

# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: 0002042067-01

Certificate Date: 27 Mar 2018

★ Star rating: 4.8



## Assessor details

Accreditation

number: VIC/BDAV/12/1475

Name: Robert Mallindine

Organisation: AGA Consultants Pty Ltd

Email: ag@agac.cc

Phone: 02 9977 2794

Declaration of interest: No potential conflicts of interest to declare

Software: AccuRate Sustainability V2.3.3.13 SP3

AAO: BDAV

## Overview

### Dwelling details

Street: Unit 1, 5 Commonwealth Parade

Suburb: Manly

State: NSW

Postcode: 2095

Type: New

NCC Class: 2

NatHERS

climate zone: 56

Lot/DP

number: -

Exposure: Suburban

### Key construction and insulation materials

(see following pages for details)

Construction: Double Brick  
Concrete roof/Plasterboard  
Timber/Slab

Insulation: R1.0 wall insulation  
Ceiling (uninsulated)

Glazing: R1.5 floor insulation  
Aluminium B SG High Solar Gain  
Low-E

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

Conditioned: 173.0

Unconditioned: 2.0

Garage:

TOTAL: 175.0

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

Heating: 62.0

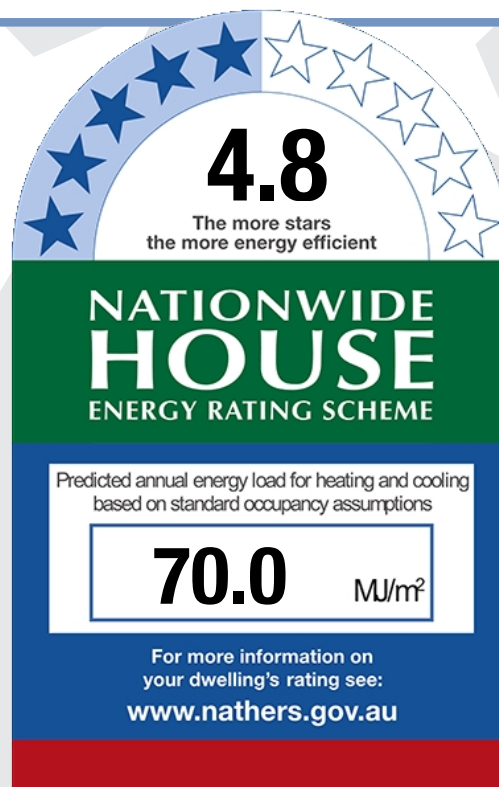
Cooling: 8.0

TOTAL: 70.0

### Plan documents

Plan ref/date: 4/10/17

Prepared by: Baxter & Jacobson Architects P/L



### 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 4.7

+10% SHGC 4.8

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.

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## Building features

### Window type and performance value

Window ID	Window type	U-value	SHGC
ALM-004-01 A	DEFAULTS: Aluminium B DG Air Fill Clear-Clear	4.8	0.59
ALM-002-03 A	DEFAULTS: Aluminium B SG High Solar Gain Low-E	5.4	0.58

### Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Living / Dining / Kitchen	ALM-002-03 A	01	2450	4000	SE	None
Living / Dining / Kitchen	ALM-002-03 A	02	1600	2000	SW	None
Living / Dining / Kitchen	ALM-002-03 A	03	1600	1200	SE	None
Bedroom 1	ALM-002-03 A	04	2450	2400	SE	None
Bedroom 1 (Ens)	ALM-004-01 A	block	400	3600	NE	None
Bedroom 2	ALM-002-03 A	05	2450	900	SE	None
Bedroom 3	ALM-002-03 A	06	2400	1500	SE	None
Bedroom 3	ALM-002-03 A	07	2400	1200	NE	None
Bedroom 3 (Ens)	ALM-002-03 A	08	2400	1200	NE	None

### 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 (m <sup>2</sup> )	Orientation	Outdoor shade	Indoor shade/diffuser
None Present						

### External wall type

ID	Wall type	Insulation	Wall wrap or foil
EW-005	Double Brick	Polystyrene extruded: R1.0	No
EW-011	Brick wall/Plasterboard	Polystyrene extruded: R1.5	No
EW-017	Double Brick	Polystyrene extruded: R1.0	No

### External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Living / Dining / Kitchen	EW-005	4500	2450	SE	Yes	2200
Living / Dining / Kitchen	EW-005	2100	2450	SW	Yes	3000
Living / Dining / Kitchen	EW-005	2600	2450	SE	Yes	4500
Living / Dining / Kitchen	EW-005	7200	2450	SW	No	
Living / Dining / Kitchen	EW-011	4200	2450	SW	No	
Bedroom 1	EW-005	4900	2450	NE	No	

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Bedroom 1	EW-005	600	2450	SE	No	
Bedroom 1	EW-005	2400	2450	SE	Yes	1700
Bedroom 1 (Ens)	EW-005	3600	2450	NE	No	
Bedroom 1 (Ens)	EW-005	800	2450	NW	Yes	4500
Bedroom 2	EW-005	900	2450	SE	No	
Bedroom 2	EW-017	3900	2450	SW	No	
Bedroom 3	EW-017	4700	2450	NE	No	
Bedroom 3	EW-005	1700	2450	SE	Yes	3000
Bedroom 3	EW-005	1300	2450	NE	Yes	1000
Bedroom 3	EW-005	3200	2450	NW	Yes	3000
Bedroom 3	EW-011	6200	1000	SW	No	
Bedroom 3 (Ens)	EW-005	1400	2450	NE	Yes	1000
Bedroom 3 (Ens)	EW-011	3000	2450	SW	No	
Media	EW-017	3200	2450	SW	No	
Media	EW-011	3800	1000	SW	No	
Bathroom	EW-017	1800	2450	SW	No	
WC	EW-017	1100	2450	SW	No	
Hall	EW-011	7200	2450	SW	No	
Hall	EW-011	1100	1000	SW	No	
Cupboard	EW-011	8500	1300	SW	No	
Cupboard	EW-005	1300	1300	NW	Yes	3000
Cupboard	EW-017	1300	1300	SW	No	

## Internal wall type

ID	Wall type	Area (m²)	Insulation	Wall wrap or foil
IW-005	Plasterboard	124.4		No

## Floors

Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Living / Dining / Kitchen/Outdoor Air	R1.5 - timber - concrete 200mm	60.3		R1.5	
Bedroom 1/Outdoor Air	R1.5 - carpet - concrete 200mm	20.5		R1.5	Carpet 10 + felt underlay 10
Bedroom 1 (Ens)/Outdoor Air	R1.5 - tiles - concrete 200mm	5.7		R1.5	Ceramic tile
Bedroom 2/Outdoor Air	R1.5 - carpet - concrete 200mm	14.4		R1.5	Carpet 10 + felt underlay 10
Bedroom 3/Outdoor Air	R1.5 - carpet - concrete 200mm	22.4		R1.5	Carpet 10 + felt underlay 10
Bedroom 3 (Ens)/Outdoor Air	R1.5 - tiles - concrete 200mm	4.5		R1.5	Ceramic tile
Media/Outdoor Air	R1.5 - carpet - concrete 200mm	12.1		R1.5	Carpet 10 + felt underlay 10
Bathroom/Outdoor Air	R1.5 - tiles - concrete 200mm	7.8		R1.5	Ceramic tile

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WC/Outdoor Air	R1.5 - tiles - concrete 200mm	1.6	R1.5	Ceramic tile
Hall/Outdoor Air	R1.5 - timber - concrete 200mm	12.9	R1.5	
Cupboard/Outdoor Air	R1.5 - timber - concrete 200mm	12.1	R1.5	

## Ceiling type

Location	Construction	Added insulation	Roof space above
Neighbour/Living / Dining / Kitchen	timber - concrete 200mm		No
Neighbour/Bedroom	timber - concrete 200mm		No
Neighbour/Bedroom 1 (Ens)	timber - concrete 200mm		No
Neighbour/Bedroom	timber - concrete 200mm		No
Neighbour/Bedroom	timber - concrete 200mm		No
Neighbour/Bedroom 3 (Ens)	timber - concrete 200mm		No
Neighbour/Media	timber - concrete 200mm		No
Neighbour/Bathroom	timber - concrete 200mm		No
Neighbour/WC	timber - concrete 200mm		No
Neighbour/Hall	timber - concrete 200mm		No
Neighbour/Cupboard	timber - concrete 200mm		No

## Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
Living / Dining / Kitchen	21	Downlight		Sealed
Living / Dining / Kitchen	1	Ceiling exhaust fan	160	Sealed
Bedroom 1	8	Downlight		Sealed
Bedroom 1 (Ens)	2	Downlight		Sealed
Bedroom 1 (Ens)	1	Ceiling exhaust fan	160	Sealed
Bedroom 2	5	Downlight		Sealed
Bedroom 3	6	Downlight		Sealed
Bedroom 3 (Ens)	2	Downlight		Sealed
Bedroom 3 (Ens)	1	Ceiling exhaust fan	160	Sealed
Media	5	Downlight		Sealed
Bathroom	2	Downlight		Sealed
Bathroom	1	Ceiling exhaust fan	160	Sealed
WC	1	Downlight		Sealed
WC	1	Ceiling exhaust fan	160	Sealed
Hall	5	Downlight		Sealed

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### Building features continued

#### Ceiling fans

Location	Number	Diameter (mm)
None Present		

#### Roof type

Construction	Added insulation	Roof colour
R1.0 - Concrete slab 200mm	R1.0	Medium

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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.

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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](http://www.nathers.gov.au)

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

# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: 0002042083-01

Certificate Date: 27 Mar 2018

★ Star rating: 4.5



## Assessor details

Accreditation number: **VIC/BDAV/12/1475**  
Name: **Robert Mallindine**  
Organisation: **AGA Consultants Pty Ltd**  
Email: **ag@agac.cc**  
Phone: **02 9977 2794**  
Declaration of interest: **No potential conflicts of interest to declare**  
Software: **AccuRate Sustainability V2.3.3.13 SP3**  
AAO: **BDAV**

## Overview

### Dwelling details

Street: **Unit 2, 5 Commonwealth Parade**  
Suburb: **Manly**  
State: **NSW** Postcode: **2095**  
Type: **New** NCC Class: **2**  
NatHERS climate zone: **56**  
Lot/DP number: - Exposure: **Suburban**

### Key construction and insulation materials

(see following pages for details)

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

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

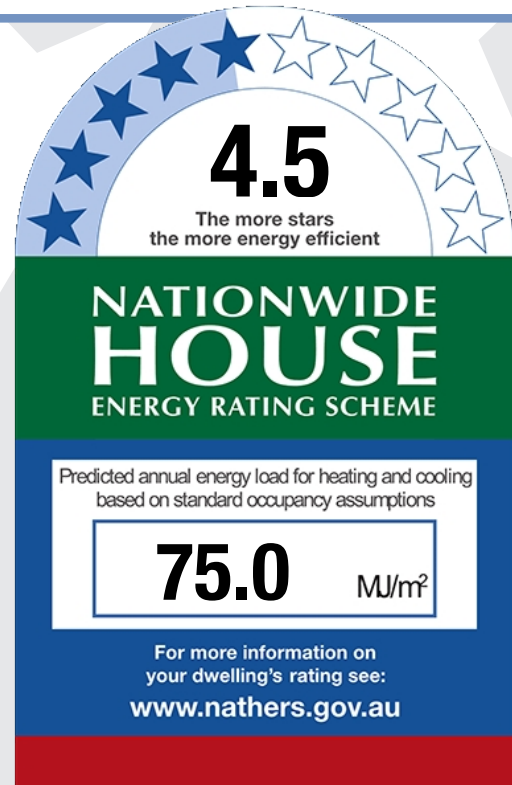
Conditioned: **184.0**  
Unconditioned: **9.0**  
Garage:  
TOTAL: **193.0**

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

Heating: **41.0**  
Cooling: **34.0**  
TOTAL: **75.0**

### Plan documents

Plan ref/date: **4/10/17**  
Prepared by: **Baxter & Jacobson Architects P/L**



### Ceiling penetrations

(see following pages for details)

Sealed: **14**  
Unsealed: **0**  
TOTAL:\*\* **14**

\*\*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: **Light-emitting diode (LED)**

### Window selection - default windows only

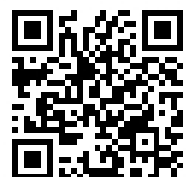
Note on allowable window values: With a 10% tolerance to the nominated SHGC window values shown on page 2, the following ratings are achieved:

-10% SHGC **4.4**  
+10% SHGC **4.5**

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.**

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Certificate Date:

**27 Mar 2018**

★ Star rating:

**4.5**



## Building features

### Window type and performance value

Window ID	Window type	U-value	SHGC
ALM-001-01 A	DEFAULTS: Aluminium A SG Clear	6.7	0.57
ALM-002-01 A	DEFAULTS: Aluminium B SG Clear	6.7	0.70
ALM-004-01 A	DEFAULTS: 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
Living / Dining / Kitchen	ALM-002-01 A	01	2500	600	NE	None
Living / Dining / Kitchen	ALM-002-01 A	02	2500	900	NE	None
Living / Dining / Kitchen	ALM-002-01 A	03	2500	3400	SE	None
Living / Dining / Kitchen	ALM-002-01 A	04	2500	5800	SE	None
Living / Dining / Kitchen	ALM-002-01 A	05	2500	600	SW	None
Bedroom 1	ALM-002-01 A	06	700	2750	NE	None
Bedroom 1	ALM-002-01 A	07	2450	2500	NW	None
Bedroom 1 (Ens)	ALM-002-01 A	08	2400	900	NW	None
Bedroom 1 (Ens)	ALM-004-01 A	block	2400	800	NE	None
Bedroom 2	ALM-004-01 A	block	400	3300	SW	None
Bedroom 2	ALM-002-01 A	09	2500	1100	NW	None
Bedroom 3	ALM-002-01 A	10	2450	900	SE	None
Bedroom 3	ALM-004-01 A	block	400	3200	SW	None
Family	ALM-002-01 A	11a	700	2700	SW	None
Family	ALM-002-01 A	11	2500	3100	NW	None
Bathroom	ALM-004-01 A	block	400	1450	SW	None
Bedroom 4 / Study	ALM-002-01 A	12	2500	900	SE	None
WIR	ALM-004-01 A	block	2400	1200	NE	None
Laundry	ALM-001-01 A	12	2400	900	SW	None

### 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
EW-005	Double Brick	Polystyrene extruded: R1.0	No

### External wall schedule



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## Building features continued

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Living / Dining / Kitchen	EW-005	7100	2500	NE	No	
Living / Dining / Kitchen	EW-005	9700	2500	SE	Yes	1700
Living / Dining / Kitchen	EW-005	900	2500	SW	Yes	1000
Living / Dining / Kitchen	EW-005	800	2500	SE	Yes	2500
Living / Dining / Kitchen	EW-005	7400	2500	SW	No	
Bedroom 1	EW-005	4000	2500	NE	No	
Bedroom 1	EW-005	3100	2500	NW	Yes	600
Bedroom 1 (Ens)	EW-005	3300	2500	NE	No	
Bedroom 1 (Ens)	EW-005	900	2500	NW	No	
Bedroom 1 (Ens)	EW-005	1100	2500	NE	No	
Bedroom 2	EW-005	3400	2500	SW	No	
Bedroom 2	EW-005	1300	2500	NW	No	
Bedroom 3	EW-005	900	2500	SE	No	
Bedroom 3	EW-005	3300	2500	SW	No	
Family	EW-005	4600	2500	SW	No	
Family	EW-005	3400	2500	NW	Yes	600
Bathroom	EW-005	1600	2500	SW	No	
Bedroom 4 / Study	EW-005	3800	2500	NE	No	
Bedroom 4 / Study	EW-005	900	2500	SE	No	
WIR	EW-005	2400	2500	NE	No	
Laundry	EW-005	1800	2500	SW	No	

## Internal wall type

ID	Wall type	Area (m <sup>2</sup> )	Insulation	Wall wrap or foil
IW-005	Plasterboard	186.3		No

## Floors

Location	Construction	Area (m <sup>2</sup> )	Sub floor ventilation	Added insulation	Covering
Living / Dining / Kitchen/Neighbour	timber - concrete 200mm	74.5			
Living / Dining / Kitchen/Outdoor Air	R1.5 - timber - concrete 200mm	3.5		R1.5	
Bedroom 1/Outdoor Air	carpet - concrete 200mm	20.2			Carpet 10 + felt underlay 10
Bedroom 1 (Ens)/Neighbour	tiles - concrete 200mm	1.6			Ceramic tile
Bedroom 1 (Ens)/Outdoor Air	R1.5 - tiles - concrete 200mm	10.9		R1.5	Ceramic tile
Bedroom	carpet - concrete 200mm	12.9			Carpet 10 + felt

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## Building features continued

2/Neighbour				underlay 10
Bedroom	carpet - concrete 200mm	12.5		Carpet 10 + felt underlay 10
3/Neighbour				Carpet 10 + felt underlay 10
Hall / WC/Neighbour	carpet - concrete 200mm	14.4		Carpet 10 + felt underlay 10
Hall / WC/Neighbour	tiles - concrete 200mm	2.5		Ceramic tile
Family/Neighbour	carpet - concrete 200mm	7.0		Carpet 10 + felt underlay 10
Family/Outdoor Air	R1.5 - carpet - concrete 200mm	8.5	R1.5	Carpet 10 + felt underlay 10
Bathroom/Neighbour	tiles - concrete 200mm	4.8		Ceramic tile
Bedroom 4 / Study/Outdoor Air	R1.5 - carpet - concrete 200mm	10.4	R1.5	Carpet 10 + felt underlay 10
WIR/Neighbour	carpet - concrete 200mm	3.4		Carpet 10 + felt underlay 10
WIR/Outdoor Air	R1.5 - carpet - concrete 200mm	1.3	R1.5	Carpet 10 + felt underlay 10
Laundry/Neighbour	tiles - concrete 200mm	3.8		Ceramic tile

## Ceiling type

Location	Construction	Added insulation	Roof space above
Neighbour/Living / Dining / Kitchen	timber - concrete 200mm		No
Neighbour/Bedroom	carpet - concrete 200mm		No
Neighbour/Bedroom 1 (Ens)	carpet - concrete 200mm		No
Neighbour/Bedroom	carpet - concrete 200mm		No
Neighbour/Bedroom	carpet - concrete 200mm		No
Neighbour/Hall / WC	carpet - concrete 200mm		No
Neighbour/Family	carpet - concrete 200mm		No
Neighbour/Bathroom	carpet - concrete 200mm		No
Neighbour/Bedroom 4 / Study	carpet - concrete 200mm		No
Neighbour/WIR	carpet - concrete 200mm		No
Neighbour/Laundry	tiles - concrete 200mm		No

## Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
Living / Dining / Kitchen	30	Downlight		Sealed
Living / Dining / Kitchen	1	Ceiling exhaust fan	160	Sealed
Bedroom 1	8	Downlight		Sealed
Bedroom 1 (Ens)	5	Downlight		Sealed

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### Building features continued

Bedroom 1 (Ens)	1	Ceiling exhaust fan	160	Sealed
Bedroom 2	5	Downlight		Sealed
Bedroom 3	5	Downlight		Sealed
Hall / WC	6	Downlight		Sealed
Hall / WC	2	Ceiling exhaust fan	160	Sealed
Family	6	Downlight		Sealed
Bathroom	2	Downlight		Sealed
Bathroom	1	Ceiling exhaust fan	160	Sealed
Bedroom 4 / Study	4	Downlight		Sealed
WIR	1	Downlight		Sealed
WIR	1	Ceiling exhaust fan	160	Sealed
Laundry	2	Downlight		Sealed
Laundry	1	Ceiling exhaust fan	160	Sealed

### Ceiling fans

Location	Number	Diameter (mm)
None Present		

### Roof type

Construction	Added insulation	Roof colour
R1.5 - Concrete slab 200mm	R1.5	Medium

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# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: 0002042091-01

Certificate Date: 27 Mar 2018

★ Star rating: 3.7



## Assessor details

Accreditation number: **VIC/BDAV/12/1475**  
Name: **Robert Mallindine**  
Organisation: **AGA Consultants Pty Ltd**  
Email: **ag@agac.cc**  
Phone: **02 9977 2794**  
Declaration of interest: **No potential conflicts of interest to declare**  
Software: **AccuRate Sustainability V2.3.3.13 SP3**  
AAO: **BDAV**

## Overview

### Dwelling details

Street: **Unit 3, 5 Commonwealth Parade**  
Suburb: **Manly**  
State: **NSW** Postcode: **2095**  
Type: **New** NCC Class: **2**  
NatHERS climate zone: **56**  
Lot/DP number: - Exposure: **Suburban**

### Key construction and insulation materials

(see following pages for details)

Construction: **Double Brick**  
**Metal roof/Plasterboard Slab**  
Insulation: **R1.0 wall insulation**  
**Ceiling (uninsulated)**  
**Floor (uninsulated)**  
Glazing: **Aluminium B SG Clear**

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

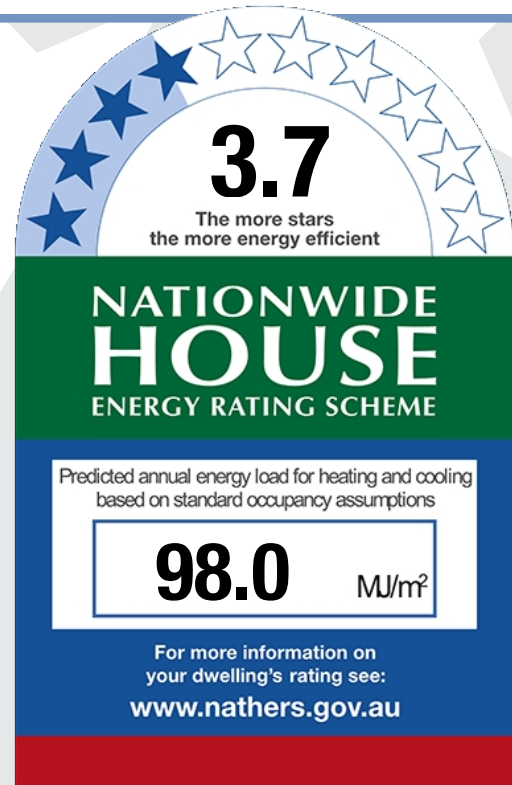
Conditioned: **188.0**  
Unconditioned: **10.0**  
Garage:  
TOTAL: **198.0**

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

Heating: **42.0**  
Cooling: **56.0**  
TOTAL: **98.0**

### Plan documents

Plan ref/date: **4/10/17**  
Prepared by: **Baxter & Jacobson Architects P/L**



### Ceiling penetrations

(see following pages for details)

Sealed: **65**  
Unsealed: **0**  
TOTAL:\*\* **65**

\*\*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: **Light-emitting diode (LED)**

### Window selection - default windows only

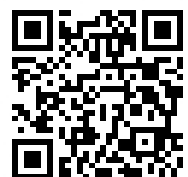
Note on allowable window values: With a 10% tolerance to the nominated SHGC window values shown on page 2, the following ratings are achieved:

-10% SHGC **3.6**  
+10% SHGC **3.7**

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-002-01 A	DEFAULTS: Aluminium B SG Clear	6.7	0.70
ALM-002-04 A	DEFAULTS: Aluminium B SG Low Solar Gain Low-E	5.6	0.41

### Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Living / Dining / Kitchen	ALM-002-01 A	01	2400	600	NE	None
Living / Dining / Kitchen	ALM-002-01 A	01b	2400	900	NE	None
Living / Dining / Kitchen	ALM-002-01 A	02	2450	4500	SE	None
Living / Dining / Kitchen	ALM-002-01 A	03	2450	3800	SE	None
Living / Dining / Kitchen	ALM-002-01 A	04	2450	600	SW	None
Bedroom 2	ALM-002-04 A	07	2450	3000	NW	None
Bedroom 2 (Ens)	ALM-002-01 A	08	400	3500	NE	None
Bedroom 3	ALM-002-01 A	09	2450	900	SE	None
Bedroom 3	ALM-002-01 A	09	700	2400	SW	None
Family Room	ALM-002-04 A	10	2450	3000	NW	None
Bathroom	ALM-002-01 A	11	700	2300	SW	None
Laundry	ALM-002-01 A	12	700	900	SW	None
Media	ALM-002-01 A	05	400	2100	NE	None
Bedroom Master	ALM-002-01 A	13	2100	4100	SE	None
Bedroom Master	ALM-002-01 A	14	400	4100	SE	None
Study	ALM-002-04 A	15	2100	4100	NW	None
Study	ALM-002-04 A	15a	450	4100	NW	None
Void over LDK	ALM-002-01 A	16	1050	2700	SE	None

### Roof window and skylight type and performance value

ID	Window type	U-value	SHGC
SG-Generic-01 A	DEFAULTS: Clear AI SG DEFAULT ROOF WINDOW System 01	7.3	0.79

### Roof window and skylight schedule

Location	ID	Roof window/skylight no.	Area (m²)	Orientation	Outdoor shade	Indoor shade/diffuser
Bedroom Master	SG-Generic-01 A	01	0.8	NE	None	None
Bedroom Master	SG-Generic-01 A	02	0.8	NE	None	None
Bedroom Master Ens	SG-Generic-01 A	03	0.8	NE	None	None
Bedroom Master Ens	SG-Generic-01 A	04	0.8	NE	None	None
Bedroom Master Ens	SG-Generic-01 A	05	0.8	NE	None	None
Bedroom Master WIR	SG-Generic-01 A	06	0.8	SW	None	None
Bedroom Master WIR	SG-Generic-01 A	07	0.8	SW	None	None

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## Building features continued

Study	SG-Generic-01 A	08	0.8	NE	None	None
Void over LDK	SG-Generic-01 A	09	0.8	NE	None	None
Void over LDK	SG-Generic-01 A	10	0.8	NE	None	None

## External wall type

ID	Wall type	Insulation	Wall wrap or foil
EW-005	Double Brick	Polystyrene extruded: R1.0	No

## External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Living / Dining / Kitchen	EW-005	5200	2450	NE	Yes	400
Living / Dining / Kitchen	EW-005	8500	2450	SE	Yes	2500
Living / Dining / Kitchen	EW-005	800	2450	SW	Yes	700
Living / Dining / Kitchen	EW-005	500	2450	SE	Yes	3000
Living / Dining / Kitchen	EW-005	5300	2450	SW	No	
Bedroom 2	EW-005	5000	2450	NE	Yes	400
Bedroom 2	EW-005	4000	2450	NW	Yes	600
Bedroom 2 (Ens)	EW-005	3500	2450	NE	No	
Bedroom 3	EW-005	900	2450	SE	Yes	8000
Bedroom 3	EW-005	3800	2450	SW	No	
Family Room	EW-005	3700	2450	SW	No	
Family Room	EW-005	3000	2450	NW	Yes	600
Bathroom	EW-005	2300	2450	SW	No	
Laundry	EW-005	1600	2450	SW	No	
Media	EW-005	2900	2450	NE	Yes	400
Bedroom Master	EW-005	4300	2400	SE	Yes	1400
Bedroom Master	EW-005	900	1700	SW	Yes	1400
Bedroom Master	EW-005	500	1800	SE	Yes	2500
Bedroom Master	EW-005	4500	1600	SW	Yes	500
Study	EW-005	5300	2400	NW	Yes	600
Roof void south	EW-005	8000	750	SW	No	
Void over LDK	EW-005	3100	1100	SE	Yes	1700

## Internal wall type

ID	Wall type	Area (m²)	Insulation	Wall wrap or foil
IW-001	Plasterboard	39.8		No
IW-005	Plasterboard	137.7		No
IW-006	Plasterboard	62.5	Glass fibre batt: R2.5	No



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## Building features continued

### Floors

Location	Construction	Area (m <sup>2</sup> )	Sub floor ventilation	Added insulation	Covering
Living / Dining / Kitchen/Neighbour	timber - concrete 200mm	55.0			
Bedroom 2/Neighbour	carpet - concrete 200mm	15.7			Carpet 10 + felt underlay 10
Bedroom 2 (Ens)/Neighbour	tiles - concrete 200mm	6.6			Ceramic tile
Bedroom 3/Neighbour	carpet - concrete 200mm	10.3			Carpet 10 + felt underlay 10
Family Room/Neighbour	carpet - concrete 200mm	10.2			Carpet 10 + felt underlay 10
Hall/Neighbour	carpet - concrete 200mm	15.8			Carpet 10 + felt underlay 10
Bathroom/Neighbour	tiles - concrete 200mm	6.2			Ceramic tile
Laundry/Neighbour	carpet - concrete 200mm	3.8			Carpet 10 + felt underlay 10
Media/Neighbour	tiles - concrete 200mm	4.1			Ceramic tile
Bedroom Master/Living / Dining / Kitchen	carpet - concrete 200mm	24.6			Carpet 10 + felt underlay 10
Bedroom Master Ens/Living / Dining / Kitchen	tiles - concrete 200mm	3.5			Ceramic tile
Bedroom Master Ens/Neighbour	tiles - concrete 200mm	8.6			Ceramic tile
Bedroom Master Ens/Hall	tiles - concrete 200mm	0.4			Ceramic tile
Bedroom Master WIR/Living / Dining / Kitchen	carpet - concrete 200mm	2.4			Carpet 10 + felt underlay 10
Bedroom Master WIR/Bedroom 3	carpet - concrete 200mm	6.1			Carpet 10 + felt underlay 10
Bedroom Master WIR/Hall	carpet - concrete 200mm	3.7			Carpet 10 + felt underlay 10
Bedroom Master WIR/Neighbour	carpet - concrete 200mm	1.0			Carpet 10 + felt underlay 10
Study/Hall	carpet - concrete 200mm	11.7			Carpet 10 + felt underlay 10
Study/Bathroom	carpet - concrete 200mm	3.6			Carpet 10 + felt underlay 10
Study/Laundry	carpet - concrete 200mm	2.0			Carpet 10 + felt underlay 10
Study/Family Room	carpet - concrete 200mm	0.6			Carpet 10 + felt underlay 10
Study/Neighbour	carpet - concrete 200mm	6.4			Carpet 10 + felt underlay 10
Roof void north/Living / Dining / Kitchen	Plasterboard 13 mm + R3.0 bulk insulation	2.6		R3.0	
Roof void north/Bedroom 2	Plasterboard 13 mm + R3.0 bulk insulation	2.3		R3.0	
Roof void north/Bedroom 2 (Ens)	Plasterboard 13 mm + R3.0 bulk insulation	3.9		R3.0	

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## Building features continued

Roof void north/Media	Plasterboard 13 mm + R3.0 bulk insulation	4.1	R3.0
Roof void south/Bathroom	Plasterboard 13 mm + R3.0 bulk insulation	2.6	R3.0
Roof void south/Laundry	Plasterboard 13 mm + R3.0 bulk insulation	1.8	R3.0
Roof void south/Bedroom 3	Plasterboard 13 mm + R3.0 bulk insulation	4.2	R3.0
Void over LDK/Living / Dining / Kitchen	Plasterboard 13 mm + R3.0 bulk insulation	21.1	R3.0

## Ceiling type

Location	Construction	Added insulation	Roof space above
Bedroom Master/Living / Dining / Kitchen	carpet - concrete 200mm		No
Bedroom Master WIR/Living / Dining / Kitchen	carpet - concrete 200mm		No
Bedroom Master Ens/Living / Dining / Kitchen	tiles - concrete 200mm		No
Roof void north/Living / Dining / Kitchen	Plasterboard 13 mm + R3.0 bulk insulation	R3.0	Yes
Void over LDK/Living / Dining / Kitchen	Plasterboard 13 mm + R3.0 bulk insulation	R3.0	No
Roof void north/Bedroom 2	Plasterboard 13 mm + R3.0 bulk insulation	R3.0	Yes
Roof void north/Bedroom 2 (Ens)	Plasterboard 13 mm + R3.0 bulk insulation	R3.0	Yes
Bedroom Master WIR/Bedroom 3	carpet - concrete 200mm		No
Roof void south/Bedroom 3	Plasterboard 13 mm + R3.0 bulk insulation	R3.0	Yes
Study/Family Room	carpet - concrete 200mm		No
Bedroom Master WIR/Hall	carpet - concrete 200mm		No
Study/Hall	carpet - concrete 200mm		No
Bedroom Master Ens/Hall	tiles - concrete 200mm		No
Study/Bathroom	carpet - concrete 200mm		No
Roof void south/Bathroom	Plasterboard 13 mm + R3.0 bulk insulation	R3.0	Yes
Study/Laundry	carpet - concrete 200mm		No
Roof void south/Laundry	Plasterboard 13 mm + R3.0 bulk insulation	R3.0	Yes
Roof void	Plasterboard 13 mm + R3.0 bulk insulation	R3.0	Yes

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## Building features continued

north/Media

### Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
Living / Dining / Kitchen	16	Downlight		Sealed
Living / Dining / Kitchen	1	Ceiling exhaust fan	160	Sealed
Bedroom 2	6	Downlight		Sealed
Bedroom 2 (Ens)	2	Downlight		Sealed
Bedroom 2 (Ens)	1	Ceiling exhaust fan	160	Sealed
Bedroom 3	5	Downlight		Sealed
Family Room	4	Downlight		Sealed
Hall	6	Downlight		Sealed
Bathroom	2	Downlight		Sealed
Bathroom	1	Ceiling exhaust fan	160	Sealed
Laundry	2	Downlight		Sealed
Laundry	1	Ceiling exhaust fan	160	Sealed
Media	2	Downlight		Sealed
Bedroom Master	13	Downlight		Sealed
Bedroom Master	1	Ceiling exhaust fan	160	Sealed
Bedroom Master Ens	5	Downlight		Sealed
Bedroom Master Ens	1	Ceiling exhaust fan	160	Sealed
Bedroom Master WIR	5	Downlight		Sealed
Study	8	Downlight		Sealed
Void over LDK	6	Downlight		Sealed

### Ceiling fans

Location	Number	Diameter (mm)
None Present		

### Roof type

Construction	Added insulation	Roof colour
R3.0 - Concrete slab 200mm (rear balcony)	R3.0	Medium
R3.0 - 22.5 - steel roof with R3.0 bulk insul + Plasterb'd ceiling under	R3.0	Medium
none - 22.5 - steel roof		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.

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