Nationwide House Energy Rating Scheme* — Multiple-dwelling summary

Certificate number: 0003521960

Certificate Date:

21 Dec 2018

Average Rating

NATIONWIDE

RATING S

The rating listed above is the average of all dwellings in this summary

For more information on your dwelling's rating see: www.nathers.gov.au



Assessor details

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

Dwelling details

AAO:

Street:	44 Rose Avenue
Suburb:	Wheeler Heights
State:	NSW
Postcode:	2097

BDAV

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



Summary of all dwellings

Certifi	cate	Detai	ls

Dwelling/Unit number	Heating load	Cooling load	Total load	Star Rating
1	37.0	25.0	61.0	5.3
2	36.0	21.0	57.0	5.6
3	37.0	24.0	62.0	5.3
4	37.0	25.0	62.0	5.2
5	38.0	18.0	57.0	5.6
6	34.0	23.0	57.0	5.6
	number 1 2 3 4 5	number Heating load 1 37.0 2 36.0 3 37.0 4 37.0 5 38.0	numberHeating loadCooling load137.025.0236.021.0337.024.0437.025.0538.018.0	numberHeating loadCooling loadFotal load137.025.061.0236.021.057.0337.024.062.0437.025.062.0538.018.057.0

NatHERS Thermal Performance Specifications (BASIX Thermal Comfort) 44 Rose Avenue, Wheeler Heights

These are the Specifications upon which the NatHERS assessment is based. If details included in these Specifications vary from other drawings or written specifications, these Specifications shall take precedence. If only one specification option is detailed for a building element, that specification must apply to all instances of that element for the project.

Windows	Glass	Frame	U value	SHGC	Detail	
Default	Single glazed, low E low solar gain	Aluminium	5.60	0.41	To unit: 6 – all glazing	
Default	Double glazed, low e low solar gain	Aluminium thermally broken	3.1	0.27		except WC / laundry) azing (except WC / laundry)
Default	Double glazed, low e high solar gain	Aluminium thermally broken	3.1	0.49	To units: 1 – all glazing (exce 4 – all west facing gl	
Skylights	Glass	Frame	U value	SHGC	Detail	
External walls	Construction	Added Insula	ation	Detail		
Cavity brick		R 1.0				
Internal walls	Construction	Added Insula	ation	Detail		
Stud Framed		None		Internal wall	s	
Brick		None		Party walls		
Floors	Construction	Added Insula	ation	Covering		Detail
Concrete		R1.0		Timber gene tiles wet are	erally; carpet bedrooms as	Floors over basement carpark
Concrete		R1.5		Timber gene tiles wet are	erally; carpet bedrooms as	To unit: 3 (Floors over basement carpark)
Framed		None		Timber gene tiles wet are	erally; carpet bedrooms as	To units: 1, 2, 4, 5 – first level floors
Ceilings	Construction	Added Insula	ation	Detail		
Plasterboard		None		Generally		
Plasterboard		R 3.5		,	pelow roof / roof space	
Roof	Construction	Added Insula	ation	Detail		
Metal sheeting		(refer to ceili	na detail)			

Other Requirements

All exhaust fans and downlights (if installed) to be sealed to prevent air-infiltration



Certificate no .: Assessor Name: Accreditation no.: Certificate date: Dwelling Address: 44 Rose Avenue 0003521960 Robert Mallindine VIC/BDAV/12/1475 21 December 2018



www.nathers.gov.au

Certificate number: 0003521879

Certificate Date: 21 Dec 2018



Assessor details

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

Overview

Dwelling details

Street:	Unit 1, 44 Rose Av	enue	
Suburb:	Wheeler Heights		
State:	NSW	Postcode:	2097
Type:	New	NCC Class:	1a
.)po:		NatHERS	-
Lot/DP		climate zone:	56
number:	-	Exposure:	Suburban

Key construction and insulation materials

(see following pages for details)

Construction:	Double Brick Metal roof/Plasterboard
Insulation:	Timber/Slab R1.0 wall insulation
Glazing:	Ceiling (uninsulated) R1.5 floor insulation Al Thermally Broken B DG Air Fill High Solar Gain

Net floor area	Net floor area (m ²)		Annual thermal performance loads		
Conditioned: Unconditioned:	127.0 5.0		performanc (MJ/m ²)	e loads	
Garage:			Heating:	37.0	
TOTAL:	132.0		Cooling:	25.0	
			TOTAL:	61.0	

Plan documents

Plan ref/date: 1704; 11/12/18 Prepared by: Barry Rush & Associates P/L

The more stars the more energy efficient NATIONWIDE ENERGY RATING SCHEME Predicted annual energy load for heating and cooling based on standard occupancy assumptions MJ/m² For more information on your dwelling's rating see: www.nathers.gov.au

Ceiling pener (see following page		maxin	TE: This total is the mum number of ceiling trations allowed to a
Sealed:	32	certifi	g (under a roof) for this cate. If this number is
Unsealed:	0		ded in construction then certificate IS NOT VALID
TOTAL:**	32	Loss pene	a new certificate is required. of ceiling insulation for the trations listed has been into account with the rating.
Principle downlig	ht type: Lig	ht-er	mitting diode (LED)
Principle downlig	ht type: Lig	ht-er	mitting diode (LED)
Principle downlig Window selec default window	tion -	ht-er	scan to access this certificate online and confirm this is valid.
Window selec	tion - ws only adow values: the nominated nown on page 2		Scan to access this certificate online and
Window selec default window Note on allowable wir With a 10% tolerance to SHGC window values sl	tion - ws only idow values: the nominated nown on page 2 achieved:		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 Rating Scheme* Certificate
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Certificate Date:

Certificate number: 0003521879

21 Dec 2018





5.3

Building features

Window type and performance value

Window ID	Window type	U-value	SHGC
ALM-002-01 A	DEFAULTS: Aluminium B SG Clear	6.7	0.70
ATB-004-03 B	DEFAULTS: AI Thermally Broken B DG Air Fill High Solar Gain low-E -Clear	3.1	0.49

Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Living / Dining / Kitchen	ATB-004-03 B	01	2400	600	E	None
Living / Dining / Kitchen	ATB-004-03 B	02	2700	4100	W	None
Living / Dining / Kitchen	ATB-004-03 B	03	2700	600	Ν	None
Living / Dining / Kitchen	ATB-004-03 B	04	2700	4000	W	None
Bedroom 1	ATB-004-03 B	05	2400	2400	E	None
Bedroom 1 Ens	ATB-004-03 B	06	600	2100	S	None
WC / Laundry	ALM-002-01 A	07	600	1700	E	None
Bedroom 2	ATB-004-03 B	08	1500	2400	E	Miniature louvres
Bedroom 3	ATB-004-03 B	09	1500	2400	E	Miniature louvres
Hall / Void over LDK	ATB-004-03 B	10	600	2400	S	None
Hall / Void over LDK	ATB-004-03 B	11	1600	4100	W	Miniature louvres
Hall / Void over LDK	ATB-004-03 B	13	1600	600	Ν	None
Hall / Void over LDK	ATB-004-03 B	14	1600	3800	W	Miniature louvres

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

External wall t	уре						
ID	Wall type		Insulation		Wall w		
EW-014	Double Brick	Polystyrene extruded: R1.0		No			
External wall s	chedule						
Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)	
Living / Dining / Kitchen	EW-014	1500	2700	E	Yes	900	
Living / Dining /	EW-014	4100	2700	S	Yes	1400	

Nationwide House Energy Rating Scheme* Certificate					******
Certificate number: 0003521879	Certificate Date:	21 Dec 2018	★ Star rating:	5.3	NATIONWIDE HOUSE ENERGY RATING SCHEME

Building features continued

Kitchen						
Living / Dining / Kitchen	EW-014	4100	2700	W	Yes	1500
Living / Dining / Kitchen	EW-014	600	2700	Ν	Yes	4000
Living / Dining / Kitchen	EW-014	4000	2700	W	Yes	2300
Bedroom 1	EW-014	4100	2700	E	No	
Bedroom 1	EW-014	3800	2700	S	No	
Bedroom 1 Ens	EW-014	2300	2700	S	Yes	1400
WC / Laundry	EW-014	900	2700	N	No	
WC / Laundry	EW-014	2300	2700	E	No	
Bedroom 2	EW-014	900	2700	N	No	
Bedroom 2	EW-014	4000	2700	E	No	
Bedroom 3	EW-014	4200	2700	E	No	
Bedroom 3	EW-014	6200	2500	S	No	
Hall / Void over LDK	EW-014	4100	2000	S	No	
Hall / Void over LDK	EW-014	4100	1700	W	Yes	1000
Hall / Void over LDK	EW-014	600	1700	Ν	Yes	3800
Hall / Void over LDK	EW-014	3800	1700	W	Yes	1200

Internal wall type				
ID	Wall type	Area (m ²)	Insulation	Wall wrap or foil
IW-001	Plasterboard	95.5		No
IW-005	Plasterboard	41.9		No

Floors					
Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Living / Dining / Kitchen/Outdoor Air	R1.0 - CP - timber - concre te 200mm	47.6		R1.5	
Living / Dining / Kitchen/Outdoor Air	R1.0 - CP - tiles - concrete 200m	r 5.0		R1.5	Ceramic tile
Bedroom 1/Outdoor Air	R1.0 - CP - carpet - concre te 200mm	14.6		R1.5	Carpet underlay (felt)
Bedroom 1 Ens/Outdoor Air	R1.0 - CP - tiles - concrete 200m	r 8.3		R1.5	Ceramic tile
WC / Laundry/Outdoor Air	R1.0 - CP - tiles - concrete 200m	r 4.8		R1.5	Ceramic tile
Bedroom 2/Living / Dining / Kitchen	carpet - framed - PB ceiling und er	11.5			Carpet underlay (felt)
Bedroom 2/WC / Laundry	carpet - framed - PB ceiling und er	4.8			Carpet underlay (felt)

Building features continued				
Bedroom 3/Bedroom 1	carpet - framed - PB ceiling und er	14.6	Carpet underlay (felt)	
Bedroom 3/Bedroom 1 Ens	carpet - framed - PB ceiling und er	8.0	Carpet underlay (felt)	
Bathroom/Living / Dining / Kitchen	tiles - framed - PB ceiling under	4.8	Ceramic tile	
Bathroom/Bedroom 1 Ens	tiles - framed - PB ceiling under	0.3	Ceramic tile	
Hall / Void over LDK/Living / Dining / Kitchen	timber - framed - PB ceiling und er	36.1		

Ceiling type			
Location	Construction	Added insulation	Roof space above
Bedroom 2/Living / Dining / Kitchen	carpet - framed - PB ceiling under		No
Bathroom/Living / Dining / Kitchen	tiles - framed - PB ceiling under		No
Hall / Void over LDK/Living / Dining / Kitchen	timber - framed - PB ceiling under		No
Bedroom 3/Bedroom 1	carpet - framed - PB ceiling under		No
Bedroom 3/Bedroom 1 Ens	carpet - framed - PB ceiling under		No
Bathroom/Bedroom 1 Ens	tiles - framed - PB ceiling under		No
Bedroom 2/WC / Laundry	carpet - framed - PB ceiling under		No

Ceiling penetra	ations			
Location	Number	Туре	Diameter (mm)	Sealed/unsealed
Living / Dining / Kitchen	9	Downlight		Sealed
Living / Dining / Kitchen	1	Ceiling exhaust fan	160	Sealed
Bedroom 1	6	Downlight		Sealed
Bedroom 1 Ens	2	Downlight		Sealed
Bedroom 1 Ens	1	Ceiling exhaust fan	160	Sealed
WC / Laundry	2	Downlight		Sealed
WC / Laundry	1	Ceiling exhaust fan	160	Sealed
Bedroom 2	6	Downlight		Sealed
Bedroom 3	9	Downlight		Sealed
Bathroom	2	Downlight		Sealed
Bathroom	1	Ceiling exhaust fan	160	Sealed
Hall / Void over LDK	14	Downlight		Sealed

Nationwide House Energy				🐔
Certificate number: 0003521879	Certificate Date:	21 Dec 2018	★ Star rating:	5.3 NATION HOU
Building features continu	ed			
Ceiling fans				
Location Number	Diameter (I	mm)		
None Present				
Roof type				
Construction			Added insulation	Roof colour
R3.5 - Steel roof with R3.0 bulk	incul + Directorbid solling	under	R3.5	Medium

Certificate number: 0003521879

Certificate Date: 21 Dec 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

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

Certificate number: 0003521887

Certificate Date: 21 Dec 2018



Assessor details

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

Overview

Dwelling details

Street:	Unit 2, 44 Rose Av	renue	
Suburb:	Wheeler Heights		
State:	NSW	Postcode:	2097
Type:	New	NCC Class:	1a
.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		NatHERS climate zone:	56
Lot/DP		climate zone.	50
number:	-	Exposure:	Suburban

Key construction and insulation materials

(see following pages for details)

Construction:	Double Brick Metal roof/Plasterboard
Inculation	Timber/Slab
Insulation:	R1.0 wall insulation Ceiling (uninsulated)
Glazing:	R1.5 floor insulation AI Thermally Broken B DG Air Fill Low Solar Gain

Net floor area (m²) Annual thermal performance loads Conditioned: 132.0 (MJ/m²) Unconditioned: 5.0 Heating: 36.0 Garage: Cooling: 21.0 137.0 TOTAL: TOTAL: 57.0

Plan documents

Plan ref/date: 1704; 11/12/18 Barry Rush & Associates P/L Prepared by:

The mor the more energy efficient NATIONWIDE ENERGY RATING SCHEME Predicted annual energy load for heating and cooling based on standard occupancy assumptions 5 MJ/m² For more information on your dwelling's rating see: www.nathers.gov.au

★ Star rating: 5.6

Ceiling penetrations (see following pages for details)		kimum nu	total is the mber of ceiling allowed to a	
Sealed: 3 Unsealed: TOTAL:** 3	2 ce ex 0 th 2 ar Lo pe	 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. 		
Principle downlight type:	Light			
Window selection - default windows onl	у	certifi	to access this cate online and	
	es: ated	certifi		

than the values stated on page 2.

NOT be selected.

If the rating listed above falls below 6.0 stars or the required rating, then

the window with this tolerance can

Nationwide House Energy R	ating Scheme* Co	ertificate			***
Certificate number: 0003521887	Certificate Date:	21 Dec 2018	★ Star rating:	5.6	

Certificate number: 0003521887

Building features

Window type and performance value

Window ID	Window type	U-value	SHGC
ALM-002-01 A	DEFAULTS: Aluminium B SG Clear	6.7	0.70
ATB-004-04 B	DEFAULTS: AI Thermally Broken B DG Air Fill Low Solar Gain low-E -Clear	3.1	0.27

Window schedule

Window ID	Window no.	Height (mm)	Width (mm)	Orientetien	
ATD 004 04 D				Orientation	Outdoor shade
ATB-004-04 B	01	2400	600	E	None
ATB-004-04 B	02	2700	8200	W	None
ATB-004-04 B	05	2400	2400	E	None
ALM-002-01 A	07	600	1700	E	None
ATB-004-04 B	08	1500	2400	E	Miniature louvres
ATB-004-04 B	09	1500	2400	E	Miniature louvres
ATB-004-04 B	11	1600	8200	W	Miniature louvres
	ATB-004-04 B ALM-002-01 A ATB-004-04 B ATB-004-04 B	ATB-004-04 B 05 ALM-002-01 A 07 ATB-004-04 B 08 ATB-004-04 B 09	ATB-004-04 B052400ALM-002-01 A07600ATB-004-04 B081500ATB-004-04 B091500	ATB-004-04 B0524002400ALM-002-01 A076001700ATB-004-04 B0815002400ATB-004-04 B0915002400	ATB-004-04 B 05 2400 2400 E ALM-002-01 A 07 600 1700 E ATB-004-04 B 08 1500 2400 E ATB-004-04 B 09 1500 2400 E

Roof windo	w and skyligh	ht type and performance	e value			
ID None Presen	Window	r type			U-value	SHGC
Roof windo	w and skylig	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-014 **Double Brick** Polystyrene extruded: R1.0 No **External wall schedule** ID Width (mm) **Fixed Shade Eaves** Location Height (mm) Orientation (mm) Living / Dining / **EW-014** 1500 2700 Е Yes 900 Kitchen 2100 2700 S Yes 4000 Living / Dining / EW-014 Kitchen Living / Dining / EW-014 8200 2700 W Yes 2500 Kitchen EW-014 4100 Bedroom 1 2700 Е No Е No WC / Laundry EW-014 2300 2700 Bedroom 2 EW-014 4900 2500 Ν No Bedroom 2 4000 Е No EW-014 2700 Е Bedroom 3 EW-014 4200 2700 No S Hall / Void over EW-014 1900 1900 Yes 3800 LDK EW-014 8200 1700 W Yes 1000

Nationwide Ho	use Energy F	Rating Scheme*	Certificate				A TATA S
Certificate number	0003521887	Certificate Date:	21 Dec	2018	★ Star rating:	5.6	NATIONWIDE HOUSE ENERGY RATING SCHEME
Building feature	es continued						
Hall / Void over LDK							
Hall / Void over LDK	EW-014	5600	2000	Ν	No		

Internal wall type				
ID	Wall type	Area (m ²)	Insulation	Wall wrap or foil
IW-001	Plasterboard	95.5		No
IW-005	Plasterboard	71.3		No

	-	ro
IU	υ	13

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Living / Dining / Kitchen/Outdoor Air	R1.0 - CP - timber - concre te 200mm	52.9		R1.5	
Living / Dining / Kitchen/Outdoor Air	R1.0 - CP - tiles - concrete 200m	nr 5.0		R1.5	Ceramic tile
Bedroom 1/Outdoor Air	R1.0 - CP - carpet - concre te 200mm	14.6		R1.5	Carpet underlay (felt)
Bedroom 1 Ens/Outdoor Air	R1.0 - CP - tiles - concrete 200m	nr 8.3		R1.5	Ceramic tile
WC / Laundry/Outdoor Air	R1.0 - CP - tiles - concrete 200m	nr 4.8		R1.5	Ceramic tile
Bedroom 2/Living / Dining / Kitchen	carpet - framed - PB ceiling und er	11.5			Carpet underlay (felt)
Bedroom 2/WC / Laundry	carpet - framed - PB ceiling und er	4.8			Carpet underlay (felt)
Bedroom 3/Bedroom 1	carpet - framed - PB ceiling und er	14.6			Carpet underlay (felt)
Bedroom 3/Bedroom 1 Ens	carpet - framed - PB ceiling und er	8.0			Carpet underlay (felt)
Bathroom/Living / Dining / Kitchen	tiles - framed - PB ceiling under	4.8			Ceramic tile
Bathroom/Bedroom 1 Ens	tiles - framed - PB ceiling under	0.3			Ceramic tile
Hall / Void over LDK/Living / Dining / Kitchen	timber - framed - PB ceiling und er	41.6			

Ceiling type			
Location	Construction	Added insulation	Roof space above
Bedroom 2/Living / Dining / Kitchen	carpet - framed - PB ceiling under		No
Bathroom/Living / Dining / Kitchen	tiles - framed - PB ceiling under		No
	timber - framed - PB ceiling under		No

Nationwide House Energy Rating Scheme* Certificate					
Certificate number: 0003521887	Certificate Date:	21 Dec 2018	★ Star rating:	5.6	NATIONWIDE HOUSE ENERGY RATING SCHEME

ł	Building features	s continued	
	Hall / Void over LDK/Living / Dining / Kitchen		
	Bedroom 3/Bedroom 1	carpet - framed - PB ceiling under	No
	Bedroom 3/Bedroom 1 Ens	carpet - framed - PB ceiling under	No
	Bathroom/Bedroom 1 Ens	tiles - framed - PB ceiling under	No
	Bedroom 2/WC / Laundry	carpet - framed - PB ceiling under	No

Ceiling penetrations

Location	Number	Туре	Diameter (mm)	Sealed/unsealed
Living / Dining / Kitchen	9	Downlight		Sealed
Living / Dining / Kitchen	1	Ceiling exhaust fan	160	Sealed
Bedroom 1	6	Downlight		Sealed
Bedroom 1 Ens	2	Downlight		Sealed
Bedroom 1 Ens	1	Ceiling exhaust fan	160	Sealed
WC / Laundry	2	Downlight		Sealed
WC / Laundry	1	Ceiling exhaust fan	160	Sealed
Bedroom 2	6	Downlight		Sealed
Bedroom 3	9	Downlight		Sealed
Bathroom	2	Downlight		Sealed
Bathroom	1	Ceiling exhaust fan	160	Sealed
Hall / Void over LDK	14	Downlight		Sealed

Ceiling fans			
Location	Number	Diameter (mm)	
None Present			

Roof type		
Construction	Added insulation	Roof colour
R3.5 - Steel roof with R3.0 bulk insul + Plasterb'd ceiling under	R3.5	Medium

Certificate number: 0003521887

Certificate Date: 21 Dec 2018

★ Star rating: 5.6



Additional information

Explanatory notes

About this report

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

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Certificate number: 0003521895

Certificate Date: 21 Dec 2018



Assessor details

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

Overview

Dwelling details

Street:	Unit 3, 44 Rose Avenue		
Suburb:	Wheeler Heights		
State:	NSW	Postcode:	2097
Type:	New	NCC Class:	1a
		NatHERS climate zone:	56
Lot/DP		_	
number:	-	Exposure:	Suburban

Key construction and insulation materials

(see following pages for details)

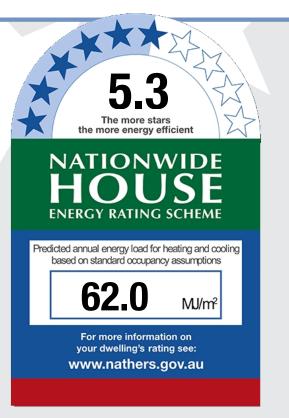
Construction:	Double Brick
	Metal roof/Plasterboard
	Timber/Slab
Insulation:	R1.0 wall insulation

R2.0 floor insulation AI Thermally Broken B DG Air Fill Low Glazing: Solar Gain

Net floor area (m ²)		Annual thermal	
Conditioned: Unconditioned:	110.0 4.0	performanc (MJ/m ²)	e loads
Garage:		Heating:	37.0
TOTAL:	114.0	Cooling:	24.0
		TOTAL:	62.0

Plan documents

Plan ref/date: 1704; 11/12/18 Prepared by: Barry Rush & Associates P/L



★ Star rating: 5.3

Ceiling penetrations(see following pages for details)Sealed:47Unsealed:0TOTAL:**47		**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	
Principle downlight type	e: Lig		n into account with the rating. mitting diode (LED)
Window selection - default windows or			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, the following ratings are achieved:

-10% SHGC 5.3

+10% SHGC 5.2

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

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

confirm this is valid.



Nationwide House Energy Rating Scheme* Certificate	
--	--

Certificate Date:

Certificate number: 0003521895

21 Dec 2018

★ Star rating:

5.3 NATIO

Building features

Window type and performance value

Window ID	Window type				U-value	SHGC
ATB-004-04 B	DEFAULTS: AI -Clear	Thermally Broker	n B DG Air Fill Lo	ow Solar Gain	low-E 3.1	0.27
Window sched	lule					
Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Living / Dining / Kitchen	ATB-004-04 B	01	2400	4850	N	None
Living / Dining / Kitchen	ATB-004-04 B	02	2400	4500	W	None
Living / Dining / Kitchen	ATB-004-04 B	07	1400	1000	W	None
Bedroom 1	ATB-004-04 B	03	2400	2400	W	None
Bedroom 2	ATB-004-04 B	04	2400	2400	E	None
Bedroom 3	ATB-004-04 B	05	700	2400	E	None
Hall / Entry	ATB-004-04 B	06	2400	500	E	None

Roof windo	w and skylig	nt type and performanc	e value			
ID None Presen	Window type Present				U-value	SHGC
Roof windo	w and skylig	nt 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		Wa	ll wrap or foil	
EW-014	Double Brick		Polystyrene e	Polystyrene extruded: R1.0		10	
External wall s	schedule						
Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)	
Living / Dining / Kitchen	EW-014	4900	2700	N	Yes	2500	
Living / Dining / Kitchen	EW-014	4800	2800	W	No		
Living / Dining / Kitchen	EW-014	1500	2700	W	Yes	5000	
Living / Dining / Kitchen	EW-014	1000	2700	Ν	No		
Living / Dining / Kitchen	EW-014	2500	2700	Ν	Yes	2500	
Living / Dining / Kitchen	EW-014	1900	2700	E	Yes	4000	
Bedroom 1	EW-014	1500	3000	S	No		
Bedroom 1	EW-014	3800	2900	W	No		
Bedroom 2	EW-014	3400	2900	E	No		

Nationwide House Energy R	ating Scheme* Co	ertificate			
Certificate number: 0003521895	Certificate Date:	21 Dec 2018	★ Star rating:	5.3	NATIONWIDE HOUSE ENERGY RATING SCHEME

Building features continued						
Bedroom 2	EW-014	900	2700	S	No	
Bedroom 3	EW-014	3500	2700	Ν	Yes	4500
Bedroom 3	EW-014	3000	2800	E	No	
Hall / Entry	EW-014	1500	2800	E	Yes	900
Bathroom	EW-014	1000	2700	Ν	Yes	4500

Internal wall type				
ID	Wall type	Area (m ²)	Insulation	Wall wrap or foil
IW-001	Plasterboard	107.4		No
IW-005	Plasterboard	31.5		No

Floors					
Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Living / Dining / Kitchen/Outdoor Air	R1.5 - CP - timber - concre te 200mm	41.1		R2.0	
Living / Dining / Kitchen/Outdoor Air	R1.5 - CP - tiles - concrete 200m	r 5.0		R2.0	Ceramic tile
Bedroom 1/Outdoor Air	R1.5 - CP - carpet - concre te 200mm	19.1		R2.0	Carpet underlay (felt)
Bedroom 1 Ens/Outdoor Air	R1.5 - CP - tiles - concrete 200m	r 8.3		R2.0	Ceramic tile
Bedroom 2/Outdoor Air	R1.5 - CP - carpet - concre te 200mm	10.5		R2.0	Carpet underlay (felt)
Bedroom 3/Outdoor Air	R1.5 - CP - carpet - concre te 200mm	10.5		R2.0	Carpet underlay (felt)
Laundry/Outdoor Air	R1.5 - CP - tiles - concrete 200m	r 4.2		R2.0	Ceramic tile
Hall / Entry/Outdoor Air	R1.5 - CP - timber - concre te 200mm	11.2		R2.0	
Bathroom/Outdoor Air	R1.5 - CP - tiles - concrete 200m	r 4.7		R2.0	Ceramic tile

Ceiling type			
Location	Construction	Added insulation	Roof space above
None Present			

Ceiling penetrations				
Location	Number	Туре	Diameter (mm)	Sealed/unsealed
Living / Dining / Kitchen	17	Downlight		Sealed
Living / Dining / Kitchen	1	Ceiling exhaust fan	160	Sealed

Nationwide House Energy Rating Scheme* Certificate					*
Certificate numbe	r: 0003521895	Certificate Date:	21 Dec 2018	★ Star rating:	5.3 NATIO
Building featu	res continuec				
Bedroom 1	6	Downlight			Sealed
Bedroom 1 Ens	2	Downlight			Sealed
Bedroom 1 Ens	1	Ceiling exhaust fan		160	Sealed
Bedroom 2	5	Downlight			Sealed
Bedroom 3	5	Downlight			Sealed
Laundry	2	Downlight			Sealed
Laundry	1	Ceiling exhaust fan		160	Sealed
Hall / Entry	4	Downlight			Sealed
Bathroom	2	Downlight			Sealed

Ceiling fans			
Location	Number	Diameter (mm)	
None Present			

160

Sealed

Ceiling exhaust fan

Bathroom

1

Roof type		
Construction	Added insulation	Roof colour
R3.5 - Steel roof with R3.0 bulk insul + Plasterb'd ceiling under	R3.5	Medium

Certificate number: 0003521895

Certificate Date: 21 Dec 2018

★ Star rating: 5.3



Additional information

Explanatory notes

About this report

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Certificate number: 0003521911

Certificate Date: 21 Dec 2018



Assessor details

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

Overview

Dwelling details

Street:	Unit 4, 44 Rose Avenue					
Suburb:	Wheeler Heights					
State:	NSW	Postcode:	2097			
Type:	New	NCC Class:	1a			
		NatHERS climate zone:	56			
Lot/DP number:	-	Exposure:	Suburban			

Key construction and insulation materials

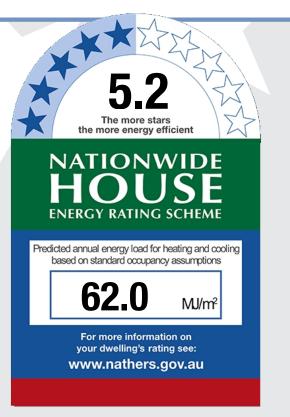
(see following pages for details)

Construction:	Double Brick Metal roof/Plasterboard
Insulation:	Timber/Slab R1.0 wall insulation
	Ceiling (uninsulated) R1.5 floor insulation
Glazing:	Al Thermally Broken B DG Air Fill High Solar Gain

Net floor area (m ²)		Annual thermal	
Conditioned: Unconditioned:	132.0 5.0	performance loads (MJ/m ²)	
Garage:		Heating:	37.0
TOTAL:	137.0	Cooling:	25.0
		TOTAL:	62.0

Plan documents

Plan ref/date: 1704; 11/12/18 Prepared by: Barry Rush & Associates P/L



Ceiling penet (see following page		maxii	TE: This total is the mum number of ceiling trations allowed to a		
Sealed:	32	certifi	g (under a roof) for this cate. If this number is		
Unsealed:	0		ded in construction then certificate IS NOT VALID		
TOTAL:**	32	and a new certificate is require Loss of ceiling insulation for the penetrations listed has been taken into account with the rating			
Principle downligh	nt type: Lia		Ũ		
Principle downligh	nt type: Lig		nitting diode (LED)		
Window select	tion -		Ũ		
Principle downligh Window select default window Note on allowable wind Nith a 10% tolerance to to SHGC window values sh he following ratings are a	tion - vs only dow values: the nominated own on page 2.	ht-er	nitting diode (LED) Scan to access this certificate online and		
Window select default windov Note on allowable wind With a 10% tolerance to to SHGC window values sh	tion - vs only dow values: the nominated own on page 2, achieved:	ht-er	nitting diode (LED) 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.



Certificate Date:

Certificate number: 0003521911

21 Dec 2018

★ Star rating:



5.2

Building features

Window type and performance value

Window ID	Window type	U-value	SHGC
ALM-002-01 A	DEFAULTS: Aluminium B SG Clear	6.7	0.70
ATB-004-03 B	DEFAULTS: AI Thermally Broken B DG Air Fill High Solar Gain low-E -Clear	3.1	0.49
ATB-004-04 B	DEFAULTS: AI Thermally Broken B DG Air Fill Low Solar Gain low-E -Clear	3.1	0.27

Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Living / Dining / Kitchen	ATB-004-04 B	01	2400	600	E	None
Living / Dining / Kitchen	ATB-004-03 B	02	2700	8200	W	None
Bedroom 1	ATB-004-04 B	05	1200	2400	Е	None
WC / Laundry	ALM-002-01 A	07	600	1700	E	None
Bedroom 2	ATB-004-04 B	08	1500	2400	E	Miniature louvres
Bedroom 3	ATB-004-04 B	09	1500	2400	E	Miniature louvres
Hall / Void over LDK	ATB-004-03 B	11	1600	8200	W	Miniature louvres

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

External wall type

ID	Wall type	pe Insulation			Wall wrap or f			
EW-014	Double Brick		Polystyrene e	xtruded: R1.0	Nc)		
External wall schedule								
Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)		
Living / Dining / Kitchen	EW-014	1500	2700	E	Yes	900		
Living / Dining / Kitchen	EW-014	4400	2700	S	Yes	2500		
Living / Dining / Kitchen	EW-014	8200	2700	W	Yes	2500		
Living / Dining / Kitchen	EW-014	1100	2700	Ν	Yes	5500		
Bedroom 1	EW-014	4100	2700	E	No			
Bedroom 1	EW-014	3800	2700	S	Yes	2500		
Bedroom 1 Ens	EW-014	2300	2700	S	Yes	2500		
WC / Laundry	EW-014	2300	2700	E	No			

Nationwide House Energy Rating Scheme* Certificate					A A
Certificate number: 0003521911	Certificate Date:	21 Dec 2018	★ Star rating:	5.2	

Certificate number: 0003521911



Building features continued

Bedroom 2	EW-014	4000	2700	Е	No	
Bedroom 3	EW-014	4200	2700	E	No	
Bedroom 3	EW-014	6200	2700	S	No	
Hall / Void over LDK	EW-014	4300	1900	S	No	
Hall / Void over LDK	EW-014	8200	1700	W	Yes	1000
Hall / Void over LDK	EW-014	1000	1800	Ν	Yes	8300

Internal wall type Insulation Wall wrap or foil Wall type Area (m²) ID IW-001 Plasterboard 95.5 No IW-005 Plasterboard 47.3 No

Floors					
Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Living / Dining / Kitchen/Outdoor Air	R1.0 - CP - timber - concre te 200mm	52.9		R1.5	
Living / Dining / Kitchen/Outdoor Air	R1.0 - CP - tiles - concrete 200m	nr 5.0		R2.0	Ceramic tile
Bedroom 1/Outdoor Air	R1.0 - CP - carpet - concre te 200mm	14.6		R1.5	Carpet underlay (felt)
Bedroom 1 Ens/Outdoor Air	R1.0 - CP - tiles - concrete 200m	nr 8.3		R2.0	Ceramic tile
WC / Laundry/Outdoor Air	R1.0 - CP - tiles - concrete 200m	nr 4.8		R2.0	Ceramic tile
Bedroom 2/Living / Dining / Kitchen	carpet - framed - PB ceiling und er	11.5			Carpet underlay (felt)
Bedroom 2/WC / Laundry	carpet - framed - PB ceiling und er	4.8			Carpet underlay (felt)
Bedroom 3/Bedroom 1	carpet - framed - PB ceiling und er	14.6			Carpet underlay (felt)
Bedroom 3/Bedroom 1 Ens	carpet - framed - PB ceiling und er	8.0			Carpet underlay (felt)
Bathroom/Living / Dining / Kitchen	tiles - framed - PB ceiling under	4.8			Ceramic tile
Bathroom/Bedroom 1 Ens	tiles - framed - PB ceiling under	0.3			Ceramic tile
Hall / Void over LDK/Living / Dining / Kitchen	timber - framed - PB ceiling und er	41.6			

Ceiling type

Nationwide House Energy Rating Scheme* Certificate					
Certificate number: 0003521911	Certificate Date:	21 Dec 2018	★ Star rating:	5.2	NATIONWIDE HOUSE ENERGY RATING SCHEME

Building features continued

Location	Construction	Added insulation	Roof space above
Bedroom 2/Living / Dining / Kitchen	carpet - framed - PB ceiling under		No
Bathroom/Living / Dining / Kitchen	tiles - framed - PB ceiling under		No
Hall / Void over LDK/Living / Dining / Kitchen	timber - framed - PB ceiling under		No
Bedroom 3/Bedroom 1	carpet - framed - PB ceiling under		No
Bedroom 3/Bedroom 1 Ens	carpet - framed - PB ceiling under		No
Bathroom/Bedroom 1 Ens	tiles - framed - PB ceiling under		No
Bedroom 2/WC / Laundry	carpet - framed - PB ceiling under		No

Ceiling penetrations

Location	Number	Туре	Diameter (mm)	Sealed/unsealed
Living / Dining / Kitchen	9	Downlight		Sealed
Living / Dining / Kitchen	1	Ceiling exhaust fan	160	Sealed
Bedroom 1	6	Downlight		Sealed
Bedroom 1 Ens	2	Downlight		Sealed
Bedroom 1 Ens	1	Ceiling exhaust fan	160	Sealed
WC / Laundry	2	Downlight		Sealed
WC / Laundry	1	Ceiling exhaust fan	160	Sealed
Bedroom 2	6	Downlight		Sealed
Bedroom 3	9	Downlight		Sealed
Bathroom	2	Downlight		Sealed
Bathroom	1	Ceiling exhaust fan	160	Sealed
Hall / Void over LDK	14	Downlight		Sealed

Ceiling fans			
Location	Number	Diameter (mm)	
None Present			

Roof type		
Construction	Added insulation	Roof colour
R3.5 - Steel roof with R3.0 bulk insul + Plasterb'd ceiling under	R3.5	Medium

Certificate number: 0003521911

Certificate Date: 21 Dec 2018

★ Star rating: 5.2



Additional information

Explanatory notes

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Certificate number: 0003521929

Certificate Date: 21 Dec 2018



Assessor details

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

Overview

Dwelling details

Street:	Unit 5, 44 Rose Avenue					
Suburb:	Wheeler Heights					
State:	NSW	Postcode:	2097			
Type:	New	NCC Class:	1a			
.)po.		NatHERS climate zone:	56			
Lot/DP		climate zone.	50			
number:	-	Exposure:	Suburban			

Key construction and insulation materials

(see following pages for details)

Construction:	Double Brick Metal roof/Plasterboard
Insulation:	Timber/Slab R1.0 wall insulation
	Ceiling (uninsulated)
Glazing:	R1.5 floor insulation AI Thermally Broken B DG Air Fill Low Solar Gain

Net floor area (m²) Annual thermal performance loads Conditioned: 132.0 (MJ/m²) Unconditioned: 5.0 Heating: 38.0 Garage: Cooling: 18.0 137.0 TOTAL: TOTAL: 57.0

Plan documents

Plan ref/date: 1704; 11/12/18 Barry Rush & Associates P/L Prepared by:

The mo the more energy efficient NATIONWIDE ENERGY RATING SCHEME Predicted annual energy load for heating and cooling based on standard occupancy assumptions 5 MJ/m² For more information on your dwelling's rating see: www.nathers.gov.au

★ Star rating: 5.6

Ceiling penetration (see following pages for		maximu	This total is the m number of ceiling tions allowed to a	
Sealed: Unsealed: TOTAL:**	32 0 32	exceded in construction then this certificate IS NOT VALID		
Drinciple downlight t				
	ype: Lig	ht-emi	tting diode (LED)	
Window selectio default windows	n -	S	Can to access this ertificate online and onfirm this is valid.	
Window selectio	n - only v values: nominated n on page 2.	S C C	Scan to access this ertificate online and	
Window selectio default windows Note on allowable window With a 10% tolerance to the I SHGC window values showr	n - only v values: nominated n on page 2.	S C C	Scan to access this ertificate online and	

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Nationwide House Energy Rating Scheme* Certificate					
Certificate number: 0003521929	Certificate Date:	21 Dec 2018	★ Star rating:	5.6	

Certificate number: 0003521929

★ Star rating:

Building features

Window type and performance value

Window ID	Window type	U-value	SHGC
ALM-002-01 A	DEFAULTS: Aluminium B SG Clear	6.7	0.70
ATB-004-04 B	DEFAULTS: AI Thermally Broken B DG Air Fill Low Solar Gain low-E -Clear	3.1	0.27

Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Living / Dining / Kitchen	ATB-004-04 B	01	2400	600	E	None
Living / Dining / Kitchen	ATB-004-04 B	02	2700	8200	W	None
Bedroom 1	ATB-004-04 B	05	1200	2400	E	None
WC / Laundry	ALM-002-01 A	07	600	1700	E	None
Bedroom 2	ATB-004-04 B	08	1500	2400	E	Miniature louvres
Bedroom 3	ATB-004-04 B	09	1500	2400	E	Miniature louvres
Hall / Void over LDK	ATB-004-04 B	11	1600	8200	W	Miniature louvres

Roof windo	w and skyligh	ht type and performance	e value			
ID None Presen	Window	r type			U-value	SHGC
Roof window and skylight 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		Wa	all wrap or foil
EW-014	Double Brick		Polystyrene e	xtruded: R1.0	No)
External wall s	chedule					
Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Living / Dining / Kitchen	EW-014	1500	2700	E	Yes	900
Living / Dining / Kitchen	EW-014	8200	2700	W	Yes	2500
Bedroom 1	EW-014	4100	2700	E	No	
Bedroom 1	EW-014	1000	2700	S	No	
WC / Laundry	EW-014	2300	2700	E	No	
Bedroom 2	EW-014	4900	2500	Ν	No	
Bedroom 2	EW-014	4000	2700	E	No	
Bedroom 3	EW-014	4200	2700	E	No	
Bedroom 3	EW-014	900	2700	S	No	
Hall / Void over LDK	EW-014	8200	1700	W	Yes	1000

Nationwide House Energy Rating Scheme* Certificate					**************************************		
Certificate number:	0003521929	Certificate Date	e: 2 1	Dec 2018	★ Star rating:	5.6	NATIONWIDE HOUSE ENERGY RATING SCHEME
Building feature	es continued						
Hall / Void over LDK	EW-014	5600	2000	N	No		

Internal wall type					
ID	Wall type	Area (m²)	Insulation	Wall wrap or foil	
IW-001	Plasterboard	95.5		No	
IW-005	Plasterboard	76.8		No	

F	lo	0	rs
		U	0

Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Living / Dining / Kitchen/Outdoor Air	R1.0 - CP - timber - concre te 200mm	52.9		R1.5	
Living / Dining / Kitchen/Outdoor Air	R1.0 - CP - tiles - concrete 200m	nr 5.0		R1.5	Ceramic tile
Bedroom 1/Outdoor Air	R1.0 - CP - carpet - concre te 200mm	14.6		R1.5	Carpet underlay (felt)
Bedroom 1 Ens/Outdoor Air	R1.0 - CP - tiles - concrete 200m	nr 8.3		R1.5	Ceramic tile
WC / Laundry/Outdoor Air	R1.0 - CP - tiles - concrete 200m	nr 4.8		R1.5	Ceramic tile
Bedroom 2/Living / Dining / Kitchen	carpet - framed - PB ceiling und er	11.5			Carpet underlay (felt)
Bedroom 2/WC / Laundry	carpet - framed - PB ceiling und er	4.8			Carpet underlay (felt)
Bedroom 3/Bedroom 1	carpet - framed - PB ceiling und er	14.6			Carpet underlay (felt)
Bedroom 3/Bedroom 1 Ens	carpet - framed - PB ceiling und er	8.0			Carpet underlay (felt)
Bathroom/Living / Dining / Kitchen	tiles - framed - PB ceiling under	4.8			Ceramic tile
Bathroom/Bedroom 1 Ens	tiles - framed - PB ceiling under	0.3			Ceramic tile
Hall / Void over LDK/Living / Dining / Kitchen	timber - framed - PB ceiling und er	41.6			

Ceiling type

Location	Construction	Added insulation	Roof space above
Bedroom 2/Living / Dining / Kitchen	carpet - framed - PB ceiling under		No
Bathroom/Living / Dining / Kitchen	tiles - framed - PB ceiling under		No
Hall / Void over LDK/Living / Dining / Kitchen	timber - framed - PB ceiling under		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:	0003521929	Certificate Date:	21 Dec 2018	★ Star rating:	5.6	NATIONWIDE HOUSE ENERGY RATING SCHEME
Building feature	es continued					
Bedroom 3/Bedroom 1	carpet - frame	d - PB ceiling under			No	
Bedroom 3/Bedroom 1 Ens	carpet - frame	d - PB ceiling under			No	
Bathroom/Bedroor 1 Ens	n tiles - framed	- PB ceiling under			No	
Bedroom 2/WC / Laundry	carpet - frame	d - PB ceiling under			No	

Ceiling penetrations				
Location	Number	Туре	Diameter (mm)	Sealed/unsealed
Living / Dining / Kitchen	9	Downlight		Sealed
Living / Dining / Kitchen	1	Ceiling exhaust fan	160	Sealed
Bedroom 1	6	Downlight		Sealed
Bedroom 1 Ens	2	Downlight		Sealed
Bedroom 1 Ens	1	Ceiling exhaust fan	160	Sealed
WC / Laundry	2	Downlight		Sealed
WC / Laundry	1	Ceiling exhaust fan	160	Sealed
Bedroom 2	6	Downlight		Sealed
Bedroom 3	9	Downlight		Sealed
Bathroom	2	Downlight		Sealed
Bathroom	1	Ceiling exhaust fan	160	Sealed
Hall / Void over LDK	14	Downlight		Sealed

Ceiling fans			
Location	Number	Diameter (mm)	
None Present			

Roof type		
Construction	Added insulation	Roof colour
R3.5 - Steel roof with R3.0 bulk insul + Plasterb'd ceiling under	R3.5	Medium

Certificate number: 0003521929

Certificate Date: 21 Dec 2018

★ Star rating: 5.6



Additional information

Explanatory notes

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Contact

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

Certificate number: 0003521952

Certificate Date: 21 Dec 2018



Assessor details

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

Overview

Dwelling details

Street:	Unit 6, 44 Rose Avenue			
Suburb:	Wheeler Heights			
State:	NSW	Postcode:	2097	
Type:	New	NCC Class:	1a	
		NatHERS climate zone:	56	
Lot/DP		cimate zone.	30	
number:	-	Exposure:	Suburban	

Key construction and insulation materials

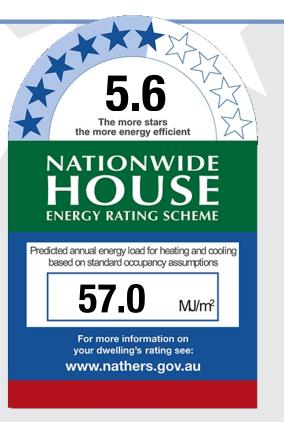
(see following pages for details)

Construction:	Double Brick
	Metal roof Timber/Slab
Insulation:	R1.0 wall insulation
	R3.5 ceiling insulation
	R1.5 floor insulation
Glazing:	Aluminium B SG Low Solar Gain Low-E

Net floor area (m ²)		Annual the	
Conditioned: Unconditioned:	110.0 5.0	performance loads (MJ/m ²)	
Garage:	010	Heating:	34.0
TOTAL:	115.0	Cooling:	23.0
		TOTAL:	57.0

Plan documents

Plan ref/date: 1704; 11/12/18 Prepared by: Barry Rush & Associates P/L



★ Star rating: 5.6

Ceiling penetration (see following pages for		**NOTE: This total is the maximum number of ceiling penetrations allowed to a
Sealed: Unsealed: TOTAL:**	44 0 44	 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.
Window selection default windows o	-	Scan to access this certificate online and confirm this is valid.
Note on allowable window v With a 10% tolerance to the no SHGC window values shown o he following ratings are achiev	minated on page 2,	
-10% SHGC 5.6 +10% SHGC 5.5		.
NB: This tolerance ONLY appli	es	100 A 100

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 Rating Scheme* Certificate					A TATATA B
Certificate number: 0003521952	Certificate Date:	21 Dec 2018	★ Star rating:	5.6	NATIONWIDE HOUSE ENERGY RATING SCHEME

Building features

Window type a	and performanc	e value				
Window ID	Window type				U-value	SHGC
ALM-002-04 A	DEFAULTS: Aluminium B SG Low Solar Gain Low-E				5.6	0.41
Window sched	lule					
Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Living / Dining / Kitchen	ALM-002-04 A	01	2400	6100	N	None
Living / Dining / Kitchen	ALM-002-04 A	02	1100	2400	W	None
Bedroom 1	ALM-002-04 A	03	1100	2400	W	None
Bedroom 2	ALM-002-04 A	04	1100	2400	E	None
Bedroom 3	ALM-002-04 A	05	1100	2400	E	None
Hall / Entry	ALM-002-04 A	06	2400	500	E	None

ID	Window type				U-value	SHGC
None Present						
Roof window	v and skylight sch	edule				
Location	ID	Roof	Area (m ²)	Orientation	Outdoor shade	Indoor

External wall t	уре					
ID	Wall type		Insulation		Wa	ll wrap or foil
EW-014	Double Brick		Polystyrene e	xtruded: R1.0	Nc)
External wall s	chedule					
Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Living / Dining / Kitchen	EW-014	10500	2700	N	Yes	450
Living / Dining / Kitchen	EW-014	4700	2700	W	No	
Bedroom 1	EW-014	2700	2700	S	No	
Bedroom 1	EW-014	3800	2700	W	No	
Bedroom 2	EW-014	3400	2700	E	No	
Bedroom 3	EW-014	3000	2700	Ν	No	
Bedroom 3	EW-014	3500	2700	E	No	
Hall / Entry	EW-014	1500	2700	E	Yes	900

Internal wall type				
ID	Wall type	Area (m ²)	Insulation	Wall wrap or foil
IW-001	Plasterboard	95.9		No
IW-005	Plasterboard	27.8		No

Certificate Date:

Certificate number: 0003521952

21 Dec 2018

★ Star rating:



5.6

Building features continued

FI	oors	
	0015	

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Living / Dining / Kitchen/Outdoor Air	R1.0 - CP - timber - concre te 200mm	45.8		R1.5	
Living / Dining / Kitchen/Outdoor Air	R1.0 - CP - tiles - concrete 200m	r 5.0		R1.5	Ceramic tile
Bedroom 1/Outdoor Air	R1.0 - CP - carpet - concre te 200mm	20.1		R1.5	Carpet underlay (felt)
Bedroom 1 Ens/Outdoor Air	R1.0 - CP - tiles - concrete 200m	r 8.3		R1.5	Ceramic tile
Bedroom 2/Outdoor Air	R1.0 - CP - carpet - concre te 200mm	10.5		R1.5	Carpet underlay (felt)
Bedroom 3/Outdoor Air	R1.0 - CP - carpet - concre te 200mm	10.5		R1.5	Carpet underlay (felt)
Bathroom/Outdoor Air	R1.0 - CP - tiles - concrete 200m	r 4.8		R1.5	Ceramic tile
Hall / Entry/Outdoor Air	R1.0 - CP - timber - concre te 200mm	9.4		R1.5	
Roof Space/Living / Dining / Kitchen	Plasterboard 13 mm + R3.5 bulk insulation	50.8		R3.5	
Roof Space/Bedroom 1	Plasterboard 13 mm + R3.5 bulk insulation	20.1		R3.5	
Roof Space/Bedroom 1 Ens	Plasterboard 13 mm + R3.5 bulk insulation	8.3		R3.5	
Roof Space/Bedroom 2	Plasterboard 13 mm + R3.5 bulk insulation	10.5		R3.5	
Roof Space/Bedroom 3	Plasterboard 13 mm + R3.5 bulk insulation	10.5		R3.5	
Roof Space/Bathroom	Plasterboard 13 mm + R3.5 bulk insulation	4.8		R3.5	
Roof Space/Hall / Entry	Plasterboard 13 mm + R3.5 bulk insulation	9.4		R3.5	

Ceiling type			
Location	Construction	Added insulation	Roof space above
Roof Space/Living / Dining / Kitchen	Plasterboard 13 mm + R3.5 bulk insulation	R3.5	Yes
Roof Space/Bedroom 1	Plasterboard 13 mm + R3.5 bulk insulation	R3.5	Yes
Roof Space/Bedroom 1 Ens	Plasterboard 13 mm + R3.5 bulk insulation	R3.5	Yes
Roof Space/Bedroom 2	Plasterboard 13 mm + R3.5 bulk insulation	R3.5	Yes
Roof Space/Bedroom 3	Plasterboard 13 mm + R3.5 bulk insulation	R3.5	Yes
Roof Space/Bathroom	Plasterboard 13 mm + R3.5 bulk insulation	R3.5	Yes
Roof Space/Hall / Entry	Plasterboard 13 mm + R3.5 bulk insulation	R3.5	Yes

Nationwide House Energy Rating Scheme* Certificate
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Certificate Date:

Certificate number: 0003521952

21 Dec 2018

★ Star rating:



5.6

Building features continued

Calling	non strations
Cennig	penetrations

Location	Number	Туре	Diameter (mm)	Sealed/unsealed
Living / Dining / Kitchen	17	Downlight		Sealed
Living / Dining / Kitchen	1	Ceiling exhaust fan	160	Sealed
Bedroom 1	6	Downlight		Sealed
Bedroom 1 Ens	2	Downlight		Sealed
Bedroom 1 Ens	1	Ceiling exhaust fan	160	Sealed
Bedroom 2	5	Downlight		Sealed
Bedroom 3	5	Downlight		Sealed
Bathroom	2	Downlight		Sealed
Bathroom	1	Ceiling exhaust fan	160	Sealed
Hall / Entry	4	Downlight		Sealed

Ceiling fans			
Location	Number	Diameter (mm)	
None Present			

Roof type		
Construction	Added insulation	Roof colour
none - 5-10 deg Colourbond steel roof with no ceiling under		Medium

Certificate number: 0003521952

Certificate Date: 21 Dec 2018

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Additional information

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