

Nationwide House Energy Rating Scheme* Certificate



Certificate number: **0004495628**

Certificate Date: **23 Dec 2019**

★ Star rating: **5.3**

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: **VIC/BDAV/19/1921**

Name: **Martin Pinson**

Organisation: **INTEGRECO**

Email: **consulting@integreco.com**

Phone: **0422144603**

Declaration
of interest: **None**

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

AAO: **BDAV**

Overview

Dwelling details

Street: **Unit Lot 5, 26 Ralston Street**

Suburb: **Palm Beach**

State: **NSW**

Postcode: **2108**

Type: **New Dwelling**

NCC Class: **1A**

Lot/DP

number: **5, Sec. 10/14048**

NatHERS

climate zone: **56**

Exposure: **Suburban**

Key construction and insulation materials

(see following pages for details)

Construction: **Tilt up Concrete**

Concrete

Suspended Concrete Slab

Insulation: **R2.5 wall insulation**

R4.0 ceiling insulation

R2.0 floor insulation

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

Net floor area (m²)

Conditioned: **278.0**

Unconditioned: **13.0**

Garage: **0.0**

TOTAL: **291.0**

Annual thermal performance loads (MJ/m²)

Heating: **42.5**

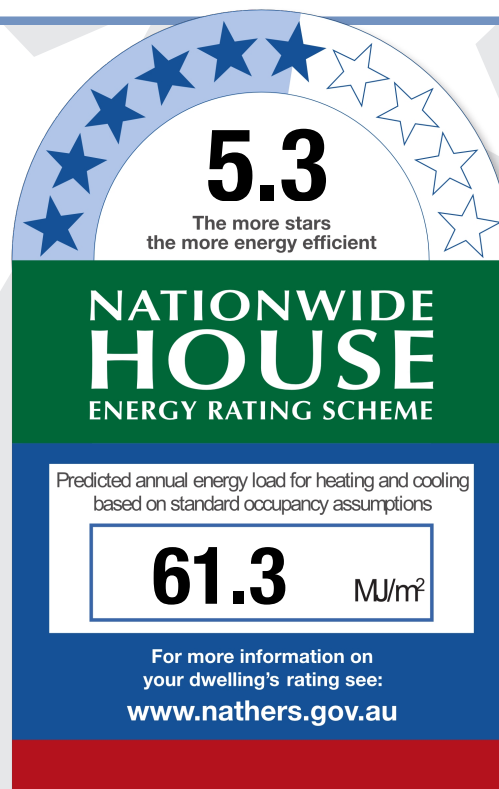
Cooling: **18.8**

TOTAL: **61.3**

Plan documents

Plan ref/date: **26 Ralston Road, Palm Beach NSW**

Prepared by: **stephenlesiuk@mac.com**



Ceiling penetrations

(see following pages for details)

Sealed: **127**

Unsealed: **0**

TOTAL:** **127**

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.



Nationwide House Energy Rating Scheme* Certificate

Certificate number: **0004495628**

Certificate Date:

23 Dec 2019

★ Star rating:

5.3



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
ATB-003-01 B	ATB-003-01 B AI Thermally Broken A DG Air Fill Clear-Clear	3.6	0.47
ATB-004-01 B	ATB-004-01 B AI Thermally Broken B DG Air Fill Clear-Clear	3.6	0.54

Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
uncon 11	ALM-002-01 A	n/a	2100	900	S	No Shading
uncon 12	ALM-002-01 A	n/a	2100	900	S	No Shading
day 12	ALM-002-01 A	n/a	2100	3600	N	No Shading
Unconditioned 3	ALM-001-01 A	n/a	1200	900	W	Vertical Louvres, Horizontal Blades
Unconditioned 4	ALM-001-01 A	n/a	1200	900	W	Vertical Louvres, Horizontal Blades
Night Time 1	ALM-002-01 A	n/a	2100	3600	S	No Shading
Bedroom 2	ALM-002-01 A	n/a	2100	3600	N	No Shading
Living 3	ATB-003-01 B	n/a	2100	1200	N	No Shading
Living 3	ATB-004-01 B	n/a	2100	3600	N	No Shading
Living 3	ATB-004-01 B	n/a	2100	3600	S	No Shading
Living 3	ATB-003-01 B	n/a	1200	1200	S	No Shading
Kitchen/Living	ATB-004-01 B	n/a	2100	6000	N	No Shading
Kitchen/Living	ALM-002-01 A	n/a	300	6199	N	No Shading
Kitchen/Living	ATB-003-01 B	n/a	1500	7200	E	Vertical Louvres, Horizontal Blades
Kitchen/Living	ALM-002-01 A	n/a	300	11400	E	No Shading
Kitchen/Living	ATB-003-01 B	n/a	1800	1200	S	No Shading
Kitchen/Living	ATB-003-01 B	n/a	1800	1200	S	No Shading
Kitchen/Living	ALM-002-01 A	n/a	300	6199	S	No Shading
Bedroom 3	ALM-002-01 A	n/a	2100	4000	S	No Shading
Bedroom 3	ALM-002-01 A	n/a	300	4199	S	No Shading
Bedroom 3	ALM-002-01 A	n/a	300	6199	W	No Shading
Bedroom 4	ALM-002-01 A	n/a	300	6199	W	No Shading
Bedroom 4	ALM-002-01 A	n/a	300	6199	W	No Shading
Bedroom 4	ALM-002-01 A	n/a	2100	4000	N	No Shading
Bedroom 4	ALM-002-01 A	n/a	300	4199	N	No Shading
Bedroom 4	ALM-002-01 A	n/a	2100	4000	E	No Shading
Bedroom 4	ALM-002-01 A	n/a	300	4199	E	No Shading
Night Time 1	ALM-002-01 A	n/a	1200	900	W	Vertical Louvres, Horizontal Blades
Night Time 1	ALM-002-01 A	n/a	300	1599	W	No Shading
Unconditioned 5	ALM-002-01 A	n/a	1200	900	W	Vertical Louvres, Horizontal Blades
Unconditioned 5	ALM-002-01 A	n/a	300	1599	W	No Shading
Day Time 3	ALM-002-01 A	n/a	1500	1200	N	No Shading
Day Time 3	ALM-001-01 A	n/a	1500	7200	E	Vertical Louvres, Horizontal Blades
Day Time 3	ALM-001-01 A	n/a	2100	1200	S	No Shading
Day Time 3	ALM-001-01 A	n/a	1500	7200	W	Vertical Louvres, Horizontal Blades

Nationwide House Energy Rating Scheme* Certificate

Certificate number: **0004495628**

Certificate Date:

23 Dec 2019

★ Star rating:

5.3



Building features continued

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

ID	Wall type	Insulation	Wall wrap or foil
EW-1	Tilt up Concrete	Bulk Insulation R2.5	No
EW-2	Fibro Cavity Panel on Battens	Bulk Insulation R2.5	No

External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
uncon 11	EW-1	1610	2400	S	No	2300
uncon 12	EW-1	1705	2400	S	No	2300
uncon 12	EW-1	1705	2400	W	No	0
Living 1	EW-1	5305	2400	N	No	600
Living 1	EW-1	8200	2400	E	No	1675
Living 1	EW-1	5400	2400	S	No	2275
Living 1	EW-1	1600	2400	W	No	3600
day 12	EW-1	5305	2400	W	No	0
day 12	EW-1	3600	2400	N	No	2100
day 12	EW-1	600	2400	E	No	7200
Unconditioned 3	EW-1	1590	2400	W	No	1200
Unconditioned 4	EW-1	1590	2400	W	No	1200
Night Time 1	EW-1	3505	2400	S	No	2600
Night Time 1	EW-1	4195	2400	W	No	800
Bedroom 2	EW-1	3995	2400	W	No	800
Bedroom 2	EW-1	3600	2400	N	No	2900
Bedroom 2	EW-1	2000	2400	E	No	0
Living 3	EW-1	1705	2400	N	No	100
Living 3	EW-1	2000	2400	E	No	5000
Living 3	EW-1	3800	2400	N	No	2100
Living 3	EW-1	7400	2400	E	No	1200
Living 3	EW-1	5505	2400	S	No	2600
Kitchen/Living	EW-1	6105	2450	N	No	5600
Kitchen/Living	EW-1	11400	2450	E	No	1400
Kitchen/Living	EW-1	6105	2450	S	No	1400
Bedroom 3	EW-1	4105	2450	S	No	1400
Bedroom 3	EW-1	6195	2450	W	No	1400
Bedroom 4	EW-1	6195	2450	W	No	1400
Bedroom 4	EW-1	4200	2450	N	No	1400
Bedroom 4	EW-1	4200	2450	E	No	7600

Nationwide House Energy Rating Scheme* Certificate

Certificate number: **0004495628**

Certificate Date:

23 Dec 2019

★ Star rating:

5.3



Building features continued

Night Time 1	EW-1	1595	2450	W	No	1400
Unconditioned 5	EW-1	1590	2450	W	No	1400
Day Time 3	EW-2	1600	2100	N	No	800
Day Time 3	EW-2	8600	2100	E	No	400
Day Time 3	EW-2	1600	2100	S	No	800
Day Time 3	EW-2	8600	2100	W	No	400

Internal wall type

Wall type	Area (m ²)	Insulation	Wall wrap or foil
IW-1 - Tilt Concrete	81.0	No insulation	No
IW-2 - Cavity wall, plasterboard on battens one side	72.0	No insulation	No

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
uncon 11	Concrete Slab on Ground 200mm	2.8	None	Bulk Insulation in Contact with Floor R2	Ceramic Tiles 8mm
uncon 12	Concrete Slab on Ground 200mm	2.9	None	Bulk Insulation in Contact with Floor R2	Ceramic Tiles 8mm
Living 1	Concrete Slab on Ground 200mm	43.7	None	Bulk Insulation in Contact with Floor R2	Bare
day 12	Concrete Slab on Ground 200mm	18.7	None	Bulk Insulation in Contact with Floor R2	Bare
Unconditioned 3/day 12	Concrete Above Plasterboard 200mm	3.8		No Insulation	Ceramic Tiles 8mm
Unconditioned 4/day 12	Concrete Above Plasterboard 200mm	3.8		No Insulation	Ceramic Tiles 8mm
Night Time 1/uncon 11	Concrete Above Plasterboard 200mm	3.1		No Insulation	Bare
Night Time 1/uncon 12	Concrete Above Plasterboard 200mm	3.1		No Insulation	Bare
Night Time 1/day 12	Concrete Above Plasterboard 200mm	0.7		No Insulation	Bare
Night Time 1	Suspended Concrete Slab 200mm	7.6	Totally Open	Bulk Insulation in Contact with Floor R2	Bare
Bedroom 2/day 12	Concrete Above Plasterboard 200mm	7.0		No Insulation	Bare
Bedroom 2	Suspended Concrete Slab 200mm	7.0	Totally Open	Bulk Insulation in Contact with Floor R2	Bare
Day Time 1/day 12	Concrete Above Plasterboard 200mm	2.6		No Insulation	Bare
Living 3/Living 1	Concrete Above Plasterboard 200mm	38.5		No Insulation	Bare
Living 3	Suspended Concrete Slab	5.7	Totally Open	Bulk Insulation	Bare

Nationwide House Energy Rating Scheme* Certificate

Certificate number: **0004495628**

Certificate Date:

23 Dec 2019

★ Star rating:

5.3



Building features continued

	200mm			in Contact with Floor R2	
Kitchen/Living /Living 3	Concrete Above Plasterboard 200mm	44.3		No Insulation	Bare
Kitchen/Living	Suspended Concrete Slab 200mm	25.2	Open	Bulk Insulation in Contact with Floor R2	Bare
Bedroom 3/Night Time 1	Concrete Above Plasterboard 200mm	14.6		No Insulation	Bare
Bedroom 3	Suspended Concrete Slab 200mm	10.6	Open	Bulk Insulation in Contact with Floor R2	Bare
Bedroom 4/Bedroom 2	Concrete Above Plasterboard 200mm	14.2		No Insulation	Bare
Bedroom 4	Suspended Concrete Slab 200mm	11.5	Open	Bulk Insulation in Contact with Floor R2	Bare
Day Time 2/Day Time 1	Concrete Above Plasterboard 200mm	2.6		No Insulation	Bare
Night Time 1/Unconditioned 4	Concrete Above Plasterboard 200mm	3.8		No Insulation	Ceramic Tiles 8mm
Night Time 1	Suspended Concrete Slab 200mm	0.9	Open	Bulk Insulation in Contact with Floor R2	Ceramic Tiles 8mm
Unconditioned 5/Unconditioned 3	Concrete Above Plasterboard 200mm	3.8		No Insulation	Ceramic Tiles 8mm
Unconditioned 5	Suspended Concrete Slab 200mm	0.9	Open	Bulk Insulation in Contact with Floor R2	Ceramic Tiles 8mm
Day Time 3/Kitchen/Living	Concrete Above Plasterboard 200mm	13.8		No Insulation	Ceramic Tiles 8mm

Ceiling type

Location	Construction	Added insulation	Roof space above
uncon 11	Plasterboard	Bulk Insulation R4	No
uncon 11	Concrete Above Plasterboard	No Insulation	No
uncon 12	Plasterboard	Bulk Insulation R4	No
uncon 12	Concrete Above Plasterboard	No Insulation	No
Living 1	Plasterboard	Bulk Insulation R4	No
Living 1	Concrete Above Plasterboard	No Insulation	No
day 12	Plasterboard	Bulk Insulation R4	No
day 12	Concrete Above Plasterboard	No Insulation	No
Unconditioned 3	Plasterboard	Bulk Insulation R4	No
Unconditioned 3	Concrete Above Plasterboard	No Insulation	No
Unconditioned 4	Plasterboard	Bulk Insulation R4	No
Unconditioned 4	Concrete Above Plasterboard	No Insulation	No

Nationwide House Energy Rating Scheme* Certificate

Certificate number: **0004495628**

Certificate Date:

23 Dec 2019

★ Star rating:

5.3



Building features continued

Night Time 1	Plasterboard	Bulk Insulation R4	No
Night Time 1	Concrete Above Plasterboard	No Insulation	No
Bedroom 2	Plasterboard	Bulk Insulation R4	No
Bedroom 2	Concrete Above Plasterboard	No Insulation	No
Day Time 1	Plasterboard	Bulk Insulation R4	No
Day Time 1	Concrete Above Plasterboard	No Insulation	No
Living 3	Plasterboard	Bulk Insulation R4	No
Living 3	Concrete Above Plasterboard	No Insulation	No
Kitchen/Living	Plasterboard	Bulk Insulation R4	No
Kitchen/Living	Concrete Above Plasterboard	No Insulation	No
Bedroom 3	Plasterboard	Bulk Insulation R4	No
Bedroom 4	Plasterboard	Bulk Insulation R4	No
Day Time 2	Plasterboard	Bulk Insulation R4	No
Night Time 1	Plasterboard	Bulk Insulation R4	No
Unconditioned 5	Plasterboard	Bulk Insulation R4	No
Day Time 3	Plasterboard	Bulk Insulation R4	No

Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
uncon 11	1	Downlights - LED	150	Sealed
uncon 12	1	Downlights - LED	150	Sealed
Living 1	18	Downlights - LED	150	Sealed
day 12	8	Downlights - LED	150	Sealed
Unconditioned 3	2	Downlights - LED	150	Sealed
Unconditioned 3	1	Exhaust Fans	300	Sealed
Unconditioned 4	2	Downlights - LED	150	Sealed
Unconditioned 4	1	Exhaust Fans	300	Sealed
Night Time 1	6	Downlights - LED	150	Sealed
Bedroom 2	6	Downlights - LED	150	Sealed
Day Time 1	1	Downlights - LED	150	Sealed
Living 3	18	Downlights - LED	150	Sealed
Kitchen/Living	28	Downlights - LED	150	Sealed
Kitchen/Living	1	Exhaust Fans	300	Sealed
Bedroom 3	11	Downlights - LED	150	Sealed
Bedroom 4	11	Downlights - LED	150	Sealed
Day Time 2	1	Downlights - LED	150	Sealed
Night Time 1	2	Downlights - LED	150	Sealed
Night Time 1	1	Exhaust Fans	300	Sealed
Unconditioned 5	2	Downlights - LED	150	Sealed

* Nationwide House Energy Rating Scheme (NatHERS) is an initiative of the Australian, state and territory governments. For more details see www.nathers.gov.au

Nationwide House Energy Rating Scheme* Certificate

Certificate number: **0004495628**

Certificate Date:

23 Dec 2019

★ Star rating:

5.3



Building features continued

Unconditioned 5	1	Exhaust Fans	300	Sealed
Day Time 3	4	Downlights - LED	150	Sealed

Ceiling fans

Location	Number	Diameter (mm)
None Present		

Roof type

Construction	Added insulation	Roof colour
Concrete	No Insulation, Only an Air Gap	Medium
Concrete	No Insulation, Only an Air Gap	Medium
Corrugated Iron	No Insulation, Only an Air Gap	Medium

Nationwide House Energy Rating Scheme* Certificate

Certificate number: 0004495628

Certificate Date: 23 Dec 2019

★ Star rating: 5.3



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