

# Nationwide House Energy Rating Scheme\* Certificate



Certificate number: **0003948643**

Certificate Date: **20 Jun 2019**

★ Star rating: **4.8**

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/15/1694**

Name: **darren parker**

Organisation: **energyraters.com.au**

Email: **darren@energyraters.com.au**

Phone: **02 60 24 10 22**

Declaration  
of interest: **None**

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

AAO: **BDAV**

## Overview

### Dwelling details

Street: **79 Kumarna St**

Suburb: **Duffys Forest**

State: **NSW**

Postcode: **2084**

Type: **New Dwelling**

NCC Class: **1A**

NatHERS

climate zone: **56**

Lot/DP

number: **-/-**

Exposure: **Open**

### Key construction and insulation materials

(see following pages for details)

Construction: **Weatherboard Cavity Panel Direct Fix  
Concrete**

Insulation: **Suspended Timber Floor**

**R2.5 wall insulation**

**R5.0 ceiling insulation**

**R2.5 floor insulation**

Glazing: **ALS-022-07 A Airflow Aluminium**

**Louvre SG 6LE**

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

Conditioned: **449.0**

Unconditioned: **95.0**

Garage: **79.0**

TOTAL: **545.0**

### Annual thermal performance loads (MJ/m<sup>2</sup>)

Heating: **43.6**

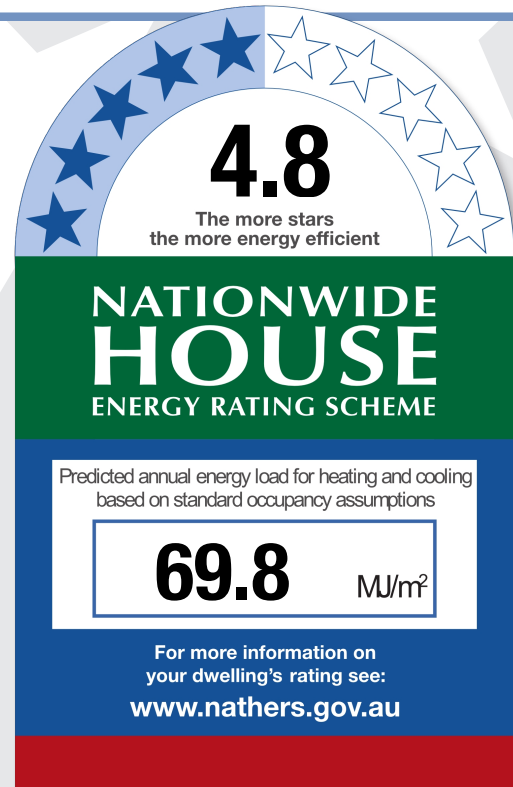
Cooling: **26.2**

TOTAL: **69.8**

### Plan documents

Plan ref/date: **401C**

Prepared by: **-**



### Ceiling penetrations

(see following pages for details)

Sealed: **87**

Unsealed: **0**

TOTAL:\*\* **87**

\*\*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

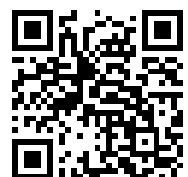
Note on allowable window values:  
Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

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: **0003948643**

Certificate Date:

**20 Jun 2019**

★ Star rating:

**4.8**



## Building features

### Window type and performance value

Window ID	Window type	U-value	SHGC
ALM-003-03 A	ALM-003-03 A Aluminium A DG Air Fill High Solar Gain low-E -Clear	4.3	0.47
ALS-037-13 A	ALS-037-13 A 92mm Carinya Classic Sliding Door DG LightBridge_ClrPrvSI_638-8-4	2.9	0.36
ALS-028-14 A	ALS-028-14 A 50mm Carinya Classic Fixed Window DG LightBridge_ClrPrvSI_638-8-4	2.3	0.40
ALS-022-07 A	ALS-022-07 A Airflow Aluminium Louvre SG 6LE	4.5	0.53
ALS-002-07 A	ALS-002-07 A 76mm ViewMax DoubleHung Window DG LightBridge_ClrSI_638-6-4	3.6	0.42

### Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
LAUNDRY	ALM-003-03 A	n/a	2700	1000	SE	No Shading
KIT/MEAL/ENTR Y	ALS-037-13 A	n/a	2700	4500	NW	No Shading
KIT/MEAL/ENTR Y	ALS-037-13 A	n/a	2700	3000	NW	No Shading
KIT/MEAL/ENTR Y	ALS-028-14 A	n/a	2700	900	SW	No Shading
KIT/MEAL/ENTR Y	ALS-028-14 A	n/a	2680	390	NE	No Shading
KIT/MEAL/ENTR Y	ALS-028-14 A	n/a	2680	390	NE	No Shading
KIT/MEAL/ENTR Y	ALS-022-07 A	n/a	2700	600	SE	No Shading
KIT/MEAL/ENTR Y	ALS-028-14 A	n/a	720	5100	SE	No Shading
KIT/MEAL/ENTR Y	ALS-022-07 A	n/a	720	900	SE	No Shading
BED 6	ALS-022-07 A	n/a	2700	1200	NE	No Shading
HALLWAY 2	ALS-022-07 A	n/a	2700	880	SW	No Shading
BED 5	ALS-022-07 A	n/a	2700	1200	NE	No Shading
STUDY/DAY BED	ALS-028-14 A	n/a	2700	2355	NW	No Shading
STUDY/DAY BED	ALS-022-07 A	n/a	1800	900	NW	No Shading
STUDY/DAY BED	ALS-028-14 A	n/a	1700	2050	SE	No Shading
STUDY/DAY BED	ALS-022-07 A	n/a	2700	1035	SW	No Shading
LIVING 2	ALS-037-13 A	n/a	2700	2990	NW	No Shading
LIVING 2	ALS-037-13 A	n/a	2700	2990	NW	No Shading
LIVING 2	ALS-022-07 A	n/a	2700	900	NE	No Shading
LIVING 2	ALS-037-13 A	n/a	2700	3000	NE	No Shading
LIVING 2	ALS-022-07 A	n/a	2700	900	SW	No Shading
LIVING 2	ALS-022-07 A	n/a	2700	900	SW	No Shading
LIVING 1	ALS-037-13 A	n/a	2700	3000	NW	No Shading
LIVING 1	ALS-002-07 A	n/a	2700	900	SW	No Shading
GYM/YOGA/ST AIR	ALS-028-14 A	n/a	1200	3000	NW	No Shading
GYM/YOGA/ST AIR	ALS-022-07 A	n/a	900	3000	SE	No Shading

# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0003948643**

Certificate Date:

**20 Jun 2019**

★ Star rating:

**4.8**



## Building features continued

GYM/YOGA/ST AIR	ALS-022-07 A	n/a	2350	900	SW	No Shading
WIR	ALS-022-07 A	n/a	1200	5640	NW	No Shading
BED 1	ALS-028-14 A	n/a	1200	3000	NW	No Shading
BED 1	ALS-022-07 A	n/a	2350	900	NE	No Shading
BED 1	ALS-022-07 A	n/a	2350	900	NE	No Shading
BED 4	ALS-022-07 A	n/a	2700	1200	NE	No Shading
BED 3	ALS-022-07 A	n/a	1950	900	SE	No Shading
BED 3	ALS-028-14 A	n/a	1950	1600	SE	No Shading
BED 2	ALS-022-07 A	n/a	1950	900	NW	No Shading
BED 2	ALS-028-14 A	n/a	1950	1600	NW	No Shading
CORRIDOR	ALS-022-07 A	n/a	2680	1025	SE	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 no.	Area (m²)	Orientation	Outdoor shade	Indoor shade/diffuser
LAUNDRY	GEN-04-008a	1	1.1	SE	None	No
BATH 4	GEN-04-008a	1	0.8	SW	None	No
GYM/YOGA/ST AIR	GEN-04-008a	1	0.9	SE	None	No
ENS	GEN-04-008a	1	0.4	SE	None	No
ENS	GEN-04-008a	2	1.3	SE	None	No
BED 1	GEN-04-008a	1	1.6	SE	None	No
BATH	GEN-04-008a	1	1.1	SW	None	No
BATH	GEN-04-008a	1	1.1	NE	None	No

## External wall type

ID	Wall type	Insulation	Wall wrap or foil
EW-1	Earth	No insulation	No
EW-2	Earth, internally lined	Anti-glare foil with bulk no gap R2.5	Yes
EW-3	Weatherboard 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	6900	2700	NE	No	100
GARAGE	EW-1	11500	2700	SE	No	100
GARAGE	EW-1	3400	2700	SW	No	100
GARAGE	EW-1	11400	2700	NW	No	100
LAUNDRY	EW-2	2395	2700	NW	No	100
LAUNDRY	EW-3	1100	2700	NE	No	1600
LAUNDRY	EW-3	1600	2700	NW	No	1200

# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0003948643**

Certificate Date:

**20 Jun 2019**

★ Star rating:

**4.8**



## Building features continued

LAUNDRY	EW-3	3995	2700	SE	No	100
PANTRY	EW-3	1195	2700	NW	No	12000
PANTRY	EW-3	2490	2700	SE	No	100
KIT/MEAL/ENTRY	EW-3	9800	2700	NW	No	100
KIT/MEAL/ENTRY	EW-3	2195	2700	SW	No	100
KIT/MEAL/ENTRY	EW-3	2290	2700	NE	No	1900
KIT/MEAL/ENTRY	EW-3	11895	2700	SE	No	100
BATH 4	EW-3	1890	2700	NE	No	100
BED 6	EW-3	4090	2700	NE	No	300
HALLWAY 2	EW-3	5995	2700	SW	No	100
HALLWAY 2	EW-3	2500	2700	SE	No	100
HALLWAY 2	EW-3	3600	2700	SW	No	100
BED 5	EW-3	4090	2700	NE	No	300
STUDY/DAY BED	EW-3	4395	2700	NW	No	1500
STUDY/DAY BED	EW-3	1195	2700	SE	No	100
STUDY/DAY BED	EW-3	500	2700	NE	No	100
STUDY/DAY BED	EW-3	2100	2700	SE	No	100
STUDY/DAY BED	EW-3	500	2700	SW	No	100
STUDY/DAY BED	EW-3	1100	2700	SE	No	100
STUDY/DAY BED	EW-3	4500	2700	SW	No	100
LIVING 2	EW-3	7800	2700	NW	No	1500
LIVING 2	EW-3	10395	2700	NE	No	100
LIVING 2	EW-3	7000	2700	SW	No	100
LIVING 1	EW-3	4700	2700	NW	No	1500
LIVING 1	EW-2	8200	2700	NE	No	100
LIVING 1	EW-3	1800	2700	SE	No	7000
LIVING 1	EW-3	8195	2700	SW	No	100
GYM/YOGA/STAIR	EW-3	7395	2700	NW	No	300
GYM/YOGA/STAIR	EW-3	7395	2700	SE	No	100
GYM/YOGA/STAIR	EW-3	4700	2700	SW	No	100
WIR	EW-3	6790	2700	NW	No	300
WIR	EW-3	3890	2700	SE	No	100
ENS	EW-3	3490	2700	SE	No	100
BED 1	EW-3	4995	2700	NW	No	300
BED 1	EW-3	4700	2700	NE	No	100
BED 1	EW-3	4395	2700	SE	No	100
BATH	EW-3	1690	2700	NE	No	100
BED 4	EW-3	4095	2700	NE	No	300
BED 4	EW-3	3600	2700	SE	No	100
BED 4	EW-3	1200	2700	SW	No	6100
BED 3	EW-3	1200	2700	NE	No	4900
BED 3	EW-3	4800	2700	SE	No	100
BED 3	EW-3	4095	2700	SW	No	100
BATH	EW-3	1690	2700	SW	No	100
BED 2	EW-3	4795	2700	NW	No	300
BED 2	EW-3	4095	2700	SW	No	100
CORRIDOR	EW-3	1190	2700	SE	No	1300

# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0003948643**

Certificate Date:

**20 Jun 2019**

★ Star rating:

**4.8**



## Building features continued

### Internal wall type

Wall type	Area (m²)	Insulation	Wall wrap or foil
IW-1 - Earth	9.0	No insulation	No
IW-2 - Cavity wall, direct fix plasterboard, single gap	12.0	Bulk Insulation, No Air Gap R2.5	No
IW-3 - Cavity wall, direct fix plasterboard, single gap	205.0	No insulation	No
IW-4 - Cavity wall, direct fix plasterboard, single gap	76.0	Bulk Insulation, No Air Gap R2	No

### Floors

Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
GARAGE	Concrete Slab on Ground 100mm	79.0	None	No Insulation	Bare
LAUNDRY	Suspended Timber Floor 19mm	16.4	Enclosed	Bulk Insulation, Gap to Floor R2.5	Ceramic Tiles 8mm
PANTRY	Suspended Timber Floor 19mm	11.0	Enclosed	Bulk Insulation, Gap to Floor R2.5	Cork Tiles or Parquetry 8mm
KIT/MEAL/ENTRY	Suspended Timber Floor 19mm	68.8	Enclosed	Bulk Insulation, Gap to Floor R2.5	Cork Tiles or Parquetry 8mm
CELLAR	Suspended Timber Floor 19mm	9.1	Enclosed	Bulk Insulation, Gap to Floor R2.5	Cork Tiles or Parquetry 8mm
BATH 4	Suspended Timber Floor 19mm	6.4	Enclosed	Bulk Insulation, Gap to Floor R2.5	Ceramic Tiles 8mm
BED 6	Suspended Timber Floor 19mm	14.3	Enclosed	Bulk Insulation, Gap to Floor R2.5	Cork Tiles or Parquetry 8mm
HALLWAY 2	Suspended Timber Floor 19mm	23.8	Enclosed	Bulk Insulation, Gap to Floor R2.5	Cork Tiles or Parquetry 8mm
BED 5	Suspended Timber Floor 19mm	14.3	Enclosed	Bulk Insulation, Gap to Floor R2.5	Cork Tiles or Parquetry 8mm
STUDY/DAY BED	Suspended Timber Floor 19mm	20.6	Enclosed	Bulk Insulation, Gap to Floor R2.5	Cork Tiles or Parquetry 8mm
LIVING 2	Suspended Timber Floor 19mm	80.6	Enclosed	Bulk Insulation, Gap to Floor R2.5	Cork Tiles or Parquetry 8mm
LIVING 1	Suspended Timber Floor 19mm	38.4	Enclosed	Bulk Insulation,	Cork Tiles or Parquetry 8mm

# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0003948643**

Certificate Date:

**20 Jun 2019**

★ Star rating:

**4.8**



## Building features continued

					Gap to Floor R2.5	
GYM/YOGA/STAIR/KIT/MEAL/ENTRY	Timber Above Plasterboard 19mm	7.7			Bulk Insulation R2.5	Cork Tiles or Parquetry 8mm
GYM/YOGA/STAIR/CELLAR	Timber Above Plasterboard 19mm	9.6			Bulk Insulation R2.5	Cork Tiles or Parquetry 8mm
GYM/YOGA/STAIR/HALLWAY 2	Timber Above Plasterboard 19mm	17.3			Bulk Insulation R2.5	Cork Tiles or Parquetry 8mm
WIR/KIT/MEAL/ENTRY	Timber Above Plasterboard 19mm	20.4			Bulk Insulation R2.5	Cork Tiles or Parquetry 8mm
WC [ENS]/KIT/MEAL/ENTRY	Timber Above Plasterboard 19mm	1.9			Bulk Insulation R2.5	Ceramic Tiles 8mm
ENS/KIT/MEAL/ENTRY	Timber Above Plasterboard 19mm	10.3			Bulk Insulation R2.5	Ceramic Tiles 8mm
BED 1/KIT/MEAL/ENTRY	Timber Above Plasterboard 19mm	21.3			Bulk Insulation R2.5	Cork Tiles or Parquetry 8mm
BATH	Suspended Timber Floor 19mm	5.7	Enclosed		Bulk Insulation, Gap to Floor R2.5	Ceramic Tiles 8mm
BED 4	Suspended Timber Floor 19mm	14.5	Enclosed		Bulk Insulation, Gap to Floor R2.5	Cork Tiles or Parquetry 8mm
BED 3	Suspended Timber Floor 19mm	19.3	Enclosed		Bulk Insulation, Gap to Floor R2.5	Cork Tiles or Parquetry 8mm
BATH	Suspended Timber Floor 19mm	7.7	Enclosed		Bulk Insulation, Gap to Floor R2.5	Ceramic Tiles 8mm
BED 2	Suspended Timber Floor 19mm	19.3	Enclosed		Bulk Insulation, Gap to Floor R2.5	Cork Tiles or Parquetry 8mm
CORRIDOR	Suspended Timber Floor 19mm	9.6	Enclosed		Bulk Insulation, Gap to Floor R2.5	Cork Tiles or Parquetry 8mm

## Ceiling type

Location	Construction	Added insulation	Roof space above
GARAGE	Plasterboard	No insulation	Yes
LAUNDRY	Plasterboard	Bulk Insulation R5	Yes
PANTRY	Plasterboard	Bulk Insulation R5	Yes
KIT/MEAL/ENTRY	Plasterboard	Bulk Insulation R5	Yes
KIT/MEAL/ENTRY	Timber Above Plasterboard	Bulk Insulation R2.5	No
CELLAR	Timber Above Plasterboard		No

# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0003948643**

Certificate Date:

**20 Jun 2019**

★ Star rating:

**4.8**



## Building features continued

		Bulk Insulation R2.5	
BATH 4	Plasterboard	Bulk Insulation R5	Yes
BED 6	Plasterboard	Bulk Insulation R5	Yes
HALLWAY 2	Plasterboard	Bulk Insulation R5	Yes
HALLWAY 2	Timber Above Plasterboard	Bulk Insulation R2.5	No
BED 5	Plasterboard	Bulk Insulation R5	Yes
STUDY/DAY BED	Plasterboard	Bulk Insulation R5	Yes
LIVING 2	Plasterboard	Bulk Insulation R5	Yes
LIVING 1	Plasterboard	Bulk Insulation R5	Yes
GYM/YOGA/STAIR	Plasterboard	Bulk Insulation R5	Yes
WIR	Plasterboard	Bulk Insulation R5	Yes
WC [ENS]	Plasterboard	Bulk Insulation R5	Yes
ENS	Plasterboard	Bulk Insulation R5	Yes
BED 1	Plasterboard	Bulk Insulation R5	Yes
BATH	Plasterboard	Bulk Insulation R5	Yes
BED 4	Plasterboard	Bulk Insulation R5	Yes
BED 3	Plasterboard	Bulk Insulation R5	Yes
BATH	Plasterboard	Bulk Insulation R5	Yes
BED 2	Plasterboard	Bulk Insulation R5	Yes
CORRIDOR	Plasterboard	Bulk Insulation R5	Yes

## Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
LAUNDRY	2	Downlights - LED	150	Sealed
LAUNDRY	1	Exhaust Fans	250	Sealed
PANTRY	2	Downlights - LED	150	Sealed
KIT/MEAL/ENTR Y	11	Downlights - LED	0	Sealed
KIT/MEAL/ENTR Y	1	Exhaust Fans	150	Sealed
BATH 4	2	Downlights - LED	150	Sealed
BATH 4	1	Exhaust Fans	250	Sealed
BED 6	3	Downlights - LED	150	Sealed



# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0003948643**

Certificate Date:

**20 Jun 2019**

★ Star rating:

**4.8**



## Building features continued

HALLWAY 2	5	Downlights - LED	0	Sealed
BED 5	3	Downlights - LED	150	Sealed
STUDY/DAY BED	3	Downlights - LED	150	Sealed
LIVING 2	8	Downlights - LED	150	Sealed
LIVING 1	6	Downlights - LED	150	Sealed
GYM/YOGA/ST AIR	5	Downlights - LED	150	Sealed
WIR	5	Downlights - LED	150	Sealed
WC [ENS]	1	Downlights - LED	150	Sealed
ENS	3	Downlights - LED	150	Sealed
ENS	1	Exhaust Fans	250	Sealed
BED 1	6	Downlights - LED	150	Sealed
BATH	2	Downlights - LED	150	Sealed
BATH	1	Exhaust Fans	250	Sealed
BED 4	3	Downlights - LED	150	Sealed
BED 3	3	Downlights - LED	150	Sealed
BATH	2	Downlights - LED	150	Sealed
BATH	1	Exhaust Fans	250	Sealed
BED 2	3	Downlights - LED	150	Sealed
CORRIDOR	3	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	Light
Corrugated Iron	No Insulation, Only an Air Gap	Light



# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: 0003948643

Certificate Date: 20 Jun 2019

★ Star rating: 4.8



## Additional information

Job# 36071

Sliding doors are ALS-037-13 on BERS but ALS-037-15 on WERS.

ALM-003-03 has been used for ED4

## 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](http://www.nathers.gov.au)

For more information on energy efficient design and insulation visit [www.yourhome.gov.au](http://www.yourhome.gov.au)