

Nationwide House Energy Rating Scheme* Certificate

Certificate number: 0004335022

Certificate Date: 05 Nov 2019

★ Star rating: 4.6



Assessor details

Accreditation number: **VIC/BDAV/12/1457**
Name: **B Carr**
Organisation: **STS**
Email: **ENQUIRIES@SUSTAINABLETHERMALSOLUTIONS.COM.AU**
Phone: **0420312721**
Declaration of interest: **No potential conflicts of interest to declare**
Software: **AccuRate Sustainability V2.3.3.13 SP4**
AAO: **BDAV**

Overview

Dwelling details

Street: **Unit MAIN, 12A John Street**
Suburb: **Avalon**
State: **NSW** Postcode: **2107**
Type: **New** NCC Class: **1a**
NatHERS climate zone: **56**
Lot/DP number: **Lot 2 DP 1237357** Exposure: **Open**

Key construction and insulation materials

(see following pages for details)

Construction: **Fibre-cement wall**
Metal roof/Plasterboard
Timber
Insulation: **R2.5 wall insulation**
Ceiling (uninsulated)
R2.0 floor insulation
Glazing: **AI Thermally Broken B DG Air Fill High Solar Gain**

Net floor area (m²)

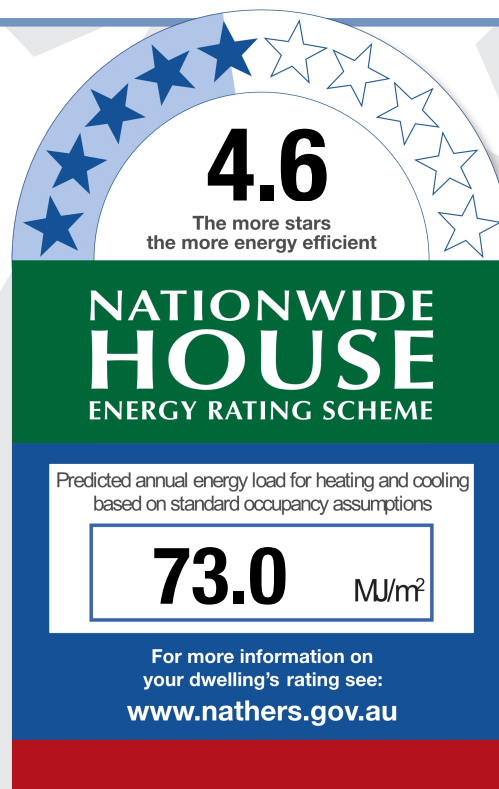
Conditioned: **179.6**
Unconditioned: **16.6**
Garage:
TOTAL: **196.2**

Annual thermal performance loads (MJ/m²)

Heating: **46.6**
Cooling: **26.4**
TOTAL: **73.0**

Plan documents

Plan ref/date: **142/19.9.19**
Prepared by: **THW Architects**



Ceiling penetrations

(see following pages for details)

Sealed: **58**
Unsealed: **0**
TOTAL:** **58**

NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. **If this number is exceeded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

Principle downlight type: **Light-emitting diode (LED)**

Window selection - default windows only

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

-10% SHGC **4.6**
+10% SHGC **4.6**

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

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

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



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Building features

Window type and performance value

Window ID	Window type	U-value	SHGC
ALM-002-01 A	DEFAULTS: Aluminium B SG Clear	6.7	0.70
ALM-004-04 A	DEFAULTS: Aluminium B DG Air Fill Low Solar Gain low-E -Clear	4.9	0.33
ATB-004-03 B	DEFAULTS: Al 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
Kitchen/Living	ALM-004-04 A	W9	2700	800	SW	None
Kitchen/Living	ATB-004-03 B	D3	2700	8300	NE	Miniature louvres
Bed 1	ALM-004-04 A	W5	1200	2400	SE	None
Bath	ALM-002-01 A	W4	1200	1800	SE	None
Bed 2	ALM-004-04 A	W3	1200	2400	SE	None
Bed 2	ALM-004-04 A	W1	2400	800	SW	None
Bed 2	ALM-004-04 A	W2	2400	800	SW	None
Media	ATB-004-03 B	W6	1200	2400	SE	None
Hall	ATB-004-03 B	D4	2700	9585	NW	Miniature louvres
Bed 3	ALM-004-04 A	D6	2700	2895	NE	None
Ens (B3)	ALM-004-04 A	W10	2000	800	SW	None
Master Bed	ATB-004-03 B	D5	2700	6410	NE	None
Master Bed	ALM-004-04 A	W14	2000	800	SW	None
Master Bed	ALM-004-04 A	W15	2000	800	SW	None
Ens (Master Bed)	ALM-004-04 A	W13	2000	800	SW	None
Upper Landing	ALM-004-04 A	W16	2700	1200	NE	None
Laundry	ALM-002-01 A	W7	800	2830	SE	None
Laundry	ALM-002-01 A	W8	800	2830	SE	None

Roof window and skylight type and performance value

ID	Window type	U-value	SHGC
None Present			

Roof window and skylight schedule

Location	ID	Roof window/skylight no.	Area (m²)	Orientation	Outdoor shade	Indoor shade/diffuser
None Present						

External wall type

ID	Wall type	Insulation	Wall wrap or foil
EW-001	Fibre-cement sheet/Plasterboard	Glass fibre batt: R2.5	Yes
EW-002	Fibre-cement sheet		No

External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Kitchen/Living	EW-001	1800	2700	SW	No	

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Kitchen/Living	EW-001	5844	2700	NW	No	
Kitchen/Living	EW-001	9000	2700	NE	Yes	450
Kitchen/Living	EW-001	500	2700	SW	No	
Kitchen/Living	EW-001	555	2700	SE	No	
Bed 1	EW-001	2300	2700	SE	No	
Bath	EW-001	1801	2700	SE	No	
Bed 2	EW-001	3000	2700	SE	No	
Bed 2	EW-001	3950	2700	SW	No	
Bed 2	EW-001	1400	2700	NW	Yes	2400
Media	EW-001	4650	2700	SE	No	
Hall	EW-001	1900	2700	SW	Yes	800
Hall	EW-001	11000	2700	NW	Yes	200
Bed 3	EW-001	3550	2700	NW	No	
Bed 3	EW-001	2895	2700	NE	Yes	1000
Ens (B3)	EW-001	1800	2700	NW	No	
Ens (B3)	EW-001	2900	2700	SW	Yes	400
Master Bed	EW-001	6411	2700	NE	Yes	1000
Master Bed	EW-001	4000	2700	SW	Yes	400
Master Bed	EW-001	5450	2700	SE	No	
Ens (Master Bed)	EW-001	1700	2700	SW	Yes	400
Upper Landing	EW-001	1201	2700	NE	Yes	1000
Upper Landing	EW-001	1800	2700	SW	Yes	3700
Laundry	EW-001	5844	2700	SE	No	
Laundry	EW-001	1600	2700	SW	No	
Laundry	EW-001	1600	2700	NE	Yes	450
Sub-floor	EW-002	12000	600	NW	No	
Sub-floor	EW-002	2000	600	SW	No	
Sub-floor	EW-002	6000	600	NW	No	
Sub-floor	EW-002	10700	600	NE	No	
Sub-floor	EW-002	6000	600	SE	No	
Sub-floor	EW-002	2000	600	SW	No	
Sub-floor	EW-002	13350	600	SE	No	
Sub-floor	EW-002	3900	600	SW	No	
Sub-floor	EW-002	1400	600	NW	No	
Sub-floor	EW-002	1850	600	SW	No	

Internal wall type

ID	Wall type	Area (m²)	Insulation	Wall wrap or foil
IW-001	Plasterboard	157.6	Glass fibre batt: R1.5	No

Floors

Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Kitchen/Living/Sub-floor	Timber (hardwood): bare/R2.0	32.4		R2.0	

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Kitchen/Living/Sub-floor	Timber (hardwood): bare/R2.0	20.0	R2.0	
Bed 1/Sub-floor	Timber (hardwood): carpet/R2.0	16.1	R2.0	Carpet 10 + rubber underlay 8
Bath/Sub-floor	Timber (hardwood): ceramic tile/R2.0	7.1	R2.0	Ceramic tile
Bed 2/Sub-floor	Timber (hardwood): carpet/R2.0	11.7	R2.0	Carpet 10 + rubber underlay 8
Media/Sub-floor	Timber (hardwood): bare/R2.0	16.1	R2.0	
Hall/Sub-floor	Timber (hardwood): bare/R2.0	26.3	R2.0	
Bed 3/Kitchen/Living	Timber (hardwood): carpet/air gap/plasterboard	10.2		Carpet 10 + rubber underlay 8
Ens (B3)/Kitchen/Living	Timber (hardwood): ceramic tile/air gap/plasterboard	5.2		Ceramic tile
Master Bed/Kitchen/Living	Timber (hardwood): carpet/air gap/plasterboard	15.5		Carpet 10 + rubber underlay 8
Master Bed/Laundry	Timber (hardwood): carpet/air gap/plasterboard	9.5		Carpet 10 + rubber underlay 8
Ens (Master Bed)/Kitchen/Living	Timber (hardwood): ceramic tile/air gap/plasterboard	8.2		Ceramic tile
Upper Landing/Kitchen/Living	Timber (hardwood): bare/air gap/plasterboard	7.8		
Upper Landing/Hall	Timber (hardwood): bare/air gap/plasterboard	3.6		
Laundry/Sub-floor	Timber (hardwood): ceramic tile/R2.0	9.5	R2.0	Ceramic tile
Sub-floor/Ground	Bare ground	156.0	Enclosed	

Ceiling type

Location	Construction	Added insulation	Roof space above
Bed 3/Kitchen/Living	Timber (hardwood): carpet/air gap/plasterboard		No
Master Bed/Kitchen/Living	Timber (hardwood): carpet/air gap/plasterboard		No
Ens (Master Bed)/Kitchen/Living	Timber (hardwood): ceramic tile/air gap/plasterboard		No
Ens (B3)/Kitchen/Living	Timber (hardwood): ceramic tile/air gap/plasterboard		No
Upper Landing/Kitchen/Living	Timber (hardwood): bare/air gap/plasterboard		No
Upper Landing/Hall	Timber (hardwood): bare/air gap/plasterboard		No
Master Bed/Laundry	Timber (hardwood): carpet/air gap/plasterboard		No
Kitchen/Living/Sub-floor	Timber (hardwood): bare/R2.0	R2.0	No
Bed 1/Sub-floor	Timber (hardwood): carpet/R2.0	R2.0	No
Bed 2/Sub-floor	Timber (hardwood): carpet/R2.0	R2.0	No
Bath/Sub-floor	Timber (hardwood): ceramic tile/R2.0	R2.0	No
Media/Sub-floor	Timber (hardwood): bare/R2.0	R2.0	No

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Hall/Sub-floor	Timber (hardwood): bare/R2.0	R2.0	No
Laundry/Sub-floor	Timber (hardwood): ceramic tile/R2.0	R2.0	No
Kitchen/Living/Sub-floor	Timber (hardwood): bare/R2.0	R2.0	No

Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
Kitchen/Living	18	Downlight		Sealed
Kitchen/Living	1	Ceiling exhaust fan	160	Sealed
Bed 1	5	Downlight		Sealed
Bath	3	Downlight		Sealed
Bath	1	Ceiling exhaust fan	160	Sealed
Bed 2	5	Downlight		Sealed
Media	6	Downlight		Sealed
Hall	10	Downlight		Sealed
Bed 3	4	Downlight		Sealed
Ens (B3)	2	Downlight		Sealed
Ens (B3)	1	Ceiling exhaust fan	160	Sealed
Master Bed	12	Downlight		Sealed
Ens (Master Bed)	3	Downlight		Sealed
Ens (Master Bed)	1	Ceiling exhaust fan	160	Sealed
Upper Landing	4	Downlight		Sealed
Laundry	4	Downlight		Sealed

Ceiling fans

Location	Number	Diameter (mm)
None Present		

Roof type

Construction	Added insulation	Roof colour
Metal deck roof: AG foil (sarking): air gap: R4.0: 10mm plasterboard	R4.0	Medium

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Additional information

Explanatory notes

About this report

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

General Information

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

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

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

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

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

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

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

Accredited Assessors

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

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

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