

Nationwide House Energy Rating Scheme* Certificate

Certificate number: 0003263654-02

Certificate Date: 17 Oct 2018

★ Star rating: 6.4



Assessor details

Accreditation number: **20399**
Name: **Frances Turrisi**
Organisation: **GAT & Associates**
Email: **frances@gatassoc.com.au**
Phone: **02 9569 1100**
Declaration of interest: **No potential conflicts of interest to declare**
Software: **AccuRate Sustainability V2.3.3.13 SP3**
AAO: **ABSA**

Overview

Dwelling details

Street: **Unit 1, 91-93 McIntosh Road**
Suburb: **Narraweena**
State: **NSW** Postcode: **2099**
Type: **New** NCC Class: **2**
NatHERS climate zone: **56**
Lot/DP number: **102/868560** Exposure: **Suburban**

Key construction and insulation materials

(see following pages for details)

Construction: **Brick Veneer**
Concrete roof/Plasterboard Slab
Insulation: **R2.0 wall insulation**
Ceiling (uninsulated)
R1.0 floor insulation
Glazing: **Aluminium B SG Clear: U = 6.70: SHGC = 0.70**

Net floor area (m²)

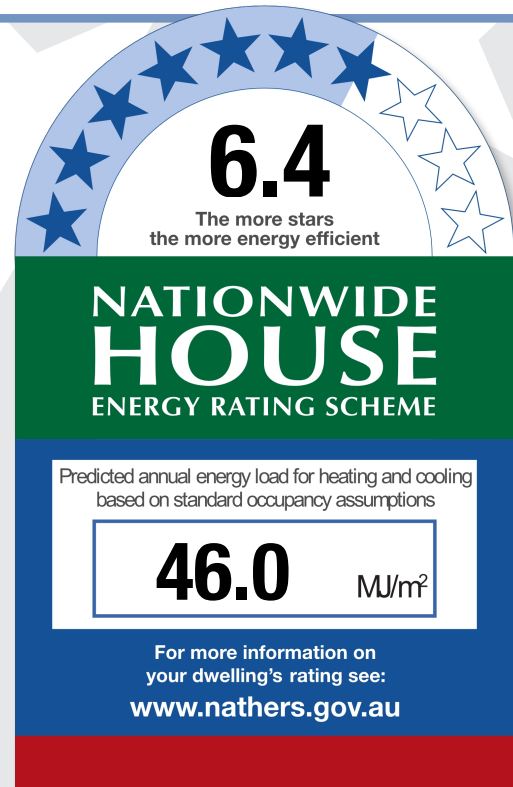
Conditioned: **78.0**
Unconditioned: **6.0**
Garage: **84.0**
TOTAL: **84.0**

Annual thermal performance loads (MJ/m²)

Heating: **22.0**
Cooling: **24.0**
TOTAL: **46.0**

Plan documents

Plan ref/date: **Sept.2018**
Prepared by: **Benson McCormack Architecture**



Ceiling penetrations

(see following pages for details)

Sealed: **19**
Unsealed: **0**
TOTAL:** **19**

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: **Halogen**

Window selection - default windows only

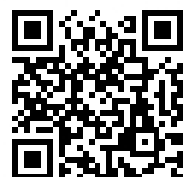
Note on allowable window values: With a 10% tolerance to the nominated SHGC window values shown on page 2, the following ratings are achieved:

-10% SHGC **6.4**
+10% SHGC **6.4**

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

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Building features

Window type and performance value

Window ID	Window type	U-value	SHGC
ALM-001-01 A	DEFAULTS: Aluminium A SG Clear: U = 6.70: SHGC = 0.57	6.7	0.57
ALM-002-01 A	DEFAULTS: Aluminium B SG Clear: U = 6.70: SHGC = 0.70	6.7	0.70

Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
LKD	ALM-001-01 A	W.U1.03	2209	1200	N	None
LKD	ALM-002-01 A	D.U1.02	2609	3200	N	None
BED 2	ALM-001-01 A	W.U1.02	2209	1200	N	None
BED 1	ALM-001-01 A	W.U1.01	2210	1200	E	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-001	Brick Veneer	Glass fibre batt: R2.0	No
EW-002	Brick Veneer		No

External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
ENTRY	EW-002	1700	2700	S	Yes	
LKD	EW-001	3450	2700	N	No	
LKD	EW-001	3000	2700	W	Yes	
LKD	EW-001	3000	2700	E	Yes	
LKD	EW-001	3300	2700	N	Yes	
BED 2	EW-001	3100	2700	N	No	
BED 2	EW-001	3100	2700	W	Yes	
BED 2	EW-001	3450	2700	E	No	
BATH	EW-001	2600	2700	E	No	
BED 1	EW-001	4200	2700	E	No	
BED 1	EW-001	3450	2700	S	No	

Internal wall type

ID	Wall type	Area (m²)	Insulation	Wall wrap or foil
IW-001	Plasterboard	51.2		No
IW-002	Plasterboard	33.5	Glass fibre batt: R1.0	No

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Building features continued

Floors

Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
ENTRY/Neighbour	as_FLOR-B006 #1001 © 200mm Concrete Floor slab with carpet-underfelt(no insul)	4.4			Carpet 10 + rubber underlay 8
LKD/Neighbour	as_FLOR-B006 #1001 © 200mm Concrete Floor slab with carpet-underfelt(no insul)	25.5			Carpet 10 + rubber underlay 8
LKD/Neighbour	as_FLOR-B006 #1005 © 200mm Concrete Floor slab with ceramic tiles (no insul)	9.4			Ceramic tile
LKD/Outdoor Air	carpet to air + R1.0 as_FLOR-B003 #2011 © 200mm Concrete Floor slab with carpet-underfelt(R1.0 insul under)	5.4		R1.0	Carpet 10 + rubber underlay 8
LKD/Outdoor Air	Tile to air + R1.0 as_FLOR-B003 #2051 © 200mm Concrete Floor slab with Ceramic tile floor (R1.0 insul underl)	2.9		R1.0	Ceramic tile
BED 2/Outdoor Air	carpet to air + R1.0 as_FLOR-B003 #2011 © 200mm Concrete Floor slab with carpet-underfelt(R1.0 insul under)	11.8		R1.0	Carpet 10 + rubber underlay 8
BATH/Outdoor Air	Tile to air + R1.0 as_FLOR-B003 #2051 © 200mm Concrete Floor slab with Ceramic tile floor (R1.0 insul underl)	5.6		R1.0	Ceramic tile
BED 1/Outdoor Air	carpet to air + R1.0 as_FLOR-B003 #2011 © 200mm Concrete Floor slab with carpet-underfelt(R1.0 insul under)	13.9		R1.0	Carpet 10 + rubber underlay 8
ENSUITE/Neighbour	as_FLOR-B006 #1005 © 200mm Concrete Floor slab with ceramic tiles (no insul)	4.5			Ceramic tile

Ceiling type

Location	Construction	Added insulation	Roof space above
Neighbour/ENTRY	as_FLOR-B006 #1001 © 200mm Concrete Floor slab with carpet-underfelt(no insul)		No
Neighbour/LKD	as_FLOR-B006 #1001 © 200mm Concrete Floor slab with carpet-underfelt(no insul)		No
Neighbour/ENSUITE	as_FLOR-B006 #1005 © 200mm Concrete Floor slab with ceramic tiles (no insul)		No

Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
ENTRY	1	Downlight		Sealed
ENTRY	1	Ceiling exhaust fan	300	Sealed
LKD	17	Downlight		Sealed
LKD	1	Ceiling exhaust fan	300	Sealed
BED 2	5	Downlight		Sealed

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Building features continued

BATH	2	Downlight		Sealed
BATH	1	Ceiling exhaust fan	300	Sealed
BED 1	5	Downlight		Sealed
ENSUITE	1	Downlight		Sealed
ENSUITE	1	Ceiling exhaust fan	300	Sealed

Ceiling fans

Location	Number	Diameter (mm)
None Present		

Roof type

Construction	Added insulation	Roof colour
as ROOF-B013.rof #2046 © Concrete slab 200mm - WP Membrane surface - R2.0 insulation under slab - Susp. Ceiling under	R2.0	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.

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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

For more information on energy efficient design and insulation visit www.yourhome.gov.au

Nationwide House Energy Rating Scheme* Certificate

Certificate number: 0003263712-01

Certificate Date: 17 Oct 2018

★ Star rating: 6.7



Assessor details

Accreditation number: **20399**
Name: **Frances Turrisi**
Organisation: **GAT & Associates**
Email: **frances@gatassoc.com.au**
Phone: **02 9569 1100**
Declaration of interest: **No potential conflicts of interest to declare**
Software: **AccuRate Sustainability V2.3.3.13 SP3**
AAO: **ABSA**

Overview

Dwelling details

Street: **Unit 2, 91-93 McIntosh Road**
Suburb: **Narraweena**
State: **NSW** Postcode: **2099**
Type: **New** NCC Class: **2**
NatHERS climate zone: **56**
Lot/DP number: **102/868560** Exposure: **Suburban**

Key construction and insulation materials

(see following pages for details)

Construction: **Brick Veneer**
Concrete roof/Plasterboard
Slab/Plasterboard
Insulation: **R2.0 wall insulation**
Ceiling (uninsulated)
Floor (uninsulated)
Glazing: **Aluminium B SG Low Solar Gain**
Low-E: U = 5.60

Net floor area (m²)

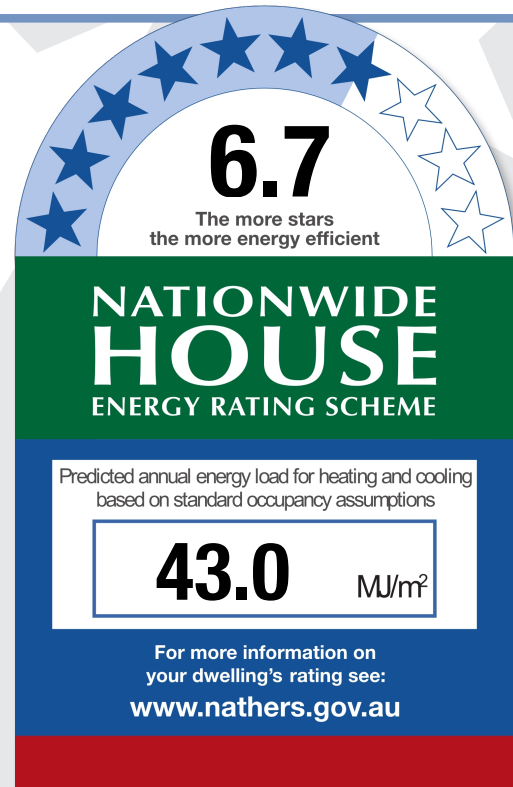
Conditioned: **81.0**
Unconditioned: **2.0**
Garage:
TOTAL: **83.0**

Annual thermal performance loads (MJ/m²)

Heating: **20.0**
Cooling: **23.0**
TOTAL: **43.0**

Plan documents

Plan ref/date: **Sept.2018**
Prepared by: **Benson McCormack Architecture**



Ceiling penetrations

(see following pages for details)

Sealed: **15**
Unsealed: **0**
TOTAL:** **15**

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: **Halogen**

Window selection - default windows only

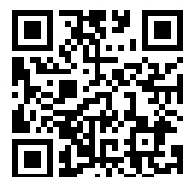
Note on allowable window values: With a 10% tolerance to the nominated SHGC window values shown on page 2, the following ratings are achieved:

-10% SHGC **6.7**
+10% SHGC **6.7**

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.

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6.7



Building features

Window type and performance value

Window ID	Window type	U-value	SHGC
ALM-001-04 A	DEFAULTS: Aluminium A SG Low Solar Gain Low-E: U = 5.60: SHGC = 0.36	5.6	0.36
ALM-002-04 A	DEFAULTS: Aluminium B SG Low Solar Gain Low-E: U = 5.60: SHGC = 0.41	5.6	0.41

Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
LKD	ALM-002-04 A	D.U2.02	2609	3200	N	None
LKD	ALM-001-04 A	W.U2.01	2209	1200	N	None
BED 2	ALM-001-04 A	W.U2.03	2210	1200	W	None
BED 1	ALM-001-04 A	W.U2.02	2210	1200	W	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-001	Brick Veneer	Glass fibre batt: R2.0	No
EW-005	Brick Veneer		No

External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
ENTRY	EW-005	1700	2700	S	Yes	
LKD	EW-001	3300	2700	N	Yes	
LKD	EW-001	3000	2700	E	Yes	
LKD	EW-001	3450	2700	N	No	
BED 2	EW-001	2950	2700	W	No	
BED 1	EW-001	3150	2700	W	No	
ENSUITE	EW-001	4000	2700	NE	No	
ENSUITE	EW-001	800	2700	N	No	

Internal wall type

ID	Wall type	Area (m²)	Insulation	Wall wrap or foil
IW-001	Plasterboard	76.1		No
IW-002	Plasterboard	37.0	Glass fibre batt: R1.0	No

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Building features continued

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
ENTRY/Neighbour	as_FLOR-B006 #1001 © 200mm Concrete Floor slab with carpet-underfelt(no insul)	2.8			Carpet 10 + rubber underlay 8
LKD/Neighbour	as_FLOR-B006 #1001 © 200mm Concrete Floor slab with carpet-underfelt(no insul)	35.3			Carpet 10 + rubber underlay 8
LKD/Neighbour	as_FLOR-B006 #1005 © 200mm Concrete Floor slab with ceramic tiles (no insul)	7.4			Ceramic tile
HALL/Neighbour	as_FLOR-B006 #1001 © 200mm Concrete Floor slab with carpet-underfelt(no insul)	1.8			Carpet 10 + rubber underlay 8
LAUNDRY/Neighbour	as_FLOR-B006 #1005 © 200mm Concrete Floor slab with ceramic tiles (no insul)	2.5			Ceramic tile
BATH/Neighbour	as_FLOR-B006 #1005 © 200mm Concrete Floor slab with ceramic tiles (no insul)	4.6			Ceramic tile
BED 2/Neighbour	as_FLOR-B006 #1001 © 200mm Concrete Floor slab with carpet-underfelt(no insul)	5.4			Carpet 10 + rubber underlay 8
BED 2/Outdoor Air	carpet to air + R1.0 as_FLOR-B003 #2011 © 200mm Concrete Floor slab with carpet-underfelt(R1.0 insul under)	5.4		R1.0	Carpet 10 + rubber underlay 8
BED 1/Neighbour	as_FLOR-B006 #1001 © 200mm Concrete Floor slab with carpet-underfelt(no insul)	5.7			Carpet 10 + rubber underlay 8
BED 1/Outdoor Air	carpet to air + R1.0 as_FLOR-B003 #2011 © 200mm Concrete Floor slab with carpet-underfelt(R1.0 insul under)	6.0		R1.0	Carpet 10 + rubber underlay 8
ENSUITE/Neighbour	as_FLOR-B006 #1005 © 200mm Concrete Floor slab with ceramic tiles (no insul)	2.0			Ceramic tile
ENSUITE/Outdoor Air	Tile to air + R1.0 as_FLOR-B003 #2051 © 200mm Concrete Floor slab with Ceramic tile floor (R1.0 insul underl)	4.6		R1.0	Ceramic tile

Ceiling type

Location	Construction	Added insulation	Roof space above
Neighbour/ENTRY	carpet to air + R1.0 as_FLOR-B003 #2011 © 200mm Concrete Floor slab with carpet-underfelt(R1.0 insul under)	R1.0	No
Neighbour/LKD	as_FLOR-B006 #1001 © 200mm Concrete Floor slab with carpet-underfelt(no insul)		No
Neighbour/HALL	as_FLOR-B006 #1001 © 200mm Concrete Floor slab with carpet-underfelt(no insul)		No
Neighbour/LAUNDRY	as_FLOR-B006 #1001 © 200mm Concrete Floor slab with carpet-underfelt(no insul)		No
Neighbour/BATH	as_FLOR-B006 #1001 © 200mm Concrete Floor slab with carpet-underfelt(no insul)		No

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Building features continued

Neighbour/BED 2	as_FLOR-B006 #1001 © 200mm Concrete Floor slab with carpet-underfelt(no insul)	No
Neighbour/BED 1	as_FLOR-B006 #1001 © 200mm Concrete Floor slab with carpet-underfelt(no insul)	No

Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
ENTRY	1	Downlight		Sealed
LKD	17	Downlight		Sealed
LKD	1	Ceiling exhaust fan	300	Sealed
HALL	1	Downlight		Sealed
LAUNDRY	1	Downlight		Sealed
LAUNDRY	1	Ceiling exhaust fan	300	Sealed
BATH	1	Downlight		Sealed
BATH	1	Ceiling exhaust fan	300	Sealed
BED 2	4	Downlight		Sealed
BED 1	4	Downlight		Sealed
ENSUITE	2	Downlight		Sealed
ENSUITE	1	Ceiling exhaust fan	300	Sealed

Ceiling fans

Location	Number	Diameter (mm)
None Present		

Roof type

Construction	Added insulation	Roof colour
as_ROOF-B013.rof #2046 © Concrete slab 200mm - WP Membrane surface - R2.0 insulation under slab - Susp. Ceiling under	R2.0	Medium

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Phone: **02 9569 1100**
Declaration of interest: **No potential conflicts of interest to declare**
Software: **AccuRate Sustainability V2.3.3.13 SP3**
AAO: **ABSA**

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Dwelling details

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NatHERS climate zone: **56**
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(see following pages for details)

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Insulation: **R2.0 wall insulation**
Ceiling (uninsulated)
Floor (uninsulated)
Glazing: **Aluminium B SG Low Solar Gain**
Low-E: U = 5.60

Net floor area (m²)

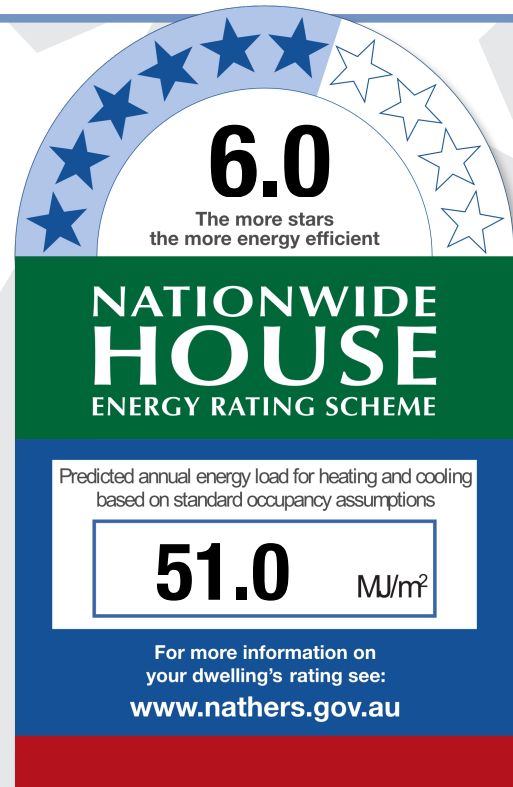
Conditioned: **48.0**
Unconditioned: **3.0**
Garage:
TOTAL: **51.0**

Annual thermal performance loads (MJ/m²)

Heating: **25.0**
Cooling: **25.0**
TOTAL: **51.0**

Plan documents

Plan ref/date: **Sept.2018**
Prepared by: **Benson McCormack Architecture**



Ceiling penetrations

(see following pages for details)

Sealed: **5**
Unsealed: **0**
TOTAL:** **5**

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: **Halogen**

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 **6.0**
+10% SHGC **5.9**

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Window type and performance value

Window ID	Window type	U-value	SHGC
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ALM-002-04 A	DEFAULTS: Aluminium B SG Low Solar Gain Low-E: U = 5.60: SHGC = 0.41	5.6	0.41

Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
L/k/D	ALM-002-04 A	D.U3.02	2610	2500	W	None
BED 1	ALM-001-04 A	W.U3.01	2210	1200	E	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-001	Brick Veneer	Glass fibre batt: R2.0	No
EW-008	Brick Veneer	Glass fibre batt: R1.0	No

External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
ENTRY	EW-008	1700	2700	E	Yes	
L/k/D	EW-008	3950	2700	E	Yes	
L/k/D	EW-001	2550	2700	W	Yes	
BED 1	EW-001	3100	2700	N	Yes	
BED 1	EW-001	3100	2700	S	Yes	
BED 1	EW-001	2900	2700	E	No	

Internal wall type

ID	Wall type	Area (m²)	Insulation	Wall wrap or foil
IW-001	Plasterboard	36.7		No
IW-002	Plasterboard	40.2	Glass fibre batt: R1.0	No

Floors

Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
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Nationwide House Energy Rating Scheme* Certificate

Certificate number: **0003263753-01**

Certificate Date:

17 Oct 2018

★ Star rating:

6.0



Building features continued

ENTRY/Neighbour	as_FLOR-B006 #1005 © 200mm 3.5 Concrete Floor slab with ceramic tiles (no insul)		Ceramic tile
Laundry/Neighbour	as_FLOR-B006 #1005 © 200mm 2.6 Concrete Floor slab with ceramic tiles (no insul)		Ceramic tile
L/k/D/Neighbour	as_FLOR-B006 #1005 © 200mm 4.4 Concrete Floor slab with ceramic tiles (no insul)		Ceramic tile
L/k/D/Neighbour	as_FLOR-B006 #1001 © 200mm 24.0 Concrete Floor slab with carpet- underfelt(no insul)		Carpet 10 + rubber underlay 8
BATH/Neighbour	as_FLOR-B006 #1005 © 200mm 4.4 Concrete Floor slab with ceramic tiles (no insul)		Ceramic tile
BED 1/Neighbour	as_FLOR-B006 #1001 © 200mm 6.9 Concrete Floor slab with carpet- underfelt(no insul)		Carpet 10 + rubber underlay 8
BED 1/Outdoor Air	carpet to air + R1.0 as_FLOR- B003 #2011 © 200mm Concrete Floor slab with carpet- underfelt(R1.0 insul under)	4.8 R1.0	Carpet 10 + rubber underlay 8

Ceiling type

Location	Construction	Added insulation	Roof space above
Neighbour/ENTRY	as_FLOR-B006 #1001 © 200mm Concrete Floor slab with carpet-underfelt(no insul)		No
Neighbour/Laundry	as_FLOR-B006 #1005 © 200mm Concrete Floor slab with ceramic tiles (no insul)		No
Neighbour/L/k/D	as_FLOR-B006 #1001 © 200mm Concrete Floor slab with carpet-underfelt(no insul)		No
Neighbour/BATH	as_FLOR-B006 #1005 © 200mm Concrete Floor slab with ceramic tiles (no insul)		No
Neighbour/BED 1	as_FLOR-B006 #1001 © 200mm Concrete Floor slab with carpet-underfelt(no insul)		No

Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
ENTRY	1	Downlight		Sealed
Laundry	1	Downlight		Sealed
Laundry	1	Ceiling exhaust fan	300	Sealed
L/k/D	11	Downlight		Sealed
L/k/D	1	Ceiling exhaust fan	300	Sealed
BATH	1	Downlight		Sealed
BATH	1	Ceiling exhaust fan	300	Sealed
BED 1	5	Downlight		Sealed

Ceiling fans

Nationwide House Energy Rating Scheme* Certificate

Certificate number: **0003263753-01**

Certificate Date:

17 Oct 2018

★ Star rating:

6.0



Building features continued

Location	Number	Diameter (mm)
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None Present		
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Roof type

Construction	Added insulation	Roof colour
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as_ROOF-B013.rof #2046 © Concrete slab 200mm - WP Membrane surface - R2.0 insulation under slab - Susp. Ceiling under	R2.0	Medium
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Nationwide House Energy Rating Scheme* Certificate

Certificate number: 0003263753-01

Certificate Date: 17 Oct 2018

★ Star rating: 6.0



Additional information

Explanatory notes

About this report

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Contact

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For more information on energy efficient design and insulation visit www.yourhome.gov.au

Nationwide House Energy Rating Scheme* Certificate

Certificate number: 0003263779-01

Certificate Date: 17 Oct 2018

★ Star rating: 6.2



Assessor details

Accreditation number: **20399**
Name: **Frances Turrisi**
Organisation: **GAT & Associates**
Email: **frances@gatassoc.com.au**
Phone: **02 9569 1100**
Declaration of interest: **No potential conflicts of interest to declare**
Software: **AccuRate Sustainability V2.3.3.13 SP3**
AAO: **ABSA**

Overview

Dwelling details

Street: **Unit 4, 91-93 McIntosh Road**
Suburb: **Narraweena**
State: **NSW** Postcode: **2099**
Type: **New** NCC Class: **2**
NatHERS climate zone: **56**
Lot/DP number: **102/868560** Exposure: **Suburban**

Key construction and insulation materials

(see following pages for details)

Construction: **Brick Veneer**
Concrete roof/Plasterboard
Slab/Plasterboard
Insulation: **R2.0 wall insulation**
Ceiling (uninsulated)
Floor (uninsulated)
Glazing: **Aluminium B SG Low Solar Gain**
Low-E: U = 5.60

Net floor area (m²)

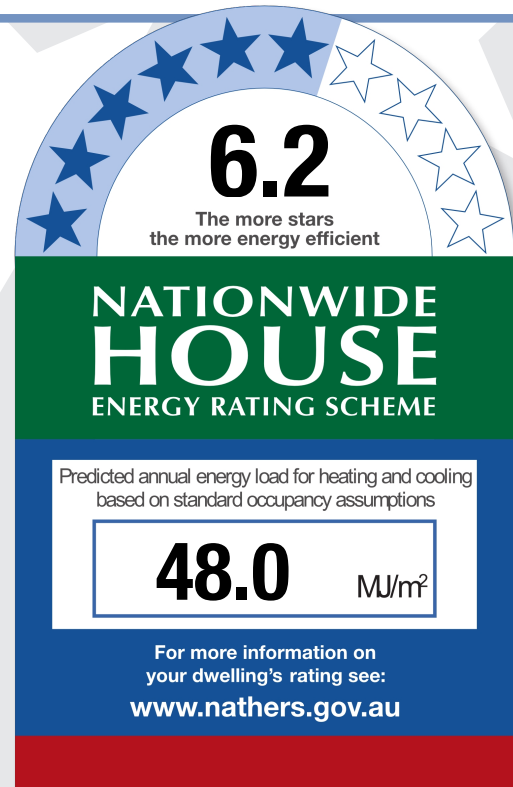
Conditioned: **48.0**
Unconditioned: **3.0**
Garage: **51.0**
TOTAL: **51.0**

Annual thermal performance loads (MJ/m²)

Heating: **24.0**
Cooling: **24.0**
TOTAL: **48.0**

Plan documents

Plan ref/date: **Sept.2018**
Prepared by: **Benson McCormack Architecture**



Ceiling penetrations

(see following pages for details)

Sealed: **5**
Unsealed: **0**
TOTAL:** **5**

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: **Halogen**

Window selection - default windows only

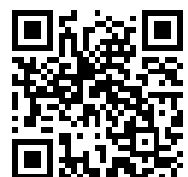
Note on allowable window values: With a 10% tolerance to the nominated SHGC window values shown on page 2, the following ratings are achieved:

-10% SHGC **6.2**
+10% SHGC **6.2**

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.



Nationwide House Energy Rating Scheme* Certificate

Certificate number: **0003263779-01**

Certificate Date:

17 Oct 2018

★ Star rating:

6.2



Building features

Window type and performance value

Window ID	Window type	U-value	SHGC
ALM-001-04 A	DEFAULTS: Aluminium A SG Low Solar Gain Low-E: U = 5.60: SHGC = 0.36	5.6	0.36
ALM-002-04 A	DEFAULTS: Aluminium B SG Low Solar Gain Low-E: U = 5.60: SHGC = 0.41	5.6	0.41

Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
L/k/D	ALM-002-04 A	D.U4.02	2610	2500	W	None
BED 1	ALM-001-04 A	W.U4.01	2210	1200	W	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-001	Brick Veneer	Glass fibre batt: R2.0	No
EW-008	Brick Veneer	Glass fibre batt: R1.0	No

External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
ENTRY	EW-008	1700	2700	E	Yes	
L/k/D	EW-008	3950	2700	E	Yes	
L/k/D	EW-001	2550	2700	W	Yes	
BED 1	EW-001	3100	2700	N	Yes	
BED 1	EW-001	2400	2700	S	Yes	
BED 1	EW-001	2900	2700	W	No	

Internal wall type

ID	Wall type	Area (m²)	Insulation	Wall wrap or foil
IW-001	Plasterboard	36.7		No
IW-002	Plasterboard	40.2	Glass fibre batt: R1.0	No

Floors

Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
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Nationwide House Energy Rating Scheme* Certificate

Certificate number: **0003263779-01**

Certificate Date:

17 Oct 2018

★ Star rating:

6.2



Building features continued

ENTRY/Neighbour	as_FLOR-B006 #1005 © 200mm 3.5 Concrete Floor slab with ceramic tiles (no insul)		Ceramic tile
Laundry/Neighbour	as_FLOR-B006 #1005 © 200mm 2.6 Concrete Floor slab with ceramic tiles (no insul)		Ceramic tile
L/k/D/Neighbour	as_FLOR-B006 #1005 © 200mm 4.4 Concrete Floor slab with ceramic tiles (no insul)		Ceramic tile
L/k/D/Neighbour	as_FLOR-B006 #1001 © 200mm 24.0 Concrete Floor slab with carpet- underfelt(no insul)		Carpet 10 + rubber underlay 8
BATH/Neighbour	as_FLOR-B006 #1005 © 200mm 4.4 Concrete Floor slab with ceramic tiles (no insul)		Ceramic tile
BED 1/Neighbour	as_FLOR-B006 #1001 © 200mm 6.9 Concrete Floor slab with carpet- underfelt(no insul)		Carpet 10 + rubber underlay 8
BED 1/Outdoor Air	carpet to air + R1.0 as_FLOR- B003 #2011 © 200mm Concrete Floor slab with carpet- underfelt(R1.0 insul under)	4.8 R1.0	Carpet 10 + rubber underlay 8

Ceiling type

Location	Construction	Added insulation	Roof space above
Neighbour/ENTRY	as_FLOR-B006 #1001 © 200mm Concrete Floor slab with carpet-underfelt(no insul)		No
Neighbour/Laundry	as_FLOR-B006 #1005 © 200mm Concrete Floor slab with ceramic tiles (no insul)		No
Neighbour/L/k/D	as_FLOR-B006 #1001 © 200mm Concrete Floor slab with carpet-underfelt(no insul)		No
Neighbour/BATH	as_FLOR-B006 #1005 © 200mm Concrete Floor slab with ceramic tiles (no insul)		No
Neighbour/BED 1	as_FLOR-B006 #1001 © 200mm Concrete Floor slab with carpet-underfelt(no insul)		No

Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
ENTRY	1	Downlight		Sealed
Laundry	1	Downlight		Sealed
Laundry	1	Ceiling exhaust fan	300	Sealed
L/k/D	11	Downlight		Sealed
L/k/D	1	Ceiling exhaust fan	300	Sealed
BATH	1	Downlight		Sealed
BATH	1	Ceiling exhaust fan	300	Sealed
BED 1	5	Downlight		Sealed

Ceiling fans

Nationwide House Energy Rating Scheme* Certificate

Certificate number: **0003263779-01**

Certificate Date:

17 Oct 2018

★ Star rating:

6.2



Building features continued

Location	Number	Diameter (mm)
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None Present		
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Roof type

Construction	Added insulation	Roof colour
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as_ROOF-B013.rof #2046 © Concrete slab 200mm - WP Membrane surface - R2.0 insulation under slab - Susp. Ceiling under	R2.0	Medium
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Nationwide House Energy Rating Scheme* Certificate

Certificate number: 0003263779-01

Certificate Date: 17 Oct 2018

★ Star rating: 6.2



Additional information

Explanatory notes

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Nationwide House Energy Rating Scheme* Certificate

Certificate number: 0003263803-01

Certificate Date: 17 Oct 2018

★ Star rating: 5.5



Assessor details

Accreditation number: **20399**
Name: **Frances Turrisi**
Organisation: **GAT & Associates**
Email: **frances@gatassoc.com.au**
Phone: **02 9569 1100**
Declaration of interest: **No potential conflicts of interest to declare**
Software: **AccuRate Sustainability V2.3.3.13 SP3**
AAO: **ABSA**

Overview

Dwelling details

Street: **Unit 5, 91-93 McIntosh Road**
Suburb: **Narraweena**
State: **NSW** Postcode: **2099**
Type: **New** NCC Class: **2**
NatHERS climate zone: **56**
Lot/DP number: **102/868560** Exposure: **Suburban**

Key construction and insulation materials

(see following pages for details)

Construction: **Brick Veneer**
Concrete roof/Plasterboard Slab
Insulation: **R2.0 wall insulation**
Ceiling (uninsulated)
R1.0 floor insulation
Glazing: **Aluminium B SG Low Solar Gain**
Low-E: U = 5.60

Net floor area (m²)

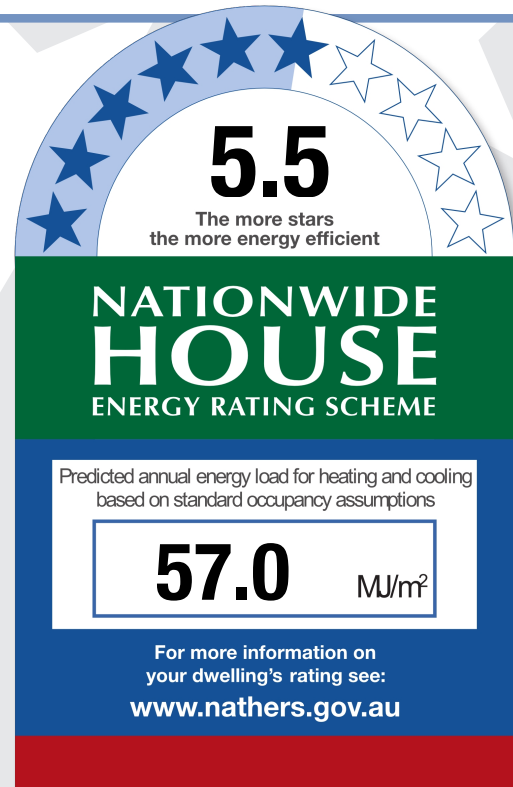
Conditioned: **75.0**
Unconditioned: **4.0**
Garage: **79.0**
TOTAL: **79.0**

Annual thermal performance loads (MJ/m²)

Heating: **36.0**
Cooling: **21.0**
TOTAL: **57.0**

Plan documents

Plan ref/date: **Sept.2018**
Prepared by: **Benson McCormack Architecture**



Ceiling penetrations

(see following pages for details)

Sealed: **10**
Unsealed: **0**
TOTAL:** **10**

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: **Halogen**

Window selection - default windows only

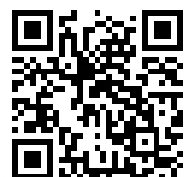
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-10% SHGC **5.5**
+10% SHGC **5.5**

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

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Nationwide House Energy Rating Scheme* Certificate

Certificate number: **0003263803-01**

Certificate Date:

17 Oct 2018

★ Star rating:

5.5



Building features

Window type and performance value

Window ID	Window type	U-value	SHGC
ALM-001-04 A	DEFAULTS: Aluminium A SG Low Solar Gain Low-E: U = 5.60: SHGC = 0.36	5.6	0.36
ALM-002-04 A	DEFAULTS: Aluminium B SG Low Solar Gain Low-E: U = 5.60: SHGC = 0.41	5.6	0.41

Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
LKD	ALM-002-04 A	D.U5.02	2610	4200	W	None
BED 1	ALM-002-04 A	W.U5.01	2210	1200	W	None
BED 2	ALM-001-04 A	W.U5.02	2200	1200	E	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-001	Brick Veneer	Glass fibre batt: R2.0	No
EW-005	Brick Veneer		No

External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
LKD	EW-005	1700	2700	E	Yes	
LKD	EW-001	4550	2700	W	Yes	
BED 1	EW-001	2500	2700	N	Yes	
BED 1	EW-001	200	2700	W	Yes	
BED 1	EW-001	3600	2700	W	No	
BED 1	EW-001	3600	2700	S	No	
ENSUITE	EW-001	1700	2700	S	No	
BED 2	EW-001	3100	2700	S	No	
BED 2	EW-001	2900	2700	E	No	
BATH	EW-001	1700	2700	S	No	

Internal wall type

ID	Wall type	Area (m²)	Insulation	Wall wrap or foil
IW-001	Plasterboard	55.6		No
IW-002	Plasterboard	10.0	Glass fibre batt: R1.0	No

Nationwide House Energy Rating Scheme* Certificate

Certificate number: **0003263803-01**

Certificate Date:

17 Oct 2018

★ Star rating:

5.5



Building features continued

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
LKD/Neighbour	as_FLOR-B006 #1001 © 200mm Concrete Floor slab with carpet-underfelt(no insul)	28.1			Carpet 10 + rubber underlay 8
LKD/Outdoor Air	carpet to air + R1.0 as_FLOR-B003 #2011 © 200mm Concrete Floor slab with carpet-underfelt(R1.0 insul under)	13.1		R1.0	Carpet 10 + rubber underlay 8
LKD/Outdoor Air	Tile to air + R1.0 as_FLOR-B003 #2051 © 200mm Concrete Floor slab with Ceramic tile floor (R1.0 insul underl)	1.5		R1.0	Ceramic tile
BED 1/Outdoor Air	carpet to air + R1.0 as_FLOR-B003 #2011 © 200mm Concrete Floor slab with carpet-underfelt(R1.0 insul under)	16.3		R1.0	Carpet 10 + rubber underlay 8
ENSUITE/Outdoor Air	Tile to air + R1.0 as_FLOR-B003 #2051 © 200mm Concrete Floor slab with Ceramic tile floor (R1.0 insul underl)	4.7		R1.0	Ceramic tile
BED 2/Outdoor Air	carpet to air + R1.0 as_FLOR-B003 #2011 © 200mm Concrete Floor slab with carpet-underfelt(R1.0 insul under)	11.4		R1.0	Carpet 10 + rubber underlay 8
BATH/Outdoor Air	carpet to air + R1.0 as_FLOR-B003 #2011 © 200mm Concrete Floor slab with carpet-underfelt(R1.0 insul under)	4.4		R1.0	Carpet 10 + rubber underlay 8

Ceiling type

Location	Construction	Added insulation	Roof space above
Neighbour/LKD	as_FLOR-B006 #1001 © 200mm Concrete Floor slab with carpet-underfelt(no insul)		No
Neighbour/BED 1	as_FLOR-B006 #1001 © 200mm Concrete Floor slab with carpet-underfelt(no insul)		No
Neighbour/ENSUITE	as_FLOR-B006 #1001 © 200mm Concrete Floor slab with carpet-underfelt(no insul)		No
Neighbour/BED 2	as_FLOR-B006 #1001 © 200mm Concrete Floor slab with carpet-underfelt(no insul)		No
Neighbour/BATH	as_FLOR-B006 #1001 © 200mm Concrete Floor slab with carpet-underfelt(no insul)		No

Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
LKD	17	Downlight		Sealed
LKD	2	Ceiling exhaust fan	300	Sealed
BED 1	6	Downlight		Sealed
ENSUITE	1	Downlight		Sealed
ENSUITE	1	Ceiling exhaust fan	300	Sealed
BED 2	4	Downlight		Sealed

Nationwide House Energy Rating Scheme* Certificate

Certificate number: **0003263803-01**

Certificate Date:

17 Oct 2018

★ Star rating:

5.5



Building features continued

BATH	1	Downlight		Sealed
BATH	1	Ceiling exhaust fan	300	Sealed

Ceiling fans

Location	Number	Diameter (mm)
None Present		

Roof type

Construction	Added insulation	Roof colour
as_ROOF-B013.rof #2046 © Concrete slab 200mm - WP Membrane surface - R2.0 insulation under slab - Susp. Ceiling under	R2.0	Medium

Nationwide House Energy Rating Scheme* Certificate

Certificate number: 0003263803-01

Certificate Date: 17 Oct 2018

★ Star rating: 5.5



Additional information

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Nationwide House Energy Rating Scheme* Certificate

Certificate number: 0003264728

Certificate Date: 17 Oct 2018

★ Star rating: 5.2



Assessor details

Accreditation number: **20399**
Name: **Frances Turrisi**
Organisation: **GAT & Associates**
Email: **frances@gatassoc.com.au**
Phone: **02 9569 1100**
Declaration of interest: **No potential conflicts of interest to declare**
Software: **AccuRate Sustainability V2.3.3.13 SP3**
AAO: **ABSA**

Overview

Dwelling details

Street: **Unit 6, 91-93 McIntosh Road**
Suburb: **Narraweena**
State: **NSW** Postcode: **2099**
Type: **New** NCC Class: **2**
NatHERS climate zone: **56**
Lot/DP number: **102/868560** Exposure: **Suburban**

Key construction and insulation materials

(see following pages for details)

Construction: **Brick Veneer**
Concrete roof/Plasterboard
Slab/Plasterboard
Insulation: **R2.0 wall insulation**
Ceiling (uninsulated)
Floor (uninsulated)
Glazing: **Aluminium A SG Clear: U = 6.70: SHGC = 0.57**

Net floor area (m²)

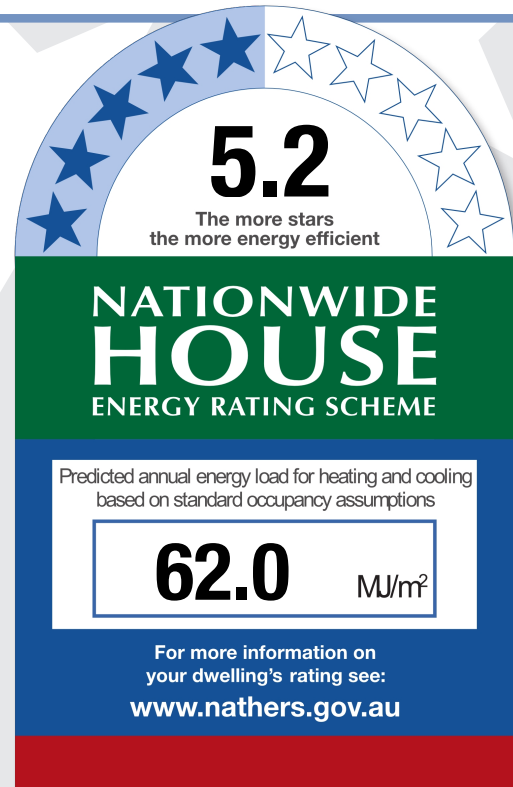
Conditioned: **94.0**
Unconditioned: **8.0**
Garage:
TOTAL: **102.0**

Annual thermal performance loads (MJ/m²)

Heating: **40.0**
Cooling: **22.0**
TOTAL: **62.0**

Plan documents

Plan ref/date: **Sept 2018**
Prepared by: **Benson McCormack Architecture**



Ceiling penetrations

(see following pages for details)

Sealed: **19**
Unsealed: **0**
TOTAL:** **19**

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: **Halogen**

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 **5.2**
+10% SHGC **5.3**

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

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Certificate Date:

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★ Star rating:

5.2



Building features

Window type and performance value

Window ID	Window type	U-value	SHGC
ALM-001-01 A	DEFAULTS: Aluminium A SG Clear: U = 6.70: SHGC = 0.57	6.7	0.57
ALM-002-01 A	DEFAULTS: Aluminium B SG Clear: U = 6.70: SHGC = 0.70	6.7	0.70

Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
L/K/D	ALM-001-01 A	W.U6.01	2210	1200	E	None
L/K/D	ALM-002-01 A	D.U6.02	2610	3280	N	None
BED 3	ALM-001-01 A	W.U6.02	2210	1200	E	None
BED 1	ALM-001-01 A	W.U6.03	2210	1200	E	None
BED 2	ALM-001-01 A	W.U6.04	2209	1200	S	None
BATH	ALM-002-01 A	W.U6.05	2100	600	S	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 ²)	Orientation	Outdoor shade	Indoor shade/diffuser
None Present						

External wall type

ID	Wall type	Insulation	Wall wrap or foil
EW-005	Brick Veneer		No
EW-006	Brick Veneer	Glass fibre batt: R2.0	No

External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
L/K/D	EW-005	2350	2700	N	Yes	
L/K/D	EW-005	6300	2700	W	Yes	
L/K/D	EW-006	3450	2700	E	No	
L/K/D	EW-006	3450	2700	N	Yes	
BED 3	EW-006	2950	2700	E	No	
BED 1	EW-006	4150	2700	E	No	
BED 1	EW-006	3600	2700	S	No	
ENSUITE	EW-006	1700	2700	S	No	
BED 2	EW-006	3000	2700	S	No	
BED 2	EW-006	1300	2700	W	No	
BATH	EW-006	1850	2700	S	No	
BATH	EW-005	1800	2700	N	Yes	

Internal wall type

Nationwide House Energy Rating Scheme* Certificate

Certificate number: **0003264728**

Certificate Date:

17 Oct 2018

★ Star rating:

5.2



Building features continued

ID	Wall type	Area (m²)	Insulation	Wall wrap or foil
IW-001	Plasterboard	89.2		No
IW-002	Plasterboard	17.8	Glass fibre batt: R1.0	No

Floors

Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
L/K/D/Neighbour	as_FLOR-B006 #1001 © 200mm Concrete Floor slab with carpet-underfelt(no insul)	48.0			Carpet 10 + rubber underlay 8
HALL/LAUNDRY/Neighbour	as_FLOR-B006 #1005 © 200mm Concrete Floor slab with ceramic tiles (no insul)	1.1			Ceramic tile
HALL/LAUNDRY/Neighbour	as_FLOR-B006 #1001 © 200mm Concrete Floor slab with carpet-underfelt(no insul)	5.5			Carpet 10 + rubber underlay 8
BED 3/Neighbour	as_FLOR-B006 #1001 © 200mm Concrete Floor slab with carpet-underfelt(no insul)	9.6			Carpet 10 + rubber underlay 8
BED 1/Neighbour	as_FLOR-B006 #1001 © 200mm Concrete Floor slab with carpet-underfelt(no insul)	14.7			Carpet 10 + rubber underlay 8
ENSUITE/Neighbour	as_FLOR-B006 #1005 © 200mm Concrete Floor slab with ceramic tiles (no insul)	4.9			Ceramic tile
BED 2/Neighbour	as_FLOR-B006 #1001 © 200mm Concrete Floor slab with carpet-underfelt(no insul)	10.5			Carpet 10 + rubber underlay 8
BATH/Outdoor Air	Tile to air + R1.0 as_FLOR-B003 #2051 © 200mm Concrete Floor slab with Ceramic tile floor (R1.0 insul underl)	6.6		R1.0	Ceramic tile
BATH/Neighbour	as_FLOR-B006 #1005 © 200mm Concrete Floor slab with ceramic tiles (no insul)	0.9			Ceramic tile

Ceiling type

Location	Construction	Added insulation	Roof space above
Neighbour/L/K/D	as_FLOR-B006 #1001 © 200mm Concrete Floor slab with carpet-underfelt(no insul)		No
Neighbour/HALL/LAUNDRY	as_FLOR-B006 #1001 © 200mm Concrete Floor slab with carpet-underfelt(no insul)		No
Neighbour/BED 1	as_FLOR-B006 #1001 © 200mm Concrete Floor slab with carpet-underfelt(no insul)		No
Neighbour/ENSUITE	as_FLOR-B006 #1001 © 200mm Concrete Floor slab with carpet-underfelt(no insul)		No
Neighbour/BED 2	as_FLOR-B006 #1001 © 200mm Concrete Floor slab with carpet-underfelt(no insul)		No
Neighbour/BATH	as_FLOR-B006 #1001 © 200mm Concrete Floor slab with carpet-underfelt(no insul)		No

Nationwide House Energy Rating Scheme* Certificate

Certificate number: **0003264728**

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★ Star rating:

5.2



Building features continued

Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
L/K/D	19	Downlight		Sealed
L/K/D	1	Ceiling exhaust fan	300	Sealed
HALL/LAUNDRY	2	Downlight		Sealed
HALL/LAUNDRY	1	Ceiling exhaust fan	300	Sealed
BED 3	4	Downlight		Sealed
BED 1	6	Downlight		Sealed
ENSUITE	1	Downlight		Sealed
ENSUITE	1	Ceiling exhaust fan	300	Sealed
BED 2	4	Downlight		Sealed
BATH	2	Downlight		Sealed
BATH	1	Ceiling exhaust fan	300	Sealed

Ceiling fans

Location	Number	Diameter (mm)
None Present		

Roof type

Construction	Added insulation	Roof colour
as_ROOF-B013.rof #2046 © Concrete slab 200mm - WP Membrane surface - R2.0 insulation under slab - Susp. Ceiling under	R2.0	Medium

Nationwide House Energy Rating Scheme* Certificate

Certificate number: 0003264728

Certificate Date: 17 Oct 2018

★ Star rating: 5.2



Additional information

Explanatory notes

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Nationwide House Energy Rating Scheme* Certificate

Certificate number: 0003264744

Certificate Date: 17 Oct 2018

★ Star rating: 5.1



Assessor details

Accreditation number: **20399**
Name: **Frances Turrisi**
Organisation: **GAT & Associates**
Email: **frances@gatassoc.com.au**
Phone: **02 9569 1100**
Declaration of interest: **No potential conflicts of interest to declare**
Software: **AccuRate Sustainability V2.3.3.13 SP3**
AAO: **ABSA**

Overview

Dwelling details

Street: **Unit 7, 91-93 McIntosh Road**
Suburb: **Narraweena**
State: **NSW** Postcode: **2099**
Type: **New** NCC Class: **2**
NatHERS climate zone: **56**
Lot/DP number: **102/868560** Exposure: **Suburban**

Key construction and insulation materials

(see following pages for details)

Construction: **Brick Veneer**
Concrete roof/Plasterboard
Slab/Plasterboard
Insulation: **R2.0 wall insulation**
Floor (uninsulated)
Glazing: **Aluminium B SG Low Solar Gain**
Low-E: U = 5.60

Net floor area (m²)

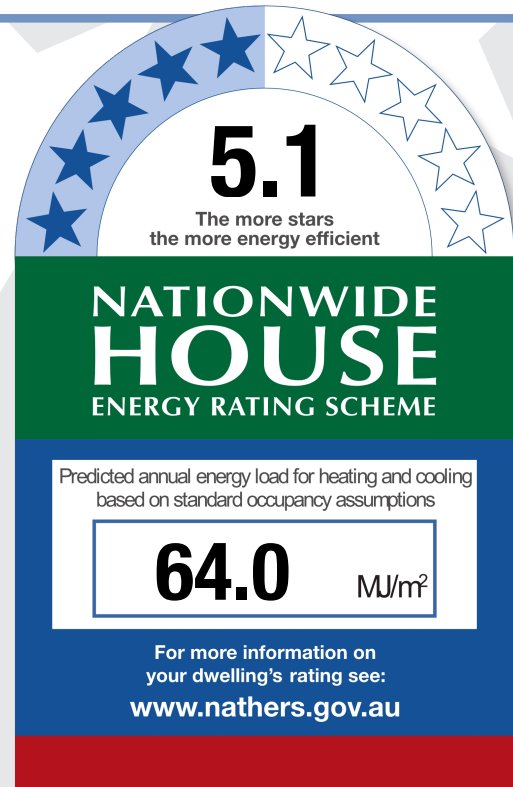
Conditioned: **90.0**
Unconditioned: **7.0**
Garage: **97.0**
TOTAL: **97.0**

Annual thermal performance loads (MJ/m²)

Heating: **35.0**
Cooling: **29.0**
TOTAL: **64.0**

Plan documents

Plan ref/date: **Sept.2018**
Prepared by: **Benson McCormack Architecture**



Ceiling penetrations

(see following pages for details)

Sealed: **39**
Unsealed: **0**
TOTAL:** **39**

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: **Halogen**

Window selection - default windows only

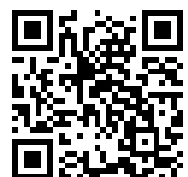
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+10% SHGC **5.1**

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



Nationwide House Energy Rating Scheme* Certificate

Certificate number: **0003264744**

Certificate Date:

17 Oct 2018

★ Star rating:

5.1



Building features

Window type and performance value

Window ID	Window type	U-value	SHGC
ALM-002-04 A	DEFAULTS: Aluminium B SG Low Solar Gain Low-E: U = 5.60: SHGC = 0.41	5.6	0.41
ALM-006-04 A	DEFAULTS: Aluminium B DG Argon Fill Low Solar Gain low-E -Clear: 4.8 U = 4.80: SHGC = 0.34		0.34

Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
BED 2	ALM-002-04 A	D.U7.06	2600	2375	W	None
BED 1	ALM-002-04 A	D.U7.05	2600	2000	W	None
BED 3	ALM-002-04 A	D.U7.04	2600	2000	N	None
L/K/D	ALM-006-04 A	D.U7.03	2600	4600	N	None
L/K/D	ALM-002-04 A	W.U7.01	2220	600	E	None
L/K/D	ALM-002-04 A	D.U7.02	2610	2000	E	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	Brick Veneer		No
EW-006	Brick Veneer	Glass fibre batt: R2.0	No

External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
ENTRY/HALL/LDR Y	EW-005	1900	2700	E	Yes	
BED 2	EW-006	3150	2700	W	Yes	
BED 1	EW-006	4500	2700	W	Yes	
BED 1	EW-006	2800	2700	N	Yes	
ENSUITE	EW-006	1750	2700	N	Yes	
BED 3	EW-006	3000	2700	N	No	
L/K/D	EW-006	6450	2700	N	Yes	
L/K/D	EW-006	5650	2700	E	Yes	
L/K/D	EW-005	1700	2700	S	Yes	

Internal wall type

Nationwide House Energy Rating Scheme* Certificate

Certificate number: **0003264744**

Certificate Date:

17 Oct 2018

★ Star rating:

5.1



Building features continued

ID	Wall type	Area (m²)	Insulation	Wall wrap or foil
IW-001	Plasterboard	103.5		No
IW-002	Plasterboard	14.6	Glass fibre batt: R1.0	No

Floors

Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
ENTRY/HALL/LDR Y/Neighbour	as_FLOR-B006 #1001 © 200mm Concrete Floor slab with carpet-underfelt(no insul)	10.4			Carpet 10 + rubber underlay 8
ENTRY/HALL/LDR Y/Neighbour	as_FLOR-B006 #1005 © 200mm Concrete Floor slab with ceramic tiles (no insul)	0.3			Ceramic tile
BATH/Neighbour	as_FLOR-B006 #1005 © 200mm Concrete Floor slab with ceramic tiles (no insul)	7.0			Ceramic tile
BED 2/Neighbour	as_FLOR-B006 #1001 © 200mm Concrete Floor slab with carpet-underfelt(no insul)	11.4			Carpet 10 + rubber underlay 8
BED 1/Neighbour	as_FLOR-B006 #1001 © 200mm Concrete Floor slab with carpet-underfelt(no insul)	16.4			Carpet 10 + rubber underlay 8
ENSUITE/Neighbour	as_FLOR-B006 #1005 © 200mm Concrete Floor slab with ceramic tiles (no insul)	4.8			Ceramic tile
BED 3/Neighbour	as_FLOR-B006 #1001 © 200mm Concrete Floor slab with carpet-underfelt(no insul)	11.5			Carpet 10 + rubber underlay 8
L/K/D/Neighbour	as_FLOR-B006 #1001 © 200mm Concrete Floor slab with carpet-underfelt(no insul)	32.3			Carpet 10 + rubber underlay 8
L/K/D/Neighbour	as_FLOR-B006 #1005 © 200mm Concrete Floor slab with ceramic tiles (no insul)	3.2			Ceramic tile

Ceiling type

Location	Construction	Added insulation	Roof space above
None Present			

Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
ENTRY/HALL/LDR Y	4	Downlight		Sealed
ENTRY/HALL/LDR Y	1	Ceiling exhaust fan	300	Sealed
BATH	2	Downlight		Sealed
BATH	1	Ceiling exhaust fan	300	Sealed
BED 2	4	Downlight		Sealed
BED 1	6	Downlight		Sealed

Nationwide House Energy Rating Scheme* Certificate

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17 Oct 2018

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5.1



Building features continued

ENSUITE	1	Downlight		Sealed
ENSUITE	1	Ceiling exhaust fan	300	Sealed
BED 3	4	Downlight		Sealed
L/K/D	14	Downlight		Sealed
L/K/D	1	Ceiling exhaust fan	300	Sealed

Ceiling fans

Location	Number	Diameter (mm)
None Present		

Roof type

Construction	Added insulation	Roof colour
as_ROOF-B013.rof #2046 © Concrete slab 200mm - WP Membrane surface - R2.0 insulation under slab - Susp. Ceiling under	R2.0	Medium

Nationwide House Energy Rating Scheme* Certificate

Certificate number: 0003264744

Certificate Date: 17 Oct 2018

★ Star rating: 5.1



Additional information

Explanatory notes

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Nationwide House Energy Rating Scheme* Certificate

Certificate number: 0003264751

Certificate Date: 17 Oct 2018

★ Star rating: 5.3



Assessor details

Accreditation number: **20399**
Name: **Frances Turrisi**
Organisation: **GAT & Associates**
Email: **frances@gatassoc.com.au**
Phone: **02 9569 1100**
Declaration of interest: **No potential conflicts of interest to declare**
Software: **AccuRate Sustainability V2.3.3.13 SP3**
AAO: **ABSA**

Overview

Dwelling details

Street: **Unit 8, 91-93 McIntosh Road**
Suburb: **Narraweena**
State: **NSW** Postcode: **2099**
Type: **New** NCC Class: **2**
NatHERS climate zone: **56**
Lot/DP number: **102/868560** Exposure: **Suburban**

Key construction and insulation materials

(see following pages for details)

Construction: **Brick Veneer**
Concrete roof/Plasterboard
Slab/Plasterboard
Insulation: **R2.0 wall insulation**
Floor (uninsulated)
Glazing: **Aluminium B DG Argon Fill Low Solar Gain low-E**

Net floor area (m²)

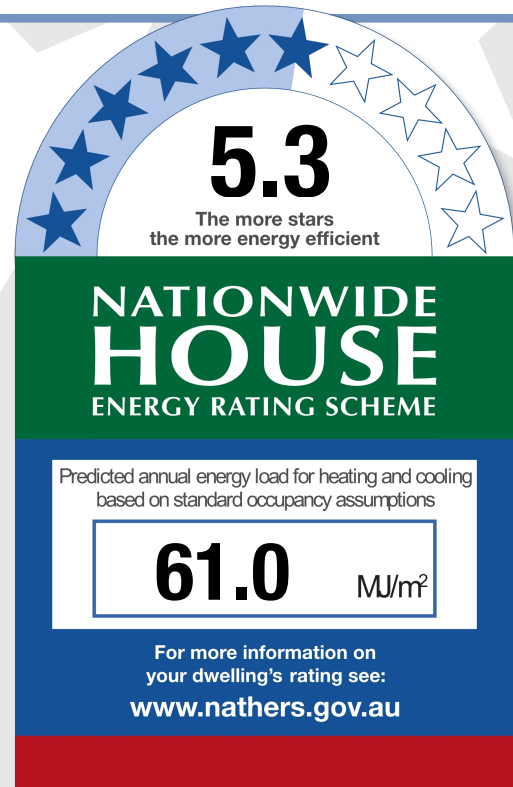
Conditioned: **81.0**
Unconditioned: **5.0**
Garage: **86.0**
TOTAL: **86.0**

Annual thermal performance loads (MJ/m²)

Heating: **33.0**
Cooling: **28.0**
TOTAL: **61.0**

Plan documents

Plan ref/date: **Sept.2018**
Prepared by: **Benson McCormack Architecture**



Ceiling penetrations

(see following pages for details)

Sealed: **35**
Unsealed: **0**
TOTAL:** **35**

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: **Halogen**

Window selection - default windows only

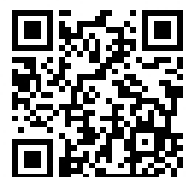
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-10% SHGC **5.3**
+10% SHGC **5.3**

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Nationwide House Energy Rating Scheme* Certificate

Certificate number: **0003264751**

Certificate Date:

17 Oct 2018

★ Star rating:

5.3



Building features

Window type and performance value

Window ID	Window type	U-value	SHGC
ALM-006-04 A	DEFAULTS: Aluminium B DG Argon Fill Low Solar Gain low-E -Clear: 4.8 U = 4.80: SHGC = 0.34		0.34

Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
LKD	ALM-006-04 A	D.U8.03	2600	3600	W	Outdoor venetians
BED 2	ALM-006-04 A	D.U8.02	2600	2000	W	None
BED 1	ALM-006-04 A	D.U8.04	2600	2000	W	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	Brick Veneer		No
EW-006	Brick Veneer	Glass fibre batt: R2.0	No

External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
ENTRY/HALL/LDR Y	EW-005	3000	2700	E	No	
LKD	EW-006	4450	2700	W	Yes	
BED 2	EW-006	3000	2700	W	Yes	
BATH	EW-005	1900	2700	E	Yes	
BED 1	EW-006	3600	2700	W	Yes	
BED 1	EW-006	1000	2700	W	Yes	

Internal wall type

ID	Wall type	Area (m²)	Insulation	Wall wrap or foil
IW-001	Plasterboard	88.6		No
IW-002	Plasterboard	57.6	Glass fibre batt: R1.0	No

Floors

Location	Construction	Area (m²)	Sub floor	Added	Covering
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Nationwide House Energy Rating Scheme* Certificate

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17 Oct 2018

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5.3



Building features continued

	ventilation	insulation
ENTRY/HALL/LDR Y/Neighbour	as_FLOR-B006 #1001 © 200mm 7.3 Concrete Floor slab with carpet-underfelt(no insul)	Carpet 10 + rubber underlay 8
ENTRY/HALL/LDR Y/Neighbour	as_FLOR-B006 #1005 © 200mm 1.3 Concrete Floor slab with ceramic tiles (no insul)	Ceramic tile
LKD/Neighbour	as_FLOR-B006 #1005 © 200mm 3.8 Concrete Floor slab with ceramic tiles (no insul)	Ceramic tile
LKD/Neighbour	as_FLOR-B006 #1001 © 200mm 31.2 Concrete Floor slab with carpet-underfelt(no insul)	Carpet 10 + rubber underlay 8
BED 2/Neighbour	as_FLOR-B006 #1001 © 200mm 11.8 Concrete Floor slab with carpet-underfelt(no insul)	Carpet 10 + rubber underlay 8
STUDY/Neighbour	as_FLOR-B006 #1001 © 200mm 4.1 Concrete Floor slab with carpet-underfelt(no insul)	Carpet 10 + rubber underlay 8
BATH/Neighbour	as_FLOR-B006 #1005 © 200mm 4.7 Concrete Floor slab with ceramic tiles (no insul)	Ceramic tile
ENSUITE/Neighbour	as_FLOR-B006 #1005 © 200mm 5.8 Concrete Floor slab with ceramic tiles (no insul)	Ceramic tile
BED 1/Neighbour	as_FLOR-B006 #1001 © 200mm 15.8 Concrete Floor slab with carpet-underfelt(no insul)	Carpet 10 + rubber underlay 8

Ceiling type

Location	Construction	Added insulation	Roof space above
None Present			

Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
ENTRY/HALL/LDR Y	2	Downlight		Sealed
ENTRY/HALL/LDR Y	1	Ceiling exhaust fan	300	Sealed
LKD	14	Downlight		Sealed
LKD	1	Ceiling exhaust fan	300	Sealed
BED 2	5	Downlight		Sealed
STUDY	1	Downlight		Sealed
BATH	1	Downlight		Sealed
BATH	1	Ceiling exhaust fan	300	Sealed
ENSUITE	2	Downlight		Sealed
ENSUITE	1	Ceiling exhaust fan	300	Sealed
BED 1	6	Downlight		Sealed

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17 Oct 2018

★ Star rating:

5.3



Building features continued

Ceiling fans

Location	Number	Diameter (mm)
None Present		

Roof type

Construction	Added insulation	Roof colour
as_ROOF-B013.rof #2046 © Concrete slab 200mm - WP Membrane surface - R2.0 insulation under slab - Susp. Ceiling under	R2.0	Medium

Nationwide House Energy Rating Scheme* Certificate

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★ Star rating: 5.3



Additional information

Explanatory notes

About this report

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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

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Disclaimer

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Contact

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For more information on energy efficient design and insulation visit www.yourhome.gov.au

Nationwide House Energy Rating Scheme* Certificate

Certificate number: 0003264769

Certificate Date: 17 Oct 2018

★ Star rating: 5.1



Assessor details

Accreditation number: **20399**
Name: **Frances Turrisi**
Organisation: **GAT & Associates**
Email: **frances@gatassoc.com.au**
Phone: **02 9569 1100**
Declaration of interest: **No potential conflicts of interest to declare**
Software: **AccuRate Sustainability V2.3.3.13 SP3**
AAO: **ABSA**

Overview

Dwelling details

Street: **Unit 9, 91-93 McIntosh Road**
Suburb: **Narraweena**
State: **NSW** Postcode: **2099**
Type: **New** NCC Class: **2**
NatHERS climate zone: **56**
Lot/DP number: **102/868560** Exposure: **Suburban**

Key construction and insulation materials

(see following pages for details)

Construction: **Brick Veneer**
Concrete roof/Plasterboard
Slab/Plasterboard
Insulation: **R2.0 wall insulation**
Floor (uninsulated)
Glazing: **Aluminium A SG Low Solar Gain**
Low-E: U = 5.60

Net floor area (m²)

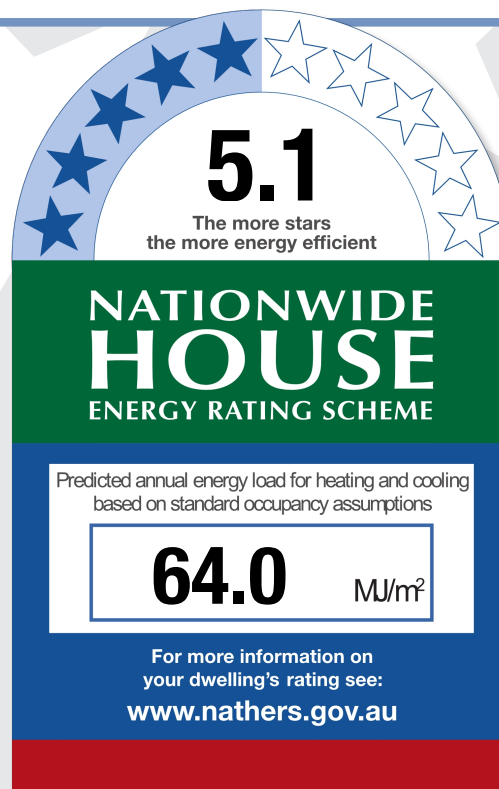
Conditioned: **110.0**
Unconditioned: **5.0**
Garage: **115.0**
TOTAL: **115.0**

Annual thermal performance loads (MJ/m²)

Heating: **36.0**
Cooling: **28.0**
TOTAL: **64.0**

Plan documents

Plan ref/date: **Sept.2018**
Prepared by: **Benson McCormack Architecture**



Ceiling penetrations

(see following pages for details)

Sealed: **48**
Unsealed: **0**
TOTAL:** **48**

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: **Halogen**

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 **5.1**
+10% SHGC **5.1**

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

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5.1



Building features

Window type and performance value

Window ID	Window type	U-value	SHGC
ALM-002-04 A	DEFAULTS: Aluminium B SG Low Solar Gain Low-E: U = 5.60: SHGC = 0.41	5.6	0.41
ALM-001-04 A	DEFAULTS: Aluminium A SG Low Solar Gain Low-E: U = 5.60: SHGC = 0.36	5.6	0.36
ALM-006-04 A	DEFAULTS: Aluminium B DG Argon Fill Low Solar Gain low-E -Clear: 4.8 U = 4.80: SHGC = 0.34		0.34

Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
L/K/D	ALM-006-04 A	D.U9.02	2600	3900	W	None
L/K/D	ALM-001-04 A	W.U9.06	2210	900	S	None
L/K/D	ALM-001-04 A	W.U9.05	2210	900	S	None
ensuite	ALM-002-04 A	W.U9.04	2100	600	S	None
Bed 1	ALM-001-04 A	W.U9.03	2210	1200	E	None
Bed 2	ALM-001-04 A	W.U9.02	2210	1200	E	None
Bed 3	ALM-001-04 A	W.U9.01	2210	1200	E	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	Brick Veneer		No
EW-006	Brick Veneer	Glass fibre batt: R2.0	No

External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Entry/Hall	EW-005	1100	2700	N	Yes	
L/K/D	EW-006	6400	2700	W	Yes	
L/K/D	EW-006	7250	2700	S	No	
L/K/D	EW-006	1800	2700	E	No	
ensuite	EW-006	3400	2700	S	No	
Bed 1	EW-006	3600	2700	S	No	
Bed 1	EW-006	4400	2700	E	No	
Bed 2	EW-006	2900	2700	E	No	
Bed 3	EW-006	2950	2700	E	No	
Bed 3	EW-005	1000	2700	N	Yes	

Nationwide House Energy Rating Scheme* Certificate

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17 Oct 2018

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5.1



Building features continued

Internal wall type

ID	Wall type	Area (m²)	Insulation	Wall wrap or foil
IW-001	Plasterboard	97.7		No
IW-002	Plasterboard	42.7	Glass fibre batt: R1.0	No

Floors

Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Entry/Hall/Neighbour	as_FLOR-B006 #1001 © 200mm Concrete Floor slab with carpet-underfelt(no insul)	14.9			Carpet 10 + rubber underlay 8
Laundry/Neighbour	as_FLOR-B006 #1005 © 200mm Concrete Floor slab with ceramic tiles (no insul)	4.7			Ceramic tile
Bath/Neighbour	as_FLOR-B006 #1005 © 200mm Concrete Floor slab with ceramic tiles (no insul)	7.3			Ceramic tile
L/K/D/Neighbour	as_FLOR-B006 #1005 © 200mm Concrete Floor slab with ceramic tiles (no insul)	10.9			Ceramic tile
L/K/D/Neighbour	as_FLOR-B006 #1001 © 200mm Concrete Floor slab with carpet-underfelt(no insul)	33.8			Carpet 10 + rubber underlay 8
ensuite/Neighbour	as_FLOR-B006 #1005 © 200mm Concrete Floor slab with ceramic tiles (no insul)	5.9			Ceramic tile
Bed 1/Neighbour	as_FLOR-B006 #1001 © 200mm Concrete Floor slab with carpet-underfelt(no insul)	15.5			Carpet 10 + rubber underlay 8
Bed 2/Neighbour	as_FLOR-B006 #1001 © 200mm Concrete Floor slab with carpet-underfelt(no insul)	10.6			Carpet 10 + rubber underlay 8
Bed 3/Neighbour	as_FLOR-B006 #1001 © 200mm Concrete Floor slab with carpet-underfelt(no insul)	10.6			Carpet 10 + rubber underlay 8

Ceiling type

Location	Construction	Added insulation	Roof space above
None Present			

Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
Entry/Hall	6	Downlight		Sealed
Laundry	1	Downlight		Sealed
Laundry	1	Ceiling exhaust fan	300	Sealed
Bath	2	Downlight		Sealed
Bath	1	Ceiling exhaust fan	300	Sealed
L/K/D	18	Downlight		Sealed

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5.1



Building features continued

L/K/D	1	Ceiling exhaust fan	300	Sealed
ensuite	2	Downlight		Sealed
ensuite	1	Ceiling exhaust fan	300	Sealed
Bed 1	6	Downlight		Sealed
Bed 1	1	Ceiling exhaust fan	300	Sealed
Bed 2	4	Downlight		Sealed
Bed 3	4	Downlight		Sealed

Ceiling fans

Location	Number	Diameter (mm)
None Present		

Roof type

Construction	Added insulation	Roof colour
as_ROOF-B013.rof #2046 © Concrete slab 200mm - WP Membrane surface - R2.0 insulation under slab - Susp. Ceiling under	R2.0	Medium

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