

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: 1ODN9065QX

Date of Certificate: 17 Oct 2019

★ Star rating: 8.4



Assessor details

Accreditation number: VIC/BDAV/11/2138
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Declaration of interest: No potential conflicts of interest to declare
Software: FirstRate5: 5.2.11 (3.13)
AAO: BDAV

Overview

Dwelling details

Address: Lot 221 Baird Avenue
Suburb: Torquay
State: VIC Postcode: 3228
Type: New Home NCC Class: Class 1a
Lot/DP number: Lot 221 NatHERS climate zone: 64
Exposure: suburban

Key construction and insulation materials

(see following pages for details)

Construction: Wall: As specified in report
Roof: As specified in report
Floor: As specified in report
Insulation: Wall: As specified in report
Roof: As specified in report
Floor: As specified in report
Glazing: As specified in report
As specified in report

Net floor area (m²)

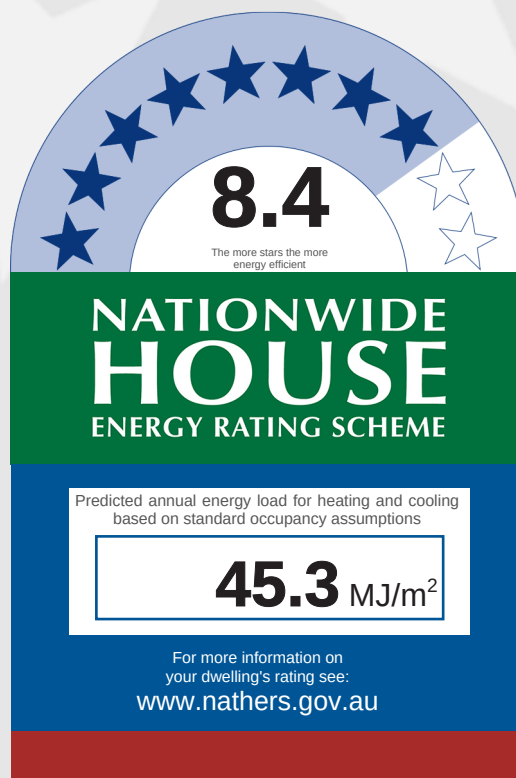
Conditioned: 150.7
Unconditioned: 17.4
Garage: 46.4
TOTAL: 214.5

Annual thermal performance loads (MJ/m²)

Heating: 36.4
Cooling: 8.9
TOTAL: 45.3

Plan documents

Plan ref/date: 0221BAIR
Prepared by: Belco Group



Ceiling penetrations

(see following pages for details)

Sealed: 0
Unsealed: 0
TOTAL:** 0

Principal downlight type: LED

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.

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If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.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



<https://www.fr5.com.au/QRCodeLandIng?PublicId=1ODN9065QX>

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Building Features

Windows type and performance value

Window ID	Window type	U-value	SHGC
YKR-007-10 A	Fixed Window DG 4ClrSYP-12Ar-6YRE0138	2.3	0.43
THC-023-22 B	Series EC35TB Awning Window DG 5mmEnTech-12Ar-5mmClr	2.4	0.45

Windows schedule

Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name	Outdoor shade
YKR-007-10 A	Opening 26	450	2400	E	Bedroom 1	No
THC-023-22 B	Opening 27	2100	1800	N	Bedroom 1	No
YKR-007-10 A	Opening 20	1800	900	W	Bedroom 2	No
YKR-007-10 A	Opening 21	1800	900	W	Bedroom 2	No
YKR-007-10 A	Opening 22	1500	1800	S	Bedroom 3	No
YKR-007-10 A	Opening 24	1500	1800	S	Media	No
YKR-007-10 A	Opening 28	1800	900	E	Kitchen/Living	No
YKR-007-10 A	Opening 29	1800	900	E	Kitchen/Living	No
THC-023-22 B	Opening 30	2100	4400	N	Kitchen/Living	No
YKR-007-10 A	Opening 31	900	2170	N	Kitchen/Living	No
YKR-007-10 A	Opening 32	900	2170	N	Kitchen/Living	No
YKR-007-10 A	Opening 35	900	2050	N	Kitchen/Living	No
YKR-007-10 A	W2	700	2100	N	Kitchen/Living	No
YKR-007-10 A	Opening 23	1000	1500	S	Bath	No
YKR-007-10 A	Opening 25	2100	1500	S	ENS	No
YKR-007-10 A	W1	1800	900	W	Garage	No

Roof windows and skylight type and performance value

ID	Window type	U-value	SHGC
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Roof window and skylight schedule

ID	Roof window/ skylight no.	Area (m ²)	Orientation	Zone name	Outdoor shade	Indoor shade/ diffuser
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External wall type

Type	Insulation	Wall wrap
1 : FR5 - AAC 75mm Panel Stud Wall	Wool/polyester batt 80/20: R2.5 (R2.5);Polystyrene expanded (k = 0.039) (R0.6)	Yes
2 : 1 - Weatherboard	Wool/polyester batt 80/20: R2.5 (R2.5);Polystyrene expanded (k =	Yes

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	0.039) (R0.6)	
3 : FR5 - Concrete Block Hollow 90mm Finished	Wool/polyester batt 80/20: R2.5 (R2.5);Polystyrene expanded (k = 0.039) (R0.6)	Yes
4 : FR5 - Brick Veneer	Wool/polyester batt 80/20: R2.5 (R2.5);Polystyrene expanded (k = 0.039) (R0.6)	Yes

External wall schedule

Wall type	Area (m ²)	Orientation	Zone name	Fixed shade	Eaves
1 : FR5 - AAC 75mm Panel Stud Wall	8.7	E	Bedroom 1	No	No
2 : 1 - Weatherboard	6.5	N	Bedroom 1	No	Yes
1 : FR5 - AAC 75mm Panel Stud Wall	10	S	Bedroom 2	No	No
1 : FR5 - AAC 75mm Panel Stud Wall	4.3	N	Bedroom 2	No	Yes
1 : FR5 - AAC 75mm Panel Stud Wall	5.2	W	Bedroom 2	No	Yes
1 : FR5 - AAC 75mm Panel Stud Wall	0.7	S	Bedroom 2	Yes	No
2 : 1 - Weatherboard	4.4	W	Bedroom 2	No	No
1 : FR5 - AAC 75mm Panel Stud Wall	8.1	S	Bedroom 3	No	No
1 : FR5 - AAC 75mm Panel Stud Wall	9.3	S	Media	No	No
1 : FR5 - AAC 75mm Panel Stud Wall	3.3	S	Store	No	No
1 : FR5 - AAC 75mm Panel Stud Wall	4.7	W	Entry	No	Yes
2 : 1 - Weatherboard	3.4	E	Kitchen/Living	No	Yes
2 : 1 - Weatherboard	0.8	S	Kitchen/Living	No	No
2 : 1 - Weatherboard	5.3	E	Kitchen/Living	No	No
2 : 1 - Weatherboard	0.8	N	Kitchen/Living	No	No
2 : 1 - Weatherboard	4	E	Kitchen/Living	No	No
2 : 1 - Weatherboard	25.7	N	Kitchen/Living	No	Yes
2 : 1 - Weatherboard	2.7	E	Kitchen/Living	No	No
2 : 1 - Weatherboard	10.3	N	Kitchen/Living	No	Yes
2 : 1 - Weatherboard	2.7	W	Kitchen/Living	No	No
1 : FR5 - AAC 75mm Panel Stud Wall	8.1	S	Bath	No	No
1 : FR5 - AAC 75mm Panel Stud Wall	4.6	S	ENS	No	No
1 : FR5 - AAC 75mm Panel Stud Wall	10.5	S	WIR	No	No
1 : FR5 - AAC 75mm Panel Stud Wall	3.6	E	WIR	No	No
2 : 1 - Weatherboard	8.2	N	WIP	No	Yes
2 : 1 - Weatherboard	5.7	N	Ldry	No	Yes
3 : FR5 - Concrete Block Hollow 90mm Finished	1.2	S	Garage	No	No
1 : FR5 - AAC 75mm Panel Stud Wall	7.4	E	Garage	No	No

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4 : FR5 - Brick Veneer	8.3	N	Garage	No	No
1 : FR5 - AAC 75mm Panel Stud Wall	6.5	W	Garage	Yes	No
3 : FR5 - Concrete Block Hollow 90mm Finished	1.4	N	Garage	No	No
3 : FR5 - Concrete Block Hollow 90mm Finished	14.9	W	Garage	No	No
1 : FR5 - AAC 75mm Panel Stud Wall	3.5	E	Utility	No	No
4 : FR5 - Brick Veneer	5.2	N	Utility	No	No

Internal wall type

Type	Area (m ²)	Insulation
1 : FR5 - Internal Plasterboard Stud Wall	44.3	
2 : FR5 - Internal Plasterboard Stud Wall	91.1	Wool/polyester batt 80/20: R2.5 (R2.5)
3 : FR5 - Concrete Block Hollow 90mm Finished	26.8	Wool/polyester batt 80/20: R2.5 (R2.5); Polystyrene expanded (k = 0.039) (R0.6)
4 : FR5 - Brick Veneer	0.8	
5 : 1 - Internal Garage Wall	26.4	Wool/polyester batt 80/20: R2.5 (R2.5)

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Bedroom 1	FR5 - CSOG: Slab on Ground	13.4	Enclosed	R2.5	Carpet
Bedroom 2	FR5 - CSOG: Slab on Ground	14.1	Enclosed	R2.5	Carpet
Bedroom 3	FR5 - CSOG: Slab on Ground	13.3	Enclosed	R2.5	Carpet
Media	FR5 - CSOG: Slab on Ground	13.9	Enclosed	R2.5	Carpet
Store	FR5 - CSOG: Slab on Ground	2.6	Enclosed	R2.5	Carpet
Study	FR5 - CSOG: Slab on Ground	2.1	Enclosed	R2.5	Carpet
Entry	FR5 - CSOG: Slab on Ground	9.5	Enclosed	R2.5	none
Kitchen/Living	FR5 - CSOG: Slab on Ground	63	Enclosed	R2.5	none
pwdr	FR5 - CSOG: Slab on Ground	2.7	Enclosed	R2.5	none
Bath	FR5 - CSOG: Slab on Ground	7.3	Enclosed	R2.5	Tiles
ENS	FR5 - CSOG: Slab on Ground	6.8	Enclosed	R2.5	Tiles
WIR	FR5 - CSOG: Slab on Ground	5.7	Enclosed	R2.5	Carpet
WIP	FR5 - CSOG: Slab on Ground	3.6	Enclosed	R2.5	none
Ldry	FR5 - CSOG: Slab on Ground	7.3	Enclosed	R2.5	none
Garage	FR5 - CSOG: Slab on Ground	46.4	Enclosed	R2.5	none

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Utility FR5 - CSOG: Slab on Ground 2.8 Enclosed R2.5 none

Ceiling type

Location	Material	Added insulation	Roof space above
Bedroom 1	Plasterboard	R5.0	Yes
Bedroom 2	Plasterboard	R5.0	Yes
Bedroom 3	Plasterboard	R5.0	Yes
Media	Plasterboard	R5.0	Yes
Store	Plasterboard	R5.0	Yes
Study	Plasterboard	R5.0	Yes
Entry	Plasterboard	R5.0	Yes
Kitchen/Living	Plasterboard	R5.0	Yes
pwdr	Plasterboard	R5.0	Yes
Bath	Plasterboard	R5.0	Yes
ENS	Plasterboard	R5.0	Yes
WIR	Plasterboard	R5.0	Yes
WIP	Plasterboard	R5.0	Yes
Ldry	Plasterboard	R5.0	Yes
Garage	Plasterboard	R5.0	Yes
Utility	Plasterboard	R5.0	Yes

Ceiling penetrations

Location	Number	Type	Width (mm)	Length (mm)	Seal/ unsealed
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Ceiling fans

Location	Number	Diameter (mm)
Bedroom 1	1	1400
Bedroom 2	1	1400
Bedroom 3	1	1400
Media	1	1400

Roof type

Material	Added insulation	Roof colour
Cont:Attic-Continuous	1.3	medium

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Additional information

IC-F rated downlights specified, no ceiling penetration.

Heat recovery and ventilation system in use, no need for exhaust fans.

Recirculating rangehood.

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 this 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 an 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