

Nationwide House Energy Rating Scheme* — Multiple-dwelling summary



Certificate number: **0003988870**

Certificate Date: **01 Jul 2019**

★ Average Star rating: **5.4**

Assessor details

Accreditation number: **VIC/BDAV/18/1887**
Name: **Marcello Belcastro**
Organisation: **Evergreen Energy Consultants**
Email: **marcello@evergreenec.com.au**
Phone: **0428612398**
Declaration of interest: **The Assessor has provided design advice to the Applicant**
Software: **BERS Pro v4.3.0.2d (3.13)**
AAO: **BDAV**

Dwelling details

Street: **20 Bubalo Street**
Suburb: **Warriewood**
State: **NSW**
Postcode: **2102**

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



Summary of all dwellings

Certificate Details

Certificate number	Dwelling/Unit number	Heating load	Cooling load	Total load	Star Rating
0003988862		35.4	24.5	60.0	5.4

Nationwide House Energy Rating Scheme* Certificate



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BERS Pro v4.3.0.0 (3.13) cannot be used to model 'roof windows'. Roof windows are 'openable or fixed windows in a roof' and do not have a shaft, as distinct from skylights which incorporate a built-in shaft and are not ventilated. BERS Pro v4.3 can only model skylights. If a roof window is present on the floor plan then this certificate is not valid.

Assessor details

Accreditation

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Organisation: **Evergreen Energy Consultants**

Email: **marcello@evergreenec.com.au**

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Overview

Dwelling details

Street: **20 Bubalo Street**

Suburb: **Warriewood**

State: **NSW**

Postcode: **2102**

Type: **New Dwelling**

NCC Class: **1A**

NatHERS

climate zone: **56**

Lot/DP

number: **30/Unregistered**

Exposure: **Suburban**

Key construction and insulation materials

(see following pages for details)

Construction: **Fibro Cavity Panel Direct Fix Roof Tiles**

Suspended Timber Floor

Insulation: **R2.5 wall insulation**

R3.5 ceiling insulation

No floor insulation

Glazing: **ALM-002-01 A Aluminium B SG Clear**

Net floor area (m²)

Conditioned: **208.0**

Unconditioned: **36.0**

Garage: **19.0**

TOTAL: **244.0**

Annual thermal performance loads (MJ/m²)

Heating: **35.4**

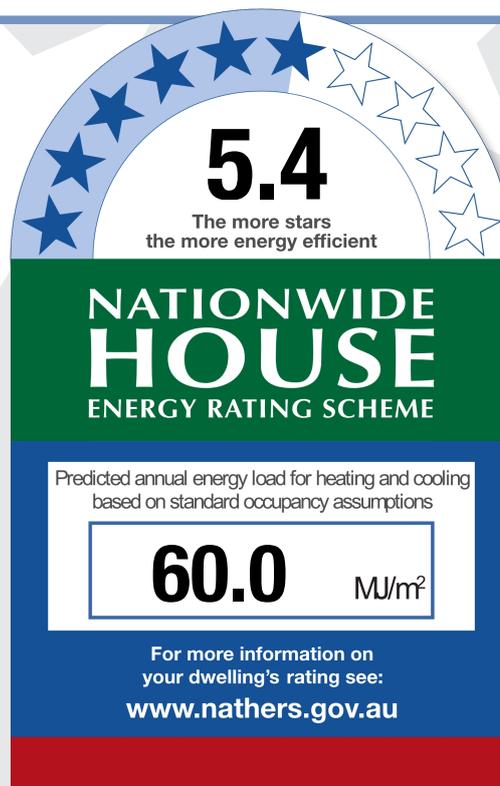
Cooling: **24.5**

TOTAL: **60.0**

Plan documents

Plan ref/date: **N195509**

Prepared by: **#Drawn By**



Ceiling penetrations

(see following pages for details)

Sealed: **6**

Unsealed: **0**

TOTAL:** **6**

****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: **Unknown**

Window selection - default windows only

Note on allowable window values:
Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/- 5% SHGC tolerance is allowed with this rating.

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 any of windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

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Building features

Window type and performance value

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

Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Pantry	ALM-002-01 A	n/a	600	1210	SW	No Shading
Kitchen/Living	ALM-002-01 A	n/a	600	1810	SW	No Shading
Kitchen/Living	ALM-002-01 A	n/a	1200	2170	SW	No Shading
Kitchen/Living	ALM-002-01 A	n/a	2100	4304	NW	No Shading
Kitchen/Living	ALM-002-01 A	n/a	1800	850	NE	No Shading
Kitchen/Living	ALM-002-01 A	n/a	1800	850	NE	No Shading
Kitchen/Living	ALM-002-01 A	n/a	1800	1450	NE	No Shading
Kitchen/Living	ALM-002-01 A	n/a	1800	850	NE	No Shading
Kitchen/Living	ALM-002-01 A	n/a	600	1090	NE	No Shading
Kitchen/Living	ALM-001-01 A	n/a	1370	850	SE	No Shading
Powder	ALM-002-01 A	n/a	772	730	NE	No Shading
Laundry	ALM-001-01 A	n/a	772	610	NE	No Shading
Media	ALM-002-01 A	n/a	1030	1810	NE	No Shading
Media	ALM-002-01 A	n/a	1200	1090	NE	No Shading
Media	ALM-002-01 A	n/a	1200	850	SE	No Shading
Media	ALM-002-01 A	n/a	1200	850	SE	No Shading
Bedroom 1	ALM-002-01 A	n/a	772	1570	SW	No Shading
Bedroom 1	ALM-002-01 A	n/a	860	3010	NW	No Shading
Ensuite	ALM-002-01 A	n/a	600	850	NW	No Shading
Ensuite	ALM-002-01 A	n/a	170	1690	NE	No Shading
Ensuite	ALM-002-01 A	n/a	944	730	NE	No Shading
Bedroom 2	ALM-002-01 A	n/a	1030	1810	SW	No Shading
Bedroom 3	ALM-002-01 A	n/a	1030	1810	SW	No Shading
Bedroom 4	ALM-002-01 A	n/a	1200	1810	SE	No Shading
Bedroom 5	ALM-002-01 A	n/a	1030	1570	NE	No Shading
Bath	ALM-002-01 A	n/a	944	730	NE	No Shading
Powder	ALM-002-01 A	n/a	944	730	NE	No Shading

Roof window and skylight type and performance value

ID	Window type	U-value	SHGC
None Present			

Roof window and skylight schedule

Location	ID	Roof window/skylight no.	Area (m ²)	Orientation	Outdoor shade	Indoor shade/diffuser
None Present						

External wall type

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Building features continued

ID	Wall type	Insulation	Wall wrap or foil
EW-1	Brick Veneer	Anti-glare foil with bulk no gap R2.5	Yes
EW-2	Metal Clad Cavity Panel Direct Fix	Anti-glare foil with bulk no gap R2.5	Yes
EW-3	Fibro Cavity Panel Direct Fix	Anti-glare foil with bulk no gap R2.5	Yes

External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Garage	EW-1	5700	2600	SW	No	100
Garage	EW-1	900	2600	NW	No	100
Garage	EW-1	3295	2600	SE	No	2400
Pantry	EW-1	2090	2600	SW	No	100
Kitchen/Living	EW-1	8695	2600	SW	No	100
Kitchen/Living	EW-1	6600	2600	NW	No	3600
Kitchen/Living	EW-1	10395	2600	NE	No	100
Kitchen/Living	EW-1	3595	2600	NE	No	100
Kitchen/Living	EW-1	4200	2600	SE	No	1300
Kitchen/Living	EW-1	1100	2600	SW	No	3400
Powder	EW-1	1390	2600	NE	No	100
Laundry	EW-1	2190	2600	NE	No	100
Media	EW-2	1095	500	SW	No	0
Media	EW-3	1095	1950	SW	No	3000
Media	EW-3	7495	2450	NE	No	600
Media	EW-3	4200	2450	SE	No	600
Bedroom 1	EW-3	5095	2450	SW	No	600
Bedroom 1	EW-3	4695	2450	NW	No	600
Bedroom 1	EW-3	1390	2450	NE	No	600
Ensuite	EW-3	1895	2450	NW	No	600
Ensuite	EW-3	4295	2450	NE	No	600
Bedroom 2	EW-3	6190	2450	SW	No	600
Bedroom 3	EW-3	4790	2450	SW	No	600
Bedroom 4	EW-3	3895	2450	SW	No	600
Bedroom 4	EW-2	2400	500	SE	No	0
Bedroom 4	EW-3	2400	1950	SE	No	600
Bedroom 5	EW-3	3390	2450	NE	No	600
Bath	EW-3	3490	2450	NE	No	600
Powder	EW-3	990	2450	NE	No	600

Internal wall type

Wall type	Area (m ²)	Insulation	Wall wrap or foil
IW-1 - Cavity wall, direct fix plasterboard, single gap	24.0	Bulk Insulation, No Air Gap R2.5	No
IW-2 - Cavity wall, direct fix plasterboard, single gap	174.0	No insulation	No

Floors

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Building features continued

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Garage	Concrete Slab on Ground 100mm	19.1	None	No Insulation	Bare
Pantry	Concrete Slab on Ground 100mm	4.9	None	No Insulation	Vinyl 3mm
Kitchen/Living	Concrete Slab on Ground 100mm	83.5	None	No Insulation	Vinyl 3mm
Powder	Concrete Slab on Ground 100mm	4.0	None	No Insulation	Ceramic Tiles 8mm
Laundry	Concrete Slab on Ground 100mm	4.8	None	No Insulation	Ceramic Tiles 8mm
Media/Kitchen/Living	Timber Above Plasterboard 19mm	22.1		No Insulation	Carpet+Rubber Underlay 18mm
Media/Powder	Timber Above Plasterboard 19mm	4.2		No Insulation	Carpet+Rubber Underlay 18mm
Media/Laundry	Timber Above Plasterboard 19mm	4.9		No Insulation	Carpet+Rubber Underlay 18mm
Bedroom 1/Kitchen/Living	Timber Above Plasterboard 19mm	14.3		No Insulation	Carpet+Rubber Underlay 18mm
Bedroom 1	Suspended Timber Floor 19mm	16.0	Totally Open	No Insulation	Carpet+Rubber Underlay 18mm
Ensuite/Kitchen/Living	Timber Above Plasterboard 19mm	1.5		No Insulation	Ceramic Tiles 8mm
Ensuite	Suspended Timber Floor 19mm	6.4	Totally Open	No Insulation	Ceramic Tiles 8mm
Bedroom 2/Kitchen/Living	Timber Above Plasterboard 19mm	16.9		No Insulation	Carpet+Rubber Underlay 18mm
Bedroom 3/Garage	Timber Above Plasterboard 19mm	4.4		No Insulation	Carpet+Rubber Underlay 18mm
Bedroom 3/Pantry	Timber Above Plasterboard 19mm	5.0		No Insulation	Carpet+Rubber Underlay 18mm
Bedroom 3/Kitchen/Living	Timber Above Plasterboard 19mm	7.3		No Insulation	Carpet+Rubber Underlay 18mm
Bedroom 4/Garage	Timber Above Plasterboard 19mm	9.5		No Insulation	Carpet+Rubber Underlay 18mm
Bedroom 4/Kitchen/Living	Timber Above Plasterboard 19mm	4.4		No Insulation	Carpet+Rubber Underlay 18mm
Bedroom 5/Kitchen/Living	Timber Above Plasterboard 19mm	6.8		No Insulation	Carpet+Rubber Underlay 18mm
Bath/Kitchen/Living	Timber Above Plasterboard 19mm	6.4		No Insulation	Ceramic Tiles 8mm
Powder/Kitchen/Living	Timber Above Plasterboard 19mm	1.9		No Insulation	Ceramic Tiles 8mm

Ceiling type

Location	Construction	Added insulation	Roof space above
Garage	Plasterboard	Bulk Insulation R3.5	Yes
Garage	Timber Above Plasterboard	No Insulation	No
Pantry	Timber Above Plasterboard	No Insulation	No
Kitchen/Living	Timber Above Plasterboard	No Insulation	No

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Building features continued

Powder	Timber Above Plasterboard	No Insulation	No
Laundry	Timber Above Plasterboard	No Insulation	No
Media	Plasterboard	Bulk Insulation R3.5	Yes
Bedroom 1	Plasterboard	Bulk Insulation R3.5	Yes
Ensuite	Plasterboard	Bulk Insulation R3.5	Yes
Bedroom 2	Plasterboard	Bulk Insulation R3.5	Yes
Bedroom 3	Plasterboard	Bulk Insulation R3.5	Yes
Bedroom 4	Plasterboard	Bulk Insulation R3.5	Yes
Bedroom 5	Plasterboard	Bulk Insulation R3.5	Yes
Bath	Plasterboard	Bulk Insulation R3.5	Yes
Powder	Plasterboard	Bulk Insulation R3.5	Yes

Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
Kitchen/Living	1	Exhaust Fans	200	Sealed
Powder	1	Exhaust Fans	200	Sealed
Laundry	1	Exhaust Fans	200	Sealed
Ensuite	1	Exhaust Fans	200	Sealed
Bath	1	Exhaust Fans	200	Sealed
Powder	1	Exhaust Fans	200	Sealed

Ceiling fans

Location	Number	Diameter (mm)
None Present		

Roof type

Construction	Added insulation	Roof colour
Roof Tiles	Foil, Gap Above, Reflective Side Down, Anti-glare Up	Dark

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Additional information

run 2 = default glass

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