Certificate number: 0004748257 Certificate Date: 09 Apr 2020 ★ Star rating: 5.0



#### Assessor details

Accreditation

number: 20884

Name: Zoltan Lipovski
Organisation: EcoMode Design

Email: zoltan@ecomode.com.au

Phone: **0410605614** 

Declaration None

of interest:

Software: BERS Pro v4.4.0.0 (3.21)

AAO: ABSA

#### **Overview**

#### **Dwelling details**

Street: Unit 2, 9 Baz Retreat

Suburb: Warriewood

State: NSW Postcode: 2102
Type: New Dwelling NCC Class: 1A

NatHERS

Lot/DP climate zone: **56** 

number: 11/270907 Exposure: Suburban

#### Key construction and insulation materials

(see following pages for details)

Construction: Weatherboard Cavity Panel Direct Fix

Corrugated Iron

Waffle pod slab 300 mm

Insulation: R2.0 wall insulation

R6.0 ceiling insulation
No floor insulation

Glazing: ATB-003-03 B AI Thermally Broken A

DG Air Fill High Solar Gain low-E -Clear

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

 Conditioned:
 104.0

 Unconditioned:
 28.0

 Garage:
 19.0

 TOTAL:
 132.0

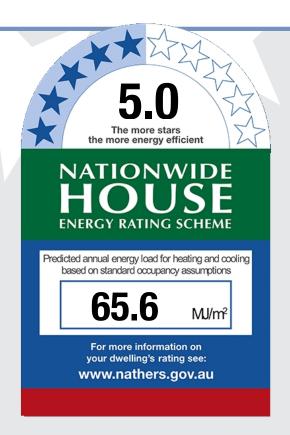
# Annual thermal performance loads (MJ/m²)

Heating: **40.0** Cooling: **25.6** TOTAL: **65.6** 

#### Plan documents

Plan ref/date: Job No. - Site, Floor Plans, Elevations, Sections

Prepared by: **DKO Architecture** 



#### **Ceiling penetrations**

(see following pages for details)

Sealed: 36
Unsealed: 1

TOTAL:\*\*

\*\*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: **LED** 

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If any of windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

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 ID	Window type	<b>U-value</b>	SHGC
ATB-004-03 B	ATB-004-03 B Al Thermally Broken B DG Air Fill High Solar Gain low-E -Clear	3.1	0.49
ATB-003-03 B	ATB-003-03 B Al Thermally Broken A DG Air Fill High Solar Gain low-E -Clear	3.1	0.39
ATB-004-04 B	ATB-004-04 B Al Thermally Broken B DG Air Fill Low Solar Gain low-E -Clear	3.1	0.27
ALM-002-04 A	ALM-002-04 A Aluminium B SG Low Solar Gain Low-E	5.6	0.41
ALM-002-03 A	ALM-002-03 A Aluminium B SG High Solar Gain Low-E	5.4	0.58
ALM-001-01 A	ALM-001-01 A Aluminium A SG Clear	6.7	0.57

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Entry	ATB-004-03 B	n/a	2340	450	SW	No Shading
Entry	ATB-003-03 B	n/a	2315	850	NW	No Shading
Stair	ATB-004-03 B	n/a	2315	850	NW	No Shading
Kitchen/Living	ATB-004-04 B	n/a	2315	1915	NW	No Shading
Kitchen/Living	ATB-004-04 B	n/a	2400	3600	NE	No Shading
Kitchen/Living	ALM-002-04 A	n/a	2400	950	NE	No Shading
Bedroom 2	ALM-002-03 A	n/a	2050	850	SW	No Shading
Bath	ALM-001-01 A	n/a	1027	1810	SW	No Shading
Bedroom 3	ATB-003-03 B	n/a	1650	2480	NW	No Shading
Upper Corridor	ATB-003-03 B	n/a	1650	1800	NW	No Shading
Bedroom 1	ATB-003-03 B	n/a	1650	1810	NE	No Shading
Ensuite	ALM-001-01 A	n/a	1057	850	NE	No Shading

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

External wall type						
ID	Wall type		Insulation			Wall wrap or foil
EW-1	Weatherboard Fix	d Cavity Panel Direct	Anti-glare foil	with bulk no gap	R2	Yes
EW-2	Brick Veneer		Anti-glare foil	with bulk no gap	R2	Yes
External wa	III schedule					
Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shad	de Eaves (mm)
Garage	EW-1	3095	3735	SW	No	700
Entry	EW-2	1895	3735	SW	No	700

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Building featur	es continue	ed				
Entry	EW-2	3200	3735	NW	No	0
Entry	EW-1	2895	3735	NW	No	0
Stair	EW-1	2190	2700	NW	No	0
Kitchen/Living	EW-1	3895	2700	NW	No	0
Kitchen/Living	EW-2	2700	2700	NW	No	0
Kitchen/Living	EW-2	5000	2700	NE	No	0
Bedroom 2	EW-1	1000	2550	SW	No	1200
Bedroom 2	EW-1	700	2550	SE	No	1000
Bedroom 2	EW-1	2100	2550	SW	No	500
Bedroom 2	EW-1	700	2550	NW	No	2500
Bath	EW-1	1895	2550	SW	No	1200
Bath	EW-1	3995	2550	NW	No	600
Bedroom 3	EW-1	3090	2550	NW	No	600
Upper Corridor	EW-1	2090	2550	NW	No	600
Bedroom 1	EW-1	3795	2550	NW	No	600
Bedroom 1	EW-1	2995	2550	NE	No	600
Ensuite	EW-1	1995	2550	NE	No	600
Ensuite	EW-1	2195	2550	SE	No	0

Wall type	Area (m²)	Insulation	Wall wrap or foil
IW-1 - Cavity wall, direct fix plasterboard, single gap	89.0	Bulk Insulation, No Air Gap R1.5	No
IW-2 - Shaft liner party wall with plaster	74.0	Bulk Insulation both sides of shaft liner R2	No
IW-3 - Cavity wall, direct fix plasterboard, single gap	50.0	No insulation	No

Floors					
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Garage	Waffle pod slab 300 mm 100mm	19.0	None	Waffle Pod 300mm	Bare
Entry	Waffle pod slab 300 mm 100mm	8.8	None	Waffle Pod 300mm	Cork Tiles or Parquetry 8mm
Powder	Waffle pod slab 300 mm 100mm	1.6	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Laundry	Waffle pod slab 300 mm 100mm	1.5	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Stair	Waffle pod slab 300 mm 100mm	10.6	None	Waffle Pod 300mm	Cork Tiles or Parquetry 8mn
Kitchen/Living	Waffle pod slab 300 mm 19mm	30.8	None	Waffle Pod 300mm	Cork Tiles or Parquetry 8mn
Bedroom 2/Garage	Timber Above Plasterboard 19mm	9.1		No Insulation	Carpet 10mm
Bedroom 2	Suspended Timber Floor 19mm	1.4	Open	Bulk Insulation, Gap to Floor R4	Carpet 10mm

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# **Building features continued**

Bath/Garage	Timber Above Plasterboard 19mm	1.9	No Insulation	Ceramic Tiles 8mm
Bath/Entry	Timber Above Plasterboard 19mm	6.7	No Insulation	Ceramic Tiles 8mm
Bedroom 3/Garage	Timber Above Plasterboard 19mm	4.0	No Insulation	Carpet 10mm
Bedroom 3/Entry	Timber Above Plasterboard 19mm	2.0	No Insulation	Carpet 10mm
Bedroom 3/Powder	Timber Above Plasterboard 19mm	1.8	No Insulation	Carpet 10mm
Bedroom 3/Stair	Timber Above Plasterboard 19mm	3.7	No Insulation	Carpet 10mm
Upper Corridor/Garage	Timber Above Plasterboard 19mm	3.8	No Insulation	Carpet 10mm
Upper Corridor/Laundry	Timber Above Plasterboard 19mm	0.9	No Insulation	Carpet 10mm
Upper Corridor/Stair	Timber Above Plasterboard 19mm	6.8	No Insulation	Carpet 10mm
Upper Corridor/Kitchen/Li ving	Timber Above Plasterboard 19mm	3.4	No Insulation	Carpet 10mm
Bedroom 1/Laundry	Timber Above Plasterboard 19mm	0.9	No Insulation	Carpet 10mm
Bedroom 1/Kitchen/Living	Timber Above Plasterboard 19mm	13.3	No Insulation	Carpet 10mm
Ensuite/Kitchen/Liv ing	Timber Above Plasterboard 100mm	4.2	No Insulation	Ceramic Tiles 8mm

# **Ceiling type**

Location	Construction	Added insulation	Roof space above
Garage	Timber Above Plasterboard	No Insulation	No
Entry	Timber Above Plasterboard	No Insulation	No
Powder	Timber Above Plasterboard	No Insulation	No
Laundry	Timber Above Plasterboard	No Insulation	No
Stair	Timber Above Plasterboard	No Insulation	No
Kitchen/Living	Plasterboard	Bulk Insulation R4	Yes
Kitchen/Living	Timber Above Plasterboard	No Insulation	No
Bedroom 2	Plasterboard	Bulk Insulation R6	Yes
Bath	Plasterboard	Bulk Insulation R6	Yes
Bedroom 3	Plasterboard	Bulk Insulation R6	Yes
Upper Corridor	Plasterboard	Bulk Insulation R6	Yes
Bedroom 1	Plasterboard	Bulk Insulation R6	Yes
Ensuite	Plasterboard	Bulk Insulation R6	Yes

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# **Building features continued**

Location	Number	Туре	Diameter (mm)	Sealed/unsealed
Entry	2	Downlights - LED	150	Sealed
Powder	1	Downlights - LED	150	Unsealed
Powder	1	Exhaust Fans	300	Sealed
Laundry	1	Downlights - LED	150	Sealed
Laundry	1	Exhaust Fans	300	Sealed
Stair	3	Downlights - LED	150	Sealed
Kitchen/Living	9	Downlights - LED	150	Sealed
Kitchen/Living	1	Exhaust Fans	300	Sealed
Bedroom 2	2	Downlights - LED	150	Sealed
Bath	2	Downlights - LED	150	Sealed
Bath	1	Exhaust Fans	300	Sealed
Bedroom 3	2	Downlights - LED	150	Sealed
Upper Corridor	5	Downlights - LED	150	Sealed
Bedroom 1	3	Downlights - LED	150	Sealed
Ensuite	2	Downlights - LED	150	Sealed
Ensuite	1	Exhaust Fans	300	Sealed

Ceiling fans			
Location	Number	Diameter (mm)	
None Present			

Construction	Added Roof cold insulation
Corrugated Iron	Bulk, Reflective Dark Side Down, Anti- glare Up R1.3
Roof Tiles	Foil, No Gap, Dark Reflective Side Down, Anti-glare Up



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

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