

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: G78HLKJ6ZS

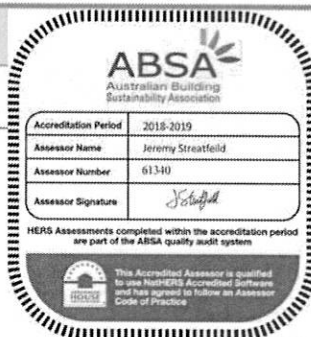
Date of Certificate: 28 Jun 2018

★ Star rating: 6



Assessor details

Accreditation number: **61340**
Name: **Jeremy Streatfeild**
Organisation: **Cocoon Energy Ratings**
Email: **jstreatfeild@hotmail.com**
Phone: **0403179103**
Declaration of interest: **Employed by designer of the building**
Software: **FirstRate5: 5.2.8a (3.13)**
AAO: **ABSA**



Overview

Dwelling details

Address: **2, 8 Aurora Close**
Suburb: **Mawson**
State: **ACT** Postcode: **2607**
Type: **New Home** NCC Class: **Class 1a**
Lot/DP number: **38** NatHERS climate zone: **24**
Exposure: **suburban**

Key construction and insulation materials (see following pages for details)

Construction: Wall: **FC**
Roof: **Colorbond**
Floor: **Concrete waffle slab**
Insulation: Wall: **R2.5 with E0.1 sarking**
Roof: **R6 with R1.5 blanket**
Floor: **225mm waffle pods**
Glazing: **Aluminium**
Double glazed

Net floor area (m²)

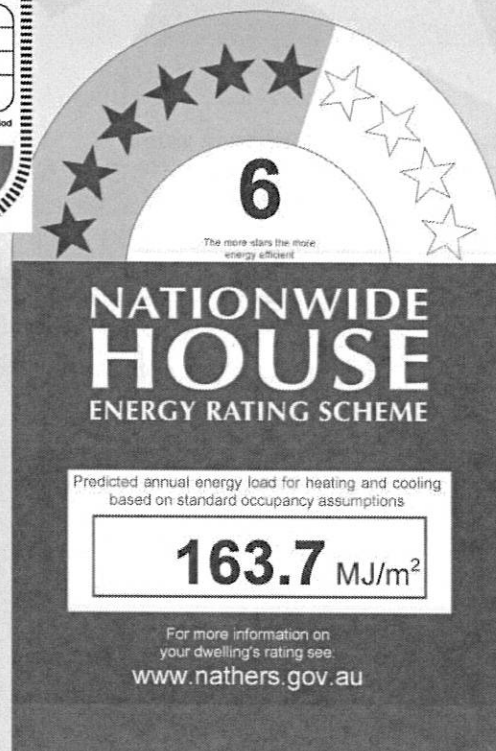
Conditioned: **120.2**
Unconditioned: **8.1**
Garage: **35.1**
TOTAL: **163.4**

Annual thermal performance loads (MJ/m²)

Heating: **145.8**
Cooling: **17.9**
TOTAL: **163.7**

Plan documents

Plan ref/date: **1709 A02,4 -10**
Prepared by: **TM Design**



Ceiling penetrations (see following pages for details)

Sealed: **37**
Unsealed: **0**
TOTAL:** **37**

**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.

Principal downlight type: **LED**

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 re-rated to confirm compliance.

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



<https://www.fr5.com.au/QRCodeLandIng?PublicId=G78HLKJ6ZS>

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Building Features

Windows type and performance value

Window ID	Window type	U-value	SHGC
TND-072-01 A	Windsor Sliding Door DG 6/12/6	3.88	0.57
TND-031-03 A	Trend AI Internal offset glazed window DG 5/14/5	3.29	0.65
TND-002-12 A	Trend AI Awning Window DG 4/10/4	4.22	0.57
TND-032-10 A	Trend Crestlite Center Glazed Window DG 6Gy/12/6EA	2.9	0.35

Windows schedule

Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name	Outdoor shade
TND-072-01 A	Opening 36	2400	1810	W	Bedroom 1	No
TND-031-03 A	Opening 34	2400	610	E	Entry	No
TND-031-03 A	Opening 35	660	1810	E	Entry	No
TND-072-01 A	Opening 33	2400	1210	E	Kit Din Liv	No
TND-072-01 A	Opening 31	2400	4210	N	Kit Din Liv	No
TND-031-03 A	Opening 32	2400	4210	N	Kit Din Liv	No
TND-002-12 A	Opening 37	1800	610	W	Ensuite	No
TND-002-12 A	Opening 38	1200	610	W	Powder	No
TND-002-12 A	Opening 27	400	1810	S	Bedroom 2	No
TND-032-10 A	frosted	800	1810	S	Bedroom 2	No
TND-002-12 A	Opening 20	400	1810	N	Bedroom 3	No
TND-032-10 A	frosted	800	1810	N	Bedroom 3	No
TND-072-01 A	Opening 29	2100	3610	E	Rumpus	No
TND-031-03 A	Opening 22	400	1210	N	Rumpus	No
TND-032-10 A	frosted	1200	1210	N	Rumpus	No
TND-031-03 A	Opening 30	2100	1810	E	Stair	No
TND-002-12 A	Opening 21	400	1810	N	Bath	No
TND-032-10 A	frosted	800	1810	N	Bath	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 - Brick Veneer	Rockwool batt: R2.5 (R2.5)	Yes
2 : Dintel 200 Pb lined	Rockwool batt: R2.5 (R2.5)	No
3 : Dintel 200 Retaining wall PB lined	Glass fibre batt: R2.5 (R2.5)	No
4 : FR5 - Internal Plasterboard Stud Wall	Rockwool batt: R2.5 (R2.5)	No
5 : FR5 - Brick Veneer		Yes
6 : FR5 - Fibro Clad Framed	Rockwool batt: R2.5 (R2.5)	Yes
7 : FR5 - Double Brick		No
8 : Dintel 200		No
9 : CSD - Brick Veneer Retaining Wall 2	Rockwool batt: R2.5 (R2.5)	No
10 : Dintel 200 retaining wall		No

External wall schedule

Wall type	Area (m ²)	Orientation	Zone name	Fixed shade	Eaves
1 : FR5 - Brick Veneer	9.5	W	Bedroom 1	Yes	No
2 : Dintel 200 Pb lined	3.6	S	Bedroom 1	Yes	No
3 : Dintel 200 Retaining wall PB lined	7.1	S	Bedroom 1	No	No
4 : FR5 - Internal Plasterboard Stud Wall	0.7	W	Hall Down	No	No
1 : FR5 - Brick Veneer	5.7	E	Entry	Yes	Yes
1 : FR5 - Brick Veneer	2.2	N	Entry	Yes	Yes
1 : FR5 - Brick Veneer	4	E	Kit Din Liv	Yes	Yes
5 : FR5 - Brick Veneer	3.5	E	Kit Din Liv	Yes	Yes
1 : FR5 - Brick Veneer	3.3	E	Kit Din Liv	Yes	Yes
6 : FR5 - Fibro Clad Framed	23.3	N	Kit Din Liv	Yes	Yes
1 : FR5 - Brick Veneer	3.2	N	Kit Din Liv	Yes	Yes
1 : FR5 - Brick Veneer	10.8	W	Kit Din Liv	Yes	No
1 : FR5 - Brick Veneer	2.3	S	WIP	Yes	No
1 : FR5 - Brick Veneer	3	W	WIP	Yes	No
1 : FR5 - Brick Veneer	6	W	Ensuite	Yes	No
1 : FR5 - Brick Veneer	2.9	S	Ensuite	Yes	No
1 : FR5 - Brick Veneer	2.6	W	Powder	Yes	No
7 : FR5 - Double Brick	16.8	E	Garage	Yes	Yes
7 : FR5 - Double Brick	3.1	N	Garage	Yes	No
8 : Dintel 200	5.2	S	Garage	Yes	No

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9 : CSD - Brick Veneer Retaining Wall 2	0.2	N	Garage	No	No
9 : CSD - Brick Veneer Retaining Wall 2	0.1	E	Garage	No	No
9 : CSD - Brick Veneer Retaining Wall 2	0.2	N	Garage	No	No
9 : CSD - Brick Veneer Retaining Wall 2	0.1	W	Garage	No	No
9 : CSD - Brick Veneer Retaining Wall 2	0.2	W	Garage	No	No
9 : CSD - Brick Veneer Retaining Wall 2	0.3	W	Garage	No	No
10 : Dintel 200 retaining wall	10.4	S	Garage	No	No
4 : FR5 - Internal Plasterboard Stud Wall	1.7	E	Garage	No	No
4 : FR5 - Internal Plasterboard Stud Wall	3.9	N	Garage	No	No
4 : FR5 - Internal Plasterboard Stud Wall	1.7	W	Garage	No	No
6 : FR5 - Fibro Clad Framed	0.7	E	Bedroom 2	Yes	Yes
6 : FR5 - Fibro Clad Framed	7.8	W	Bedroom 2	No	Yes
6 : FR5 - Fibro Clad Framed	9.4	S	Bedroom 2	Yes	Yes
6 : FR5 - Fibro Clad Framed	7.1	W	Bedroom 3	No	Yes
6 : FR5 - Fibro Clad Framed	9.7	N	Bedroom 3	No	Yes
6 : FR5 - Fibro Clad Framed	0.4	E	Rumpus	Yes	Yes
6 : FR5 - Fibro Clad Framed	1.5	S	Rumpus	Yes	No
6 : FR5 - Fibro Clad Framed	9.7	E	Rumpus	Yes	Yes
6 : FR5 - Fibro Clad Framed	7.9	N	Rumpus	No	Yes
6 : FR5 - Fibro Clad Framed	4.8	E	Stair	Yes	Yes
6 : FR5 - Fibro Clad Framed	11.3	S	Stair	Yes	Yes
6 : FR5 - Fibro Clad Framed	5.6	N	Bath	No	Yes

Internal wall type

Type	Area (m ²)	Insulation
1 : FR5 - Internal Plasterboard Stud Wall	72.4	
2 : FR5 - Internal Plasterboard Stud Wall	81.7	Rockwool batt: R2.5 (R2.5)
3 : Joinery	6.6	

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Bedroom 1	Waffle Pod : 225-100: 225mm waffle pod, 100mm concrete (R0.7)	0.1	Enclosed	0.0	Carpet
Bedroom 1	Waffle Pod : 225-100: 225mm waffle pod, 100mm concrete (R0.7)	16.1	Enclosed	0.0	Carpet

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WIR	Waffle Pod : 225-100: 225mm waffle pod, 100mm concrete (R0.7)	4.3	Enclosed	0.0	Carpet
Hall Down	Waffle Pod : 225-100: 225mm waffle pod, 100mm concrete (R0.7)	2.1	Enclosed	0.0	Carpet
Entry	Waffle Pod : 225-100: 225mm waffle pod, 100mm concrete (R0.7)	8.8	Enclosed	0.0	Carpet
Kit Din Liv	Waffle Pod : 225-100: 225mm waffle pod, 100mm concrete (R0.7)	7.7	Enclosed	0.0	Tiles
Kit Din Liv	Waffle Pod : 225-100: 225mm waffle pod, 100mm concrete (R0.7)	28.5	Enclosed	0.0	Tiles
Kit Din Liv	Waffle Pod : 225-100: 225mm waffle pod, 100mm concrete (R0.7)	3.8	Enclosed	0.0	Tiles
WIP	Waffle Pod : 225-100: 225mm waffle pod, 100mm concrete (R0.7)	1.8	Enclosed	0.0	Tiles
Laundry	Waffle Pod : 225-100: 225mm waffle pod, 100mm concrete (R0.7)	4.5	Enclosed	0.0	Tiles
Ensuite	Waffle Pod : 225-100: 225mm waffle pod, 100mm concrete (R0.7)	0.1	Enclosed	0.0	Tiles
Ensuite	Waffle Pod : 225-100: 225mm waffle pod, 100mm concrete (R0.7)	3.9	Enclosed	0.0	Tiles
Powder	Waffle Pod : 225-100: 225mm waffle pod, 100mm concrete (R0.7)	1	Enclosed	0.0	Tiles
Powder	Waffle Pod : 225-100: 225mm waffle pod, 100mm concrete (R0.7)	1	Enclosed	0.0	Tiles
Garage	Waffle Pod : 225-100: 225mm waffle pod, 100mm concrete (R0.7)	35.1	Enclosed	0.0	none
Bedroom 2	Timber	11.9	Enclosed	4.0	Carpet
Bedroom 3	Timber	10.6	Enclosed	4.0	Carpet
Rumpus	Timber	4.6	Elevated	4.0	Carpet
Rumpus	Timber	7.7	Enclosed	4.0	Carpet
Hall	Timber	3.6	Enclosed	4.0	Carpet
Stair	Timber	8.8	Enclosed	4.0	Carpet
Bath	Timber	6.1	Enclosed	4.0	Tiles

Ceiling type

Location	Material	Added insulation	Roof space above
Bedroom 1	Plasterboard	4.0	No
Bedroom 1	Plasterboard	6.0	Yes
WIR	Plasterboard	6.0	Yes
Hall Down	Plasterboard	4.0	No

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Entry	Plasterboard	4.0	No
Kit Din Liv	Plasterboard	6.0	Yes
Kit Din Liv	Plasterboard	4.0	No
Kit Din Liv	Plasterboard	4.0	No
Kit Din Liv	Plasterboard	4.0	No
Kit Din Liv	Plasterboard	4.0	No
Kit Din Liv	Plasterboard	4.0	No
Kit Din Liv	Plasterboard	4.0	No
Kit Din Liv	Plasterboard	4.0	No
WIP	Plasterboard	6.0	Yes
Laundry	Plasterboard	4.0	No
Ensuite	Plasterboard	4.0	No
Ensuite	Plasterboard	6.0	Yes
Powder	Plasterboard	4.0	No
Powder	Plasterboard	6.0	Yes
Garage	Plasterboard	6.0	Yes
Bedroom 2	Plasterboard	6.0	Yes
Bedroom 3	Plasterboard	6.0	Yes
Rumpus	Plasterboard	6.0	Yes
Rumpus	Plasterboard	6.0	Yes
Hall	Plasterboard	6.0	Yes
Stair	Plasterboard	6.0	Yes
Bath	Plasterboard	6.0	Yes

Ceiling penetrations

Location	Number	Type	Width (mm)	Length (mm)	Seal/ unsealed
Bedroom 1	4	Downlights	100	100	Sealed
WIR	1	Downlights	100	100	Sealed
Hall Down	1	Downlights	100	100	Sealed
Entry	1	Downlights	100	100	Sealed
Kit Din Liv	1	Exhaust Fans	300	300	Sealed
Kit Din Liv	10	Downlights	100	100	Sealed
WIP	1	Downlights	100	100	Sealed
Laundry	1	Downlights	100	100	Sealed
Laundry	1	Exhaust Fans	300	300	Sealed
Ensuite	1	Downlights	100	100	Sealed

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Building Features

Ensuite	1	Exhaust Fans	300	300	Sealed
Powder	1	Downlights	100	100	Sealed
Bedroom 2	2	Downlights	100	100	Sealed
Bedroom 3	2	Downlights	100	100	Sealed
Rumpus	4	Downlights	100	100	Sealed
Hall	1	Downlights	100	100	Sealed
Stair	2	Downlights	100	100	Sealed
Bath	1	Downlights	100	100	Sealed
Bath	1	Exhaust Fans	300	300	Sealed

Ceiling fans

Location	Number	Diameter (mm)
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Roof type

Material	Added insulation	Roof colour
Cont:Attic-Continuous	1.5	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 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