Certificate number: **0004335048** Certificate Date: **05 Nov 2019** ★ Star rating: **5.2** 



#### Assessor details

Accreditation

number: VIC/BDAV/12/1457

Name: **B Carr** Organisation: **STS** 

Email: enquiries@sustainablethermalsolutions.com.au

Phone: **0420312721** 

Declaration No potential conflicts of interest to

of interest: declare

Software: AccuRate Sustainability V2.3.3.13 SP4

AAO: BDAV

## Overview

#### **Dwelling details**

Street: Unit SECONDRY, 12B John Street

Suburb: Avalon

State: NSW Postcode: 2107
Type: New NCC Class: 1a

NatHERS

Lot/DP climate zone: **56** 

number: Lot 2 DP 1237357 Exposure: Open

#### Key construction and insulation materials

(see following pages for details)

Construction: Fibre-cement wall

Metal roof/Plasterboard

Slab

Insulation: R2.5 wall insulation

R2.0 ceiling insulation Floor (uninsulated)

Glazing: Aluminium B DG Air Fill High Solar

**Gain low-E** 

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

 Conditioned:
 35.1

 Unconditioned:
 41.8

 Garage:
 37.4

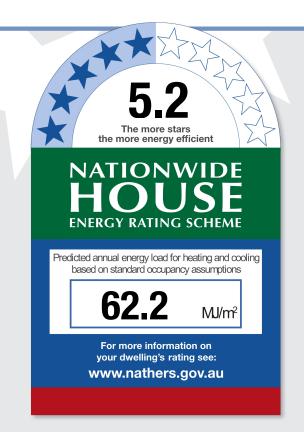
 TOTAL:
 76.9

# Annual thermal performance loads (MJ/m²)

Heating: **38.5**Cooling: **23.7**TOTAL: **62.2** 

## Plan documents

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



#### **Ceiling penetrations**

(see following pages for details)

Sealed: 2

Unsealed: 0
TOTAL:\*\* 2

\*\*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.

Principle downlight type: No Ceiling Penetration Downlights

## Window selection - default windows only

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

-10% SHGC **5.3** 

+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.

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



<sup>\*</sup> Nationwide House Energy Rating Scheme (NatHERS) is an initiative of the Australian, state and territory governments. For more details see www.nathers.gov.au

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## **Building features**

Window type	and performand	e value				
Window ID	Window type				U-value	SHGC
ALM-002-01 A		uminium B SG C	lear		6.7	0.70
ALM-004-03 A	DEFAULTS: AI	uminium B DG A	ir Fill High Solar	Gain low-E -Cl	ear 4.3	0.53
Window sche	dule					
Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Garage	ALM-002-01 A	W18	800	1700	SE	None
Garage	ALM-002-01 A	W17	2100	800	SW	None
Kitchen/Living	ALM-004-03 A	W19	700	2700	SW	Outdoor venetians
Kitchen/Living	ALM-004-03 A	D9	2600	5700	NW	Outdoor venetians
Bed 2	ALM-004-03 A	W22	2600	1000	NE	Outdoor venetians
Bath	ALM-002-01 A	W21	800	1700	SE	None
Bed 1	ALM-004-03 A	W20	2600	800	SW	Outdoor venetians

ID	Window	type			U-value	SHGC
None Present	t					
Roof windo	w and skyligh	t schedule				
Location	ID	Roof	Area (m²)	Oniontation	Outdoor shade	In dees

ID	Wall type		Insulation		Wa	all wrap or foi
EW-001	Fibre-cement sheet/Plasterboard		Glass fibre batt: R2.5		Yes	
External wall	schedule					
Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Garage	EW-001	7700	2400	SE	No	
Garage	EW-001	5700	2400	SW	No	
Garage	EW-001	5700	2400	NW	Yes	1500
Garage	EW-001	2800	2400	NE	No	
Garage	EW-001	1730	2400	NW	No	
Garage	EW-001	2600	2400	NE	No	
Kitchen/Living	EW-001	3440	2600	SW	No	
Kitchen/Living	EW-001	5725	2600	NW	Yes	200
Kitchen/Living	EW-001	3440	2600	NE	No	
Bed 2	EW-001	1730	2600	NW	No	
Bed 2	EW-001	2620	2600	NE	No	
Bath	EW-001	1701	2600	SE	No	

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## **Building features continued**

Bed 1	EW-001	2500	2600	SE	No	
Bed 1	EW-001	2620	2600	SW	No	

rap or foil

Floors					
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Garage/Outdoor Air	Concrete Slab 100 mm: bare/bare	37.4			
Kitchen/Living/Gar age	Timber (hardwood): bare/R2.0/plasterboard	20.1		R2.0	
Bed 2/Garage	Timber (hardwood): carpet/R2.0/plasterboard	8.7		R2.0	Carpet 10 + rubber underlay 8
Bath/Garage	Timber (hardwood): ceramic tile/R2.0/plasterboard	4.4		R2.0	Ceramic tile
Bed 1/Garage	Timber (hardwood): carpet/R2.0/plasterboard	6.3		R2.0	Carpet 10 + rubber underlay 8

Location	Construction	Added insulation	Roof space above
Kitchen/Living/Gar age	Timber (hardwood): bare/R2.0/plasterboard	R2.0	No
Bed 2/Garage	Timber (hardwood): carpet/R2.0/plasterboard	R2.0	No
Bed 1/Garage	Timber (hardwood): carpet/R2.0/plasterboard	R2.0	No
Bath/Garage	Timber (hardwood): ceramic tile/R2.0/plasterboard	R2.0	No

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

Ceiling fans			
Location	Number	Diameter (mm)	
None Present			

## **Roof type**

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## **Building features continued**

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



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

<sup>\*</sup> Nationwide House Energy Rating Scheme (NatHERS) is an initiative of the Australian, state and territory governments. For more details see www.nathers.gov.au