

# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: 0002264935

Certificate Date: 08 Dec 2017

★ Star rating: 5.6



## Assessor details

Accreditation number: **20045**  
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Declaration of interest: **Employed by designer of the building**  
Software: **AccuRate Sustainability V2.3.3.13 SP3**  
AAO: **ABSA**

## Overview

### Dwelling details

Street: **2 Ellis Street**  
Suburb: **Sylvania**  
State: **NSW** Postcode: **2224**  
Type: **New** NCC Class: **1a**  
NatHERS climate zone: **56**  
Lot/DP number: **B/402725** Exposure: **Suburban**

### Key construction and insulation materials

(see following pages for details)

Construction: **Double Brick**  
**Concrete roof/Plasterboard Slab**  
Insulation: **R1.0 wall insulation**  
**Ceiling (uninsulated)**  
**Floor (uninsulated)**  
Glazing: **Aluminium B DG Argon Fill Clear-Clear**

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

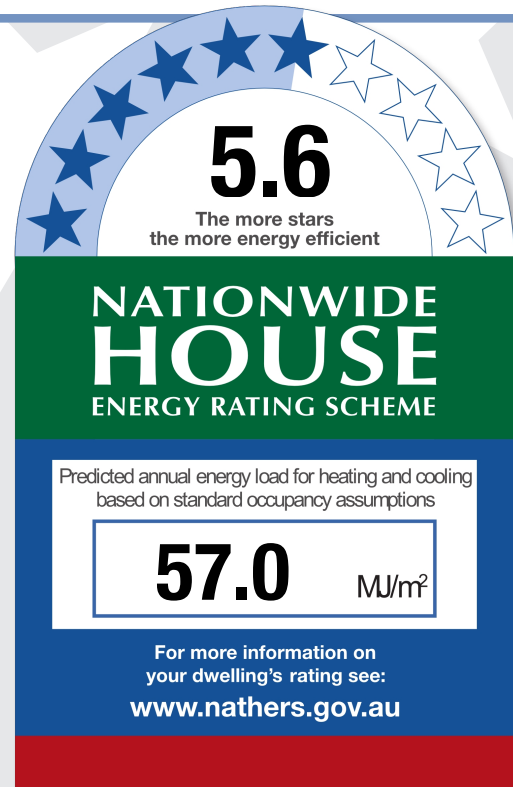
Conditioned: **239.0**  
Unconditioned: **95.0**  
Garage: **55.0**  
TOTAL: **334.0**

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

Heating: **41.0**  
Cooling: **15.0**  
TOTAL: **57.0**

### Plan documents

Plan ref/date: **Job No. 1252 DA/23/11/17**  
Prepared by: **Nautilus**



### Ceiling penetrations

(see following pages for details)

Sealed: **0**  
Unsealed: **0**  
TOTAL:\*\* **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 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: **No downlights modelled**

### Window selection - default windows only

Note on allowable window values: With a 10% tolerance to the nominated SHGC window values shown on page 2, the following ratings are achieved:

-10% SHGC **5.4**  
+10% SHGC **5.7**

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 the rating listed above falls below 6.0 stars or the required rating, then the window with this tolerance can NOT be selected.**

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
ALM-001-02 A	DEFAULTS: Aluminium A SG Tint	6.6	0.41
ALM-002-02 A	DEFAULTS: Aluminium B SG Tint	6.6	0.49
ALM-005-01 A	DEFAULTS: Aluminium A DG Argon Fill Clear-Clear	4.5	0.50
ALM-006-01 A	DEFAULTS: Aluminium B DG Argon Fill Clear-Clear	4.5	0.61

### Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Entry/Stair/Hall (Gd)	ALM-002-02 A	Entry	2700	1200	NW	None
Entry/Stair/Hall (Gd)	ALM-002-02 A	Stair	2100	1200	NE	None
Bed 1	ALM-006-01 A	B1	2700	3100	NE	None
Ens 1	ALM-002-02 A	Ens 1	900	1800	SE	None
WIR 1	ALM-001-02 A	WIR 1	1500	900	SE	None
Ens 2	ALM-001-02 A	Ens 2	1500	1200	SE	None
Bed 2	ALM-005-01 A	Bed 2	1500	2800	SE	None
Bed 3	ALM-005-01 A	B3	1500	2800	SE	None
Bath	ALM-001-02 A	Bath	1500	1600	SE	None
Bed 4	ALM-005-01 A	B4	1200	2800	SE	None
Laundry	ALM-005-01 A	Lndy	1500	900	SE	None
Retreat/Study	ALM-006-01 A	Study	2700	3500	SW	None
Retreat/Study	ALM-005-01 A	Retreat	1000	2800	SE	None
Kitchen/Dining/Lounge/Stair (1st)	ALM-002-02 A	Stair	2100	1200	NE	None
Kitchen/Dining/Lounge/Stair (1st)	ALM-005-01 A	Lounge	1500	1200	NW	None
Kitchen/Dining/Lounge/Stair (1st)	ALM-006-01 A	Lounge	2700	4300	NE	None
Kitchen/Dining/Lounge/Stair (1st)	ALM-006-01 A	Lounge	1800	700	SE	None
Kitchen/Dining/Lounge/Stair (1st)	ALM-005-01 A	Kitchen	1000	2700	SE	None
Kitchen/Dining/Lounge/Stair (1st)	ALM-006-01 A	Door	2700	1000	SW	None
Kitchen/Dining/Lounge/Stair (1st)	ALM-006-01 A	Highlight	400	1800	NW	None
Kitchen/Dining/Lounge/Stair (1st)	ALM-006-01 A	Highlight	400	1800	SE	None
Kitchen/Dining/Lounge/Stair (1st)	ALM-006-01 A	Highlight	400	2800	NE	None
Kitchen/Dining/Lounge/Stair (1st)	ALM-006-01 A	Highlight	400	2800	SW	None
WIP	ALM-005-01 A	WIP	1200	700	SW	None
Powder	ALM-001-02 A	Powder	1200	1100	SW	None

### Roof window and skylight type and performance value

ID	Window type	U-value	SHGC
None Present			

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### 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
EW-005	Fibre-cement	Glass fibre batt: R2.0	No
EW-007	Double Brick	Polystyrene expanded: R1.0	No
EW-008	Concrete blocks		No
EW-009	Concrete blocks		No

### External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Garage	EW-009	11250	2600	NW	No	
Garage	EW-008	6300	2600	NE	Yes	1800
Garage	EW-009	2200	300	NW	No	
Store	EW-009	10500	2600	NW	No	
Store	EW-009	4400	300	NW	No	
Stair/Lift (Basement)	EW-009	6600	2600	NW	No	
Stair/Lift (Basement)	EW-009	2600	300	NW	No	
Entry/Stair/Hall (Gd)	EW-007	1800	2743	NE	Yes	1450
Entry/Stair/Hall (Gd)	EW-007	2400	2743	NW	Yes	600
Entry/Stair/Hall (Gd)	EW-007	2650	3343	NE	No	
Entry/Stair/Hall (Gd)	EW-007	4000	3343	NW	No	
Bed 1	EW-007	3350	2743	NW	Yes	2500
Bed 1	EW-007	4250	2743	NE	Yes	1100
Bed 1	EW-007	3900	2743	SE	No	
Ens 1	EW-007	2050	2743	SE	No	
WIR 1	EW-007	2150	2743	SE	No	
WIR 1	EW-007	480	2743	SW	No	
Ens 2	EW-007	1530	2743	SE	No	
Bed 2	EW-007	3460	2743	SE	No	
Bed 2	EW-007	480	2743	NE	No	
Bed 3	EW-007	480	2743	SW	No	
Bed 3	EW-007	3200	2743	SE	No	
Bath	EW-007	2370	2743	SE	No	
Bed 4	EW-007	3170	2743	SE	No	
Bed 4	EW-007	480	2743	NE	No	
Laundry	EW-007	2200	2743	SE	No	
Retreat/Study	EW-007	5920	2743	SW	Yes	750

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Retreat/Study	EW-007	3700	2743	SE	No	
Kitchen/Dining/Lounge/Stair (1st)	EW-007	4000	2743	NW	No	
Kitchen/Dining/Lounge/Stair (1st)	EW-007	2650	2743	NE	No	
Kitchen/Dining/Lounge/Stair (1st)	EW-007	2400	2743	NW	No	
Kitchen/Dining/Lounge/Stair (1st)	EW-007	5690	2743	NE	Yes	2000
Kitchen/Dining/Lounge/Stair (1st)	EW-007	13100	2743	SE	No	
Kitchen/Dining/Lounge/Stair (1st)	EW-007	1800	2743	SW	Yes	750
Kitchen/Dining/Lounge/Stair (1st)	EW-005	1800	600	NW	Yes	300
Kitchen/Dining/Lounge/Stair (1st)	EW-005	1800	600	SE	Yes	300
Kitchen/Dining/Lounge/Stair (1st)	EW-005	2800	600	NE	Yes	300
Kitchen/Dining/Lounge/Stair (1st)	EW-005	2800	600	SW	Yes	300
WIP	EW-007	1970	2743	SW	Yes	750
WIP	EW-007	600	2743	SE	No	
Powder	EW-007	1450	2743	SW	No	
Powder	EW-007	1800	2743	SE	No	

## Internal wall type

ID	Wall type	Area (m²)	Insulation	Wall wrap or foil
IW-002	Plasterboard	205.5		No
IW-003	Plasterboard	92.2		No
IW-004	Concrete blocks	48.8		No

## Floors

Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Garage/Ground	Concrete Slab 150 mm: bare/bare	54.7			
Store/Ground	Concrete Slab 150 mm: bare/bare	26.9			
Stair/Lift (Basement)/Ground	Concrete Slab 150 mm: bare/bare	10.4			
Entry/Stair/Hall (Gd)/Stair/Lift (Basement)	as_FLOR-B002 #1001 © 150mm Concrete Floor slab with carpet-underfelt(no insul)	10.4			Carpet 10 + rubber underlay 8
Entry/Stair/Hall (Gd)/Store	150mm Concrete Floor slab with carpet-underfelt(R1.0 insul under)	6.2		R1.0	Carpet 10 + rubber underlay 8
Entry/Stair/Hall (Gd)/Garage	150mm Concrete Floor slab with carpet-underfelt(R1.0 insul under)	15.6		R1.0	Carpet 10 + rubber underlay 8

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Entry/Stair/Hall (Gd)/Ground	as_FLOR-B002 #1001 © 150mm Concrete Floor slab with carpet-underfelt(no insul)	14.6		Carpet 10 + rubber underlay 8
Bed 1/Outdoor Air	150mm Concrete Floor slab with carpet-underfelt(R1.0 insul under)	13.0	R1.0	Carpet 10 + rubber underlay 8
Bed 1/Garage	150mm Concrete Floor slab with carpet-underfelt(R1.0 insul under)	5.9	R1.0	Carpet 10 + rubber underlay 8
Ens 1/Garage	150mm Concrete Floor slab with Ceramic tile floor (R1.0 insul underl)	6.2	R1.0	Ceramic tile
WIR 1/Garage	150mm Concrete Floor slab with carpet-underfelt(R1.0 insul under)	9.1	R1.0	Carpet 10 + rubber underlay 8
Ens 2/Garage	150mm Concrete Floor slab with Ceramic tile floor (R1.0 insul underl)	5.8	R1.0	Ceramic tile
Bed 2/Garage	150mm Concrete Floor slab with carpet-underfelt(R1.0 insul under)	9.9	R1.0	Carpet 10 + rubber underlay 8
Bed 2/Store	150mm Concrete Floor slab with carpet-underfelt(R1.0 insul under)	5.0	R1.0	Carpet 10 + rubber underlay 8
Bed 3/Store	150mm Concrete Floor slab with carpet-underfelt(R1.0 insul under)	13.8	R1.0	Carpet 10 + rubber underlay 8
Bath/Ground	as_FLOR-B002 #1005 © 150mm Concrete Floor slab with ceramic tiles (no insul)	9.6		Ceramic tile
Bed 4/Ground	as_FLOR-B002 #1001 © 150mm Concrete Floor slab with carpet-underfelt(no insul)	11.9		Carpet 10 + rubber underlay 8
Laundry/Ground	as_FLOR-B002 #1005 © 150mm Concrete Floor slab with ceramic tiles (no insul)	8.8		Ceramic tile
Retreat/Study/Gro und	as_FLOR-B002 #1001 © 150mm Concrete Floor slab with carpet-underfelt(no insul)	21.8		Carpet 10 + rubber underlay 8
Kitchen/Dining/Lou nge/Stair (1st)/Bed	as_FLOR-B005 #1001 © 150mm Concrete Floor slab with carpet-underfelt(no insul) Pbd under	4.4		Carpet 10 + rubber underlay 8
Kitchen/Dining/Lou nge/Stair (1st)/WIR	as_FLOR-B005 #1001 © 150mm Concrete Floor slab with carpet-underfelt(no insul) Pbd under	8.1		Carpet 10 + rubber underlay 8
Kitchen/Dining/Lou nge/Stair (1st)/Ens	as_FLOR-B005 #1001 © 150mm Concrete Floor slab with carpet-underfelt(no insul) Pbd under	5.3		Carpet 10 + rubber underlay 8
Kitchen/Dining/Lou nge/Stair (1st)/Ens	as_FLOR-B005 #1005 © 150mm Concrete Floor slab with ceramic tiles (no insul) Pbd under	5.8		Ceramic tile
Kitchen/Dining/Lou nge/Stair (1st)/Bed	as_FLOR-B005 #1001 © 150mm Concrete Floor slab with carpet-underfelt(no insul) Pbd under	13.3		Carpet 10 + rubber underlay 8
Kitchen/Dining/Lou nge/Stair (1st)/Entry/Stair/Ha ll (Gd)	as_FLOR-B005 #1001 © 150mm Concrete Floor slab with carpet-underfelt(no insul) Pbd under	29.8		Carpet 10 + rubber underlay 8
Kitchen/Dining/Lou nge/Stair (1st)/Bed	as_FLOR-B005 #1001 © 150mm	12.3		Carpet 10 + rubber underlay 8

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WIP/Bath	Concrete Floor slab with carpet-underfelt(no insul) Pbd under as_FLOR-B005 #1005 © 150mm 1.0 Concrete Floor slab with ceramic tiles (no insul) Pbd under	Ceramic tile
WIP/Bed 3	as_FLOR-B005 #1005 © 150mm 0.2 Concrete Floor slab with ceramic tiles (no insul) Pbd under	Ceramic tile
WIP/Entry/Stair/Hall (Gd)	as_FLOR-B005 #1005 © 150mm 5.7 Concrete Floor slab with ceramic tiles (no insul) Pbd under	Ceramic tile
Powder/Bed 3	as_FLOR-B005 #1005 © 150mm 2.1 Concrete Floor slab with ceramic tiles (no insul) Pbd under	Ceramic tile
Powder/Bath	as_FLOR-B005 #1005 © 150mm 2.1 Concrete Floor slab with ceramic tiles (no insul) Pbd under	Ceramic tile

## Ceiling type

Location	Construction	Added insulation	Roof space above
Entry/Stair/Hall (Gd)/Garage	150mm Concrete Floor slab with carpet-underfelt(R1.0 insul under)	R1.0	No
Bed 1/Garage	150mm Concrete Floor slab with carpet-underfelt(R1.0 insul under)	R1.0	No
Ens 1/Garage	150mm Concrete Floor slab with Ceramic tile floor (R1.0 insul underl)	R1.0	No
WIR 1/Garage	150mm Concrete Floor slab with carpet-underfelt(R1.0 insul under)	R1.0	No
Ens 2/Garage	150mm Concrete Floor slab with Ceramic tile floor (R1.0 insul underl)	R1.0	No
Bed 2/Garage	150mm Concrete Floor slab with carpet-underfelt(R1.0 insul under)	R1.0	No
Entry/Stair/Hall (Gd)/Store	150mm Concrete Floor slab with carpet-underfelt(R1.0 insul under)	R1.0	No
Bed 3/Store	150mm Concrete Floor slab with carpet-underfelt(R1.0 insul under)	R1.0	No
Bed 2/Store	150mm Concrete Floor slab with carpet-underfelt(R1.0 insul under)	R1.0	No
Entry/Stair/Hall (Gd)/Stair/Lift (Basement)	as_FLOR-B002 #1001 © 150mm Concrete Floor slab with carpet-underfelt(no insul)		No
Kitchen/Dining/Lounge/Stair (1st)/Entry/Stair/Hall (Gd)	as_FLOR-B005 #1001 © 150mm Concrete Floor slab with carpet-underfelt(no insul) Pbd under		No
WIP/Entry/Stair/Hall (Gd)	as_FLOR-B005 #1005 © 150mm Concrete Floor slab with ceramic tiles (no insul) Pbd under		No
Kitchen/Dining/Lounge/Stair (1st)/Bed	as_FLOR-B005 #1001 © 150mm Concrete Floor slab with carpet-underfelt(no insul) Pbd under		No
Kitchen/Dining/Lounge/Stair (1st)/Ens	as_FLOR-B005 #1001 © 150mm Concrete Floor slab with carpet-underfelt(no insul) Pbd under		No
Kitchen/Dining/Lounge/Stair (1st)/WIR	as_FLOR-B005 #1001 © 150mm Concrete Floor slab with carpet-underfelt(no insul) Pbd under		No
Kitchen/Dining/Lounge	as_FLOR-B005 #1005 © 150mm Concrete Floor slab with		No



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### Building features continued

nge/Stair (1st)/Ens	2 ceramic tiles (no insul) Pbd under	
Kitchen/Dining/Lou	as_FLOR-B005 #1001 © 150mm Concrete Floor slab with	No
nge/Stair (1st)/Bed	carpet-underfelt(no insul) Pbd under	
WIP/Bed 3	as_FLOR-B005 #1005 © 150mm Concrete Floor slab with	No
	ceramic tiles (no insul) Pbd under	
Powder/Bed 3	as_FLOR-B005 #1005 © 150mm Concrete Floor slab with	No
	ceramic tiles (no insul) Pbd under	
Kitchen/Dining/Lou	as_FLOR-B005 #1001 © 150mm Concrete Floor slab with	No
nge/Stair (1st)/Bed	carpet-underfelt(no insul) Pbd under	
WIP/Bath	as_FLOR-B005 #1005 © 150mm Concrete Floor slab with	No
	ceramic tiles (no insul) Pbd under	
Powder/Bath	as_FLOR-B005 #1005 © 150mm Concrete Floor slab with	No
	ceramic tiles (no insul) Pbd under	

### Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
None Present				

### Ceiling fans

Location	Number	Diameter (mm)
None Present		

### Roof type

Construction	Added insulation	Roof colour
as_ROOF-B011.rof #2038 © Concrete slab 150mm - Tile walking surface - R3.0 insulation under slab - Susp. Ceiling under	R3.0	Medium
as_ROOF-B011.rof #2048 © Concrete slab 150mm - WP Membrane surface - R3.0 insulation under slab - Susp. Ceiling under	R2.0	Concrete (dry)
as_ROOF-A021 #2015 © Horiz pitch Colourbond steel roof with R3.0 bulk insul + R3.0 Plasterb'd ceiling under		Medium

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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)