Certificate number: **0003263654-02** 

Certificate Date: 17 Oct 2018



#### 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			
Туре:	New	NCC Class:	2			
.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		NatHERS	_			
Lot/DP		climate zone:	56			
number:	102/868560	Exposure:	Suburban			

#### Key construction and insulation materials

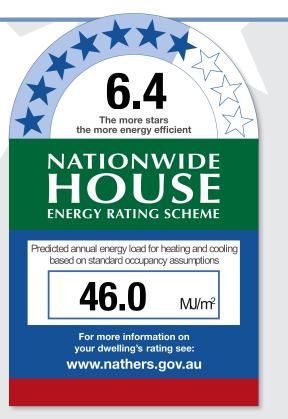
(see following pages for details)

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

Net floor area (m <sup>2</sup> )		Annual thermal	
Conditioned: Unconditioned:	78.0 6.0	performanc (MJ/m <sup>2</sup> )	e loads
Garage:	0.0	Heating:	22.0
TOTAL:	84.0	Cooling:	24.0
		TOTAL:	46.0

#### **Plan documents**

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



Ceiling penetrat (see following pages for		maxin penet	TE: This total is the num number of ceiling rations allowed to a	
Sealed: 19		ceiling (under a roof) for this certificate. If this number is		
Unsealed:	0		ded in construction then ertificate IS NOT VALID	
	-	penet	of ceiling insulation for the rations listed has been into account with the rating.	
Principle downlight ty	pe: Hal	ogen	1	
Principle downlight ty Window selection default windows	י ו -	ogen	Scan to access this certificate online and confirm this is valid.	
Window selection	<ul> <li>n -</li> <li>only</li> <li>values:</li> <li>ominated</li> <li>on page 2</li> </ul>		Scan to access this certificate online and	
Window selection default windows Note on allowable window With a 10% tolerance to the n SHGC window values shown	<ul> <li>n -</li> <li>only</li> <li>values:</li> <li>ominated</li> <li>on page 2</li> </ul>		Scan to access this certificate online and	
Window selection default windows Note on allowable window With a 10% tolerance to the n SHGC window values shown the following ratings are achie	<ul> <li>n -</li> <li>only</li> <li>values:</li> <li>ominated</li> <li>on page 2</li> </ul>		Scan to access this certificate online and	

to SHGC, the U-value can always be lower but not higher than the values stated on page 2.



Certificate number: **0003263654-02** Certificate Date:

17 Oct 2018

★ Star rating:

6.4 NATI

#### **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 Presen	t						
Roof windo	w and skyligh	nt schedule					
Location	ID	Roof window/skylight no.	Area (m²)	Orientation	Outdoor shade	Indoor shade/diffuser	
None Presen	t				2		

#### **External wall type** Insulation Wall wrap or foil ID Wall type Glass fibre batt: R2.0 EW-001 **Brick Veneer** No EW-002 **Brick Veneer** No **External wall schedule** Orientation Location ID Width (mm) Height (mm) **Fixed Shade Eaves** (mm) ENTRY 2700 S Yes EW-002 1700 LKD EW-001 3450 2700 Ν No W LKD EW-001 3000 2700 Yes LKD Е Yes EW-001 3000 2700 LKD EW-001 3300 2700 Ν Yes BED 2 2700 Ν No EW-001 3100 W BED 2 EW-001 3100 2700 Yes 3450 2700 Е No BED 2 EW-001 Е BATH EW-001 2600 2700 No Е BED 1 EW-001 4200 2700 No S BED 1 EW-001 3450 2700 No

Internal wall type					
ID	Wall type	Area (m <sup>2</sup> )	Insulation	Wall wrap or foil	
IW-001	Plasterboard	51.2		No	
IW-002	Plasterboard	33.5	Glass fibre batt: R1.0	No	

Certificate number: 0003263654-02 Certificate Date:

17 Oct 2018

★ Star rating:

6.4

#### **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)				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/Neighbo ur	as_FLOR-B006 #1005 © 200mm Concrete Floor slab with ceramic tiles (no insul)	4.5			Ceramic tile

#### **Ceiling type** Location Construction Added **Roof space** insulation above Neighbour/ENTRY as FLOR-B006 #1001 © 200mm Concrete Floor slab with No carpet-underfelt(no insul) Neighbour/LKD as\_FLOR-B006 #1001 © 200mm Concrete Floor slab with No carpet-underfelt(no insul) Neighbour/ENSUIT as\_FLOR-B006 #1005 © 200mm Concrete Floor slab with No Е ceramic tiles (no insul)

#### **Ceiling penetrations**

Location	Number	Туре	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

Nationwide House Energy Rating Scheme* Certificate						A A A A A A A A A A A A A A A A A A A
Certificate nu	mber: 0003263654-02	Certificate Date:	17 Oct 2018	★ Star rating:	6.4	NATIONWIDE HOUSE ENERGY RATING SCHEME
Building fe	atures continued					
BATH	2	Downlight			Sealed	
BATH	1	Ceiling exhaust fan		300	Sealed	
BED 1	5	Downlight			Sealed	

Downlight

Ceiling exhaust fan

ENSUITE

ENSUITE

1

1

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

Sealed

Sealed

300

Certificate number: 0003263654-02

Certificate Date: 17 Oct 2018

★ Star rating: 6.4



#### **Additional information**

# **Explanatory notes**

#### About this report

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

#### **General Information**

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

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

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

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

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

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

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

#### **Accredited Assessors**

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

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

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

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

#### Disclaimer

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

#### Contact

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

Certificate number: 0003263712-01

Certificate Date: 17 Oct 2018



#### 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**

	Unit 2, 91-93 Mcintosh Road					
Suburb:	Narraweena					
State:	NSW	Postcode:	2099			
Туре:	New	NCC Class: NatHERS	2			
Lot/DP		climate zone:	56			
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)
Glazing:	Floor (uninsulated) Aluminium B SG Low Solar Gain Low-E: U = 5.60

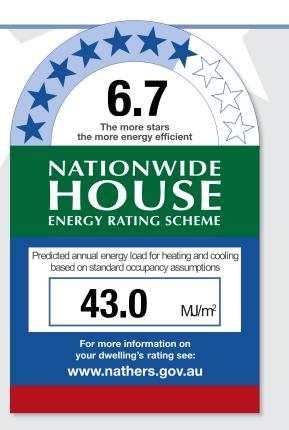
#### Net floor area (m<sup>2</sup>)

Conditioned: Unconditioned:	81.0 2.0	performanc (MJ/m²)	e loads
Garage:	2.0	Heating:	20.0
TOTAL:	83.0	Cooling:	23.0
		TOTAL:	43.0

**Annual thermal** 

#### **Plan documents**

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



★ Star rating: 6.7

Ceiling penetrations(see following pages for details)Sealed:15Unsealed:0TOTAL:**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 exceded 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. Ogen
Window selection - default windows only	Scan to access this certificate online and confirm this is valid.
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 <b>6.7</b>	

#### +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.



Certificate number: 0003263712-01 Certificate Date:

ALM-001-04 A

W.U2.02

17 Oct 2018

★ Star rating:

W

None

1200

6.7 NATIO

# **Building features**

BED 1

willow type and performance value	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: 5.6 O SHGC = 0.36						
ALM-002-04 A	DEFAULTS: All SHGC = 0.41	uminium B SG L	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	Ν	None	
LKD	ALM-001-04 A	W.U2.01	2209	1200	Ν	None	
BED 2	ALM-001-04 A	W.U2.03	2210	1200	W	None	

2210

Roof window and skylight type and performance value								
ID	Window type				U-value	SHGC		
None Present								
Roof window	and skylight sch	edule						
Location	ID	Roof	$\Delta rea (m^2)$	Orientation	Outdoor shade	Indoor		

External wall type								
ID	Wall type Insulation				Wa	ll wrap or foi		
EW-001	Brick Veneer		Glass fibre ba	tt: R2.0	No	)		
EW-005	Brick Veneer	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	Ν	Yes			
LKD	EW-001	3000	2700	E	Yes			
LKD	EW-001	3450	2700	Ν	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	Ν	No			

Internal wall type							
ID	Wall type	Area (m <sup>2</sup> )	Insulation	Wall wrap or foil			
IW-001	Plasterboard	76.1		No			
IW-002	Plasterboard	37.0	Glass fibre batt: R1.0	No			

Certificate number: 0003263712-01 Certificate Date:

17 Oct 2018

★ Star rating:

6.7 N

## **Building features continued**

#### Floors

Location	Construction	Area (m <sup>2</sup> )	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/Neighb our	as_FLOR-B006 #1005 © 200mm Concrete Floor slab with ceramic tiles (no insul)				Ceramic tile
BATH/Neighbour	as_FLOR-B006 #1005 © 200mm Concrete Floor slab with ceramic tiles (no insul)				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/Neighbo ur	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/LAUND RY	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

Certificate number: **0003263712-01** Certificate Date:

17 Oct 2018



****	*****
NATI HC	ONWIDE

6.7

# 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	Туре	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 None Present

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

Certificate number: 0003263712-01

Certificate Date: 17 Oct 2018

★ Star rating: 6.7



#### **Additional information**

# **Explanatory notes**

#### About this report

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

#### **General Information**

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

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

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

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

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

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

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

#### **Accredited Assessors**

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

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

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

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

#### Disclaimer

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

#### Contact

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

Certificate number: 0003263753-01

Certificate Date: 17 Oct 2018

★ Star rating: 6.0



#### 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 3, 91-93 Mcint	osh Road	
Suburb:	Narraweena		
State:	NSW	Postcode:	2099
Туре:	New	NCC Class: NatHERS	2
Lot/DP		climate zone:	56
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)
Glazing:	Floor (uninsulated) Aluminium B SG Low Solar Gain Low-E: U = 5.60

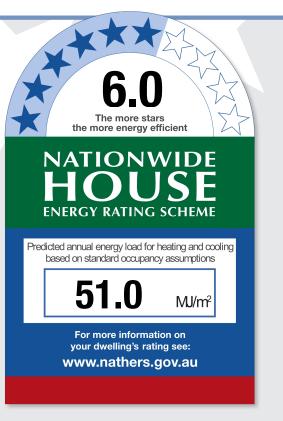
#### Net floor area (m<sup>2</sup>)

	()		
Conditioned: Unconditioned:	48.0 3.0	performanc (MJ/m <sup>2</sup> )	e loads
Garage:	0.0	Heating:	25.0
TOTAL:	51.0	Cooling:	25.0
		TOTAL:	51.0

**Annual thermal** 

#### **Plan documents**

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



Ceiling penetrations (see following pages for details)	**NOTE: This total is the maximum number of ceiling penetrations allowed to a
Sealed:5Unsealed:0TOTAL:**5	<ul> <li>ceiling (under a roof) for this certificate. If this number is exceded 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.</li> </ul>
Principle downlight type: Hal Window selection - default windows only	Scan to access this certificate online and
Note on allowable window values: With a 10% tolerance to the nominated SHGC window values shown on page 2 he following ratings are achieved:	confirm this is valid.
-10% SHGC <b>6.0</b> +10% SHGC <b>5.9</b>	
NB: This tolerance ONLY applies	

to SHGC, the U-value can always be lower but not higher than the values stated on page 2.



Certificate number: 0003263753-01 Certificate Date:

17 Oct 2018

★ Star rating:



6.0

# **Building features**

Window type a	and performanc	e value				
Window ID	Window type				U-value	SHGC
ALM-001-04 A	DEFAULTS: Alu SHGC = 0.36	uminium A SG Lo	ow Solar Gain Lo	w-E: U = 5.60:	5.6	0.36
ALM-002-04 A	DEFAULTS: Alu SHGC = 0.41	uminium B SG Lo	ow Solar Gain Lo	w-E: U = 5.60:	5.6	0.41
Window sched	lule					
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

Orientation Outdoor shade Indoor shade/diffuser

Wall wrap or foil No No
No
e Eaves (mm)

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		

Location Construction Area (m <sup>2</sup> ) Sub floor Added Covering	Floors					
	Location	Construction	Area (m <sup>2</sup> )	Sub floor ventilation	Added insulation	Covering

Certificate number: 0003263753-01 Certificate Date:

17 Oct 2018

★ Star rating:

6.0

<b>Building</b>	features	continued

ENTRY/Neighbour	as_FLOR-B006 #1005 © 200mm Concrete Floor slab with ceramic tiles (no insul)			Ceramic tile
Laundry/Neighbour	as_FLOR-B006 #1005 © 200mm Concrete Floor slab with ceramic tiles (no insul)	2.6		Ceramic tile
L/k/D/Neighbour	as_FLOR-B006 #1005 © 200mm Concrete Floor slab with ceramic tiles (no insul)			Ceramic tile
L/k/D/Neighbour	as_FLOR-B006 #1001 © 200mm Concrete Floor slab with carpet- underfelt(no insul)	24.0		Carpet 10 + rubber underlay 8
BATH/Neighbour	as_FLOR-B006 #1005 © 200mm Concrete Floor slab with ceramic tiles (no insul)			Ceramic tile
BED 1/Neighbour	as_FLOR-B006 #1001 © 200mm Concrete Floor slab with carpet- underfelt(no insul)	6.9		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	Туре	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 Ra	ting Scheme* Co	ertificate			
Certificate nun	nber: 0003263753-01	Certificate Date:	17 Oct 2018	★ Star rating:	6.0	NATIONW HOUS ENERGY RATING SO
Building fea	atures continued					
Location	Number	Diameter (r	nm)			
None Presen	t					
Roof type						
Construction	1			Added insulation	Roof co	our
	)13.rof #2046 © Concre ion under slab - Susp. (	R2.0	Medium			

Certificate number: 0003263753-01

Certificate Date: 17 Oct 2018

★ Star rating: 6.0



#### **Additional information**

# **Explanatory notes**

#### About this report

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

#### **General Information**

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

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

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

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

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

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

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

#### **Accredited Assessors**

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

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

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

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

#### Disclaimer

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

#### Contact

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

Certificate number: 0003263779-01

Certificate Date: 17 Oct 2018



#### 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			
Туре:	New	NCC Class: NatHERS	2			
Lot/DP		climate zone:	56			
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)
Glazing:	Floor (uninsulated) Aluminium B SG Low Solar Gain Low-E: U = 5.60

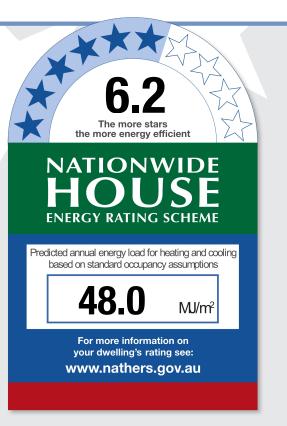
#### Net floor area (m<sup>2</sup>)

Conditioned: 48.0		performand (MJ/m <sup>2</sup> )	ce loads
Unconditioned: Garage:	3.0	Heating:	24.0
TOTAL:	51.0	Cooling:	24.0
		TOTAL:	48.0

**Annual thermal** 

#### **Plan documents**

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



★ Star rating: 6.2

Ceiling penetrations (see following pages for details	maxi	TE: This total is the mum number of ceiling trations allowed to a
Sealed:5Unsealed:0TOTAL:**5	certified exce this of and a Loss pene	g (under a roof) for this icate. If this number is ded in construction then certificate IS NOT VALID a new certificate is required. of ceiling insulation for the trations listed has been n into account with the rating.
Principle downlight type: Ha	alogei	n
	alogei	Scan to access this certificate online and
Principle downlight type: Ha <b>Nindow selection -</b> <b>Jefault windows only</b> Iote on allowable window values: <i>V</i> ith a 10% tolerance to the nominated HGC window values shown on page the following ratings are achieved: -10% SHGC <b>6.2</b>	d	Scan to access this

to SHGC, the U-value can always be lower but not higher than the values stated on page 2.



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: Alu SHGC = 0.36	uminium A SG Lov	w Solar Gain Lo	w-E: U = 5.60:	5.6	0.36
ALM-002-04 A	DEFAULTS: Alu SHGC = 0.41	uminium B SG Lov	w Solar Gain Lo	w-E: U = 5.60:	5.6	0.41
Window sched	dule					
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 windo	w and skyligh	t type and performanc	e value			
ID None Presen	Window	type			U-value	SHGC
Roof windo	w and skyligh	it schedule				
Location	ID	Roof window/skylight no.	Area (m²)	Orientation	Outdoor shade	Indoor shade/diffuser
None Presen	nt					

External wa	ll type					
ID	Wall type		Insulation		Wa	ll wrap or foil
EW-001	Brick Veneer		Glass fibre ba	tt: R2.0	No	
EW-008	Brick Veneer		Glass fibre ba	tt: R1.0	No	
External wa	II 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	Ν	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

Location Construction Area (m <sup>2</sup> ) Sub floor Added Covering	Floors					
	Location	Construction	Area (m <sup>2</sup> )	Sub floor ventilation	Added insulation	Covering

Certificate number: 0003263779-01 Certificate Date:

17 Oct 2018

★ Star rating:



Building	a features	continued
Danang	Jicatares	

ENTRY/Neighbour	as_FLOR-B006 #1005 © 200mm Concrete Floor slab with ceramic tiles (no insul)	3.5		Ceramic tile
Laundry/Neighbour	as_FLOR-B006 #1005 © 200mm Concrete Floor slab with ceramic tiles (no insul)	2.6		Ceramic tile
L/k/D/Neighbour	as_FLOR-B006 #1005 © 200mm Concrete Floor slab with ceramic tiles (no insul)	4.4		Ceramic tile
L/k/D/Neighbour	as_FLOR-B006 #1001 © 200mm Concrete Floor slab with carpet- underfelt(no insul)	24.0		Carpet 10 + rubber underlay 8
BATH/Neighbour	as_FLOR-B006 #1005 © 200mm Concrete Floor slab with ceramic tiles (no insul)	4.4		Ceramic tile
BED 1/Neighbour	as_FLOR-B006 #1001 © 200mm Concrete Floor slab with carpet- underfelt(no insul)	6.9		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	Туре	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 Ra	ting Scheme* Co	ertificate			
Certificate nur	nber: 0003263779-01	Certificate Date:	17 Oct 2018	★ Star rating:	6.2	NATIONW HOU ENERGY RATING S
Building fea	atures continued					
Location	Number	Diameter (r	nm)			
None Presen	t					
Roof type						
Construction	1			Added insulation	Roof co	lour
as_ROOF-B013.rof #2046 © Concrete slab 200mm - WP Membrane surface - R2.0 insulation under slab - Susp. Ceiling under			R2.0	Medium		

Certificate number: 0003263779-01

Certificate Date: 17 Oct 2018

★ Star rating: 6.2



#### **Additional information**

# **Explanatory notes**

#### About this report

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

#### **General Information**

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

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

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

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

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

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

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

#### **Accredited Assessors**

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

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

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

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

#### Disclaimer

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

#### Contact

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

Certificate number: 0003263803-01

Certificate Date: 17 Oct 2018



#### 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 Mcint	osh Road	
Suburb:	Narraweena		
State:	NSW	Postcode:	2099
Type:	New	NCC Class:	2
.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		NatHERS	_
Lot/DP		climate zone:	56
number:	102/868560	Exposure:	Suburban

#### Key construction and insulation materials

(see following pages for details)

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

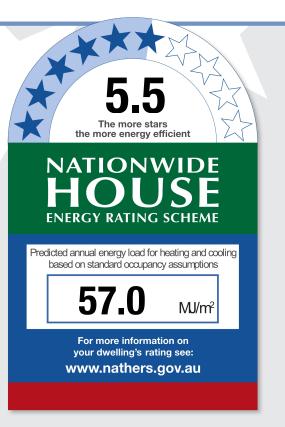
#### Net floor area (m<sup>2</sup>)

Conditioned: Unconditioned:	75.0	performanc (MJ/m²)	ce loads	
Garage:	4.0	Heating:	36.0	
TOTAL:	79.0	Cooling:	21.0	
		TOTAL:	57.0	

**Annual thermal** 

#### **Plan documents**

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



Ceiling penet	rations	**NOTE: This total is the maximum number of ceiling
(see following page	s for details)	
Sealed:	10	<ul> <li>ceiling (under a roof) for this certificate. If this number is</li> </ul>
Unsealed:	0	exceded in construction then this certificate IS NOT VALID
TOTAL:**	10	and a new certificate is required
Dringinla downligh		taken into account with the rating.
Principle downligh	пт туре: на	logen
Window select	ion -	Scan to access this certificate online and confirm this is valid.
Window select default windov Note on allowable wind With a 10% tolerance to t SHGC window values sh the following ratings are a	tion - vs only dow values: the nominated own on page 2	Scan to access this certificate online and confirm this is valid.
Window select default windov Note on allowable wind With a 10% tolerance to t SHGC window values sh	tion - vs only dow values: the nominated own on page 2 achieved:	Scan to access this certificate online and confirm this is valid.
Window select default window Note on allowable wind With a 10% tolerance to t SHGC window values sh the following ratings are a	tion - vs only dow values: the nominated own on page 2 achieved:	Scan to access this certificate online and confirm this is valid.

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



Certificate number: 0003263803-01 Certificate Date:

17 Oct 2018

★ Star rating:



# **Building features**

Window ID	Window type				U-value	SHGC
ALM-001-04 A	DEFAULTS: All SHGC = 0.36	uminium A SG Lo	ow Solar Gain Lo	w-E: U = 5.60:	5.6	0.36
ALM-002-04 A	DEFAULTS: All SHGC = 0.41	uminium B SG Lo	ow Solar Gain Lo	w-E: U = 5.60:	5.6	0.41
Window sche	dule					
Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
	ALM-002-04 A	D.U5.02	2610	4200	W	None
LKD						
LKD BED 1	ALM-002-04 A	W.U5.01	2210	1200	W	None

ID	Window type				U-value	SHGC
None Present						
Roof window	and skylight sch	nedule				
Location	ID	Roof window/skylight	Area (m²)	Orientation	Outdoor shade	Indoor shade/diffuser

External wal	l type					
ID	Wall type		Insulation		Wa	all wrap or foil
EW-001	Brick Veneer		Glass fibre ba	tt: R2.0	No	)
EW-005	Brick Veneer				No	)
External wal	l 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	Ν	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

Certificate number: 0003263803-01 Certificate Date:

17 Oct 2018



★ Star rating:

**Building features continued** 

	-	
n	n	rs
$\sim$	$\mathbf{\nabla}$	

Location	Construction	Area (m²)	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

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/ENSUIT E	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 pene	Ceiling penetrations							
Location	Number	Туре	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 H	louse Energy Ra	ating Scheme* Cer	tificate			
Certificate numb	er: 0003263803-01	Certificate Date:	17 Oct 2018	★ Star rating:	5.5	NATIONWIDE HOUSE ENERGY RATING SCHEME
Building feat	ures continued					
BATH	1	Downlight			Sealed	
BATH	1	Ceiling exhaust fan		300	Sealed	
Ceiling fans						
Location	Number	Diameter (mi	n)			
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

Certificate number: 0003263803-01

Certificate Date: 17 Oct 2018

📩 🖈 Star rating: 5.5



#### **Additional information**

# **Explanatory notes**

#### About this report

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

#### **General Information**

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

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

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

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

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

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

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

#### **Accredited Assessors**

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

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

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

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

#### Disclaimer

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

#### Contact

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

Certificate number: 0003264728

Certificate Date: 17 Oct 2018



#### 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				
Туре:	New	NCC Class:	2				
Lot/DP		NatHERS climate zone:	56				
number:	102/868560	Exposure:	Suburban				

#### Key construction and insulation materials

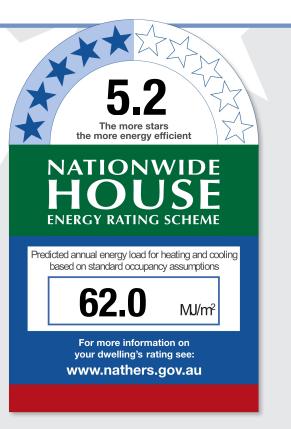
(see following pages for details)

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
Ŭ	= 0.57

Net floor area (m <sup>2</sup> )		Annual thermal	
Conditioned: Unconditioned:	94.0 8.0	performanc (MJ/m <sup>2</sup> )	e loads
Garage: TOTAL:	102.0	Heating: Cooling:	40.0 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: Unsealed: TOTAL:**	19 0 19	certifience excert this of and a Loss pene	g (under a roof) for this icate. If this number is ded in construction then certificate IS NOT VALID a new certificate is require of ceiling insulation for the trations listed has been n into account with the rating		
Data state a state will also be			-		
Principle downlight t	type: <b>Ha</b> l	logei	n		
Principle downlight t Window selection default windows	on -		n Scan to access this certificate online and confirm this is valid.		
Window selectio	on - only w values: nominated n on page 2	-	Scan to access this certificate online and		
Window selection default windows Note on allowable window With a 10% tolerance to the SHGC window values show	on - only w values: nominated n on page 2	-	Scan to access this certificate online and		

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.



Nationwide House Energy R	ating Scheme* Co	ertificate			A TARK
Certificate number: 0003264728	Certificate Date:	17 Oct 2018	★ Star rating:	5.2	NATIONWIDE HOUSE

# **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

Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
ALM-001-01 A	W.U6.01	2210	1200	E	None
ALM-002-01 A	D.U6.02	2610	3280	N	None
ALM-001-01 A	W.U6.02	2210	1200	E	None
ALM-001-01 A	W.U6.03	2210	1200	E	None
ALM-001-01 A	W.U6.04	2209	1200	S	None
ALM-002-01 A	W.U6.05	2100	600	S	None
	ALM-001-01 A ALM-002-01 A ALM-001-01 A ALM-001-01 A ALM-001-01 A	ALM-001-01 AW.U6.01ALM-002-01 AD.U6.02ALM-001-01 AW.U6.02ALM-001-01 AW.U6.03ALM-001-01 AW.U6.04	ALM-001-01 AW.U6.012210ALM-002-01 AD.U6.022610ALM-001-01 AW.U6.022210ALM-001-01 AW.U6.032210ALM-001-01 AW.U6.042209	ALM-001-01 AW.U6.0122101200ALM-002-01 AD.U6.0226103280ALM-001-01 AW.U6.0222101200ALM-001-01 AW.U6.0322101200ALM-001-01 AW.U6.0422091200	ALM-001-01 AW.U6.0122101200EALM-002-01 AD.U6.0226103280NALM-001-01 AW.U6.0222101200EALM-001-01 AW.U6.0322101200EALM-001-01 AW.U6.0422091200S

Roof window	v and skylight typ	e and performanc	e value			
ID	Window type				U-value	SHGC
None Present						
Roof window	v and skylight scl	nedule				
Location	ID	Roof window/skylight no.	Area (m²)	Orientation	Outdoor shade	Indoor shade/diffuser
None Present						

External wal	l type					
ID	Wall type		Insulation		Wa	III wrap or foil
EW-005	Brick Veneer				No	)
EW-006	Brick Veneer		Glass fibre ba	tt: R2.0	No	)
External wal	l 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	Ν	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	Ν	Yes	

#### Internal wall type

Nationwide House Energy Rating Scheme* Certificate					A A A A A A A A A A A A A A A A A A A
Certificate number: 0003264728	Certificate Date:	17 Oct 2018	★ Star rating:	5.2	NATIONWIDE HOUSE ENERGY RATING SCHEME
Building features continued					

ID	Wall type	Area (m <sup>2</sup> )	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 (m <sup>2</sup> )	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/N eighbour	as_FLOR-B006 #1005 © 200mm Concrete Floor slab with ceramic tiles (no insul)				Ceramic tile
HALL/LAUNDRY/N eighbour	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/Neighbo ur	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)				Ceramic tile

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/L AUNDRY	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/ENSUIT E	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					A A A A A A A A A A A A A A A A A A A
Certificate number: 0003264728	Certificate Date:	17 Oct 2018	★ Star rating:	5.2	NATIONWIDE HOUSE ENERGY RATING SCHEME

# **Building features continued**

Ceiling penetrations				
Location	Number	Туре	Diameter (mm)	Sealed/unsealed
L/K/D	19	Downlight		Sealed
L/K/D	1	Ceiling exhaust fan	300	Sealed
HALL/LAUNE	DRY 2	Downlight		Sealed
HALL/LAUNE	DRY 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

Certificate number: 0003264728

Certificate Date: 17 Oct 2018

★ Star rating: 5.2



#### **Additional information**

# **Explanatory notes**

#### About this report

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

#### **General Information**

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

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

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

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

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

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

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

#### **Accredited Assessors**

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

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

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

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

#### Disclaimer

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

#### Contact

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

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 Mcint	osh Road	
Suburb:	Narraweena		
State:	NSW	Postcode:	2099
Type:	New	NCC Class:	2
		NatHERS	
Lot/DP		climate zone:	56
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

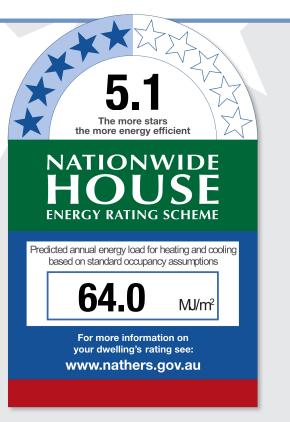
Glazing: Floor (uninsulated) Aluminium B SG Low Solar Gain Low-E: U = 5.60

Net floor area (m <sup>2</sup> )		Annual thermal	
Conditioned:	90.0	performanc	e loads
Unconditioned:	7.0	(MJ/m <sup>2</sup> )	
Garage:	97.0	Heating:	35.0
TOTAL:		Cooling:	29.0
TOTAL.	01.0	TOTAL:	64.0

#### **Plan documents**

 Plan ref/date:
 Sept.2018

 Prepared by:
 Benson McCormack Architecture



Ceiling penetration (see following pages for deta	ails) penetrations allowed to a
Sealed: 3 Unsealed: 0 TOTAL:** 3	exceded in construction then this certificate IS NOT VALID
Principle downlight type: Window selection - default windows only	Scan to access this certificate online and
Window selection -	Scan to access this certificate online and confirm this is valid.

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



Certificate Date:

Certificate number: 0003264744

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: U = 4.80: SHGC = 0.34	4.8	0.34

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 windo	w and skylig	ht type and performanc	e value			
ID	Window	v type			U-value	SHGC
None Presen	t					
Roof windo	w and skyligl	ht schedule				
Location	ID	Roof window/skylight no.	Area (m²)	Orientation	Outdoor shade	Indoor shade/diffuser
None Presen	t					

#### 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	Ν	Yes	
ENSUITE	EW-006	1750	2700	Ν	Yes	
BED 3	EW-006	3000	2700	Ν	No	
L/K/D	EW-006	6450	2700	Ν	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	NATIONWIDE HOUSE ENERGY RATING SCHEME
Building features continued					

Dunung	reatures continue	u .		
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 (m <sup>2</sup> )	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)				Ceramic tile
BATH/Neighbour	as_FLOR-B006 #1005 © 200mm Concrete Floor slab with ceramic tiles (no insul)				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/Neighbo ur	as_FLOR-B006 #1005 © 200mm Concrete Floor slab with ceramic tiles (no insul)				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)				Ceramic tile

Ceiling type			
Location	Construction	Added insulation	Roof space above
None Present			

Ceiling penetra	Ceiling penetrations					
Location	Number	Туре	Diameter (mm)	Sealed/unsealed		
ENTRY/HALL/L DRY	4	Downlight		Sealed		
ENTRY/HALL/L DRY	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						A A A A A A A A A A A A A A A A A A A
Certificate numb	ber: 0003264744	Certificate Date:	17 Oct 2018	★ Star rating:	5.1	NATIONWIDE HOUSE ENERGY RATING SCHEME
Building feat	ures 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

Certificate number: 0003264744

Certificate Date: 17 Oct 2018

📩 🖈 Star rating: 5.1



#### **Additional information**

# **Explanatory notes**

#### About this report

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

#### **General Information**

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

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

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

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

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

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

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

#### **Accredited Assessors**

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

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

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

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

#### Disclaimer

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

#### Contact

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

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 Mcint	osh Road	
Suburb:	Narraweena		
State:	NSW	Postcode:	2099
Туре:	New	NCC Class: NatHERS	2
Lot/DP		climate zone:	56
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

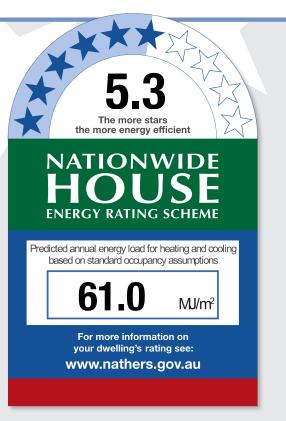
Glazing: Floor (uninsulated) Aluminium B DG Argon Fill Low Solar Gain low-E

Net floor area (m <sup>2</sup> )		Annual ther	
Conditioned: Unconditioned:	81.0 5.0	(NJ/m²)	
Garage:	5.0	Heating:	33.0
TOTAL:	86.0	Cooling:	28.0
		TOTAL:	61.0

#### **Plan documents**

 Plan ref/date:
 Sept.2018

 Prepared by:
 Benson McCormack Architecture



Ceiling penet		maxii	TE: This total is the mum number of ceiling trations allowed to a
Sealed: Unsealed: TOTAL:**	35 0 35	ceiling (under a roof) for this certificate. If this number is exceded in construction ther this certificate IS NOT VALID and a new certificate is requi Loss of ceiling insulation for the penetrations listed has been taken into account with the rati alogen	
Principle downligh	it type: Hal	loger	1
Window select	ion -	loger	Scan to access this certificate online and confirm this is valid.
Window select	ion - /s only low values: he nominated pwn on page 2	-	Scan to access this certificate online and
Window select default window Note on allowable wind With a 10% tolerance to the SHGC window values sho	ion - /s only low values: he nominated pown on page 2 chieved:	-	Scan to access this certificate online and

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



Certificate Date:

Certificate number: 0003264751

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: All U = 4.80: SHGC		Argon Fill Low Sol	ar Gain Iow-E	-Clear: 4.8	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

ID None Present	Window type				U-value	SHGC
Roof window	<i>i</i> and skylight sch	nedule				
Location	ID	Roof window/skylight	Area (m <sup>2</sup> )	Orientation	Outdoor shade	Indoor shade/diffuser

External wall type							
ID V	Vall type		Insulation		Wa	ll wrap or foil	
EW-005	Brick Veneer				No		
EW-006	Brick Veneer		Glass fibre ba	tt: R2.0	No		
External wall scl	hedule						
Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)	
ENTRY/HALL/LDR Y	R 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) Si	ub floor	Added	Covering

Certificate number: 0003264751

Certificate Date: **17 Oct 2018** 

★ Star rating:



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/Neighbo ur	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	Туре	Diameter (mm)	Sealed/unsealed
ENTRY/HALL/L DRY	2	Downlight		Sealed
ENTRY/HALL/L DRY	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

Certificate number: 0003264751	Certificate Date:	17 Oct 2018	★ Star rating:	5.3 NATION
Building features continue	d			
Ceiling fans				
Location Number	Diameter (r	nm)		
None Present				
Roof type				
Construction			Added insulation	Roof colour
			insulation	

Certificate number: 0003264751

Certificate Date: 17 Oct 2018

★ Star rating: 5.3



#### **Additional information**

# **Explanatory notes**

#### About this report

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

#### **General Information**

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

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

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

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

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

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

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

#### **Accredited Assessors**

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

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

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

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

#### Disclaimer

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

#### Contact

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

Certificate number: 0003264769

Certificate Date: 17 Oct 2018



#### 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 Mcint	osh Road	
Suburb:	Narraweena		
State:	NSW	Postcode:	2099
Type:	New	NCC Class:	2
		NatHERS	-
Lot/DP		climate zone:	56
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) **Aluminium A SG Low Solar Gain** Glazing: Low-E: U = 5.60

#### Net floor area (m<sup>2</sup>) Conditioned: 1

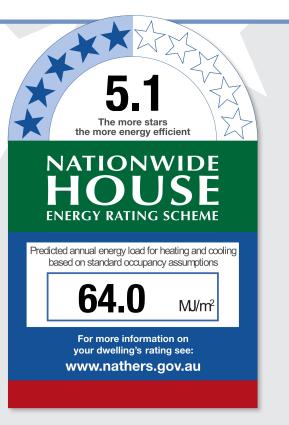
Unconditioned:

Garage: TOTAL:

m²) 110.0	Annual ther performanc (MJ/m <sup>2</sup> )	
5.0	Heating:	36.0
115.0	Cooling:	28.0
	TOTAL:	64.0

#### **Plan documents**

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



Ceiling pene		maxi pene	TE: This total is the mum number of ceiling etrations allowed to a
Sealed:	48	certif	ng (under a roof) for this ficate. <b>If this number is</b>
Unsealed:	0		eded in construction then certificate IS NOT VALID
TOTAL:**	48	Loss pene	a new certificate is required of ceiling insulation for the strations listed has been
Principle downlig	ht type: <b>Ha</b> l		n into account with the rating. n
			n
Principle downlig Window selec default window	tion -		Ũ
Window selec	tion - ws only dow values: the nominated nown on page 2	loge	n Scan to access this certificate online and

+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.



Certificate Date:

Certificate number: 0003264769

17 Oct 2018

★ Star rating:

5.1

# **Building features**

Window type and pe	rformance 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: $U = 4.80$ : SHGC = 0.34	4.8	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

ID	Window t	уре			U-value	SHGC
None Presen	t					
Roof windo	w and skyligh	t schedule				
Location	ID	Roof window/skylight	Area (m <sup>2</sup> )	Orientation	Outdoor shade	Indoor shade/diffuser

#### **External wall type**

ID	Wall type		Insulation		Wa	II wrap or foi
EW-005	Brick Veneer				No	
EW-006	Brick Veneer		Glass fibre ba	tt: R2.0	No	)
External wa	II 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	Ν	Yes	

Nationwide House Energy R	ating Scheme* Co	ertificate			
Certificate number: 0003264769	Certificate Date:	17 Oct 2018	★ Star rating:	5.1	NATIONWIDE HOUSE

**Building features continued** 

Internal wall type					
ID	Wall type	Area (m <sup>2</sup> )	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 (m <sup>2</sup> )	Sub floor ventilation	Added insulation	Covering
Entry/Hall/Neighbo ur	as_FLOR-B006 #1001 © 200mm Concrete Floor slab with carpet- underfelt(no insul)	14.9			Carpet 10 + rubber underlay
Laundry/Neighbour	as_FLOR-B006 #1005 © 200mm Concrete Floor slab with ceramic tiles (no insul)				Ceramic tile
Bath/Neighbour	as_FLOR-B006 #1005 © 200mm Concrete Floor slab with ceramic tiles (no insul)				Ceramic tile
L/K/D/Neighbour	as_FLOR-B006 #1005 © 200mm Concrete Floor slab with ceramic tiles (no insul)				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
ensuite/Neighbour	as_FLOR-B006 #1005 © 200mm Concrete Floor slab with ceramic tiles (no insul)				Ceramic tile
Bed 1/Neighbour	as_FLOR-B006 #1001 © 200mm Concrete Floor slab with carpet- underfelt(no insul)	15.5			Carpet 10 + rubber underlay
Bed 2/Neighbour	as_FLOR-B006 #1001 © 200mm Concrete Floor slab with carpet- underfelt(no insul)	10.6			Carpet 10 + rubber underlay
Bed 3/Neighbour	as_FLOR-B006 #1001 © 200mm Concrete Floor slab with carpet- underfelt(no insul)	10.6			Carpet 10 + rubber underlay

Ceiling type			
Location	Construction	Added insulation	Roof space above
None Present			

Ceil	lina	penetrations
CCI	ing	penetrations

Location	Number	Туре	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

Nationwide	House Energy F	Rating Scheme* Ce	rtificate			A A A A A A A A A A A A A A A A A A A
Certificate nur	mber: 0003264769	Certificate Date:	17 Oct 2018	★ Star rating:	5.1	NATIONWID HOUSE ENERGY RATING SCHEM
Building fea	atures continuec	I				
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	

Ceil	ina	fans
CCI	III	10113

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

Certificate number: 0003264769

Certificate Date: 17 Oct 2018

★ Star rating: 5.1



#### **Additional information**

# **Explanatory notes**

#### About this report

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

#### **General Information**

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

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

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

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

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

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

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

#### **Accredited Assessors**

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

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

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

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

#### Disclaimer

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

#### Contact

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