

Nationwide House Energy Rating Scheme* Certificate



Certificate number: **0002594539-01**

Certificate Date: **09 Jul 2018**

★ Star rating: **4.9**

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

number: **20374**

Name: **Stephen Collins**

Organisation: **Concept Designs Australia**

Email: **conceptdesigns@tpg.com.au**

Phone: **0418 877 571**

Declaration
of interest: **None**

Software: **BERS Pro v4.3.0.2c (3.13)**

AAO: **ABSA**

Overview

Dwelling details

Street: **13 Jonathon Place**

Suburb: **FORSTER**

State: **NSW**

Postcode: **2428**

Type: **New Dwelling**

NCC Class: **1A**

NatHERS

climate zone: **15**

Lot/DP

number: **266/1199076**

Exposure: **Suburban**

Key construction and insulation materials

(see following pages for details)

Construction: **Metal Clad Cavity Panel Direct Fix
Corrugated Iron**

Insulation: **Suspended Timber Floor**

R2.5 wall insulation

R3.5 ceiling insulation

R2.0 floor insulation

Glazing: **AWS-005-21 A 514 AI Double Hung**

Window SG 6.38CPGy

Net floor area (m²)

Conditioned: **196.0**

Unconditioned: **84.0**

Garage: **54.0**

TOTAL: **280.0**

Annual thermal performance loads (MJ/m²)

Heating: **56.6**

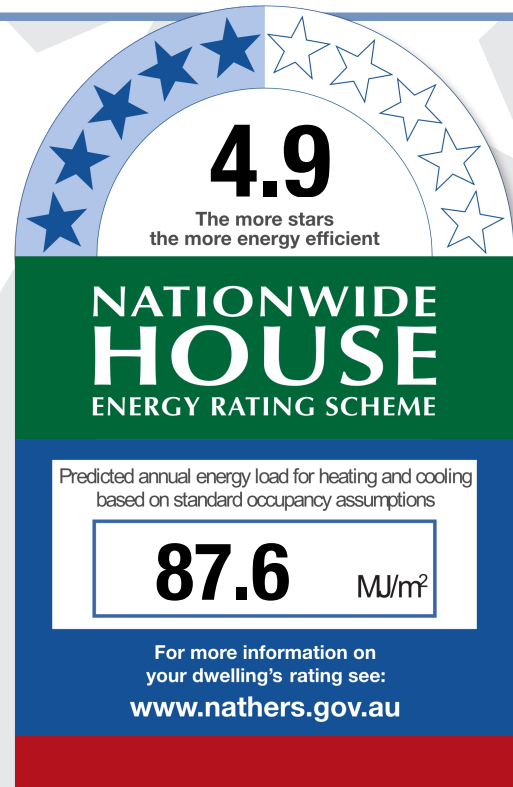
Cooling: **31.0**

TOTAL: **87.6**

Plan documents

Plan ref/date: **0218-3**

Prepared by: **Riordans Design Service**



Ceiling penetrations

(see following pages for details)

Sealed: **64**

Unsealed: **0**

TOTAL:** **64**

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: **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 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.



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Building features

Window type and performance value

Window ID	Window type	U-value	SHGC
AWS-005-21 A	AWS-005-21 A 514 Al Double Hung Window SG 6.38CPGy	4.3	0.43
AWS-018-20 A	AWS-018-20 A 549 ED Al Entry Door SG 6.38CPGy	4.4	0.34
AWS-011-20 A	AWS-011-20 A 541/542 Al Sliding Door SG 6.38CPGy	4.4	0.43
AWS-068-01 A	AWS-068-01 A RES SERIES 517 FIXED WINDOW SG 638ComPlyGry	4.4	0.46
VAN-004-03 A	VAN-004-03 A SERIES 525 LOUVRE WINDOW SG 6EVanClr	4.7	0.49
AWS-001-21 A	AWS-001-21 A 502/504 Al Sliding Window SG 6.38CPGy	4.5	0.43

Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Garage	AWS-005-21 A	n/a	600	1800	S	No Shading
Entry Hall	AWS-018-20 A	n/a	2100	900	W	No Shading
Entry Hall	AWS-005-21 A	n/a	2100	515	W	No Shading
Entry Hall	AWS-005-21 A	n/a	2100	515	W	No Shading
Bath	AWS-005-21 A	n/a	900	1200	N	No Shading
Bedroom 3	AWS-005-21 A	n/a	1800	800	W	No Shading
Bedroom 3	AWS-005-21 A	n/a	1800	800	W	No Shading
Bedroom 4	AWS-005-21 A	n/a	1800	800	W	No Shading
Bedroom 4	AWS-005-21 A	n/a	1800	800	W	No Shading
Kitchen/Living	AWS-011-20 A	n/a	2100	3300	E	No Shading
Kitchen/Living	AWS-068-01 A	n/a	400	5400	S	No Shading
Kitchen/Living	AWS-011-20 A	n/a	2100	5400	W	No Shading
Kitchen/Living	AWS-011-20 A	n/a	2100	2400	N	No Shading
Kitchen/Living	AWS-068-01 A	n/a	2100	700	W	No Shading
Media	AWS-011-20 A	n/a	2100	2400	W	No Shading
Media	AWS-005-21 A	n/a	2100	700	W	No Shading
Master Bed	AWS-005-21 A	n/a	1200	900	N	No Shading
Master Bed	AWS-005-21 A	n/a	1200	900	N	No Shading
Master Bed	AWS-011-20 A	n/a	2100	1800	S	No Shading
Master Bed	VAN-004-03 A	n/a	1800	2700	W	Vertical Louvres, Horizontal Blades
Ensuite	AWS-001-21 A	n/a	900	900	N	No Shading
WIR	AWS-001-21 A	n/a	900	600	N	No Shading
Bath	AWS-001-21 A	n/a	900	900	N	No Shading
Bath	AWS-001-21 A	n/a	1200	1800	E	No Shading
Bedroom 2	AWS-001-21 A	n/a	1200	1800	E	No Shading
Ldry	AWS-018-20 A	n/a	2100	900	E	No Shading
Pantry	AWS-005-21 A	n/a	1200	1200	E	No Shading

Roof window and skylight type and performance value

ID	Window type	U-value	SHGC
GEN-04-008a	Double-glazed clear, Timber and Aluminium Frame	0.0	0.00

Roof window and skylight schedule

Location	ID	Roof window/skylight	Area (m ²)	Orientation	Outdoor shade	Indoor shade/diffuser
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		no.				
Kitchen/Living	GEN-04-008a	1	0.8	E	None	No

External wall type

ID	Wall type	Insulation	Wall wrap or foil
EW-1	Fibro Cavity Panel Direct Fix	Foil, Anti-glare one side, Reflective other	Yes
EW-2	Brick Veneer	Foil, Anti-glare one side, Reflective other	Yes
EW-3	Single Skin Brick	No insulation	No
EW-4	Cavity Brick	Bulk Insulation R1	No
EW-5	Fibro Cavity Panel Direct Fix	Bulk Insulation R2.5	No
EW-6	Brick Veneer	Anti-glare foil with bulk no gap R2.5	Yes
EW-7	Fibro Cavity Panel Direct Fix	Anti-glare foil with bulk no gap R2.5	Yes
EW-8	Metal Clad 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	6645	2800	E	No	3700
Garage	EW-2	8200	2970	S	No	100
Garage	EW-3	6645	2970	W	No	3100
Entry Hall	EW-4	900	2800	S	No	6800
Entry Hall	EW-4	2145	2800	W	No	2200
Entry Hall	EW-5	1095	2800	E	No	8000
Entry Hall	EW-5	1100	2800	N	No	4000
Entry Hall	EW-5	4000	2800	E	No	6900
Entry Hall	EW-5	3200	2800	N	No	8000
Entry Hall	EW-5	1245	2800	E	No	3700
Bath	EW-6	2595	2800	N	No	100
Bath	EW-5	2795	2800	E	No	8000
Bedroom 3	EW-4	3845	2800	W	No	800
Bedroom 3	EW-6	3595	2800	N	No	100
Bedroom 4	EW-4	1400	2800	S	No	9000
Bedroom 4	EW-4	3045	2800	W	No	800
Kitchen/Living	EW-7	3795	2550	E	No	4300
Kitchen/Living	EW-8	7495	2800	S	No	600
Kitchen/Living	EW-8	6700	3000	W	No	2000
Kitchen/Living	EW-8	4200	2900	N	No	9800
Kitchen/Living	EW-7	1295	2800	W	No	6200
Media	EW-7	3990	2400	W	No	6200
Master Bed	EW-8	5495	2900	N	No	600
Master Bed	EW-7	5595	2900	S	No	12600
Master Bed	EW-8	3900	3100	W	No	600
Ensuite	EW-8	2190	2400	N	No	600
WIR	EW-8	2090	2400	N	No	600
Bath	EW-8	4995	2400	N	No	600
Bath	EW-8	2895	2400	E	No	700
Bedroom 2	EW-8	4090	2400	E	No	700

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Ldry	EW-8	2395	2400	E	No	700
Ldry	EW-8	3595	2400	S	No	7100
Pantry	EW-7	2695	2400	E	No	4300
Pantry	EW-8	2295	2400	S	No	600

Internal wall type

Wall type	Area (m ²)	Insulation	Wall wrap or foil
IW-1 - Single Skin Brick	23.0	Bulk Insulation, No Air Gap R1.2	No
IW-2 - Single Skin Brick	31.0	No insulation	No
IW-3 - Cavity wall, direct fix plasterboard, single gap	101.0	No insulation	No
IW-4 - Cavity wall, direct fix plasterboard, single gap	31.0	Bulk Insulation, No Air Gap R2	No
IW-5 - Cavity wall, direct fix plasterboard, single gap	3.0	Bulk Insulation, No Air Gap R1	No

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Garage	Waffle pod slab 225 mm 100mm	54.5	None	Waffle Pod 225mm	Bare
Entry Hall	Waffle pod slab 225 mm 100mm	26.9	None	Waffle Pod 225mm	Bare
Bath	Waffle pod slab 225 mm 100mm	7.0	None	Waffle Pod 225mm	Ceramic Tiles 8mm
Bedroom 3	Waffle pod slab 225 mm 100mm	13.7	None	Waffle Pod 225mm	Bare
Bedroom 4	Waffle pod slab 225 mm 100mm	14.1	None	Waffle Pod 225mm	Bare
Kitchen/Living /Garage	Timber Above Plasterboard 19mm	48.3		Bulk Insulation R2	Carpet 10mm
Kitchen/Living /Entry Hall	Timber Above Plasterboard 19mm	7.2		No Insulation	Carpet 10mm
Kitchen/Living	Suspended Timber Floor 19mm	10.6	Totally Open	Bulk Insulation in Contact with Floor R2	Cork Tiles or Parquetry 8mm
Media/Entry Hall	Timber Above Plasterboard 19mm	9.3		No Insulation	Carpet 10mm
Media	Suspended Timber Floor 19mm	7.0	Enclosed	Bulk Insulation in Contact with Floor R2	Cork Tiles or Parquetry 8mm
Master Bed/Entry Hall	Timber Above Plasterboard 19mm	1.4		No Insulation	Cork Tiles or Parquetry 8mm
Master Bed/Bath	Timber Above Plasterboard 19mm	3.3		No Insulation	Cork Tiles or Parquetry 8mm
Master Bed/Bedroom 3	Timber Above Plasterboard 19mm	13.9		No Insulation	Cork Tiles or Parquetry 8mm
Master Bed	Suspended Timber Floor 19mm	2.7	Totally Open	Bulk Insulation in Contact with Floor R2	Cork Tiles or Parquetry 8mm
Ensuite/Bath		3.7		No Insulation	

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	Timber Above Plasterboard 19mm				Ceramic Tiles 8mm
Ensuite	Suspended Timber Floor 19mm	2.2	Enclosed	Bulk Insulation in Contact with Floor R2	Ceramic Tiles 8mm
WIR	Suspended Timber Floor 19mm	5.7	Enclosed	Bulk Insulation in Contact with Floor R2	Cork Tiles or Parquetry 8mm
Master Bed Hall/Entry Hall	Timber Above Plasterboard 19mm	1.2		No Insulation	Cork Tiles or Parquetry 8mm
Master Bed Hall	Suspended Timber Floor 19mm	2.6	Enclosed	Bulk Insulation in Contact with Floor R2	Cork Tiles or Parquetry 8mm
Bath	Suspended Timber Floor 19mm	14.1	Enclosed	Bulk Insulation in Contact with Floor R2	Ceramic Tiles 8mm
Bedroom 2	Suspended Timber Floor 19mm	14.3	Enclosed	Bulk Insulation in Contact with Floor R2	Cork Tiles or Parquetry 8mm
Ldry	Suspended Timber Floor 19mm	8.4	Enclosed	Bulk Insulation in Contact with Floor R2	Ceramic Tiles 8mm
Hall	Suspended Timber Floor 19mm	6.4	Enclosed	Bulk Insulation in Contact with Floor R2	Cork Tiles or Parquetry 8mm
Pantry/Garage	Timber Above Plasterboard 19mm	6.0		Bulk Insulation R2	Cork Tiles or Parquetry 8mm

Ceiling type

Location	Construction	Added insulation	Roof space above
Garage	Concrete	No insulation	No
Garage	Timber Above Plasterboard	Bulk Insulation R2	No
Entry Hall	Plasterboard	Bulk Insulation R3.5	No
Entry Hall	Timber Above Plasterboard	No Insulation	No
Bath	Timber Above Plasterboard	No Insulation	No
Bedroom 3	Timber Above Plasterboard	No Insulation	No
Bedroom 4	Plasterboard	Bulk Insulation R3.5	No
Kitchen/Living	Plasterboard	Bulk Insulation R3.5	Yes
Media	Plasterboard	Bulk Insulation R3.5	Yes
Master Bed	Plasterboard	Bulk Insulation R3.5	No
Ensuite	Plasterboard	Bulk Insulation R3.5	Yes
WIR	Plasterboard	Bulk Insulation R3.5	Yes
Master Bed Hall	Plasterboard	Bulk Insulation R3.5	Yes
Bath	Plasterboard	Bulk Insulation R3.5	Yes

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Bedroom 2	Plasterboard	Bulk Insulation R3.5	Yes
Ldry	Plasterboard	Bulk Insulation R3.5	Yes
Hall	Plasterboard	Bulk Insulation R3.5	Yes
Pantry	Plasterboard	Bulk Insulation R3.5	Yes

Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
Garage	6	Downlights - LED	150	Sealed
Entry Hall	4	Downlights - LED	150	Sealed
Entry Hall	1	Exhaust Fans	300	Sealed
Bath	2	Downlights - LED	150	Sealed
Bath	1	Exhaust Fans	300	Sealed
Bedroom 3	4	Downlights - LED	150	Sealed
Bedroom 4	4	Downlights - LED	150	Sealed
Kitchen/Living	13	Downlights - LED	150	Sealed
Kitchen/Living	1	Exhaust Fans	200	Sealed
Media	4	Downlights - LED	150	Sealed
Master Bed	6	Downlights - LED	150	Sealed
Ensuite	2	Downlights - LED	150	Sealed
Ensuite	1	Exhaust Fans	200	Sealed
WIR	1	Downlights - LED	150	Sealed
Master Bed Hall	1	Downlights - LED	150	Sealed
Bath	3	Downlights - LED	150	Sealed
Bath	1	Exhaust Fans	300	Sealed
Bedroom 2	4	Downlights - LED	150	Sealed
Ldry	2	Downlights - LED	150	Sealed
Hall	2	Downlights - LED	150	Sealed
Pantry	1	Downlights - LED	150	Sealed

Ceiling fans

Location	Number	Diameter (mm)
None Present		

Roof type

Construction	Added insulation	Roof colour
Waterproofing Membrane	No Added Insulation, No air Gap	Medium
Concrete	No Added Insulation, No air	Medium

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Corrugated Iron	Gap	
	No Insulation, Only an Air Gap	Medium
Corrugated Iron	Bulk, Reflective Side Down, No Air Gap Above R1.3	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 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