlights - LED	150	Sealed
Bath ff	1	Exhaust Fans	300	Sealed
Ensuite b4	2	Downlights - LED	150	Sealed
Ensuite b4	1	Exhaust Fans	300	Sealed
Bedroom 4	4	Downlights - LED	150	Sealed
Living/Stairs	8	Downlights - LED	150	Sealed
Stairs to terra	2	Downlights - LED	150	Sealed
Ensuite b2	2	Downlights - LED	150	Sealed
Ensuite b2	1	Exhaust Fans	300	Sealed

## Ceiling fans

Location	Number	Diameter (mm)
None Present		

## Roof type

Construction	Added insulation	Roof colour
Waterproofing Membrane	No Insulation, Only an Air Gap	Medium

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### Building features continued

Corrugated Iron

Bulk, Reflective Dark  
Side Down, Anti-  
glare Up R1

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## Additional information

## Explanatory notes

### About this report

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

### General Information

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

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

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

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

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

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

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

### Accredited Assessors

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

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

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

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

### Disclaimer

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

### Contact

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

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