

# Nationwide House Energy Rating Scheme\* Certificate



Certificate number: **0004273835**

Certificate Date: **15 Oct 2019**

★ Star rating: **6.4**

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: **20920**  
Name: **Terry Chapman**  
Organisation: **Chapman Environmental Services Pty Ltd**  
Email: **terry@basixcertificates.com.au**  
Phone: **0414 265292**  
Declaration of interest: **None**  
Software: **BERS Pro v4.3.0.2d (3.13)**  
AAO: **ABSA**

## Overview

### Dwelling details

Street: **Unit U201, 38-40 Orth St**  
Suburb: **Kingswood**  
State: **NSW** Postcode: **2747**  
Type: **New Dwelling** NCC Class: **2**  
NatHERS climate zone: **28**  
Lot/DP number: **62/36728** Exposure: **Suburban**

### Key construction and insulation materials

(see following pages for details)

Construction: **AAC Cavity Panel Direct Fix Concrete, Plasterboard Concrete Slab, Unit Below**  
Insulation: **R2.0 wall insulation No ceiling insulation No floor insulation**  
Glazing: **ALM-002-04 A Aluminium B SG Low Solar Gain Low-E**

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

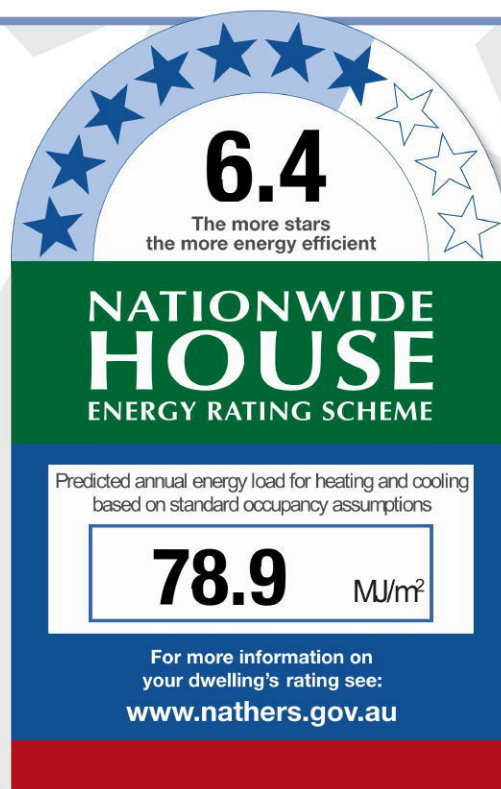
Conditioned: **73.0**  
Unconditioned: **0.0**  
Garage: **0.0**  
TOTAL: **73.0**

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

Heating: **20.6**  
Cooling: **58.3**  
TOTAL: **78.9**

### Plan documents

Plan ref/date: **1714**  
Prepared by: **AC PROJECT GROUP**



### Ceiling penetrations

(see following pages for details)

Sealed: **30**  
Unsealed: **0**  
TOTAL:\*\* **30**

\*\*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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Certificate number: 0004273835

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6.4



## Building features

### Window type and performance value

Window ID	Window type	U-value	SHGC
ALM-002-04 A	ALM-002-04 A Aluminium B SG Low Solar Gain Low-E	5.6	0.41
ALM-001-04 A	ALM-001-04 A Aluminium A SG Low Solar Gain Low-E	5.6	0.36

### Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Bedroom 1	ALM-002-04 A	n/a	2800	330	W	No Shading
Bedroom 1	ALM-001-04 A	n/a	2800	750	W	No Shading
Bedroom 1	ALM-002-04 A	n/a	2800	1350	W	No Shading
Bedroom 2	ALM-001-04 A	n/a	2000	750	W	No Shading
Bedroom 2	ALM-002-04 A	n/a	2800	750	W	No Shading
Kitchen/Living	ALM-001-04 A	n/a	2000	750	W	No Shading
Kitchen/Living	ALM-001-04 A	n/a	2100	940	N	No Shading
Kitchen/Living	ALM-002-04 A	n/a	2143	2600	W	No Shading
Kitchen/Living	ALM-002-04 A	n/a	2800	900	N	No Shading

### 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 <sup>2</sup> )	Orientation	Outdoor shade	Indoor shade/diffuser
None Present						

### External wall type

ID	Wall type	Insulation	Wall wrap or foil
EW-1	AAC Cavity Panel Direct Fix	Foil, Anti-glare one side + Bulk Insulation R2	Yes
EW-2	Fibro Cavity Panel Direct Fix	Bulk Insulation R2	No

### External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Bedroom 1	EW-1	1295	2800	S	No	0
Bedroom 1	EW-1	600	2800	W	No	0
Bedroom 1	EW-1	3900	2800	S	No	0
Bedroom 1	EW-1	3095	2800	W	No	0
Bedroom 2	EW-1	3090	2800	W	No	0
Kitchen/Living	EW-1	2495	2800	W	No	0
Kitchen/Living	EW-1	2400	2800	N	No	4100
Kitchen/Living	EW-1	4100	2800	W	No	2400
Kitchen/Living	EW-1	4000	2800	N	No	0
Kitchen/Living	EW-1	2000	2800	E	No	5200
Kitchen/Living	EW-2	2400	2800	E	No	0
Kitchen/Living	EW-1	2095	2800	S	No	0

# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004273835**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**6.4**



## Building features continued

### Internal wall type

Wall type	Area (m <sup>2</sup> )	Insulation	Wall wrap or foil
IW-1 - Cavity wall, direct fix plasterboard, single gap	76.0	No insulation	No
IW-2 - Shaft liner party wall with plaster	28.0	Bulk Insulation both sides of shaft liner R2	No

### Floors

Location	Construction	Area (m <sup>2</sup> )	Sub floor ventilation	Added insulation	Covering
Bedroom 1	Concrete Slab, Unit Below 150mm	12.7	None	No Insulation	Carpet+Rubber Underlay 18mm
Ensuite	Concrete Slab, Unit Below 150mm	3.5	None	No Insulation	Ceramic Tiles 8mm
Bedroom 2	Concrete Slab, Unit Below 150mm	13.2	None	No Insulation	Carpet+Rubber Underlay 18mm
Bath	Concrete Slab, Unit Below 150mm	3.5	None	No Insulation	Ceramic Tiles 8mm
Kitchen/Living	Concrete Slab, Unit Below 150mm	29.6	None	No Insulation	Ceramic Tiles 8mm
Kitchen/Living	Concrete Slab, Unit Below 150mm	10.9	None	No Insulation	Ceramic Tiles 8mm

### Ceiling type

Location	Construction	Added insulation	Roof space above
Bedroom 1	Concrete, Plasterboard	No insulation	No
Ensuite	Concrete, Plasterboard	No insulation	No
Bedroom 2	Concrete, Plasterboard	No insulation	No
Bath	Concrete, Plasterboard	No insulation	No
Kitchen/Living	Concrete, Plasterboard	No insulation	No
Kitchen/Living	Concrete, Plasterboard	No insulation	No

### Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
Bedroom 1	4	Downlights - LED	150	Sealed
Ensuite	1	Downlights - LED	150	Sealed
Ensuite	1	Exhaust Fans	300	Sealed
Bedroom 2	4	Downlights - LED	150	Sealed
Bath	1	Downlights - LED	150	Sealed
Bath	1	Exhaust Fans	300	Sealed
Kitchen/Living	12	Downlights - LED	150	Sealed
Kitchen/Living	1	Exhaust Fans	300	Sealed
Kitchen/Living	4	Downlights - LED	150	Sealed
Kitchen/Living	1	Exhaust Fans	300	Sealed

## Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004273835**

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### Building features continued

#### Ceiling fans

Location	Number	Diameter (mm)
None Present		

#### Roof type

Construction	Added insulation	Roof colour
None Present		

# Nationwide House Energy Rating Scheme\* Certificate



Certificate number:

Certificate Date:

★ Star rating:

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

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

\* Nationwide House Energy Rating Scheme (NatHERS) is an initiative of the Australian, state and territory governments.

For more details see [www.nathers.gov.au](http://www.nathers.gov.au)

# Nationwide House Energy Rating Scheme\* Certificate



Certificate number: **0004273868**

Certificate Date: **15 Oct 2019**

★ Star rating: **9.0**

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: **20920**  
Name: **Terry Chapman**  
Organisation: **Chapman Environmental Services Pty Ltd**  
Email: **terry@basixcertificates.com.au**  
Phone: **0414 265292**  
Declaration of interest: **None**  
Software: **BERS Pro v4.3.0.2d (3.13)**  
AAO: **ABSA**

## Overview

### Dwelling details

Street: **Unit U202, 38-40 Orth St**  
Suburb: **Kingswood**  
State: **NSW** Postcode: **2747**  
Type: **New Dwelling** NCC Class: **2**  
NatHERS climate zone: **28**  
Lot/DP number: **62/36728** Exposure: **Suburban**

### Key construction and insulation materials

(see following pages for details)

Construction: **Cavity Brick**  
**Concrete, Plasterboard**  
**Concrete Slab, Unit Below**  
Insulation: **No wall insulation**  
**No ceiling insulation**  
**No floor insulation**  
Glazing: **ALM-001-01 A Aluminium A SG Clear**

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

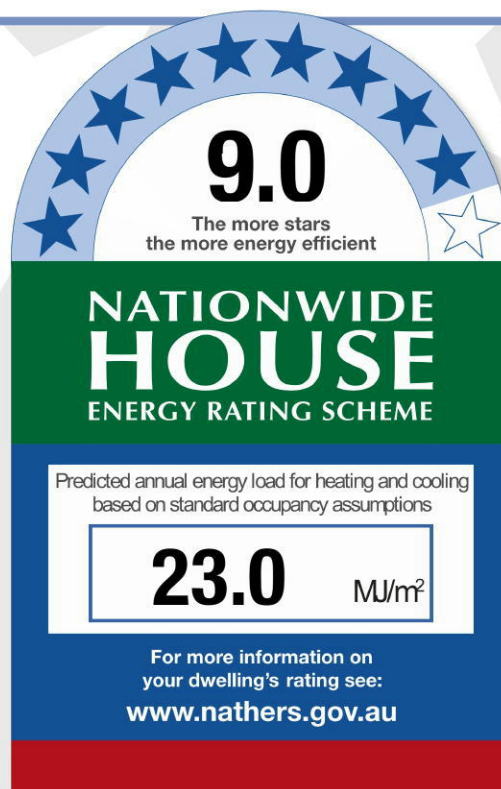
Conditioned: **75.0**  
Unconditioned: **0.0**  
Garage: **0.0**  
TOTAL: **75.0**

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

Heating: **7.5**  
Cooling: **15.4**  
TOTAL: **23.0**

## Plan documents

Plan ref/date: **1714**  
Prepared by: **AC PROJECT GROUP**



### Ceiling penetrations

(see following pages for details)

Sealed: **28**  
Unsealed: **0**  
TOTAL:\*\* **28**

\*\*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.**

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# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: 0004273868

Certificate Date:

15 Oct 2019

★ Star rating:

9.0



## 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

### Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Kitchen/Living	ALM-002-01 A	n/a	2143	2600	N	No Shading
Bedroom 1	ALM-001-01 A	n/a	2800	950	N	No Shading
Bedroom 2	ALM-001-01 A	n/a	1200	750	N	No Shading

### 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 (m²)	Orientation	Outdoor shade	Indoor shade/diffuser
None Present						

### External wall type

ID	Wall type	Insulation	Wall wrap or foil
EW-1	Cavity Brick	No insulation	No
EW-2	Fibro Cavity Panel Direct Fix	Bulk Insulation R2	No

### External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Kitchen/Living	EW-1	4100	2800	N	No	2000
Kitchen/Living	EW-1	600	2800	E	No	4700
Kitchen/Living	EW-2	2800	2800	S	No	2700
Bedroom 1	EW-1	2600	2800	W	No	5600
Bedroom 1	EW-1	3200	2800	N	No	0
Bedroom 2	EW-1	1490	2800	N	No	2600

### Internal wall type

Wall type	Area (m²)	Insulation	Wall wrap or foil
IW-1 - Cavity wall, direct fix plasterboard, single gap	71.0	No insulation	No
IW-2 - Shaft liner party wall with plaster	71.0	Bulk Insulation both sides of shaft liner R2	No

## Floors

# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004273868**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**9.0**



## Building features continued

Location	Construction	Area (m <sup>2</sup> )	Sub floor ventilation	Added insulation	Covering
Kitchen/Living	Concrete Slab, Unit Below 150mm	35.9	None	No Insulation	Ceramic Tiles 8mm
Bedroom 1	Concrete Slab, Unit Below 150mm	16.1	None	No Insulation	Carpet+Rubber Underlay 18mm
Ensuite	Concrete Slab, Unit Below 150mm	3.4	None	No Insulation	Ceramic Tiles 8mm
Bath	Concrete Slab, Unit Below 150mm	4.5	None	No Insulation	Ceramic Tiles 8mm
Bedroom 2	Concrete Slab, Unit Below 150mm	12.0	None	No Insulation	Carpet+Rubber Underlay 18mm
Kitchen/Living	Concrete Slab, Unit Below 150mm	3.1	None	No Insulation	Ceramic Tiles 8mm

## Ceiling type

Location	Construction	Added insulation	Roof space above
Kitchen/Living	Concrete, Plasterboard	No insulation	No
Bedroom 1	Concrete, Plasterboard	No insulation	No
Ensuite	Concrete, Plasterboard	No insulation	No
Bath	Concrete, Plasterboard	No insulation	No
Bedroom 2	Concrete, Plasterboard	No insulation	No
Kitchen/Living	Concrete, Plasterboard	No insulation	No

## Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
Kitchen/Living	12	Downlights - LED	150	Sealed
Kitchen/Living	2	Exhaust Fans	300	Sealed
Bedroom 1	5	Downlights - LED	150	Sealed
Ensuite	1	Downlights - LED	150	Sealed
Ensuite	1	Exhaust Fans	300	Sealed
Bath	1	Downlights - LED	150	Sealed
Bath	1	Exhaust Fans	300	Sealed
Bedroom 2	4	Downlights - LED	150	Sealed
Kitchen/Living	1	Downlights - LED	150	Sealed

## Ceiling fans

Location	Number	Diameter (mm)
None Present		

## Roof type

Construction	Added insulation	Roof colour
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## Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004273868**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**9.0**



### Building features continued

None Present

# Nationwide House Energy Rating Scheme\* Certificate



Certificate number:

Certificate Date:

★ Star rating:

## Additional information

## Explanatory notes

### About this report

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### Accredited Assessors

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For more details see [www.nathers.gov.au](http://www.nathers.gov.au)

# Nationwide House Energy Rating Scheme\* Certificate



Certificate number: **0004273892**

Certificate Date: **15 Oct 2019**

★ Star rating: **7.9**

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: **20920**  
Name: **Terry Chapman**  
Organisation: **Chapman Environmental Services Pty Ltd**  
Email: **terry@basixcertificates.com.au**  
Phone: **0414 265292**  
Declaration of interest: **None**  
Software: **BERS Pro v4.3.0.2d (3.13)**  
AAO: **ABSA**

## Overview

### Dwelling details

Street: **Unit U203, 38-40 Orth St**  
Suburb: **Kingswood**  
State: **NSW** Postcode: **2747**  
Type: **New Dwelling** NCC Class: **2**  
NatHERS climate zone: **28**  
Lot/DP number: **62/36728** Exposure: **Suburban**

### Key construction and insulation materials

(see following pages for details)

Construction: **AAC Cavity Panel Direct Fix Concrete, Plasterboard Concrete Slab, Unit Below**  
Insulation: **R2.0 wall insulation No ceiling insulation No floor insulation**  
Glazing: **ALM-001-01 A Aluminium A SG Clear**

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

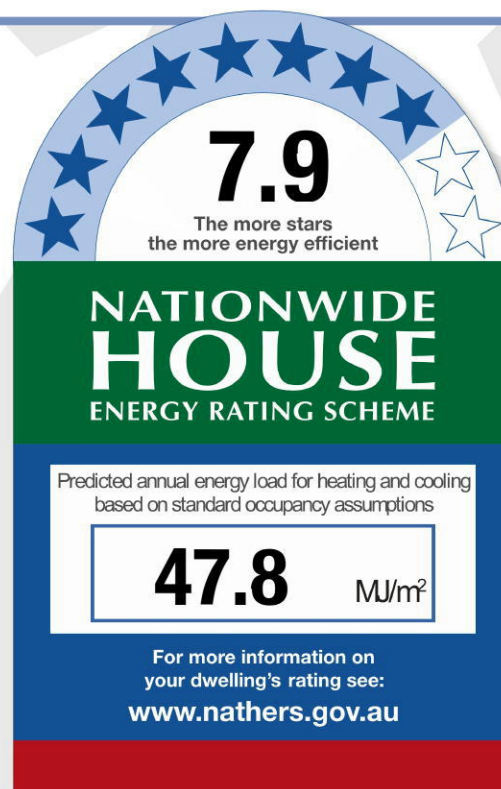
Conditioned: **73.0**  
Unconditioned: **0.0**  
Garage: **0.0**  
TOTAL: **73.0**

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

Heating: **23.6**  
Cooling: **24.2**  
TOTAL: **47.8**

### Plan documents

Plan ref/date: **1714**  
Prepared by: **AC PROJECT GROUP**



### Ceiling penetrations

(see following pages for details)

Sealed: **30**  
Unsealed: **0**  
TOTAL:\*\* **30**

\*\*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: 0004273892

Certificate Date:

15 Oct 2019

★ Star rating:

7.9



## Building features

### Window type and performance value

Window ID	Window type	U-value	SHGC
ALM-001-01 A	ALM-001-01 A Aluminium A SG Clear	6.7	0.57
ALM-002-01 A	ALM-002-01 A Aluminium B SG Clear	6.7	0.70

### Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Bedroom 1	ALM-001-01 A	n/a	2000	750	E	No Shading
Bedroom 2	ALM-001-01 A	n/a	2000	750	E	No Shading
Kitchen/Living	ALM-002-01 A	n/a	2800	1200	N	No Shading
Kitchen/Living	ALM-001-01 A	n/a	2800	925	N	No Shading
Kitchen/Living	ALM-002-01 A	n/a	2143	2600	E	No Shading
Kitchen/Living	ALM-001-01 A	n/a	1200	940	N	No Shading

### 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 (m²)	Orientation	Outdoor shade	Indoor shade/diffuser
None Present						

### External wall type

ID	Wall type	Insulation	Wall wrap or foil
EW-1	AAC Cavity Panel Direct Fix	Foil, Anti-glare one side + Bulk Insulation R2	Yes
EW-2	Fibro Cavity Panel Direct Fix	Bulk Insulation R2	No

### External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Bedroom 1	EW-1	2595	2800	E	No	0
Bedroom 1	EW-2	600	2800	E	No	0
Bedroom 1	EW-2	3495	2800	S	No	2000
Ensuite	EW-2	1895	2800	S	No	2000
Ensuite	EW-2	700	2800	W	No	1200
Bedroom 2	EW-1	3090	2800	E	No	0
Kitchen/Living	EW-1	4000	2800	N	No	0
Kitchen/Living	EW-1	3600	2800	E	No	2600
Kitchen/Living	EW-1	2600	2800	N	No	3600
Kitchen/Living	EW-1	2995	2800	E	No	0
Kitchen/Living	EW-2	1195	2800	S	No	2700

### Internal wall type

# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004273892**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**7.9**



## Building features continued

Wall type	Area (m <sup>2</sup> )	Insulation	Wall wrap or foil
IW-1 - Cavity wall, direct fix plasterboard, single gap	73.0	No insulation	No
IW-2 - Shaft liner party wall with plaster	34.0	Bulk Insulation both sides of shaft liner R2	No

## Floors

Location	Construction	Area (m <sup>2</sup> )	Sub floor ventilation	Added insulation	Covering
Bedroom 1	Concrete Slab, Unit Below 150mm	12.4	None	No Insulation	Carpet+Rubber Underlay 18mm
Ensuite	Concrete Slab, Unit Below 150mm	3.4	None	No Insulation	Ceramic Tiles 8mm
Bedroom 2	Concrete Slab, Unit Below 150mm	10.7	None	No Insulation	Carpet+Rubber Underlay 18mm
Bath	Concrete Slab, Unit Below 150mm	4.1	None	No Insulation	Ceramic Tiles 8mm
Kitchen/Living	Concrete Slab, Unit Below 150mm	31.5	None	No Insulation	Ceramic Tiles 8mm
Kitchen/Living	Concrete Slab, Unit Below 150mm	10.5	None	No Insulation	Ceramic Tiles 8mm

## Ceiling type

Location	Construction	Added insulation	Roof space above
Bedroom 1	Concrete, Plasterboard	No insulation	No
Ensuite	Concrete, Plasterboard	No insulation	No
Bedroom 2	Concrete, Plasterboard	No insulation	No
Bath	Concrete, Plasterboard	No insulation	No
Kitchen/Living	Concrete, Plasterboard	No insulation	No
Kitchen/Living	Concrete, Plasterboard	No insulation	No

## Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
Bedroom 1	4	Downlights - LED	150	Sealed
Ensuite	1	Downlights - LED	150	Sealed
Ensuite	1	Exhaust Fans	300	Sealed
Bedroom 2	4	Downlights - LED	150	Sealed
Bath	1	Downlights - LED	150	Sealed
Bath	1	Exhaust Fans	300	Sealed
Kitchen/Living	12	Downlights - LED	150	Sealed
Kitchen/Living	1	Exhaust Fans	300	Sealed
Kitchen/Living	4	Downlights - LED	150	Sealed
Kitchen/Living	1	Exhaust Fans	300	Sealed

## Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004273892**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**7.9**



### Building features continued

#### Ceiling fans

Location	Number	Diameter (mm)
None Present		

#### Roof type

Construction	Added insulation	Roof colour
None Present		

# Nationwide House Energy Rating Scheme\* Certificate



Certificate number:

Certificate Date:

★ Star rating:

## Additional information

## Explanatory notes

### About this report

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# Nationwide House Energy Rating Scheme\* Certificate



Certificate number: **0004273983**

Certificate Date: **15 Oct 2019**

★ Star rating: **8.4**

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: **20920**  
Name: **Terry Chapman**  
Organisation: **Chapman Environmental Services Pty Ltd**  
Email: **terry@basixcertificates.com.au**  
Phone: **0414 265292**  
Declaration of interest: **None**  
Software: **BERS Pro v4.3.0.2d (3.13)**  
AAO: **ABSA**

## Overview

### Dwelling details

Street: **Unit U206, 38-40 Orth St**  
Suburb: **Kingswood**  
State: **NSW** Postcode: **2747**  
Type: **New Dwelling** NCC Class: **2**  
NatHERS climate zone: **28**  
Lot/DP number: **62/36728** Exposure: **Suburban**

### Key construction and insulation materials

(see following pages for details)

Construction: **AAC Cavity Panel Direct Fix Concrete, Plasterboard Concrete Slab, Unit Below**  
Insulation: **R2.0 wall insulation No ceiling insulation No floor insulation**  
Glazing: **ALM-001-01 A Aluminium A SG Clear**

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

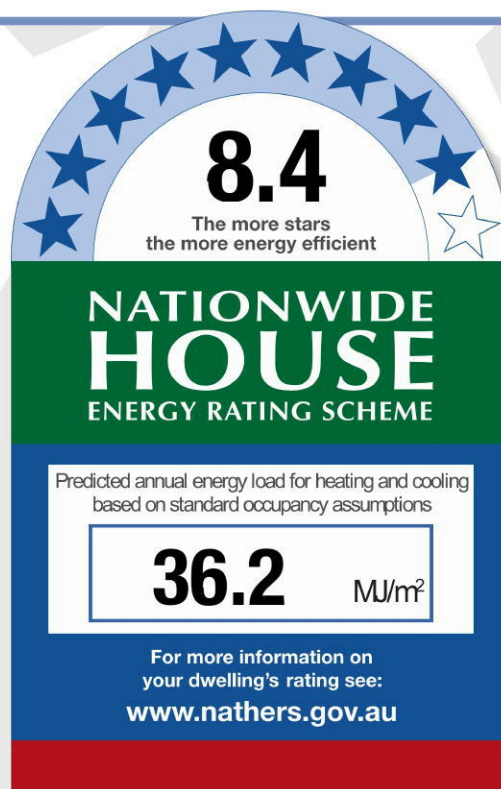
Conditioned: **70.0**  
Unconditioned: **4.0**  
Garage: **0.0**  
TOTAL: **74.0**

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

Heating: **8.7**  
Cooling: **27.6**  
TOTAL: **36.2**

### Plan documents

Plan ref/date: **1714**  
Prepared by: **AC PROJECT GROUP**



### Ceiling penetrations

(see following pages for details)

Sealed: **27**  
Unsealed: **0**  
TOTAL:\*\* **27**

\*\*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: 0004273983

Certificate Date:

15 Oct 2019

★ Star rating:

8.4



## 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

### Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Kitchen/Living	ALM-002-01 A	n/a	2143	2600	N	No Shading
Bedroom 1	ALM-001-01 A	n/a	2000	750	E	No Shading
Ensuite	ALM-001-01 A	n/a	2000	750	E	No Shading
Bath	ALM-001-01 A	n/a	2000	750	E	No Shading
Bedroom 2	ALM-001-01 A	n/a	2000	750	N	No Shading
Bedroom 2	ALM-001-01 A	n/a	2000	750	E	No Shading

### 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 (m²)	Orientation	Outdoor shade	Indoor shade/diffuser
None Present						

### External wall type

ID	Wall type	Insulation	Wall wrap or foil
EW-1	AAC Cavity Panel Direct Fix	Bulk Insulation R2	No
EW-2	Fibro Cavity Panel Direct Fix	Bulk Insulation R2	No

### External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Kitchen/Living	EW-1	4295	2800	N	No	2400
Kitchen/Living	EW-2	900	2800	W	No	1300
Kitchen/Living	EW-2	1300	2800	S	No	2000
Bedroom 1	EW-1	3795	2800	E	No	0
Ensuite	EW-1	2090	2800	E	No	0
Bath	EW-1	1990	2800	E	No	0
Bedroom 2	EW-1	2400	2800	W	No	4300
Bedroom 2	EW-1	3200	2800	N	No	0
Bedroom 2	EW-1	3695	2800	E	No	0

### Internal wall type

Wall type	Area (m²)	Insulation	Wall wrap or foil
IW-1 - Cavity wall, direct fix plasterboard, single gap	52.0	No insulation	No

# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004273983**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**8.4**

## Building features continued

IW-2 - Shaft liner party wall with plaster 41.0 Bulk Insulation both sides of shaft liner R2 No

## Floors

Location	Construction	Area (m <sup>2</sup> )	Sub floor ventilation	Added insulation	Covering
Kitchen/Living	Concrete Slab, Unit Below 150mm	41.8	None	No Insulation	Ceramic Tiles 8mm
Bedroom 1	Concrete Slab, Unit Below 150mm	12.7	None	No Insulation	Carpet+Rubber Underlay 18mm
Ensuite	Concrete Slab, Unit Below 150mm	3.9	None	No Insulation	Ceramic Tiles 8mm
Bath	Concrete Slab, Unit Below 150mm	3.7	None	No Insulation	Ceramic Tiles 8mm
Bedroom 2	Concrete Slab, Unit Below 150mm	11.6	None	No Insulation	Carpet+Rubber Underlay 18mm

## Ceiling type

Location	Construction	Added insulation	Roof space above
Kitchen/Living	Concrete, Plasterboard	No insulation	No
Bedroom 1	Concrete, Plasterboard	No insulation	No
Ensuite	Concrete, Plasterboard	No insulation	No
Bath	Concrete, Plasterboard	No insulation	No
Bedroom 2	Concrete, Plasterboard	No insulation	No

## Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
Kitchen/Living	13	Downlights - LED	150	Sealed
Kitchen/Living	2	Exhaust Fans	300	Sealed
Bedroom 1	4	Downlights - LED	150	Sealed
Ensuite	1	Downlights - LED	150	Sealed
Ensuite	1	Exhaust Fans	300	Sealed
Bath	1	Downlights - LED	150	Sealed
Bath	1	Exhaust Fans	300	Sealed
Bedroom 2	4	Downlights - LED	150	Sealed

## Ceiling fans

Location	Number	Diameter (mm)
None Present		

## Roof type

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## Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004273983**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**8.4**



### Building features continued

#### Construction

#### Added insulation

#### Roof colour

None Present

# Nationwide House Energy Rating Scheme\* Certificate



Certificate number:

Certificate Date:

★ Star rating:

## Additional information

## Explanatory notes

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# Nationwide House Energy Rating Scheme\* Certificate



Certificate number: **0004274015**

Certificate Date: **15 Oct 2019**

★ Star rating: **7.1**

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: **20920**  
Name: **Terry Chapman**  
Organisation: **Chapman Environmental Services Pty Ltd**  
Email: **terry@basixcertificates.com.au**  
Phone: **0414 265292**  
Declaration of interest: **None**  
Software: **BERS Pro v4.3.0.2d (3.13)**  
AAO: **ABSA**

## Overview

### Dwelling details

Street: **Unit U207, 38-40 Orth St**  
Suburb: **Kingswood**  
State: **NSW** Postcode: **2747**  
Type: **New Dwelling** NCC Class: **2**  
NatHERS climate zone: **28**  
Lot/DP number: **62/36728** Exposure: **Suburban**

### Key construction and insulation materials

(see following pages for details)

Construction: **AAC Cavity Panel Direct Fix Concrete, Plasterboard Concrete Slab, Unit Below**  
Insulation: **R2.0 wall insulation No ceiling insulation No floor insulation**  
Glazing: **ALM-001-01 A Aluminium A SG Clear**

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

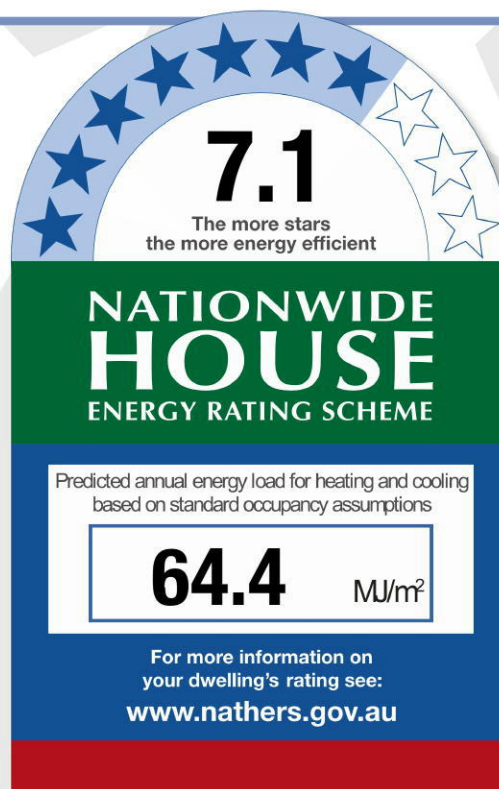
Conditioned: **74.0**  
Unconditioned: **0.0**  
Garage: **0.0**  
TOTAL: **74.0**

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

Heating: **38.8**  
Cooling: **25.6**  
TOTAL: **64.4**

### Plan documents

Plan ref/date: **1714**  
Prepared by: **AC PROJECT GROUP**



### Ceiling penetrations

(see following pages for details)

Sealed: **26**  
Unsealed: **0**  
TOTAL:\*\* **26**

\*\*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: **0004274015**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**7.1**



## Building features

### Window type and performance value

Window ID	Window type	U-value	SHGC
ALM-001-01 A	ALM-001-01 A Aluminium A SG Clear	6.7	0.57
ALM-002-01 A	ALM-002-01 A Aluminium B SG Clear	6.7	0.70

### Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Kitchen/Living	ALM-001-01 A	n/a	2000	750	E	No Shading
Kitchen/Living	ALM-001-01 A	n/a	2000	750	E	No Shading
Kitchen/Living	ALM-002-01 A	n/a	2143	2600	S	No Shading
Bedroom 1	ALM-001-01 A	n/a	2000	750	E	No Shading
Bedroom 2	ALM-002-01 A	n/a	2143	1800	E	No Shading

### 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 (m²)	Orientation	Outdoor shade	Indoor shade/diffuser
None Present						

### External wall type

ID	Wall type	Insulation	Wall wrap or foil
EW-1	Fibro Cavity Panel Direct Fix	Bulk Insulation R2	No
EW-2	AAC Cavity Panel Direct Fix	Bulk Insulation R2	No

### External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Kitchen/Living	EW-1	3195	2800	N	No	0
Kitchen/Living	EW-2	4095	2800	E	No	0
Kitchen/Living	EW-2	3995	2800	S	No	2500
Kitchen/Living	EW-1	5295	2800	W	No	2000
Bedroom 1	EW-2	3095	2800	E	No	0
Bath	EW-1	1200	2800	W	No	0
Bedroom 2	EW-2	2500	2800	E	No	4000
Ensuite	EW-1	995	2800	W	No	2000

### Internal wall type

Wall type	Area (m²)	Insulation	Wall wrap or foil
IW-1 - Cavity wall, direct fix plasterboard, single gap	52.0	No insulation	No
IW-2 - Shaft liner party wall with plaster	38.0	Bulk Insulation both sides of shaft liner R2	No

# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004274015**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**7.1**

## Building features continued

### Floors

Location	Construction	Area (m <sup>2</sup> )	Sub floor ventilation	Added insulation	Covering
Kitchen/Living	Concrete Slab, Unit Below 150mm	42.8	None	No Insulation	Ceramic Tiles 8mm
Bedroom 1	Concrete Slab, Unit Below 150mm	11.6	None	No Insulation	Carpet+Rubber Underlay 18mm
Bath	Concrete Slab, Unit Below 150mm	3.8	None	No Insulation	Ceramic Tiles 8mm
Bedroom 2	Concrete Slab, Unit Below 150mm	11.5	None	No Insulation	Carpet+Rubber Underlay 18mm
Ensuite	Concrete Slab, Unit Below 150mm	4.0	None	No Insulation	Ceramic Tiles 8mm

### Ceiling type

Location	Construction	Added insulation	Roof space above
Kitchen/Living	Concrete, Plasterboard	No insulation	No
Bedroom 1	Concrete, Plasterboard	No insulation	No
Bath	Concrete, Plasterboard	No insulation	No
Bedroom 2	Concrete, Plasterboard	No insulation	No
Ensuite	Concrete, Plasterboard	No insulation	No

### Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
Kitchen/Living	12	Downlights - LED	150	Sealed
Kitchen/Living	2	Exhaust Fans	300	Sealed
Bedroom 1	4	Downlights - LED	150	Sealed
Bath	1	Downlights - LED	150	Sealed
Bath	1	Exhaust Fans	300	Sealed
Bedroom 2	4	Downlights - LED	150	Sealed
Ensuite	1	Downlights - LED	150	Sealed
Ensuite	1	Exhaust Fans	300	Sealed

### Ceiling fans

Location	Number	Diameter (mm)
None Present		

### Roof type

Construction	Added insulation	Roof colour
None Present		

# Nationwide House Energy Rating Scheme\* Certificate



Certificate number:

Certificate Date:

★ Star rating:

## Additional information

## Explanatory notes

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# Nationwide House Energy Rating Scheme\* Certificate



Certificate number: **0004274064**

Certificate Date: **15 Oct 2019**

★ Star rating: **7.6**

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## Assessor details

Accreditation number: **20920**  
Name: **Terry Chapman**  
Organisation: **Chapman Environmental Services Pty Ltd**  
Email: **terry@basixcertificates.com.au**  
Phone: **0414 265292**  
Declaration of interest: **None**  
Software: **BERS Pro v4.3.0.2d (3.13)**  
AAO: **ABSA**

## Overview

### Dwelling details

Street: **Unit U208, 38-40 Orth St**  
Suburb: **Kingswood**  
State: **NSW** Postcode: **2747**  
Type: **New Dwelling** NCC Class: **2**  
NatHERS climate zone: **28**  
Lot/DP number: **62/36728** Exposure: **Suburban**

### Key construction and insulation materials

(see following pages for details)

Construction: **AAC Cavity Panel Direct Fix Concrete, Plasterboard Concrete Slab, Unit Below**  
Insulation: **R2.0 wall insulation No ceiling insulation No floor insulation**  
Glazing: **ALM-001-01 A Aluminium A SG Clear**

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

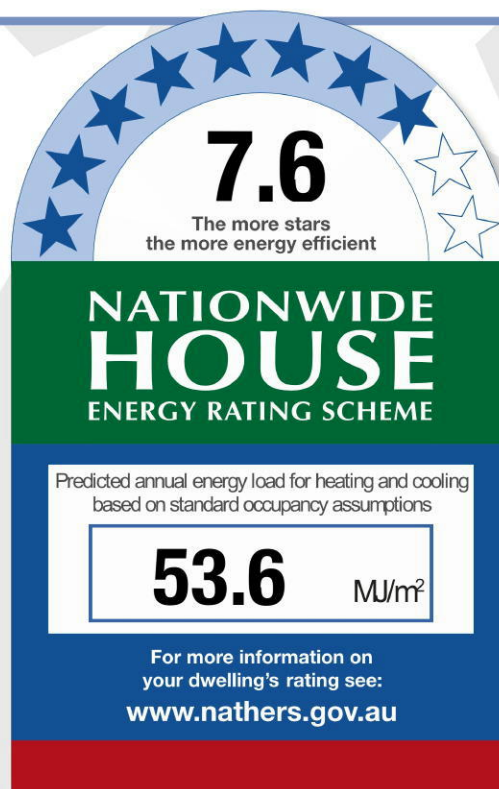
Conditioned: **70.0**  
Unconditioned: **4.0**  
Garage: **0.0**  
TOTAL: **73.0**

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

Heating: **30.2**  
Cooling: **23.4**  
TOTAL: **53.6**

### Plan documents

Plan ref/date: **1714**  
Prepared by: **AC PROJECT GROUP**



### Ceiling penetrations

(see following pages for details)

Sealed: **27**  
Unsealed: **0**  
TOTAL:\*\* **27**

\*\*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: 0004274064

Certificate Date:

15 Oct 2019

★ Star rating:

7.6



## 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

### Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Kitchen/Living	ALM-002-01 A	n/a	2143	2600	E	No Shading
Bedroom 1	ALM-001-01 A	n/a	2000	750	E	No Shading
Bedroom 1	ALM-001-01 A	n/a	2000	750	S	No Shading
Ensuite	ALM-001-01 A	n/a	2000	750	S	No Shading
Bath	ALM-001-01 A	n/a	2000	750	S	No Shading
Bedroom 2	ALM-001-01 A	n/a	2000	750	S	No Shading

### 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 (m²)	Orientation	Outdoor shade	Indoor shade/diffuser
None Present						

### External wall type

ID	Wall type	Insulation	Wall wrap or foil
EW-1	Fibro Cavity Panel Direct Fix	Bulk Insulation R2	No
EW-2	AAC Cavity Panel Direct Fix	Bulk Insulation R2	No

### External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Kitchen/Living	EW-1	1800	2800	N	No	0
Kitchen/Living	EW-2	1300	2800	N	No	0
Kitchen/Living	EW-2	4095	2800	E	No	2400
Bedroom 1	EW-2	2400	2800	N	No	4100
Bedroom 1	EW-2	3000	2800	E	No	0
Bedroom 1	EW-2	3495	2800	S	No	0
Ensuite	EW-2	2090	2800	S	No	0
Bath	EW-2	1990	2800	S	No	0
Bedroom 2	EW-2	3695	2800	S	No	0
Bedroom 2	EW-2	2300	2800	W	No	0

### Internal wall type

Wall type	Area (m²)	Insulation	Wall wrap or foil
	42.0	Bulk Insulation both sides of shaft liner R2	No

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

# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004274064**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**7.6**

## Building features continued

IW-1 - Shaft liner party wall with plaster

IW-2 - Cavity wall, direct fix plasterboard, single gap	59.0	No insulation	No
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## Floors

Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Kitchen/Living	Concrete Slab, Unit Below 150mm	41.0	None	No Insulation	Ceramic Tiles 8mm
Bedroom 1	Concrete Slab, Unit Below 150mm	12.4	None	No Insulation	Carpet+Rubber Underlay 18mm
Ensuite	Concrete Slab, Unit Below 150mm	3.7	None	No Insulation	Ceramic Tiles 8mm
Bath	Concrete Slab, Unit Below 150mm	3.5	None	No Insulation	Ceramic Tiles 8mm
Bedroom 2	Concrete Slab, Unit Below 150mm	10.8	None	No Insulation	Carpet+Rubber Underlay 18mm
Hall	Concrete Slab, Unit Below 150mm	1.9	None	No Insulation	Ceramic Tiles 8mm

## Ceiling type

Location	Construction	Added insulation	Roof space above
Kitchen/Living	Concrete, Plasterboard	No insulation	No
Bedroom 1	Concrete, Plasterboard	No insulation	No
Ensuite	Concrete, Plasterboard	No insulation	No
Bath	Concrete, Plasterboard	No insulation	No
Bedroom 2	Concrete, Plasterboard	No insulation	No
Hall	Concrete, Plasterboard	No insulation	No

## Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
Kitchen/Living	12	Downlights - LED	150	Sealed
Kitchen/Living	2	Exhaust Fans	300	Sealed
Bedroom 1	4	Downlights - LED	150	Sealed
Ensuite	1	Downlights - LED	150	Sealed
Ensuite	1	Exhaust Fans	300	Sealed
Bath	1	Downlights - LED	150	Sealed
Bath	1	Exhaust Fans	300	Sealed
Bedroom 2	4	Downlights - LED	150	Sealed
Hall	1	Downlights - LED	150	Sealed

## Ceiling fans

## Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004274064**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**7.6**



### Building features continued

Location	Number	Diameter (mm)
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None Present		
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### Roof type

Construction
--------------

Added insulation
------------------

Roof colour
-------------

None Present
--------------

# Nationwide House Energy Rating Scheme\* Certificate



Certificate number:

Certificate Date:

★ Star rating:

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

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

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For more details see [www.nathers.gov.au](http://www.nathers.gov.au)

# Nationwide House Energy Rating Scheme\* Certificate



Certificate number: **0004274098**

Certificate Date: **15 Oct 2019**

★ Star rating: **6.9**

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: **20920**  
Name: **Terry Chapman**  
Organisation: **Chapman Environmental Services Pty Ltd**  
Email: **terry@basixcertificates.com.au**  
Phone: **0414 265292**  
Declaration of interest: **None**  
Software: **BERS Pro v4.3.0.2d (3.13)**  
AAO: **ABSA**

## Overview

### Dwelling details

Street: **Unit U209, 38-40 Orth St**  
Suburb: **Kingswood**  
State: **NSW** Postcode: **2747**  
Type: **New Dwelling** NCC Class: **2**  
NatHERS climate zone: **28**  
Lot/DP number: **62/36728** Exposure: **Suburban**

### Key construction and insulation materials

(see following pages for details)

Construction: **Fibro Cavity Panel Direct Fix Concrete, Plasterboard Concrete Slab, Unit Below**  
Insulation: **R2.0 wall insulation No ceiling insulation No floor insulation**  
Glazing: **ALM-001-01 A Aluminium A SG Clear**

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

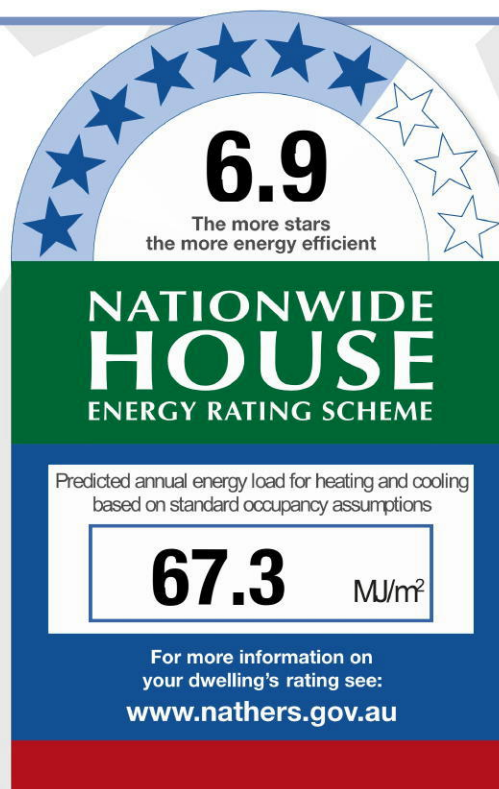
Conditioned: **69.0**  
Unconditioned: **0.0**  
Garage: **0.0**  
TOTAL: **69.0**

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

Heating: **37.5**  
Cooling: **29.9**  
TOTAL: **67.3**

### Plan documents

Plan ref/date: **1714**  
Prepared by: **AC PROJECT GROUP**



### Ceiling penetrations

(see following pages for details)

Sealed: **25**  
Unsealed: **0**  
TOTAL:\*\* **25**

\*\*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: 0004274098

Certificate Date:

15 Oct 2019

★ Star rating:

6.9



## Building features

### Window type and performance value

Window ID	Window type	U-value	SHGC
ALM-001-01 A	ALM-001-01 A Aluminium A SG Clear	6.7	0.57
ALM-002-01 A	ALM-002-01 A Aluminium B SG Clear	6.7	0.70

### Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Bedroom 1	ALM-001-01 A	n/a	2000	750	W	No Shading
Bedroom 1	ALM-001-01 A	n/a	2000	750	W	No Shading
Kitchen/Living	ALM-002-01 A	n/a	2100	2600	S	No Shading
Kitchen/Living	ALM-001-01 A	n/a	2000	750	W	No Shading
Kitchen/Living	ALM-001-01 A	n/a	2000	750	W	No Shading

### 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 (m²)	Orientation	Outdoor shade	Indoor shade/diffuser
None Present						

### External wall type

ID	Wall type	Insulation	Wall wrap or foil
EW-1	AAC Cavity Panel Direct Fix	Bulk Insulation R2	No
EW-2	Fibro Cavity Panel Direct Fix	Bulk Insulation R2	No

### External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Bedroom 1	EW-1	2800	2800	S	No	0
Bedroom 1	EW-1	4295	2800	W	No	0
Ensuite	EW-2	3500	2800	N	No	2300
Ensuite	EW-2	1600	2800	E	No	5600
Ensuite	EW-2	2695	2800	W	No	0
Kitchen/Living	EW-2	795	2800	E	No	1900
Kitchen/Living	EW-1	4400	2800	S	No	1300
Kitchen/Living	EW-1	5295	2800	W	No	0
Entry and hall	EW-2	1895	2800	N	No	1600
Entry and hall	EW-2	1600	2800	W	No	5400
Entry and hall	EW-2	1800	2800	N	No	2300
Entry and hall	EW-2	4105	2800	E	No	1900

### Internal wall type

# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004274098**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**6.9**



## Building features continued

Wall type	Area (m²)	Insulation	Wall wrap or foil
IW-1 - Cavity wall, direct fix plasterboard, single gap	37.0	No insulation	No
IW-2 - Shaft liner party wall with plaster	21.0	Bulk Insulation both sides of shaft liner R2	No

## Floors

Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Bedroom 1	Concrete Slab, Unit Below 150mm	13.8	None	No Insulation	Carpet+Rubber Underlay 18mm
Ensuite	Concrete Slab, Unit Below 150mm	9.2	None	No Insulation	Ceramic Tiles 8mm
Kitchen/Living	Concrete Slab, Unit Below 150mm	34.3	None	No Insulation	Ceramic Tiles 8mm
Entry and hall	Concrete Slab, Unit Below 150mm	12.1	None	No Insulation	Ceramic Tiles 8mm

## Ceiling type

Location	Construction	Added insulation	Roof space above
Bedroom 1	Concrete, Plasterboard	No insulation	No
Ensuite	Concrete, Plasterboard	No insulation	No
Kitchen/Living	Concrete, Plasterboard	No insulation	No
Entry and hall	Concrete, Plasterboard	No insulation	No

## Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
Bedroom 1	4	Downlights - LED	150	Sealed
Ensuite	2	Downlights - LED	150	Sealed
Ensuite	1	Exhaust Fans	300	Sealed
Kitchen/Living	12	Downlights - LED	150	Sealed
Kitchen/Living	1	Exhaust Fans	300	Sealed
Entry and hall	4	Downlights - LED	150	Sealed
Entry and hall	1	Exhaust Fans	300	Sealed

## Ceiling fans

Location	Number	Diameter (mm)
None Present		

## Roof type

Construction	Added insulation	Roof colour
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## Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004274098**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**6.9**



### Building features continued

None Present

# Nationwide House Energy Rating Scheme\* Certificate



Certificate number:

Certificate Date:

★ Star rating:

## 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

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### Accredited Assessors

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### Disclaimer

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### Contact

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

\* Nationwide House Energy Rating Scheme (NatHERS) is an initiative of the Australian, state and territory governments.

For more details see [www.nathers.gov.au](http://www.nathers.gov.au)

# Nationwide House Energy Rating Scheme\* Certificate



Certificate number: **0004274122**

Certificate Date: **15 Oct 2019**

★ Star rating: **5.9**

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: **20920**  
Name: **Terry Chapman**  
Organisation: **Chapman Environmental Services Pty Ltd**  
Email: **terry@basixcertificates.com.au**  
Phone: **0414 265292**  
Declaration of interest: **None**  
Software: **BERS Pro v4.3.0.2d (3.13)**  
AAO: **ABSA**

## Overview

### Dwelling details

Street: **Unit U301, 38-40 Orth St**  
Suburb: **Kingswood**  
State: **NSW** Postcode: **2747**  
Type: **New Dwelling** NCC Class: **2**  
NatHERS climate zone: **28**  
Lot/DP number: **62/36728** Exposure: **Open**

### Key construction and insulation materials

(see following pages for details)

Construction: **AAC Cavity Panel Direct Fix Concrete, Plasterboard Concrete Slab, Unit Below**  
Insulation: **R2.0 wall insulation No ceiling insulation No floor insulation**  
Glazing: **ALM-002-01 A Aluminium B SG Clear**

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

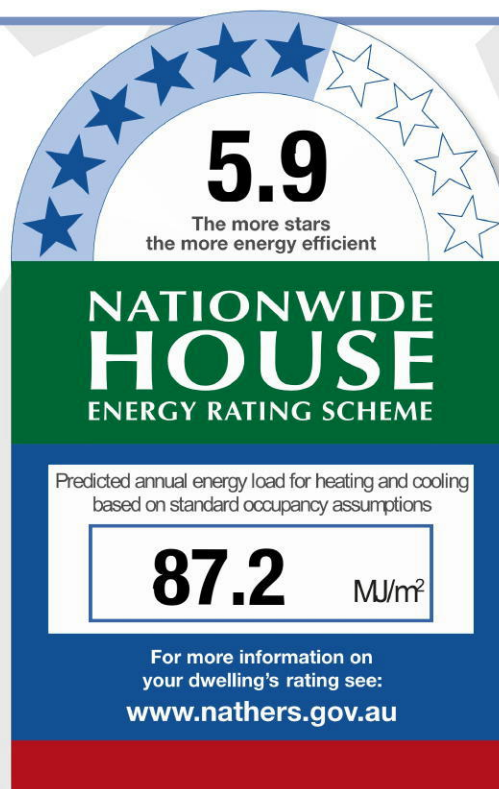
Conditioned: **73.0**  
Unconditioned: **0.0**  
Garage: **0.0**  
TOTAL: **73.0**

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

Heating: **23.6**  
Cooling: **63.6**  
TOTAL: **87.2**

### Plan documents

Plan ref/date: **1714**  
Prepared by: **AC PROJECT GROUP**



### Ceiling penetrations

(see following pages for details)

Sealed: **30**  
Unsealed: **0**  
TOTAL:\*\* **30**

\*\*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: 0004274122

Certificate Date:

15 Oct 2019

★ Star rating:

5.9



## 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

### Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Bedroom 1	ALM-002-01 A	n/a	2800	330	W	No Shading
Bedroom 1	ALM-001-01 A	n/a	2800	750	W	No Shading
Bedroom 1	ALM-002-01 A	n/a	2800	1350	W	No Shading
Bedroom 2	ALM-001-01 A	n/a	2000	750	W	No Shading
Bedroom 2	ALM-002-01 A	n/a	2800	750	W	No Shading
Kitchen/Living	ALM-001-01 A	n/a	2000	750	W	No Shading
Kitchen/Living	ALM-001-01 A	n/a	2100	940	N	No Shading
Kitchen/Living	ALM-002-01 A	n/a	2143	2600	W	No Shading
Kitchen/Living	ALM-002-01 A	n/a	2800	900	N	No Shading

### 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 <sup>2</sup> )	Orientation	Outdoor shade	Indoor shade/diffuser
None Present						

### External wall type

ID	Wall type	Insulation	Wall wrap or foil
EW-1	AAC Cavity Panel Direct Fix	Foil, Anti-glare one side + Bulk Insulation R2	Yes
EW-2	Fibro Cavity Panel Direct Fix	Bulk Insulation R2	No

### External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Bedroom 1	EW-1	1295	2800	S	No	0
Bedroom 1	EW-1	600	2800	W	No	0
Bedroom 1	EW-1	3900	2800	S	No	0
Bedroom 1	EW-1	3095	2800	W	No	0
Bedroom 2	EW-1	3090	2800	W	No	0
Kitchen/Living	EW-1	2495	2800	W	No	0
Kitchen/Living	EW-1	2400	2800	N	No	4100
Kitchen/Living	EW-1	4100	2800	W	No	2400
Kitchen/Living	EW-1	4000	2800	N	No	0
Kitchen/Living	EW-1	2000	2800	E	No	5200
Kitchen/Living	EW-2	2400	2800	E	No	0
Kitchen/Living	EW-1	2095	2800	S	No	0

# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004274122**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**5.9**



## Building features continued

### Internal wall type

Wall type	Area (m <sup>2</sup> )	Insulation	Wall wrap or foil
IW-1 - Cavity wall, direct fix plasterboard, single gap	76.0	No insulation	No
IW-2 - Shaft liner party wall with plaster	28.0	Bulk Insulation both sides of shaft liner R2	No

### Floors

Location	Construction	Area (m <sup>2</sup> )	Sub floor ventilation	Added insulation	Covering
Bedroom 1	Concrete Slab, Unit Below 150mm	12.7	None	No Insulation	Carpet+Rubber Underlay 18mm
Ensuite	Concrete Slab, Unit Below 150mm	3.5	None	No Insulation	Ceramic Tiles 8mm
Bedroom 2	Concrete Slab, Unit Below 150mm	13.2	None	No Insulation	Carpet+Rubber Underlay 18mm
Bath	Concrete Slab, Unit Below 150mm	3.5	None	No Insulation	Ceramic Tiles 8mm
Kitchen/Living	Concrete Slab, Unit Below 150mm	29.6	None	No Insulation	Ceramic Tiles 8mm
Kitchen/Living	Concrete Slab, Unit Below 150mm	10.9	None	No Insulation	Ceramic Tiles 8mm

### Ceiling type

Location	Construction	Added insulation	Roof space above
Bedroom 1	Concrete, Plasterboard	No insulation	No
Ensuite	Concrete, Plasterboard	No insulation	No
Bedroom 2	Concrete, Plasterboard	No insulation	No
Bath	Concrete, Plasterboard	No insulation	No
Kitchen/Living	Concrete, Plasterboard	No insulation	No
Kitchen/Living	Concrete, Plasterboard	No insulation	No

### Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
Bedroom 1	4	Downlights - LED	150	Sealed
Ensuite	1	Downlights - LED	150	Sealed
Ensuite	1	Exhaust Fans	300	Sealed
Bedroom 2	4	Downlights - LED	150	Sealed
Bath	1	Downlights - LED	150	Sealed
Bath	1	Exhaust Fans	300	Sealed
Kitchen/Living	12	Downlights - LED	150	Sealed
Kitchen/Living	1	Exhaust Fans	300	Sealed
Kitchen/Living	4	Downlights - LED	150	Sealed
Kitchen/Living	1	Exhaust Fans	300	Sealed

## Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004274122**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**5.9**



### Building features continued

#### Ceiling fans

Location	Number	Diameter (mm)
None Present		

#### Roof type

Construction	Added insulation	Roof colour
None Present		

# Nationwide House Energy Rating Scheme\* Certificate



Certificate number:

Certificate Date:

★ Star rating:

## Additional information

## Explanatory notes

### About this report

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### General Information

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### Contact

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# Nationwide House Energy Rating Scheme\* Certificate



Certificate number: **0004274148**

Certificate Date: **15 Oct 2019**

★ Star rating: **9.0**

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: **20920**  
Name: **Terry Chapman**  
Organisation: **Chapman Environmental Services Pty Ltd**  
Email: **terry@basixcertificates.com.au**  
Phone: **0414 265292**  
Declaration of interest: **None**  
Software: **BERS Pro v4.3.0.2d (3.13)**  
AAO: **ABSA**

## Overview

### Dwelling details

Street: **Unit U302, 38-40 Orth St**  
Suburb: **Kingswood**  
State: **NSW** Postcode: **2747**  
Type: **New Dwelling** NCC Class: **2**  
NatHERS climate zone: **28**  
Lot/DP number: **62/36728** Exposure: **Open**

### Key construction and insulation materials

(see following pages for details)

Construction: **Cavity Brick**  
**Concrete, Plasterboard**  
**Concrete Slab, Unit Below**  
Insulation: **No wall insulation**  
**No ceiling insulation**  
**No floor insulation**  
Glazing: **ALM-001-01 A Aluminium A SG Clear**

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

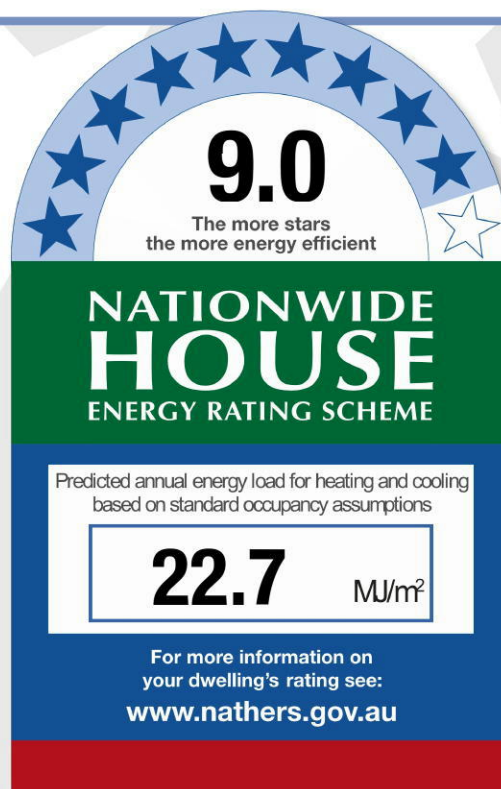
Conditioned: **75.0**  
Unconditioned: **0.0**  
Garage: **0.0**  
TOTAL: **75.0**

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

Heating: **9.0**  
Cooling: **13.8**  
TOTAL: **22.7**

## Plan documents

Plan ref/date: **1714**  
Prepared by: **AC PROJECT GROUP**



### Ceiling penetrations

(see following pages for details)

Sealed: **28**  
Unsealed: **0**  
TOTAL:\*\* **28**

\*\*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: 0004274148

Certificate Date:

15 Oct 2019

★ Star rating:

9.0



## 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

### Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Kitchen/Living	ALM-002-01 A	n/a	2143	2600	N	No Shading
Bedroom 1	ALM-001-01 A	n/a	2800	950	N	No Shading
Bedroom 2	ALM-001-01 A	n/a	1200	750	N	No Shading

### 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 (m²)	Orientation	Outdoor shade	Indoor shade/diffuser
None Present						

### External wall type

ID	Wall type	Insulation	Wall wrap or foil
EW-1	Cavity Brick	No insulation	No
EW-2	Fibro Cavity Panel Direct Fix	Bulk Insulation R2	No

### External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Kitchen/Living	EW-1	4100	2800	N	No	2000
Kitchen/Living	EW-1	600	2800	E	No	4700
Kitchen/Living	EW-2	2800	2800	S	No	2700
Bedroom 1	EW-1	2600	2800	W	No	5600
Bedroom 1	EW-1	3200	2800	N	No	0
Bedroom 2	EW-1	1490	2800	N	No	2600

### Internal wall type

Wall type	Area (m²)	Insulation	Wall wrap or foil
IW-1 - Cavity wall, direct fix plasterboard, single gap	71.0	No insulation	No
IW-2 - Shaft liner party wall with plaster	71.0	Bulk Insulation both sides of shaft liner R2	No

## Floors

# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004274148**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**9.0**



## Building features continued

Location	Construction	Area (m <sup>2</sup> )	Sub floor ventilation	Added insulation	Covering
Kitchen/Living	Concrete Slab, Unit Below 150mm	35.9	None	No Insulation	Ceramic Tiles 8mm
Bedroom 1	Concrete Slab, Unit Below 150mm	16.1	None	No Insulation	Carpet+Rubber Underlay 18mm
Ensuite	Concrete Slab, Unit Below 150mm	3.4	None	No Insulation	Ceramic Tiles 8mm
Bath	Concrete Slab, Unit Below 150mm	4.5	None	No Insulation	Ceramic Tiles 8mm
Bedroom 2	Concrete Slab, Unit Below 150mm	12.0	None	No Insulation	Carpet+Rubber Underlay 18mm
Kitchen/Living	Concrete Slab, Unit Below 150mm	3.1	None	No Insulation	Ceramic Tiles 8mm

## Ceiling type

Location	Construction	Added insulation	Roof space above
Kitchen/Living	Concrete, Plasterboard	No insulation	No
Bedroom 1	Concrete, Plasterboard	No insulation	No
Ensuite	Concrete, Plasterboard	No insulation	No
Bath	Concrete, Plasterboard	No insulation	No
Bedroom 2	Concrete, Plasterboard	No insulation	No
Kitchen/Living	Concrete, Plasterboard	No insulation	No

## Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
Kitchen/Living	12	Downlights - LED	150	Sealed
Kitchen/Living	2	Exhaust Fans	300	Sealed
Bedroom 1	5	Downlights - LED	150	Sealed
Ensuite	1	Downlights - LED	150	Sealed
Ensuite	1	Exhaust Fans	300	Sealed
Bath	1	Downlights - LED	150	Sealed
Bath	1	Exhaust Fans	300	Sealed
Bedroom 2	4	Downlights - LED	150	Sealed
Kitchen/Living	1	Downlights - LED	150	Sealed

## Ceiling fans

Location	Number	Diameter (mm)
None Present		

## Roof type

Construction	Added insulation	Roof colour
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## Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004274148**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**9.0**



### Building features continued

None Present

# Nationwide House Energy Rating Scheme\* Certificate



Certificate number:

Certificate Date:

★ Star rating:

## Additional information

## Explanatory notes

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# Nationwide House Energy Rating Scheme\* Certificate



Certificate number: **0004274155**

Certificate Date: **15 Oct 2019**

★ Star rating: **7.9**

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: **20920**

Name: **Terry Chapman**

Organisation: **Chapman Environmental Services Pty Ltd**

Email: **terry@basixcertificates.com.au**

Phone: **0414 265292**

Declaration  
of interest: **None**

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

AAO: **ABSA**

## Overview

### Dwelling details

Street: **Unit U303, 38-40 Orth St**

Suburb: **Kingswood**

State: **NSW**

Postcode: **2747**

Type: **New Dwelling**

NCC Class: **2**

NatHERS

climate zone: **28**

Lot/DP

number: **62/36728**

Exposure: **Open**

### Key construction and insulation materials

(see following pages for details)

Construction: **AAC Cavity Panel Direct Fix  
Concrete, Plasterboard  
Concrete Slab, Unit Below**

Insulation: **R2.0 wall insulation  
No ceiling insulation  
No floor insulation**

Glazing: **ALM-001-01 A Aluminium A SG Clear**

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

Conditioned: **73.0**

Unconditioned: **0.0**

Garage: **0.0**

TOTAL: **73.0**

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

Heating: **25.1**

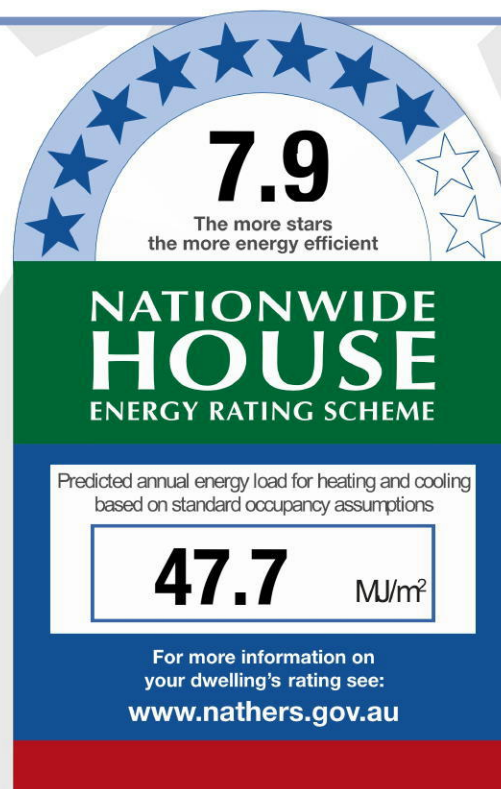
Cooling: **22.6**

TOTAL: **47.7**

### Plan documents

Plan ref/date: **1714**

Prepared by: **AC PROJECT GROUP**



### Ceiling penetrations

(see following pages for details)

Sealed: **30**

Unsealed: **0**

TOTAL:\*\* **30**

\*\*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.

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# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: 0004274155

Certificate Date:

15 Oct 2019

★ Star rating:

7.9



## Building features

### Window type and performance value

Window ID	Window type	U-value	SHGC
ALM-001-01 A	ALM-001-01 A Aluminium A SG Clear	6.7	0.57
ALM-002-01 A	ALM-002-01 A Aluminium B SG Clear	6.7	0.70

### Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Bedroom 1	ALM-001-01 A	n/a	2000	750	E	No Shading
Bedroom 2	ALM-001-01 A	n/a	2000	750	E	No Shading
Kitchen/Living	ALM-002-01 A	n/a	2800	1200	N	No Shading
Kitchen/Living	ALM-001-01 A	n/a	2800	925	N	No Shading
Kitchen/Living	ALM-002-01 A	n/a	2143	2600	E	No Shading
Kitchen/Living	ALM-001-01 A	n/a	1200	940	N	No Shading

### 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 (m²)	Orientation	Outdoor shade	Indoor shade/diffuser
None Present						

### External wall type

ID	Wall type	Insulation	Wall wrap or foil
EW-1	AAC Cavity Panel Direct Fix	Foil, Anti-glare one side + Bulk Insulation R2	Yes
EW-2	Fibro Cavity Panel Direct Fix	Bulk Insulation R2	No

### External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Bedroom 1	EW-1	2595	2800	E	No	0
Bedroom 1	EW-2	600	2800	E	No	0
Bedroom 1	EW-2	3495	2800	S	No	2000
Ensuite	EW-2	1895	2800	S	No	2000
Ensuite	EW-2	700	2800	W	No	1200
Bedroom 2	EW-1	3090	2800	E	No	0
Kitchen/Living	EW-1	4000	2800	N	No	0
Kitchen/Living	EW-1	3600	2800	E	No	2600
Kitchen/Living	EW-1	2600	2800	N	No	3600
Kitchen/Living	EW-1	2995	2800	E	No	0
Kitchen/Living	EW-2	1195	2800	S	No	2700

### Internal wall type

# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004274155**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**7.9**



## Building features continued

Wall type	Area (m <sup>2</sup> )	Insulation	Wall wrap or foil
IW-1 - Cavity wall, direct fix plasterboard, single gap	73.0	No insulation	No
IW-2 - Shaft liner party wall with plaster	34.0	Bulk Insulation both sides of shaft liner R2	No

## Floors

Location	Construction	Area (m <sup>2</sup> )	Sub floor ventilation	Added insulation	Covering
Bedroom 1	Concrete Slab, Unit Below 150mm	12.4	None	No Insulation	Carpet+Rubber Underlay 18mm
Ensuite	Concrete Slab, Unit Below 150mm	3.4	None	No Insulation	Ceramic Tiles 8mm
Bedroom 2	Concrete Slab, Unit Below 150mm	10.7	None	No Insulation	Carpet+Rubber Underlay 18mm
Bath	Concrete Slab, Unit Below 150mm	4.1	None	No Insulation	Ceramic Tiles 8mm
Kitchen/Living	Concrete Slab, Unit Below 150mm	31.5	None	No Insulation	Ceramic Tiles 8mm
Kitchen/Living	Concrete Slab, Unit Below 150mm	10.5	None	No Insulation	Ceramic Tiles 8mm

## Ceiling type

Location	Construction	Added insulation	Roof space above
Bedroom 1	Concrete, Plasterboard	No insulation	No
Ensuite	Concrete, Plasterboard	No insulation	No
Bedroom 2	Concrete, Plasterboard	No insulation	No
Bath	Concrete, Plasterboard	No insulation	No
Kitchen/Living	Concrete, Plasterboard	No insulation	No
Kitchen/Living	Concrete, Plasterboard	No insulation	No

## Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
Bedroom 1	4	Downlights - LED	150	Sealed
Ensuite	1	Downlights - LED	150	Sealed
Ensuite	1	Exhaust Fans	300	Sealed
Bedroom 2	4	Downlights - LED	150	Sealed
Bath	1	Downlights - LED	150	Sealed
Bath	1	Exhaust Fans	300	Sealed
Kitchen/Living	12	Downlights - LED	150	Sealed
Kitchen/Living	1	Exhaust Fans	300	Sealed
Kitchen/Living	4	Downlights - LED	150	Sealed
Kitchen/Living	1	Exhaust Fans	300	Sealed

## Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004274155**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**7.9**



### Building features continued

#### Ceiling fans

Location	Number	Diameter (mm)
None Present		

#### Roof type

Construction	Added insulation	Roof colour
None Present		

# Nationwide House Energy Rating Scheme\* Certificate



Certificate number:

Certificate Date:

★ Star rating:

## Additional information

## Explanatory notes

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For more details see [www.nathers.gov.au](http://www.nathers.gov.au)

# Nationwide House Energy Rating Scheme\* Certificate



Certificate number: **0004274171**

Certificate Date: **15 Oct 2019**

★ Star rating: **8.2**

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## Assessor details

Accreditation number: **20920**  
Name: **Terry Chapman**  
Organisation: **Chapman Environmental Services Pty Ltd**  
Email: **terry@basixcertificates.com.au**  
Phone: **0414 265292**  
Declaration of interest: **None**  
Software: **BERS Pro v4.3.0.2d (3.13)**  
AAO: **ABSA**

## Overview

### Dwelling details

Street: **Unit U304, 38-40 Orth St**  
Suburb: **Kingswood**  
State: **NSW** Postcode: **2747**  
Type: **New Dwelling** NCC Class: **2**  
NatHERS climate zone: **28**  
Lot/DP number: **62/36728** Exposure: **Open**

### Key construction and insulation materials

(see following pages for details)

Construction: **AAC Cavity Panel Direct Fix Concrete, Plasterboard Concrete Slab, Unit Below**  
Insulation: **R2.0 wall insulation No ceiling insulation No floor insulation**  
Glazing: **ALM-001-01 A Aluminium A SG Clear**

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

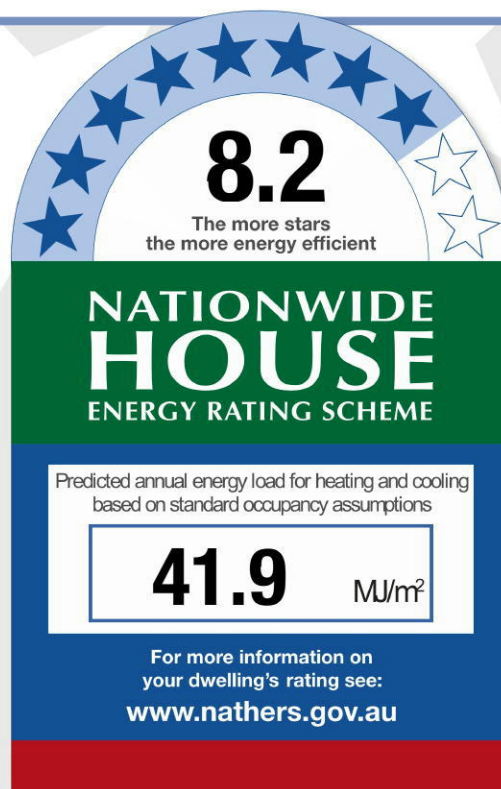
Conditioned: **74.0**  
Unconditioned: **0.0**  
Garage: **0.0**  
TOTAL: **74.0**

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

Heating: **25.6**  
Cooling: **16.3**  
TOTAL: **41.9**

## Plan documents

Plan ref/date: **1714**  
Prepared by: **AC PROJECT GROUP**



### Ceiling penetrations

(see following pages for details)

Sealed: **30**  
Unsealed: **0**  
TOTAL:\*\* **30**

\*\*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: 0004274171

Certificate Date:

15 Oct 2019

★ Star rating:

8.2



## Building features

### Window type and performance value

Window ID	Window type	U-value	SHGC
ALM-001-01 A	ALM-001-01 A Aluminium A SG Clear	6.7	0.57
ALM-002-01 A	ALM-002-01 A Aluminium B SG Clear	6.7	0.70

### Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Bedroom 1	ALM-001-01 A	n/a	2000	750	W	No Shading
Bedroom 2	ALM-001-01 A	n/a	2000	750	W	No Shading
Kitchen/Living	ALM-001-01 A	n/a	1200	940	N	No Shading
Kitchen/Living	ALM-002-01 A	n/a	2143	2600	W	No Shading
Kitchen/Living	ALM-002-01 A	n/a	2800	750	N	No Shading

### 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 <sup>2</sup> )	Orientation	Outdoor shade	Indoor shade/diffuser
None Present						

### External wall type

ID	Wall type	Insulation	Wall wrap or foil
EW-1	Fibro Cavity Panel Direct Fix	Bulk Insulation R2	No
EW-2	AAC Cavity Panel Direct Fix	Foil, Anti-glare one side + Bulk Insulation R2	Yes

### External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Bedroom 1	EW-1	3795	2800	S	No	1800
Bedroom 1	EW-2	3195	2800	W	No	0
Ensuite	EW-1	2090	2800	S	No	1800
Bedroom 2	EW-2	3090	2800	W	No	0
Kitchen/Living	EW-2	2595	2800	W	No	0
Kitchen/Living	EW-2	3100	2800	N	No	3400
Kitchen/Living	EW-2	3400	2800	W	No	3100
Kitchen/Living	EW-2	4000	2800	N	No	0
Entry hall	EW-1	1195	2800	S	No	1800

### Internal wall type

Wall type	Area (m <sup>2</sup> )	Insulation	Wall wrap or foil
IW-1 - Cavity wall, direct fix plasterboard, single gap	77.0	No insulation	No
IW-2 - Shaft liner party wall with	34.0	Bulk Insulation both sides of shaft liner R2	No

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

# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004274171**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**8.2**



## Building features continued

plaster

### Floors

Location	Construction	Area (m <sup>2</sup> )	Sub floor ventilation	Added insulation	Covering
Bedroom 1	Concrete Slab, Unit Below 150mm	13.7	None	No Insulation	Carpet+Rubber Underlay 18mm
Ensuite	Concrete Slab, Unit Below 150mm	3.9	None	No Insulation	Ceramic Tiles 8mm
Bedroom 2	Concrete Slab, Unit Below 150mm	11.3	None	No Insulation	Carpet+Rubber Underlay 18mm
Bath	Concrete Slab, Unit Below 150mm	4.0	None	No Insulation	Ceramic Tiles 8mm
Kitchen/Living	Concrete Slab, Unit Below 150mm	30.7	None	No Insulation	Ceramic Tiles 8mm
Entry hall	Concrete Slab, Unit Below 150mm	10.7	None	No Insulation	Ceramic Tiles 8mm

### Ceiling type

Location	Construction	Added insulation	Roof space above
Bedroom 1	Concrete, Plasterboard	No insulation	No
Ensuite	Concrete, Plasterboard	No insulation	No
Bedroom 2	Concrete, Plasterboard	No insulation	No
Bath	Concrete, Plasterboard	No insulation	No
Kitchen/Living	Concrete, Plasterboard	No insulation	No
Entry hall	Concrete, Plasterboard	No insulation	No

### Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
Bedroom 1	4	Downlights - LED	150	Sealed
Ensuite	1	Downlights - LED	150	Sealed
Ensuite	1	Exhaust Fans	300	Sealed
Bedroom 2	4	Downlights - LED	150	Sealed
Bath	1	Downlights - LED	150	Sealed
Bath	1	Exhaust Fans	300	Sealed
Kitchen/Living	12	Downlights - LED	150	Sealed
Kitchen/Living	1	Exhaust Fans	300	Sealed
Entry hall	4	Downlights - LED	150	Sealed
Entry hall	1	Exhaust Fans	300	Sealed

### Ceiling fans

Location	Number	Diameter (mm)
None Present		

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## Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004274171**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**8.2**



### Building features continued

#### Roof type

Construction	Added insulation	Roof colour
None Present		

# Nationwide House Energy Rating Scheme\* Certificate



Certificate number:

Certificate Date:

★ Star rating:

## 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).

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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)

\* Nationwide House Energy Rating Scheme (NatHERS) is an initiative of the Australian, state and territory governments.

For more details see [www.nathers.gov.au](http://www.nathers.gov.au)

# Nationwide House Energy Rating Scheme\* Certificate



Certificate number: **0004273850**

Certificate Date: **15 Oct 2019**

★ Star rating: **8.8**

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: **20920**  
Name: **Terry Chapman**  
Organisation: **Chapman Environmental Services Pty Ltd**  
Email: **terry@basixcertificates.com.au**  
Phone: **0414 265292**  
Declaration of interest: **None**  
Software: **BERS Pro v4.3.0.2d (3.13)**  
AAO: **ABSA**

## Overview

### Dwelling details

Street: **Unit U305, 38-40 Orth St**  
Suburb: **Kingswood**  
State: **NSW** Postcode: **2747**  
Type: **New Dwelling** NCC Class: **2**  
NatHERS climate zone: **28**  
Lot/DP number: **62/36728** Exposure: **Open**

### Key construction and insulation materials

(see following pages for details)

Construction: **Cavity Brick**  
**Concrete, Plasterboard**  
**Concrete Slab, Unit Below**  
Insulation: **No wall insulation**  
**No ceiling insulation**  
**No floor insulation**  
Glazing: **ALM-001-01 A Aluminium A SG Clear**

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

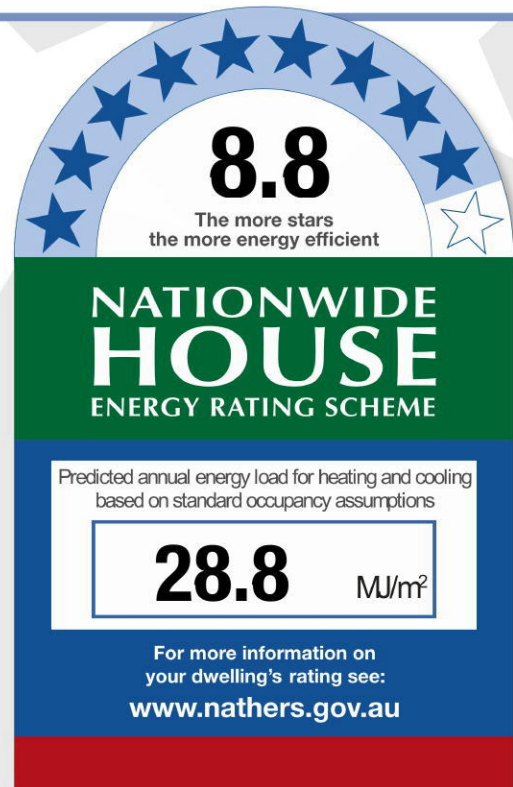
Conditioned: **76.0**  
Unconditioned: **0.0**  
Garage: **0.0**  
TOTAL: **76.0**

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

Heating: **9.1**  
Cooling: **19.7**  
TOTAL: **28.8**

### Plan documents

Plan ref/date: **1714**  
Prepared by: **AC PROJECT GROUP**



### Ceiling penetrations

(see following pages for details)

Sealed: **28**  
Unsealed: **0**  
TOTAL:\*\* **28**

\*\*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: 0004273850

Certificate Date:

15 Oct 2019

★ Star rating:

8.8



## 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

### Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Kitchen/Living	ALM-002-01 A	n/a	2143	2600	N	No Shading
Bedroom 1	ALM-001-01 A	n/a	2800	950	N	No Shading
Bedroom 1	ALM-001-01 A	n/a	2800	1200	N	No Shading
Bedroom 2	ALM-001-01 A	n/a	1200	750	N	No Shading

### 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 (m²)	Orientation	Outdoor shade	Indoor shade/diffuser
None Present						

### External wall type

ID	Wall type	Insulation	Wall wrap or foil
EW-1	Fibro Cavity Panel Direct Fix	Bulk Insulation R2	No
EW-2	Cavity Brick	No insulation	No

### External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Kitchen/Living	EW-1	4100	2800	S	No	2700
Kitchen/Living	EW-2	600	2800	W	No	4700
Kitchen/Living	EW-2	4100	2800	N	No	2000
Bedroom 1	EW-2	3200	2800	N	No	0
Bedroom 1	EW-2	2600	2800	E	No	5600
Bedroom 2	EW-2	1490	2800	N	No	2600

### Internal wall type

Wall type	Area (m²)	Insulation	Wall wrap or foil
IW-1 - Shaft liner party wall with plaster	67.0	Bulk Insulation both sides of shaft liner R2	No
IW-2 - Cavity wall, direct fix plasterboard, single gap	71.0	No insulation	No

## Floors

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# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004273850**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**8.8**



## Building features continued

Location	Construction	Area (m <sup>2</sup> )	Sub floor ventilation	Added insulation	Covering
Kitchen/Living	Concrete Slab, Unit Below 150mm	35.3	None	No Insulation	Ceramic Tiles 8mm
Bedroom 1	Concrete Slab, Unit Below 150mm	16.1	None	No Insulation	Carpet+Rubber Underlay 18mm
Ensuite	Concrete Slab, Unit Below 150mm	3.4	None	No Insulation	Ceramic Tiles 8mm
Bath	Concrete Slab, Unit Below 150mm	5.5	None	No Insulation	Ceramic Tiles 8mm
Bedroom 2	Concrete Slab, Unit Below 150mm	12.1	None	No Insulation	Carpet+Rubber Underlay 18mm
Kitchen/Living	Concrete Slab, Unit Below 150mm	3.1	None	No Insulation	Ceramic Tiles 8mm

## Ceiling type

Location	Construction	Added insulation	Roof space above
Kitchen/Living	Concrete, Plasterboard	No insulation	No
Bedroom 1	Concrete, Plasterboard	No insulation	No
Ensuite	Concrete, Plasterboard	No insulation	No
Bath	Concrete, Plasterboard	No insulation	No
Bedroom 2	Concrete, Plasterboard	No insulation	No
Kitchen/Living	Concrete, Plasterboard	No insulation	No

## Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
Kitchen/Living	12	Downlights - LED	150	Sealed
Kitchen/Living	2	Exhaust Fans	300	Sealed
Bedroom 1	5	Downlights - LED	150	Sealed
Ensuite	1	Downlights - LED	150	Sealed
Ensuite	1	Exhaust Fans	300	Sealed
Bath	1	Downlights - LED	150	Sealed
Bath	1	Exhaust Fans	300	Sealed
Bedroom 2	4	Downlights - LED	150	Sealed
Kitchen/Living	1	Downlights - LED	150	Sealed

## Ceiling fans

Location	Number	Diameter (mm)
None Present		

## Roof type

Construction	Added	Roof colour
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## Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004273850**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**8.8**



### Building features continued

#### insulation

None Present

# Nationwide House Energy Rating Scheme\* Certificate



Certificate number:

Certificate Date:

★ Star rating:

## Additional information

## Explanatory notes

### About this report

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### General Information

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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

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### Contact

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

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For more details see [www.nathers.gov.au](http://www.nathers.gov.au)

# Nationwide House Energy Rating Scheme\* Certificate



Certificate number: **0004273876**

Certificate Date: **15 Oct 2019**

★ Star rating: **8.5**

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: **20920**  
Name: **Terry Chapman**  
Organisation: **Chapman Environmental Services Pty Ltd**  
Email: **terry@basixcertificates.com.au**  
Phone: **0414 265292**  
Declaration of interest: **None**  
Software: **BERS Pro v4.3.0.2d (3.13)**  
AAO: **ABSA**

## Overview

### Dwelling details

Street: **Unit U306, 38-40 Orth St**  
Suburb: **Kingswood**  
State: **NSW** Postcode: **2747**  
Type: **New Dwelling** NCC Class: **2**  
NatHERS climate zone: **28**  
Lot/DP number: **62/36728** Exposure: **Open**

### Key construction and insulation materials

(see following pages for details)

Construction: **AAC Cavity Panel Direct Fix Concrete, Plasterboard Concrete Slab, Unit Below**  
Insulation: **R2.0 wall insulation No ceiling insulation No floor insulation**  
Glazing: **ALM-001-01 A Aluminium A SG Clear**

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

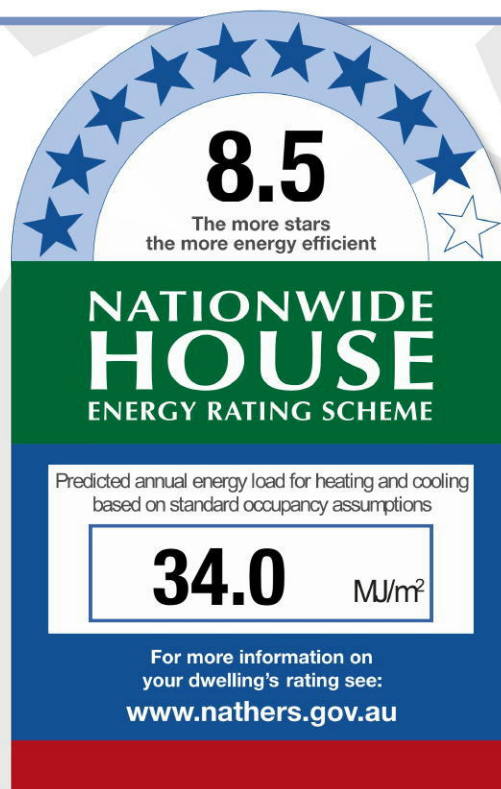
Conditioned: **70.0**  
Unconditioned: **4.0**  
Garage: **0.0**  
TOTAL: **74.0**

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

Heating: **10.4**  
Cooling: **23.6**  
TOTAL: **34.0**

### Plan documents

Plan ref/date: **1714**  
Prepared by: **AC PROJECT GROUP**



### Ceiling penetrations

(see following pages for details)

Sealed: **27**  
Unsealed: **0**  
TOTAL:\*\* **27**

\*\*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: 0004273876

Certificate Date:

15 Oct 2019

★ Star rating:

8.5



## 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

### Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Kitchen/Living	ALM-002-01 A	n/a	2143	2600	N	No Shading
Bedroom 1	ALM-001-01 A	n/a	2000	750	E	No Shading
Ensuite	ALM-001-01 A	n/a	2000	750	E	No Shading
Bath	ALM-001-01 A	n/a	2000	750	E	No Shading
Bedroom 2	ALM-001-01 A	n/a	2000	750	N	No Shading
Bedroom 2	ALM-001-01 A	n/a	2000	750	E	No Shading

### 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 (m²)	Orientation	Outdoor shade	Indoor shade/diffuser
None Present						

### External wall type

ID	Wall type	Insulation	Wall wrap or foil
EW-1	AAC Cavity Panel Direct Fix	Bulk Insulation R2	No
EW-2	Fibro Cavity Panel Direct Fix	Bulk Insulation R2	No

### External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Kitchen/Living	EW-1	4295	2800	N	No	2400
Kitchen/Living	EW-2	900	2800	W	No	1300
Kitchen/Living	EW-2	1300	2800	S	No	2000
Bedroom 1	EW-1	3795	2800	E	No	0
Ensuite	EW-1	2090	2800	E	No	0
Bath	EW-1	1990	2800	E	No	0
Bedroom 2	EW-1	2400	2800	W	No	4300
Bedroom 2	EW-1	3200	2800	N	No	0
Bedroom 2	EW-1	3695	2800	E	No	0

### Internal wall type

Wall type	Area (m²)	Insulation	Wall wrap or foil
IW-1 - Cavity wall, direct fix plasterboard, single gap	52.0	No insulation	No

# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004273876**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**8.5**



## Building features continued

IW-2 - Shaft liner party wall with plaster 41.0 Bulk Insulation both sides of shaft liner R2 No

## Floors

Location	Construction	Area (m <sup>2</sup> )	Sub floor ventilation	Added insulation	Covering
Kitchen/Living	Concrete Slab, Unit Below 150mm	41.8	None	No Insulation	Ceramic Tiles 8mm
Bedroom 1	Concrete Slab, Unit Below 150mm	12.7	None	No Insulation	Carpet+Rubber Underlay 18mm
Ensuite	Concrete Slab, Unit Below 150mm	3.9	None	No Insulation	Ceramic Tiles 8mm
Bath	Concrete Slab, Unit Below 150mm	3.7	None	No Insulation	Ceramic Tiles 8mm
Bedroom 2	Concrete Slab, Unit Below 150mm	11.6	None	No Insulation	Carpet+Rubber Underlay 18mm

## Ceiling type

Location	Construction	Added insulation	Roof space above
Kitchen/Living	Concrete, Plasterboard	No insulation	No
Bedroom 1	Concrete, Plasterboard	No insulation	No
Ensuite	Concrete, Plasterboard	No insulation	No
Bath	Concrete, Plasterboard	No insulation	No
Bedroom 2	Concrete, Plasterboard	No insulation	No

## Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
Kitchen/Living	13	Downlights - LED	150	Sealed
Kitchen/Living	2	Exhaust Fans	300	Sealed
Bedroom 1	4	Downlights - LED	150	Sealed
Ensuite	1	Downlights - LED	150	Sealed
Ensuite	1	Exhaust Fans	300	Sealed
Bath	1	Downlights - LED	150	Sealed
Bath	1	Exhaust Fans	300	Sealed
Bedroom 2	4	Downlights - LED	150	Sealed

## Ceiling fans

Location	Number	Diameter (mm)
None Present		

## Roof type

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

## Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004273876**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**8.5**



### Building features continued

#### Construction

#### Added insulation

#### Roof colour

None Present

# Nationwide House Energy Rating Scheme\* Certificate



Certificate number:

Certificate Date:

★ Star rating:

## Additional information

## Explanatory notes

### About this report

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### General Information

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# Nationwide House Energy Rating Scheme\* Certificate



Certificate number: **0004273900**

Certificate Date: **15 Oct 2019**

★ Star rating: **7.1**

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: **20920**  
Name: **Terry Chapman**  
Organisation: **Chapman Environmental Services Pty Ltd**  
Email: **terry@basixcertificates.com.au**  
Phone: **0414 265292**  
Declaration of interest: **None**  
Software: **BERS Pro v4.3.0.2d (3.13)**  
AAO: **ABSA**

## Overview

### Dwelling details

Street: **Unit U307, 38-40 Orth St**  
Suburb: **Kingswood**  
State: **NSW** Postcode: **2747**  
Type: **New Dwelling** NCC Class: **2**  
NatHERS climate zone: **28**  
Lot/DP number: **62/36728** Exposure: **Open**

### Key construction and insulation materials

(see following pages for details)

Construction: **AAC Cavity Panel Direct Fix Concrete, Plasterboard Concrete Slab, Unit Below**  
Insulation: **R2.0 wall insulation No ceiling insulation No floor insulation**  
Glazing: **ALM-001-01 A Aluminium A SG Clear**

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

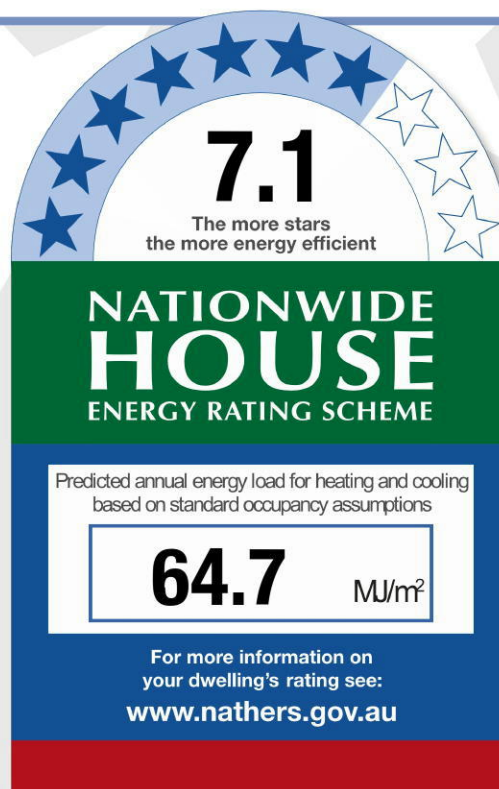
Conditioned: **74.0**  
Unconditioned: **0.0**  
Garage: **0.0**  
TOTAL: **74.0**

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

Heating: **41.4**  
Cooling: **23.3**  
TOTAL: **64.7**

### Plan documents

Plan ref/date: **1714**  
Prepared by: **AC PROJECT GROUP**



### Ceiling penetrations

(see following pages for details)

Sealed: **26**  
Unsealed: **0**  
TOTAL:\*\* **26**

\*\*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: 0004273900

Certificate Date:

15 Oct 2019

★ Star rating:

7.1



## Building features

### Window type and performance value

Window ID	Window type	U-value	SHGC
ALM-001-01 A	ALM-001-01 A Aluminium A SG Clear	6.7	0.57
ALM-002-01 A	ALM-002-01 A Aluminium B SG Clear	6.7	0.70

### Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Kitchen/Living	ALM-001-01 A	n/a	2000	750	E	No Shading
Kitchen/Living	ALM-001-01 A	n/a	2000	750	E	No Shading
Kitchen/Living	ALM-002-01 A	n/a	2143	2600	S	No Shading
Bedroom 1	ALM-001-01 A	n/a	2000	750	E	No Shading
Bedroom 2	ALM-002-01 A	n/a	2143	1800	E	No Shading

### 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 (m²)	Orientation	Outdoor shade	Indoor shade/diffuser
None Present						

### External wall type

ID	Wall type	Insulation	Wall wrap or foil
EW-1	Fibro Cavity Panel Direct Fix	Bulk Insulation R2	No
EW-2	AAC Cavity Panel Direct Fix	Bulk Insulation R2	No

### External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Kitchen/Living	EW-1	3195	2800	N	No	0
Kitchen/Living	EW-2	4095	2800	E	No	0
Kitchen/Living	EW-2	3995	2800	S	No	2500
Kitchen/Living	EW-1	5295	2800	W	No	2000
Bedroom 1	EW-2	3095	2800	E	No	0
Bath	EW-1	1200	2800	W	No	0
Bedroom 2	EW-2	2500	2800	E	No	4000
Ensuite	EW-1	995	2800	W	No	2000

### Internal wall type

Wall type	Area (m²)	Insulation	Wall wrap or foil
IW-1 - Cavity wall, direct fix plasterboard, single gap	52.0	No insulation	No
IW-2 - Shaft liner party wall with plaster	38.0	Bulk Insulation both sides of shaft liner R2	No

## Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004273900**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**7.1**

### Building features continued

#### Floors

Location	Construction	Area (m <sup>2</sup> )	Sub floor ventilation	Added insulation	Covering
Kitchen/Living	Concrete Slab, Unit Below 150mm	42.8	None	No Insulation	Ceramic Tiles 8mm
Bedroom 1	Concrete Slab, Unit Below 150mm	11.6	None	No Insulation	Carpet+Rubber Underlay 18mm
Bath	Concrete Slab, Unit Below 150mm	3.8	None	No Insulation	Ceramic Tiles 8mm
Bedroom 2	Concrete Slab, Unit Below 150mm	11.5	None	No Insulation	Carpet+Rubber Underlay 18mm
Ensuite	Concrete Slab, Unit Below 150mm	4.0	None	No Insulation	Ceramic Tiles 8mm

#### Ceiling type

Location	Construction	Added insulation	Roof space above
Kitchen/Living	Concrete, Plasterboard	No insulation	No
Bedroom 1	Concrete, Plasterboard	No insulation	No
Bath	Concrete, Plasterboard	No insulation	No
Bedroom 2	Concrete, Plasterboard	No insulation	No
Ensuite	Concrete, Plasterboard	No insulation	No

#### Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
Kitchen/Living	12	Downlights - LED	150	Sealed
Kitchen/Living	2	Exhaust Fans	300	Sealed
Bedroom 1	4	Downlights - LED	150	Sealed
Bath	1	Downlights - LED	150	Sealed
Bath	1	Exhaust Fans	300	Sealed
Bedroom 2	4	Downlights - LED	150	Sealed
Ensuite	1	Downlights - LED	150	Sealed
Ensuite	1	Exhaust Fans	300	Sealed

#### Ceiling fans

Location	Number	Diameter (mm)
None Present		

#### Roof type

Construction	Added insulation	Roof colour
None Present		

# Nationwide House Energy Rating Scheme\* Certificate



Certificate number:

Certificate Date:

★ Star rating:

## Additional information

## Explanatory notes

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# Nationwide House Energy Rating Scheme\* Certificate



Certificate number: **0004273926**

Certificate Date: **15 Oct 2019**

★ Star rating: **7.6**

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: **20920**

Name: **Terry Chapman**

Organisation: **Chapman Environmental Services Pty Ltd**

Email: **terry@basixcertificates.com.au**

Phone: **0414 265292**

Declaration  
of interest: **None**

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

AAO: **ABSA**

## Overview

### Dwelling details

Street: **Unit U308, 38-40 Orth St**

Suburb: **Kingswood**

State: **NSW**

Postcode: **2747**

Type: **New Dwelling**

NCC Class: **2**

NatHERS

climate zone: **28**

Lot/DP

number: **62/36728**

Exposure: **Open**

### Key construction and insulation materials

(see following pages for details)

Construction: **AAC Cavity Panel Direct Fix  
Concrete, Plasterboard  
Concrete Slab, Unit Below**

Insulation: **R2.0 wall insulation  
No ceiling insulation  
No floor insulation**

Glazing: **ALM-001-01 A Aluminium A SG Clear**

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

Conditioned: **70.0**

Unconditioned: **4.0**

Garage: **0.0**

TOTAL: **73.0**

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

Heating: **32.7**

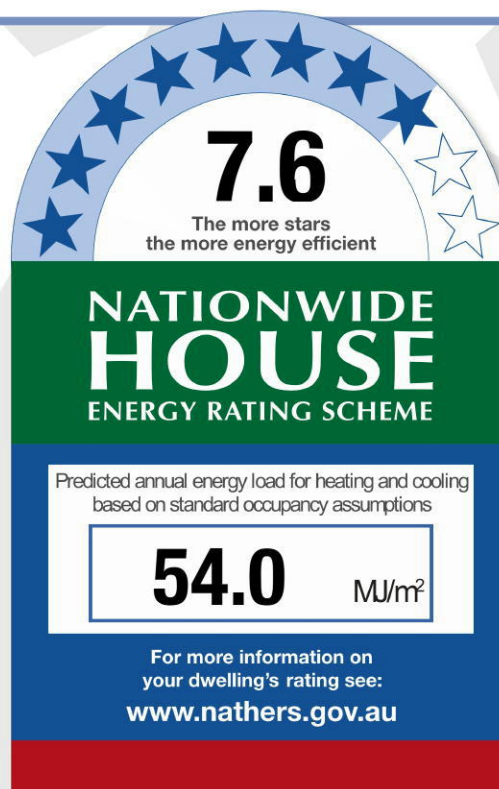
Cooling: **21.4**

TOTAL: **54.0**

### Plan documents

Plan ref/date: **1714**

Prepared by: **AC PROJECT GROUP**



### Ceiling penetrations

(see following pages for details)

Sealed: **27**

Unsealed: **0**

TOTAL:\*\* **27**

\*\*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.

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Scan to access this  
certificate online and  
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# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: 0004273926

Certificate Date:

15 Oct 2019

★ Star rating:

7.6



## 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

### Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Kitchen/Living	ALM-002-01 A	n/a	2143	2600	E	No Shading
Bedroom 1	ALM-001-01 A	n/a	2000	750	E	No Shading
Bedroom 1	ALM-001-01 A	n/a	2000	750	S	No Shading
Ensuite	ALM-001-01 A	n/a	2000	750	S	No Shading
Bath	ALM-001-01 A	n/a	2000	750	S	No Shading
Bedroom 2	ALM-001-01 A	n/a	2000	750	S	No Shading

### 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 (m²)	Orientation	Outdoor shade	Indoor shade/diffuser
None Present						

### External wall type

ID	Wall type	Insulation	Wall wrap or foil
EW-1	Fibro Cavity Panel Direct Fix	Bulk Insulation R2	No
EW-2	AAC Cavity Panel Direct Fix	Bulk Insulation R2	No

### External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Kitchen/Living	EW-1	1800	2800	N	No	0
Kitchen/Living	EW-2	1300	2800	N	No	0
Kitchen/Living	EW-2	4095	2800	E	No	2400
Bedroom 1	EW-2	2400	2800	N	No	4100
Bedroom 1	EW-2	3000	2800	E	No	0
Bedroom 1	EW-2	3495	2800	S	No	0
Ensuite	EW-2	2090	2800	S	No	0
Bath	EW-2	1990	2800	S	No	0
Bedroom 2	EW-2	3695	2800	S	No	0
Bedroom 2	EW-2	2300	2800	W	No	0

### Internal wall type

Wall type	Area (m²)	Insulation	Wall wrap or foil
	42.0	Bulk Insulation both sides of shaft liner R2	No

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# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004273926**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**7.6**



## Building features continued

IW-1 - Shaft liner party wall with plaster

IW-2 - Cavity wall, direct fix plasterboard, single gap      59.0      No insulation      No

## Floors

Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Kitchen/Living	Concrete Slab, Unit Below 150mm	41.0	None	No Insulation	Ceramic Tiles 8mm
Bedroom 1	Concrete Slab, Unit Below 150mm	12.4	None	No Insulation	Carpet+Rubber Underlay 18mm
Ensuite	Concrete Slab, Unit Below 150mm	3.7	None	No Insulation	Ceramic Tiles 8mm
Bath	Concrete Slab, Unit Below 150mm	3.5	None	No Insulation	Ceramic Tiles 8mm
Bedroom 2	Concrete Slab, Unit Below 150mm	10.8	None	No Insulation	Carpet+Rubber Underlay 18mm
Hall	Concrete Slab, Unit Below 150mm	1.9	None	No Insulation	Ceramic Tiles 8mm

## Ceiling type

Location	Construction	Added insulation	Roof space above
Kitchen/Living	Concrete, Plasterboard	No insulation	No
Bedroom 1	Concrete, Plasterboard	No insulation	No
Ensuite	Concrete, Plasterboard	No insulation	No
Bath	Concrete, Plasterboard	No insulation	No
Bedroom 2	Concrete, Plasterboard	No insulation	No
Hall	Concrete, Plasterboard	No insulation	No

## Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
Kitchen/Living	12	Downlights - LED	150	Sealed
Kitchen/Living	2	Exhaust Fans	300	Sealed
Bedroom 1	4	Downlights - LED	150	Sealed
Ensuite	1	Downlights - LED	150	Sealed
Ensuite	1	Exhaust Fans	300	Sealed
Bath	1	Downlights - LED	150	Sealed
Bath	1	Exhaust Fans	300	Sealed
Bedroom 2	4	Downlights - LED	150	Sealed
Hall	1	Downlights - LED	150	Sealed

## Ceiling fans

## Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004273926**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**7.6**



### Building features continued

Location	Number	Diameter (mm)
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None Present		
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### Roof type

Construction
--------------

Added insulation
------------------

Roof colour
-------------

None Present
--------------

# Nationwide House Energy Rating Scheme\* Certificate



Certificate number:

Certificate Date:

★ Star rating:

## Additional information

## Explanatory notes

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### Contact

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# Nationwide House Energy Rating Scheme\* Certificate



Certificate number: **0004273959**

Certificate Date: **15 Oct 2019**

★ Star rating: **6.9**

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: **20920**  
Name: **Terry Chapman**  
Organisation: **Chapman Environmental Services Pty Ltd**  
Email: **terry@basixcertificates.com.au**  
Phone: **0414 265292**  
Declaration of interest: **None**  
Software: **BERS Pro v4.3.0.2d (3.13)**  
AAO: **ABSA**

## Overview

### Dwelling details

Street: **Unit U309, 38-40 Orth St**  
Suburb: **Kingswood**  
State: **NSW** Postcode: **2747**  
Type: **New Dwelling** NCC Class: **2**  
NatHERS climate zone: **28**  
Lot/DP number: **62/36728** Exposure: **Open**

### Key construction and insulation materials

(see following pages for details)

Construction: **Fibro Cavity Panel Direct Fix Concrete, Plasterboard Concrete Slab, Unit Below**  
Insulation: **R2.0 wall insulation No ceiling insulation No floor insulation**  
Glazing: **ALM-001-01 A Aluminium A SG Clear**

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

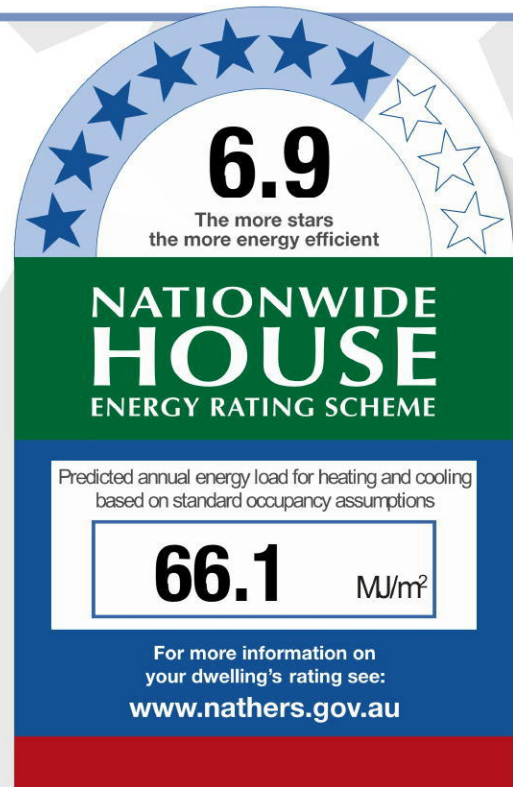
Conditioned: **69.0**  
Unconditioned: **0.0**  
Garage: **0.0**  
TOTAL: **69.0**

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

Heating: **39.8**  
Cooling: **26.2**  
TOTAL: **66.1**

## Plan documents

Plan ref/date: **1714**  
Prepared by: **AC PROJECT GROUP**



### Ceiling penetrations

(see following pages for details)

Sealed: **25**  
Unsealed: **0**  
TOTAL:\*\* **25**

\*\*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: 0004273959

Certificate Date:

15 Oct 2019

★ Star rating:

6.9



## Building features

### Window type and performance value

Window ID	Window type	U-value	SHGC
ALM-001-01 A	ALM-001-01 A Aluminium A SG Clear	6.7	0.57
ALM-002-01 A	ALM-002-01 A Aluminium B SG Clear	6.7	0.70

### Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Bedroom 1	ALM-001-01 A	n/a	2000	750	W	No Shading
Bedroom 1	ALM-001-01 A	n/a	2000	750	W	No Shading
Kitchen/Living	ALM-002-01 A	n/a	2100	2600	S	No Shading
Kitchen/Living	ALM-001-01 A	n/a	2000	750	W	No Shading
Kitchen/Living	ALM-001-01 A	n/a	2000	750	W	No Shading

### 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 (m²)	Orientation	Outdoor shade	Indoor shade/diffuser
None Present						

### External wall type

ID	Wall type	Insulation	Wall wrap or foil
EW-1	AAC Cavity Panel Direct Fix	Bulk Insulation R2	No
EW-2	Fibro Cavity Panel Direct Fix	Bulk Insulation R2	No

### External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Bedroom 1	EW-1	2800	2800	S	No	0
Bedroom 1	EW-1	4295	2800	W	No	0
Ensuite	EW-2	3500	2800	N	No	2300
Ensuite	EW-2	1600	2800	E	No	5600
Ensuite	EW-2	2695	2800	W	No	0
Kitchen/Living	EW-2	795	2800	E	No	1900
Kitchen/Living	EW-1	4400	2800	S	No	1300
Kitchen/Living	EW-1	5295	2800	W	No	0
Entry and hall	EW-2	1895	2800	N	No	1600
Entry and hall	EW-2	1600	2800	W	No	5400
Entry and hall	EW-2	1800	2800	N	No	2300
Entry and hall	EW-2	4105	2800	E	No	1900

### Internal wall type

# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004273959**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**6.9**



## Building features continued

Wall type	Area (m²)	Insulation	Wall wrap or foil
IW-1 - Cavity wall, direct fix plasterboard, single gap	37.0	No insulation	No
IW-2 - Shaft liner party wall with plaster	21.0	Bulk Insulation both sides of shaft liner R2	No

## Floors

Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Bedroom 1	Concrete Slab, Unit Below 150mm	13.8	None	No Insulation	Carpet+Rubber Underlay 18mm
Ensuite	Concrete Slab, Unit Below 150mm	9.2	None	No Insulation	Ceramic Tiles 8mm
Kitchen/Living	Concrete Slab, Unit Below 150mm	34.3	None	No Insulation	Ceramic Tiles 8mm
Entry and hall	Concrete Slab, Unit Below 150mm	12.1	None	No Insulation	Ceramic Tiles 8mm

## Ceiling type

Location	Construction	Added insulation	Roof space above
Bedroom 1	Concrete, Plasterboard	No insulation	No
Ensuite	Concrete, Plasterboard	No insulation	No
Kitchen/Living	Concrete, Plasterboard	No insulation	No
Entry and hall	Concrete, Plasterboard	No insulation	No

## Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
Bedroom 1	4	Downlights - LED	150	Sealed
Ensuite	2	Downlights - LED	150	Sealed
Ensuite	1	Exhaust Fans	300	Sealed
Kitchen/Living	12	Downlights - LED	150	Sealed
Kitchen/Living	1	Exhaust Fans	300	Sealed
Entry and hall	4	Downlights - LED	150	Sealed
Entry and hall	1	Exhaust Fans	300	Sealed

## Ceiling fans

Location	Number	Diameter (mm)
None Present		

## Roof type

Construction	Added insulation	Roof colour
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## Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004273959**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**6.9**



### Building features continued

None Present

# Nationwide House Energy Rating Scheme\* Certificate



Certificate number:

Certificate Date:

★ Star rating:

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

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

\* Nationwide House Energy Rating Scheme (NatHERS) is an initiative of the Australian, state and territory governments.

For more details see [www.nathers.gov.au](http://www.nathers.gov.au)

# Nationwide House Energy Rating Scheme\* Certificate



Certificate number: **0004273934**

Certificate Date: **15 Oct 2019**

★ Star rating: **8.3**

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: **20920**  
Name: **Terry Chapman**  
Organisation: **Chapman Environmental Services Pty Ltd**  
Email: **terry@basixcertificates.com.au**  
Phone: **0414 265292**  
Declaration of interest: **None**  
Software: **BERS Pro v4.3.0.2d (3.13)**  
AAO: **ABSA**

## Overview

### Dwelling details

Street: **Unit U204, 38-40 Orth St**  
Suburb: **Kingswood**  
State: **NSW** Postcode: **2747**  
Type: **New Dwelling** NCC Class: **2**  
NatHERS climate zone: **28**  
Lot/DP number: **62/36728** Exposure: **Suburban**

### Key construction and insulation materials

(see following pages for details)

Construction: **AAC Cavity Panel Direct Fix Concrete, Plasterboard Concrete Slab, Unit Below**  
Insulation: **R2.0 wall insulation No ceiling insulation No floor insulation**  
Glazing: **ALM-001-01 A Aluminium A SG Clear**

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

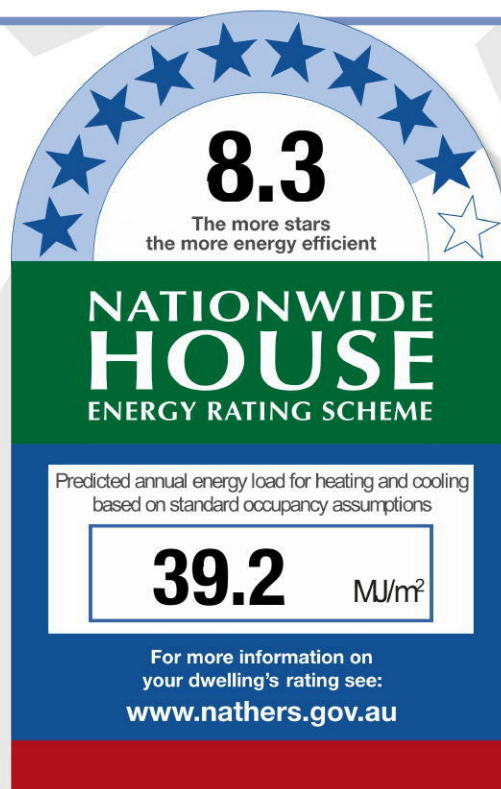
Conditioned: **74.0**  
Unconditioned: **0.0**  
Garage: **0.0**  
TOTAL: **74.0**

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

Heating: **19.1**  
Cooling: **20.2**  
TOTAL: **39.2**

### Plan documents

Plan ref/date: **1714**  
Prepared by: **AC PROJECT GROUP**



### Ceiling penetrations

(see following pages for details)

Sealed: **30**  
Unsealed: **0**  
TOTAL:\*\* **30**

\*\*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: 0004273934

Certificate Date:

15 Oct 2019

★ Star rating:

8.3



## Building features

### Window type and performance value

Window ID	Window type	U-value	SHGC
ALM-001-01 A	ALM-001-01 A Aluminium A SG Clear	6.7	0.57
ALM-002-01 A	ALM-002-01 A Aluminium B SG Clear	6.7	0.70

### Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Bedroom 1	ALM-001-01 A	n/a	2000	750	W	No Shading
Bedroom 2	ALM-001-01 A	n/a	2000	750	W	No Shading
Kitchen/Living	ALM-001-01 A	n/a	1200	940	N	No Shading
Kitchen/Living	ALM-002-01 A	n/a	2143	2600	W	No Shading
Kitchen/Living	ALM-002-01 A	n/a	2800	750	N	No Shading

### 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 (m²)	Orientation	Outdoor shade	Indoor shade/diffuser
None Present						

### External wall type

ID	Wall type	Insulation	Wall wrap or foil
EW-1	Fibro Cavity Panel Direct Fix	Bulk Insulation R2	No
EW-2	AAC Cavity Panel Direct Fix	Foil, Anti-glare one side + Bulk Insulation R2	Yes

### External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Bedroom 1	EW-1	3795	2800	S	No	1800
Bedroom 1	EW-2	3195	2800	W	No	0
Ensuite	EW-1	2090	2800	S	No	1800
Bedroom 2	EW-2	3090	2800	W	No	0
Kitchen/Living	EW-2	2595	2800	W	No	0
Kitchen/Living	EW-2	3100	2800	N	No	3400
Kitchen/Living	EW-2	3400	2800	W	No	3100
Kitchen/Living	EW-2	4000	2800	N	No	0
Entry hall	EW-1	1195	2800	S	No	1800

### Internal wall type

Wall type	Area (m²)	Insulation	Wall wrap or foil
IW-1 - Cavity wall, direct fix plasterboard, single gap	77.0	No insulation	No
IW-2 - Shaft liner party wall with	34.0	Bulk Insulation both sides of shaft liner R2	No

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# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004273934**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**8.3**



## Building features continued

plaster

### Floors

Location	Construction	Area (m <sup>2</sup> )	Sub floor ventilation	Added insulation	Covering
Bedroom 1	Concrete Slab, Unit Below 150mm	13.7	None	No Insulation	Carpet+Rubber Underlay 18mm
Ensuite	Concrete Slab, Unit Below 150mm	3.9	None	No Insulation	Ceramic Tiles 8mm
Bedroom 2	Concrete Slab, Unit Below 150mm	11.3	None	No Insulation	Carpet+Rubber Underlay 18mm
Bath	Concrete Slab, Unit Below 150mm	4.0	None	No Insulation	Ceramic Tiles 8mm
Kitchen/Living	Concrete Slab, Unit Below 150mm	30.7	None	No Insulation	Ceramic Tiles 8mm
Entry hall	Concrete Slab, Unit Below 150mm	10.7	None	No Insulation	Ceramic Tiles 8mm

### Ceiling type

Location	Construction	Added insulation	Roof space above
Bedroom 1	Concrete, Plasterboard	No insulation	No
Ensuite	Concrete, Plasterboard	No insulation	No
Bedroom 2	Concrete, Plasterboard	No insulation	No
Bath	Concrete, Plasterboard	No insulation	No
Kitchen/Living	Concrete, Plasterboard	No insulation	No
Entry hall	Concrete, Plasterboard	No insulation	No

### Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
Bedroom 1	4	Downlights - LED	150	Sealed
Ensuite	1	Downlights - LED	150	Sealed
Ensuite	1	Exhaust Fans	300	Sealed
Bedroom 2	4	Downlights - LED	150	Sealed
Bath	1	Downlights - LED	150	Sealed
Bath	1	Exhaust Fans	300	Sealed
Kitchen/Living	12	Downlights - LED	150	Sealed
Kitchen/Living	1	Exhaust Fans	300	Sealed
Entry hall	4	Downlights - LED	150	Sealed
Entry hall	1	Exhaust Fans	300	Sealed

### Ceiling fans

Location	Number	Diameter (mm)
None Present		

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## Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004273934**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**8.3**



### Building features continued

#### Roof type

Construction	Added insulation	Roof colour
None Present		

# Nationwide House Energy Rating Scheme\* Certificate



Certificate number:

Certificate Date:

★ Star rating:

## Additional information

## Explanatory notes

### About this report

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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).

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### Accredited Assessors

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

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For more details see [www.nathers.gov.au](http://www.nathers.gov.au)

# Nationwide House Energy Rating Scheme\* Certificate



Certificate number: **0004273975**

Certificate Date: **15 Oct 2019**

★ Star rating: **8.8**

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: **20920**  
Name: **Terry Chapman**  
Organisation: **Chapman Environmental Services Pty Ltd**  
Email: **terry@basixcertificates.com.au**  
Phone: **0414 265292**  
Declaration of interest: **None**  
Software: **BERS Pro v4.3.0.2d (3.13)**  
AAO: **ABSA**

## Overview

### Dwelling details

Street: **Unit U205, 38-40 Orth St**  
Suburb: **Kingswood**  
State: **NSW** Postcode: **2747**  
Type: **New Dwelling** NCC Class: **2**  
NatHERS climate zone: **28**  
Lot/DP number: **62/36728** Exposure: **Suburban**

### Key construction and insulation materials

(see following pages for details)

Construction: **Cavity Brick**  
**Concrete, Plasterboard**  
**Concrete Slab, Unit Below**  
Insulation: **No wall insulation**  
**No ceiling insulation**  
**No floor insulation**  
Glazing: **ALM-001-01 A Aluminium A SG Clear**

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

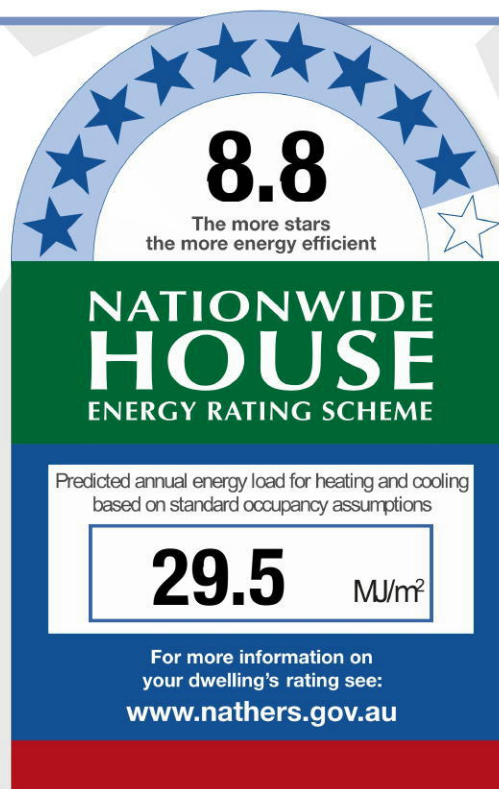
Conditioned: **76.0**  
Unconditioned: **0.0**  
Garage: **0.0**  
TOTAL: **76.0**

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

Heating: **7.6**  
Cooling: **21.9**  
TOTAL: **29.5**

### Plan documents

Plan ref/date: **1714**  
Prepared by: **AC PROJECT GROUP**



### Ceiling penetrations

(see following pages for details)

Sealed: **28**  
Unsealed: **0**  
TOTAL:\*\* **28**

\*\*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: 0004273975

Certificate Date:

15 Oct 2019

★ Star rating:

8.8



## 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

### Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Kitchen/Living	ALM-002-01 A	n/a	2143	2600	N	No Shading
Bedroom 1	ALM-001-01 A	n/a	2800	950	N	No Shading
Bedroom 1	ALM-001-01 A	n/a	2800	1200	N	No Shading
Bedroom 2	ALM-001-01 A	n/a	1200	750	N	No Shading

### 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 (m²)	Orientation	Outdoor shade	Indoor shade/diffuser
None Present						

### External wall type

ID	Wall type	Insulation	Wall wrap or foil
EW-1	Fibro Cavity Panel Direct Fix	Bulk Insulation R2	No
EW-2	Cavity Brick	No insulation	No

### External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Kitchen/Living	EW-1	4100	2800	S	No	2700
Kitchen/Living	EW-2	600	2800	W	No	4700
Kitchen/Living	EW-2	4100	2800	N	No	2000
Bedroom 1	EW-2	3200	2800	N	No	0
Bedroom 1	EW-2	2600	2800	E	No	5600
Bedroom 2	EW-2	1490	2800	N	No	2600

### Internal wall type

Wall type	Area (m²)	Insulation	Wall wrap or foil
IW-1 - Shaft liner party wall with plaster	67.0	Bulk Insulation both sides of shaft liner R2	No
IW-2 - Cavity wall, direct fix plasterboard, single gap	71.0	No insulation	No

## Floors

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# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004273975**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**8.8**



## Building features continued

Location	Construction	Area (m <sup>2</sup> )	Sub floor ventilation	Added insulation	Covering
Kitchen/Living	Concrete Slab, Unit Below 150mm	35.3	None	No Insulation	Ceramic Tiles 8mm
Bedroom 1	Concrete Slab, Unit Below 150mm	16.1	None	No Insulation	Carpet+Rubber Underlay 18mm
Ensuite	Concrete Slab, Unit Below 150mm	3.4	None	No Insulation	Ceramic Tiles 8mm
Bath	Concrete Slab, Unit Below 150mm	5.5	None	No Insulation	Ceramic Tiles 8mm
Bedroom 2	Concrete Slab, Unit Below 150mm	12.1	None	No Insulation	Carpet+Rubber Underlay 18mm
Kitchen/Living	Concrete Slab, Unit Below 150mm	3.1	None	No Insulation	Ceramic Tiles 8mm

## Ceiling type

Location	Construction	Added insulation	Roof space above
Kitchen/Living	Concrete, Plasterboard	No insulation	No
Bedroom 1	Concrete, Plasterboard	No insulation	No
Ensuite	Concrete, Plasterboard	No insulation	No
Bath	Concrete, Plasterboard	No insulation	No
Bedroom 2	Concrete, Plasterboard	No insulation	No
Kitchen/Living	Concrete, Plasterboard	No insulation	No

## Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
Kitchen/Living	12	Downlights - LED	150	Sealed
Kitchen/Living	2	Exhaust Fans	300	Sealed
Bedroom 1	5	Downlights - LED	150	Sealed
Ensuite	1	Downlights - LED	150	Sealed
Ensuite	1	Exhaust Fans	300	Sealed
Bath	1	Downlights - LED	150	Sealed
Bath	1	Exhaust Fans	300	Sealed
Bedroom 2	4	Downlights - LED	150	Sealed
Kitchen/Living	1	Downlights - LED	150	Sealed

## Ceiling fans

Location	Number	Diameter (mm)
None Present		

## Roof type

Construction	Added	Roof colour
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## Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004273975**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**8.8**



### Building features continued

#### insulation

None Present

# Nationwide House Energy Rating Scheme\* Certificate



Certificate number:

Certificate Date:

★ Star rating:

## Additional information

## Explanatory notes

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### Contact

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# Nationwide House Energy Rating Scheme\* Certificate



Certificate number: **0004274189**

Certificate Date: **15 Oct 2019**

★ Star rating: **6.7**

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: **20920**  
Name: **Terry Chapman**  
Organisation: **Chapman Environmental Services Pty Ltd**  
Email: **terry@basixcertificates.com.au**  
Phone: **0414 265292**  
Declaration of interest: **None**  
Software: **BERS Pro v4.3.0.2d (3.13)**  
AAO: **ABSA**

## Overview

### Dwelling details

Street: **Unit U407, 38-40 Orth St**  
Suburb: **Kingswood**  
State: **NSW** Postcode: **2747**  
Type: **New Dwelling** NCC Class: **2**  
NatHERS climate zone: **28**  
Lot/DP number: **62/36728** Exposure: **Open**

### Key construction and insulation materials

(see following pages for details)

Construction: **AAC Cavity Panel Direct Fix Concrete, Plasterboard Concrete Slab, Unit Below**  
Insulation: **R2.0 wall insulation No ceiling insulation No floor insulation**  
Glazing: **ALM-001-01 A Aluminium A SG Clear**

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

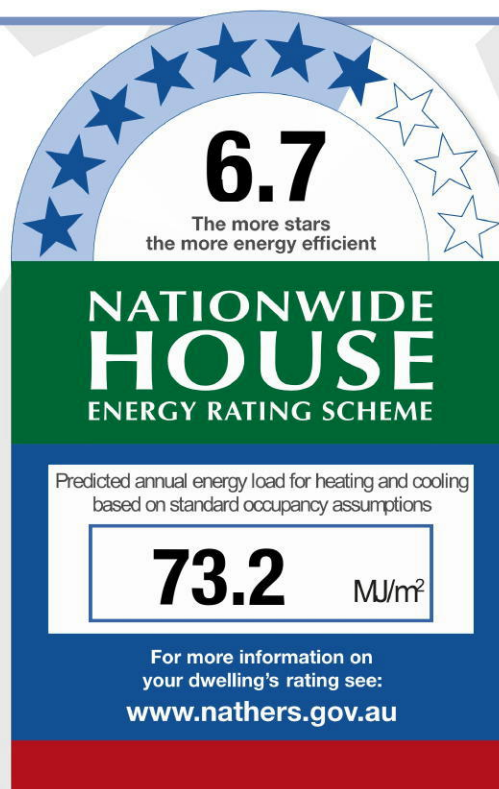
Conditioned: **52.0**  
Unconditioned: **0.0**  
Garage: **0.0**  
TOTAL: **52.0**

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

Heating: **43.9**  
Cooling: **29.3**  
TOTAL: **73.2**

### Plan documents

Plan ref/date: **1714**  
Prepared by: **AC PROJECT GROUP**



### Ceiling penetrations

(see following pages for details)

Sealed: **20**  
Unsealed: **0**  
TOTAL:\*\* **20**

\*\*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: 0004274189

Certificate Date:

15 Oct 2019

★ Star rating:

6.7



## Building features

### Window type and performance value

Window ID	Window type	U-value	SHGC
ALM-001-01 A	ALM-001-01 A Aluminium A SG Clear	6.7	0.57
ALM-002-01 A	ALM-002-01 A Aluminium B SG Clear	6.7	0.70

### Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Kitchen/Living	ALM-001-01 A	n/a	2000	750	E	No Shading
Kitchen/Living	ALM-001-01 A	n/a	2000	750	E	No Shading
Kitchen/Living	ALM-002-01 A	n/a	2143	2600	S	No Shading
Bedroom 2	ALM-002-01 A	n/a	2143	1800	E	No Shading

### 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 <sup>2</sup> )	Orientation	Outdoor shade	Indoor shade/diffuser
None Present						

### External wall type

ID	Wall type	Insulation	Wall wrap or foil
EW-1	Fibro Cavity Panel Direct Fix	Bulk Insulation R2	No
EW-2	AAC Cavity Panel Direct Fix	Bulk Insulation R2	No

### External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Kitchen/Living	EW-1	1700	2800	N	No	0
Kitchen/Living	EW-2	3900	2800	E	No	0
Kitchen/Living	EW-2	3995	2800	S	No	2500
Kitchen/Living	EW-1	4395	2800	W	No	2000
Bedroom 2	EW-2	2500	2800	E	No	4000
Ensuite	EW-1	995	2800	W	No	2000

### Internal wall type

Wall type	Area (m <sup>2</sup> )	Insulation	Wall wrap or foil
IW-1 - Shaft liner party wall with plaster	46.0	Bulk Insulation both sides of shaft liner R2	No
IW-2 - Cavity wall, direct fix plasterboard, single gap	24.0	No insulation	No

## Floors

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## Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004274189**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**6.7**

### Building features continued

Location	Construction	Area (m <sup>2</sup> )	Sub floor ventilation	Added insulation	Covering
Kitchen/Living	Concrete Slab, Unit Below 150mm	36.1	None	No Insulation	Ceramic Tiles 8mm
Bedroom 2	Concrete Slab, Unit Below 150mm	11.5	None	No Insulation	Carpet+Rubber Underlay 18mm
Ensuite	Concrete Slab, Unit Below 150mm	4.0	None	No Insulation	Ceramic Tiles 8mm

### Ceiling type

Location	Construction	Added insulation	Roof space above
Kitchen/Living	Concrete, Plasterboard	No insulation	No
Bedroom 2	Concrete, Plasterboard	No insulation	No
Ensuite	Concrete, Plasterboard	No insulation	No

### Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
Kitchen/Living	12	Downlights - LED	150	Sealed
Kitchen/Living	2	Exhaust Fans	300	Sealed
Bedroom 2	4	Downlights - LED	150	Sealed
Ensuite	1	Downlights - LED	150	Sealed
Ensuite	1	Exhaust Fans	300	Sealed

### Ceiling fans

Location	Number	Diameter (mm)
None Present		

### Roof type

Construction	Added insulation	Roof colour
None Present		

# Nationwide House Energy Rating Scheme\* Certificate



Certificate number:

Certificate Date:

★ Star rating:

## Additional information

## Explanatory notes

### About this report

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# Nationwide House Energy Rating Scheme\* Certificate



Certificate number: **0004273843**

Certificate Date: **15 Oct 2019**

★ Star rating: **7.6**

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: **20920**  
Name: **Terry Chapman**  
Organisation: **Chapman Environmental Services Pty Ltd**  
Email: **terry@basixcertificates.com.au**  
Phone: **0414 265292**  
Declaration of interest: **None**  
Software: **BERS Pro v4.3.0.2d (3.13)**  
AAO: **ABSA**

## Overview

### Dwelling details

Street: **Unit U408, 38-40 Orth St**  
Suburb: **Kingswood**  
State: **NSW** Postcode: **2747**  
Type: **New Dwelling** NCC Class: **2**  
NatHERS climate zone: **28**  
Lot/DP number: **62/36728** Exposure: **Open**

### Key construction and insulation materials

(see following pages for details)

Construction: **AAC Cavity Panel Direct Fix Concrete, Plasterboard Concrete Slab, Unit Below**  
Insulation: **R2.0 wall insulation No ceiling insulation No floor insulation**  
Glazing: **ALM-001-01 A Aluminium A SG Clear**

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

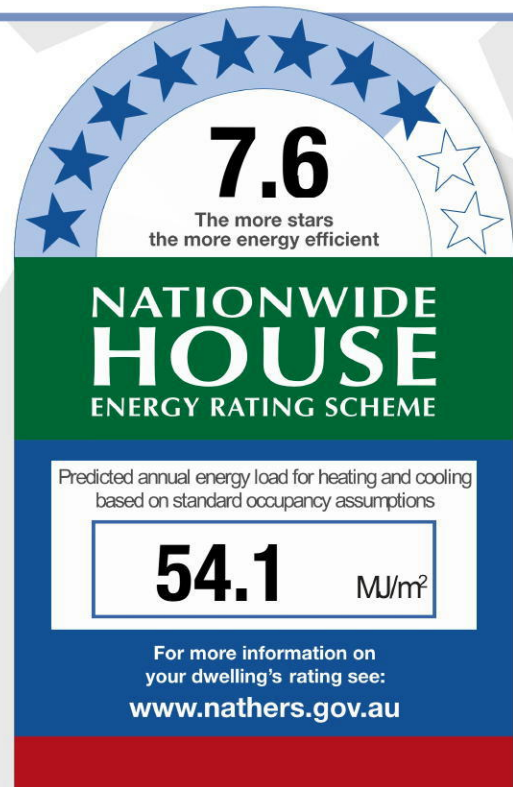
Conditioned: **70.0**  
Unconditioned: **4.0**  
Garage: **0.0**  
TOTAL: **73.0**

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

Heating: **33.1**  
Cooling: **21.0**  
TOTAL: **54.1**

### Plan documents

Plan ref/date: **1714**  
Prepared by: **AC PROJECT GROUP**



### Ceiling penetrations

(see following pages for details)

Sealed: **27**  
Unsealed: **0**  
TOTAL:\*\* **27**

\*\*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: 0004273843

Certificate Date:

15 Oct 2019

★ Star rating:

7.6



## 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

### Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Kitchen/Living	ALM-002-01 A	n/a	2143	2600	E	No Shading
Bedroom 1	ALM-001-01 A	n/a	2000	750	E	No Shading
Bedroom 1	ALM-001-01 A	n/a	2000	750	S	No Shading
Ensuite	ALM-001-01 A	n/a	2000	750	S	No Shading
Bath	ALM-001-01 A	n/a	2000	750	S	No Shading
Bedroom 2	ALM-001-01 A	n/a	2000	750	S	No Shading

### 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 (m²)	Orientation	Outdoor shade	Indoor shade/diffuser
None Present						

### External wall type

ID	Wall type	Insulation	Wall wrap or foil
EW-1	Fibro Cavity Panel Direct Fix	Bulk Insulation R2	No
EW-2	AAC Cavity Panel Direct Fix	Bulk Insulation R2	No

### External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Kitchen/Living	EW-1	1800	2800	N	No	0
Kitchen/Living	EW-2	1300	2800	N	No	0
Kitchen/Living	EW-2	4095	2800	E	No	2400
Bedroom 1	EW-2	2400	2800	N	No	4100
Bedroom 1	EW-2	3000	2800	E	No	0
Bedroom 1	EW-2	3495	2800	S	No	0
Ensuite	EW-2	2090	2800	S	No	0
Bath	EW-2	1990	2800	S	No	0
Bedroom 2	EW-2	3695	2800	S	No	0
Bedroom 2	EW-2	2300	2800	W	No	0

### Internal wall type

Wall type	Area (m²)	Insulation	Wall wrap or foil
	42.0	Bulk Insulation both sides of shaft liner R2	No

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# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004273843**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**7.6**

## Building features continued

IW-1 - Shaft liner party wall with plaster

IW-2 - Cavity wall, direct fix plasterboard, single gap	59.0	No insulation	No
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## Floors

Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Kitchen/Living	Concrete Slab, Unit Below 150mm	41.0	None	No Insulation	Ceramic Tiles 8mm
Bedroom 1	Concrete Slab, Unit Below 150mm	12.4	None	No Insulation	Carpet+Rubber Underlay 18mm
Ensuite	Concrete Slab, Unit Below 150mm	3.7	None	No Insulation	Ceramic Tiles 8mm
Bath	Concrete Slab, Unit Below 150mm	3.5	None	No Insulation	Ceramic Tiles 8mm
Bedroom 2	Concrete Slab, Unit Below 150mm	10.8	None	No Insulation	Carpet+Rubber Underlay 18mm
Hall	Concrete Slab, Unit Below 150mm	1.9	None	No Insulation	Ceramic Tiles 8mm

## Ceiling type

Location	Construction	Added insulation	Roof space above
Kitchen/Living	Concrete, Plasterboard	No insulation	No
Bedroom 1	Concrete, Plasterboard	No insulation	No
Ensuite	Concrete, Plasterboard	No insulation	No
Bath	Concrete, Plasterboard	No insulation	No
Bedroom 2	Concrete, Plasterboard	No insulation	No
Hall	Concrete, Plasterboard	No insulation	No

## Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
Kitchen/Living	12	Downlights - LED	150	Sealed
Kitchen/Living	2	Exhaust Fans	300	Sealed
Bedroom 1	4	Downlights - LED	150	Sealed
Ensuite	1	Downlights - LED	150	Sealed
Ensuite	1	Exhaust Fans	300	Sealed
Bath	1	Downlights - LED	150	Sealed
Bath	1	Exhaust Fans	300	Sealed
Bedroom 2	4	Downlights - LED	150	Sealed
Hall	1	Downlights - LED	150	Sealed

## Ceiling fans

## Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004273843**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**7.6**



### Building features continued

Location	Number	Diameter (mm)
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None Present		
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### Roof type

Construction
--------------

Added insulation
------------------

Roof colour
-------------

None Present
--------------

# Nationwide House Energy Rating Scheme\* Certificate



Certificate number:

Certificate Date:

★ Star rating:

## Additional information

## Explanatory notes

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### Contact

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# Nationwide House Energy Rating Scheme\* Certificate



Certificate number: **0004273884**

Certificate Date: **15 Oct 2019**

★ Star rating: **6.9**

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: **20920**

Name: **Terry Chapman**

Organisation: **Chapman Environmental Services Pty Ltd**

Email: **terry@basixcertificates.com.au**

Phone: **0414 265292**

Declaration  
of interest: **None**

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

AAO: **ABSA**

## Overview

### Dwelling details

Street: **Unit U409, 38-40 Orth St**

Suburb: **Kingswood**

State: **NSW**

Postcode: **2747**

Type: **New Dwelling**

NCC Class: **2**

NatHERS

climate zone: **28**

Lot/DP

number: **62/36728**

Exposure: **Open**

### Key construction and insulation materials

(see following pages for details)

Construction: **Fibro Cavity Panel Direct Fix  
Concrete, Plasterboard  
Concrete Slab, Unit Below**

Insulation: **R2.0 wall insulation  
No ceiling insulation  
No floor insulation**

Glazing: **ALM-001-01 A Aluminium A SG Clear**

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

Conditioned: **69.0**

Unconditioned: **0.0**

Garage: **0.0**

TOTAL: **69.0**

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

Heating: **40.3**

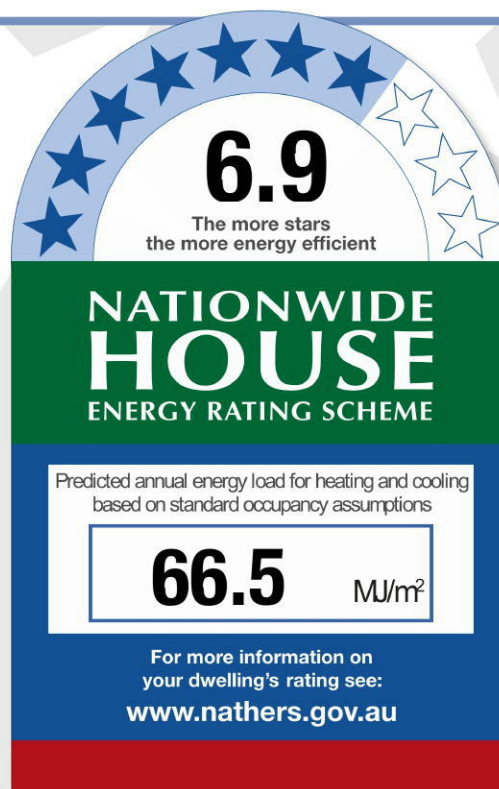
Cooling: **26.2**

TOTAL: **66.5**

### Plan documents

Plan ref/date: **1714**

Prepared by: **AC PROJECT GROUP**



### Ceiling penetrations

(see following pages for details)

Sealed: **25**

Unsealed: **0**

TOTAL:\*\* **25**

\*\*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.

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



# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: 0004273884

Certificate Date:

15 Oct 2019

★ Star rating:

6.9



## Building features

### Window type and performance value

Window ID	Window type	U-value	SHGC
ALM-001-01 A	ALM-001-01 A Aluminium A SG Clear	6.7	0.57
ALM-002-01 A	ALM-002-01 A Aluminium B SG Clear	6.7	0.70

### Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Bedroom 1	ALM-001-01 A	n/a	2000	750	W	No Shading
Bedroom 1	ALM-001-01 A	n/a	2000	750	W	No Shading
Kitchen/Living	ALM-002-01 A	n/a	2100	2600	S	No Shading
Kitchen/Living	ALM-001-01 A	n/a	2000	750	W	No Shading
Kitchen/Living	ALM-001-01 A	n/a	2000	750	W	No Shading

### 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 (m²)	Orientation	Outdoor shade	Indoor shade/diffuser
None Present						

### External wall type

ID	Wall type	Insulation	Wall wrap or foil
EW-1	AAC Cavity Panel Direct Fix	Bulk Insulation R2	No
EW-2	Fibro Cavity Panel Direct Fix	Bulk Insulation R2	No

### External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Bedroom 1	EW-1	2800	2800	S	No	0
Bedroom 1	EW-1	4295	2800	W	No	0
Ensuite	EW-2	3500	2800	N	No	2300
Ensuite	EW-2	1600	2800	E	No	5600
Ensuite	EW-2	2695	2800	W	No	0
Kitchen/Living	EW-2	795	2800	E	No	1900
Kitchen/Living	EW-1	4400	2800	S	No	1300
Kitchen/Living	EW-1	5295	2800	W	No	0
Entry and hall	EW-2	1895	2800	N	No	1600
Entry and hall	EW-2	1600	2800	W	No	5400
Entry and hall	EW-2	1800	2800	N	No	2300
Entry and hall	EW-2	4105	2800	E	No	1900

### Internal wall type

# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004273884**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**6.9**



## Building features continued

Wall type	Area (m <sup>2</sup> )	Insulation	Wall wrap or foil
IW-1 - Cavity wall, direct fix plasterboard, single gap	37.0	No insulation	No
IW-2 - Shaft liner party wall with plaster	21.0	Bulk Insulation both sides of shaft liner R2	No

## Floors

Location	Construction	Area (m <sup>2</sup> )	Sub floor ventilation	Added insulation	Covering
Bedroom 1	Concrete Slab, Unit Below 150mm	13.8	None	No Insulation	Carpet+Rubber Underlay 18mm
Ensuite	Concrete Slab, Unit Below 150mm	9.2	None	No Insulation	Ceramic Tiles 8mm
Kitchen/Living	Concrete Slab, Unit Below 150mm	34.3	None	No Insulation	Ceramic Tiles 8mm
Entry and hall	Concrete Slab, Unit Below 150mm	12.1	None	No Insulation	Ceramic Tiles 8mm

## Ceiling type

Location	Construction	Added insulation	Roof space above
Bedroom 1	Concrete, Plasterboard	No insulation	No
Ensuite	Concrete, Plasterboard	No insulation	No
Kitchen/Living	Concrete, Plasterboard	No insulation	No
Entry and hall	Concrete, Plasterboard	No insulation	No

## Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
Bedroom 1	4	Downlights - LED	150	Sealed
Ensuite	2	Downlights - LED	150	Sealed
Ensuite	1	Exhaust Fans	300	Sealed
Kitchen/Living	12	Downlights - LED	150	Sealed
Kitchen/Living	1	Exhaust Fans	300	Sealed
Entry and hall	4	Downlights - LED	150	Sealed
Entry and hall	1	Exhaust Fans	300	Sealed

## Ceiling fans

Location	Number	Diameter (mm)
None Present		

## Roof type

Construction	Added insulation	Roof colour
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## Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004273884**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**6.9**



### Building features continued

None Present

# Nationwide House Energy Rating Scheme\* Certificate



Certificate number:

Certificate Date:

★ Star rating:

## 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).

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### Disclaimer

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### 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)

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# Nationwide House Energy Rating Scheme\* Certificate



Certificate number: **0004273918**

Certificate Date: **15 Oct 2019**

★ Star rating: **5.9**

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: **20920**  
Name: **Terry Chapman**  
Organisation: **Chapman Environmental Services Pty Ltd**  
Email: **terry@basixcertificates.com.au**  
Phone: **0414 265292**  
Declaration of interest: **None**  
Software: **BERS Pro v4.3.0.2d (3.13)**  
AAO: **ABSA**

## Overview

### Dwelling details

Street: **Unit U501, 38-40 Orth St**  
Suburb: **Kingswood**  
State: **NSW** Postcode: **2747**  
Type: **New Dwelling** NCC Class: **2**  
NatHERS climate zone: **28**  
Lot/DP number: **62/36728** Exposure: **Open**

### Key construction and insulation materials

(see following pages for details)

Construction: **AAC Cavity Panel Direct Fix Waterproofing Membrane Concrete Slab, Unit Below**  
Insulation: **R2.0 wall insulation R2.5 ceiling insulation No floor insulation**  
Glazing: **ALM-002-01 A Aluminium B SG Clear**

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

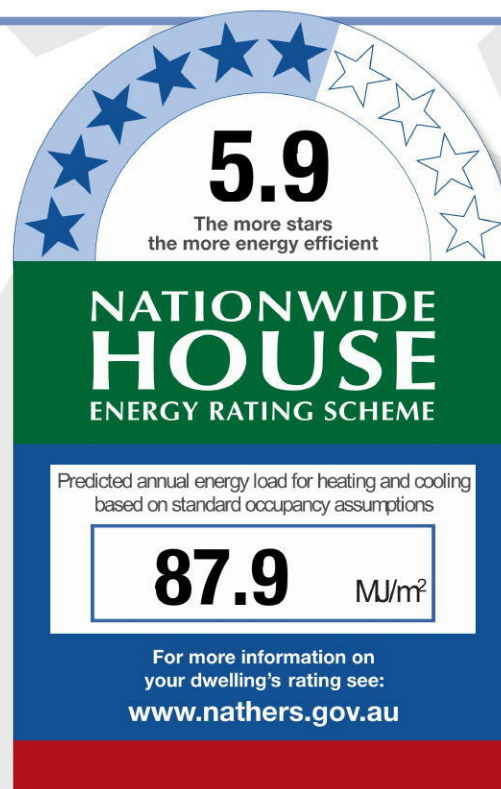
Conditioned: **73.0**  
Unconditioned: **0.0**  
Garage: **0.0**  
TOTAL: **73.0**

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

Heating: **30.2**  
Cooling: **57.6**  
TOTAL: **87.9**

## Plan documents

Plan ref/date: **1714**  
Prepared by: **AC PROJECT GROUP**



### Ceiling penetrations

(see following pages for details)

Sealed: **30**  
Unsealed: **0**  
TOTAL:\*\* **30**

\*\*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: 0004273918

Certificate Date:

15 Oct 2019

★ Star rating:

5.9



## 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

### Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Bedroom 1	ALM-002-01 A	n/a	2800	330	W	No Shading
Bedroom 1	ALM-001-01 A	n/a	2800	750	W	No Shading
Bedroom 1	ALM-002-01 A	n/a	2800	1350	W	No Shading
Bedroom 2	ALM-001-01 A	n/a	2000	750	W	No Shading
Bedroom 2	ALM-002-01 A	n/a	2800	750	W	No Shading
Kitchen/Living	ALM-001-01 A	n/a	2000	750	W	No Shading
Kitchen/Living	ALM-001-01 A	n/a	2100	940	N	No Shading
Kitchen/Living	ALM-002-01 A	n/a	2143	2600	W	No Shading
Kitchen/Living	ALM-002-01 A	n/a	2800	900	N	No Shading

### 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 <sup>2</sup> )	Orientation	Outdoor shade	Indoor shade/diffuser
None Present						

### External wall type

ID	Wall type	Insulation	Wall wrap or foil
EW-1	AAC Cavity Panel Direct Fix	Foil, Anti-glare one side + Bulk Insulation R2	Yes
EW-2	Fibro Cavity Panel Direct Fix	Bulk Insulation R2	No

### External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Bedroom 1	EW-1	1295	2800	S	No	0
Bedroom 1	EW-1	600	2800	W	No	0
Bedroom 1	EW-1	3900	2800	S	No	0
Bedroom 1	EW-1	3095	2800	W	No	0
Bedroom 2	EW-1	3090	2800	W	No	0
Kitchen/Living	EW-1	2495	2800	W	No	0
Kitchen/Living	EW-1	2400	2800	N	No	4100
Kitchen/Living	EW-1	4100	2800	W	No	2400
Kitchen/Living	EW-1	4000	2800	N	No	0
Kitchen/Living	EW-1	2000	2800	E	No	5200
Kitchen/Living	EW-2	2400	2800	E	No	0
Kitchen/Living	EW-1	2095	2800	S	No	0

# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004273918**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**5.9**



## Building features continued

### Internal wall type

Wall type	Area (m <sup>2</sup> )	Insulation	Wall wrap or foil
IW-1 - Cavity wall, direct fix plasterboard, single gap	76.0	No insulation	No
IW-2 - Shaft liner party wall with plaster	28.0	Bulk Insulation both sides of shaft liner R2	No

### Floors

Location	Construction	Area (m <sup>2</sup> )	Sub floor ventilation	Added insulation	Covering
Bedroom 1	Concrete Slab, Unit Below 150mm	12.7	None	No Insulation	Carpet+Rubber Underlay 18mm
Ensuite	Concrete Slab, Unit Below 150mm	3.5	None	No Insulation	Ceramic Tiles 8mm
Bedroom 2	Concrete Slab, Unit Below 150mm	13.2	None	No Insulation	Carpet+Rubber Underlay 18mm
Bath	Concrete Slab, Unit Below 150mm	3.5	None	No Insulation	Ceramic Tiles 8mm
Kitchen/Living	Concrete Slab, Unit Below 150mm	29.6	None	No Insulation	Ceramic Tiles 8mm
Kitchen/Living	Concrete Slab, Unit Below 150mm	10.9	None	No Insulation	Ceramic Tiles 8mm

### Ceiling type

Location	Construction	Added insulation	Roof space above
Bedroom 1	Concrete, Plasterboard	Bulk Insulation R2.5	Yes
Ensuite	Concrete, Plasterboard	Bulk Insulation R2.5	Yes
Bedroom 2	Concrete, Plasterboard	Bulk Insulation R2.5	Yes
Bath	Concrete, Plasterboard	Bulk Insulation R2.5	Yes
Kitchen/Living	Concrete, Plasterboard	Bulk Insulation R2.5	Yes
Kitchen/Living	Concrete, Plasterboard	Bulk Insulation R2.5	Yes

### Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
Bedroom 1	4	Downlights - LED	150	Sealed
Ensuite	1	Downlights - LED	150	Sealed
Ensuite	1	Exhaust Fans	300	Sealed
Bedroom 2	4	Downlights - LED	150	Sealed
Bath	1	Downlights - LED	150	Sealed
Bath	1	Exhaust Fans	300	Sealed
Kitchen/Living	12	Downlights - LED	150	Sealed

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## Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004273918**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**5.9**



### Building features continued

Kitchen/Living	1	Exhaust Fans	300	Sealed
Kitchen/Living	4	Downlights - LED	150	Sealed
Kitchen/Living	1	Exhaust Fans	300	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

# Nationwide House Energy Rating Scheme\* Certificate



Certificate number:

Certificate Date:

★ Star rating:

## Additional information

## Explanatory notes

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# Nationwide House Energy Rating Scheme\* Certificate



Certificate number: **0004273942**

Certificate Date: **15 Oct 2019**

★ Star rating: **8.9**

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: **20920**  
Name: **Terry Chapman**  
Organisation: **Chapman Environmental Services Pty Ltd**  
Email: **terry@basixcertificates.com.au**  
Phone: **0414 265292**  
Declaration of interest: **None**  
Software: **BERS Pro v4.3.0.2d (3.13)**  
AAO: **ABSA**

## Overview

### Dwelling details

Street: **Unit U502, 38-40 Orth St**  
Suburb: **Kingswood**  
State: **NSW** Postcode: **2747**  
Type: **New Dwelling** NCC Class: **2**  
NatHERS climate zone: **28**  
Lot/DP number: **62/36728** Exposure: **Open**

### Key construction and insulation materials

(see following pages for details)

Construction: **Cavity Brick**  
**Concrete, Plasterboard**  
**Concrete Slab, Unit Below**  
Insulation: **No wall insulation**  
**No ceiling insulation**  
**No floor insulation**  
Glazing: **ALM-001-01 A Aluminium A SG Clear**

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

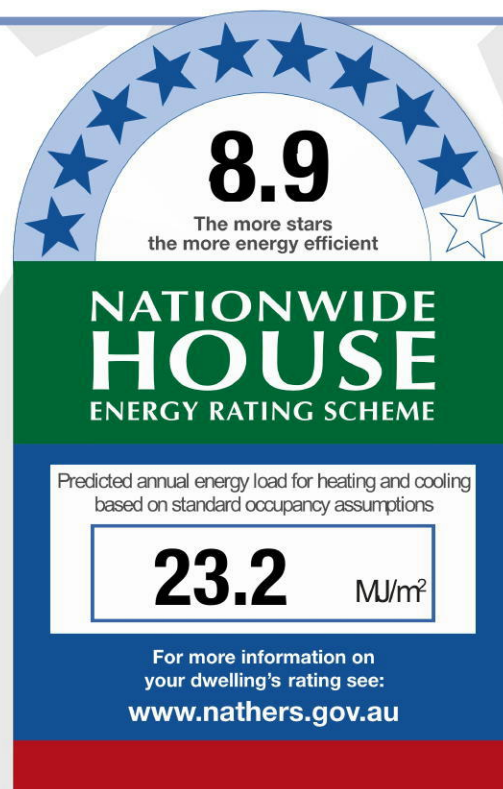
Conditioned: **75.0**  
Unconditioned: **0.0**  
Garage: **0.0**  
TOTAL: **75.0**

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

Heating: **9.4**  
Cooling: **13.8**  
TOTAL: **23.2**

### Plan documents

Plan ref/date: **1714**  
Prepared by: **AC PROJECT GROUP**



### Ceiling penetrations

(see following pages for details)

Sealed: **28**  
Unsealed: **0**  
TOTAL:\*\* **28**

\*\*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  
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# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: 0004273942

Certificate Date:

15 Oct 2019

★ Star rating:

8.9



## 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

### Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Kitchen/Living	ALM-002-01 A	n/a	2143	2600	N	No Shading
Bedroom 1	ALM-001-01 A	n/a	2800	950	N	No Shading
Bedroom 2	ALM-001-01 A	n/a	1200	750	N	No Shading

### 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 (m²)	Orientation	Outdoor shade	Indoor shade/diffuser
None Present						

### External wall type

ID	Wall type	Insulation	Wall wrap or foil
EW-1	Cavity Brick	No insulation	No
EW-2	Fibro Cavity Panel Direct Fix	Bulk Insulation R2	No

### External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Kitchen/Living	EW-1	4100	2800	N	No	2000
Kitchen/Living	EW-1	600	2800	E	No	4700
Kitchen/Living	EW-2	2800	2800	S	No	2700
Bedroom 1	EW-1	2600	2800	W	No	5600
Bedroom 1	EW-1	3200	2800	N	No	0
Bedroom 2	EW-1	1490	2800	N	No	2600

### Internal wall type

Wall type	Area (m²)	Insulation	Wall wrap or foil
IW-1 - Cavity wall, direct fix plasterboard, single gap	71.0	No insulation	No
IW-2 - Shaft liner party wall with plaster	71.0	Bulk Insulation both sides of shaft liner R2	No

## Floors

# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004273942**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**8.9**



## Building features continued

Location	Construction	Area (m <sup>2</sup> )	Sub floor ventilation	Added insulation	Covering
Kitchen/Living	Concrete Slab, Unit Below 150mm	35.9	None	No Insulation	Ceramic Tiles 8mm
Bedroom 1	Concrete Slab, Unit Below 150mm	16.1	None	No Insulation	Carpet+Rubber Underlay 18mm
Ensuite	Concrete Slab, Unit Below 150mm	3.4	None	No Insulation	Ceramic Tiles 8mm
Bath	Concrete Slab, Unit Below 150mm	4.5	None	No Insulation	Ceramic Tiles 8mm
Bedroom 2	Concrete Slab, Unit Below 150mm	12.0	None	No Insulation	Carpet+Rubber Underlay 18mm
Kitchen/Living	Concrete Slab, Unit Below 150mm	3.1	None	No Insulation	Ceramic Tiles 8mm

## Ceiling type

Location	Construction	Added insulation	Roof space above
Kitchen/Living	Concrete, Plasterboard	No insulation	No
Bedroom 1	Concrete, Plasterboard	No insulation	No
Ensuite	Concrete, Plasterboard	No insulation	No
Bath	Concrete, Plasterboard	No insulation	No
Bedroom 2	Concrete, Plasterboard	No insulation	No
Kitchen/Living	Concrete, Plasterboard	No insulation	No

## Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
Kitchen/Living	12	Downlights - LED	150	Sealed
Kitchen/Living	2	Exhaust Fans	300	Sealed
Bedroom 1	5	Downlights - LED	150	Sealed
Ensuite	1	Downlights - LED	150	Sealed
Ensuite	1	Exhaust Fans	300	Sealed
Bath	1	Downlights - LED	150	Sealed
Bath	1	Exhaust Fans	300	Sealed
Bedroom 2	4	Downlights - LED	150	Sealed
Kitchen/Living	1	Downlights - LED	150	Sealed

## Ceiling fans

Location	Number	Diameter (mm)
None Present		

## Roof type

Construction	Added insulation	Roof colour
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## Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004273942**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**8.9**



### Building features continued

None Present

# Nationwide House Energy Rating Scheme\* Certificate



Certificate number:

Certificate Date:

★ Star rating:

## 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.

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# Nationwide House Energy Rating Scheme\* Certificate



Certificate number: **0004273967**

Certificate Date: **15 Oct 2019**

★ Star rating: **7.9**

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: **20920**  
Name: **Terry Chapman**  
Organisation: **Chapman Environmental Services Pty Ltd**  
Email: **terry@basixcertificates.com.au**  
Phone: **0414 265292**  
Declaration of interest: **None**  
Software: **BERS Pro v4.3.0.2d (3.13)**  
AAO: **ABSA**

## Overview

### Dwelling details

Street: **Unit U503, 38-40 Orth St**  
Suburb: **Kingswood**  
State: **NSW** Postcode: **2747**  
Type: **New Dwelling** NCC Class: **2**  
NatHERS climate zone: **28**  
Lot/DP number: **62/36728** Exposure: **Open**

### Key construction and insulation materials

(see following pages for details)

Construction: **AAC Cavity Panel Direct Fix Concrete, Plasterboard Concrete Slab, Unit Below**  
Insulation: **R2.0 wall insulation No ceiling insulation No floor insulation**  
Glazing: **ALM-001-01 A Aluminium A SG Clear**

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

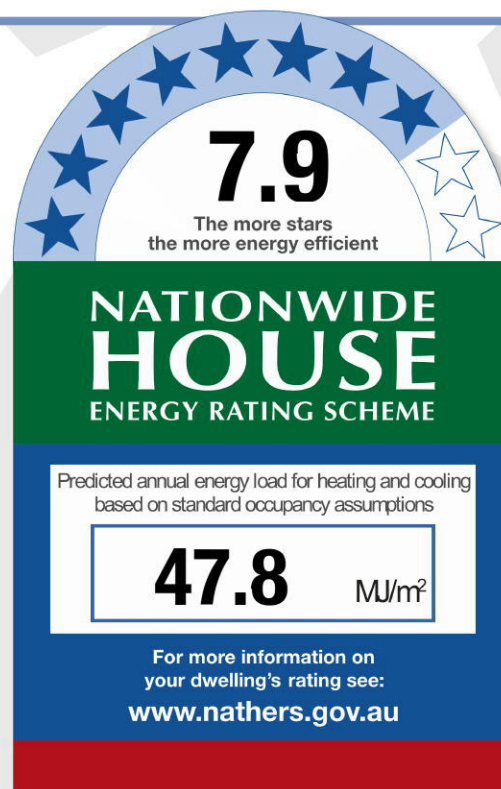
Conditioned: **73.0**  
Unconditioned: **0.0**  
Garage: **0.0**  
TOTAL: **73.0**

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

Heating: **25.1**  
Cooling: **22.7**  
TOTAL: **47.8**

### Plan documents

Plan ref/date: **1714**  
Prepared by: **AC PROJECT GROUP**



### Ceiling penetrations

(see following pages for details)

Sealed: **30**  
Unsealed: **0**  
TOTAL:\*\* **30**

\*\*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: 0004273967

Certificate Date:

15 Oct 2019

★ Star rating:

7.9



## Building features

### Window type and performance value

Window ID	Window type	U-value	SHGC
ALM-001-01 A	ALM-001-01 A Aluminium A SG Clear	6.7	0.57
ALM-002-01 A	ALM-002-01 A Aluminium B SG Clear	6.7	0.70

### Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Bedroom 1	ALM-001-01 A	n/a	2000	750	E	No Shading
Bedroom 2	ALM-001-01 A	n/a	2000	750	E	No Shading
Kitchen/Living	ALM-002-01 A	n/a	2800	1200	N	No Shading
Kitchen/Living	ALM-001-01 A	n/a	2800	925	N	No Shading
Kitchen/Living	ALM-002-01 A	n/a	2143	2600	E	No Shading
Kitchen/Living	ALM-001-01 A	n/a	1200	940	N	No Shading

### 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 (m²)	Orientation	Outdoor shade	Indoor shade/diffuser
None Present						

### External wall type

ID	Wall type	Insulation	Wall wrap or foil
EW-1	AAC Cavity Panel Direct Fix	Foil, Anti-glare one side + Bulk Insulation R2	Yes
EW-2	Fibro Cavity Panel Direct Fix	Bulk Insulation R2	No

### External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Bedroom 1	EW-1	2595	2800	E	No	0
Bedroom 1	EW-2	600	2800	E	No	0
Bedroom 1	EW-2	3495	2800	S	No	2000
Ensuite	EW-2	1895	2800	S	No	2000
Ensuite	EW-2	700	2800	W	No	1200
Bedroom 2	EW-1	3090	2800	E	No	0
Kitchen/Living	EW-1	4000	2800	N	No	0
Kitchen/Living	EW-1	3600	2800	E	No	2600
Kitchen/Living	EW-1	2600	2800	N	No	3600
Kitchen/Living	EW-1	2995	2800	E	No	0
Kitchen/Living	EW-2	1195	2800	S	No	2700

### Internal wall type

# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004273967**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**7.9**



## Building features continued

Wall type	Area (m <sup>2</sup> )	Insulation	Wall wrap or foil
IW-1 - Cavity wall, direct fix plasterboard, single gap	73.0	No insulation	No
IW-2 - Shaft liner party wall with plaster	34.0	Bulk Insulation both sides of shaft liner R2	No

## Floors

Location	Construction	Area (m <sup>2</sup> )	Sub floor ventilation	Added insulation	Covering
Bedroom 1	Concrete Slab, Unit Below 150mm	12.4	None	No Insulation	Carpet+Rubber Underlay 18mm
Ensuite	Concrete Slab, Unit Below 150mm	3.4	None	No Insulation	Ceramic Tiles 8mm
Bedroom 2	Concrete Slab, Unit Below 150mm	10.7	None	No Insulation	Carpet+Rubber Underlay 18mm
Bath	Concrete Slab, Unit Below 150mm	4.1	None	No Insulation	Ceramic Tiles 8mm
Kitchen/Living	Concrete Slab, Unit Below 150mm	31.5	None	No Insulation	Ceramic Tiles 8mm
Kitchen/Living	Concrete Slab, Unit Below 150mm	10.5	None	No Insulation	Ceramic Tiles 8mm

## Ceiling type

Location	Construction	Added insulation	Roof space above
Bedroom 1	Concrete, Plasterboard	No insulation	No
Ensuite	Concrete, Plasterboard	No insulation	No
Bedroom 2	Concrete, Plasterboard	No insulation	No
Bath	Concrete, Plasterboard	No insulation	No
Kitchen/Living	Concrete, Plasterboard	No insulation	No
Kitchen/Living	Concrete, Plasterboard	No insulation	No

## Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
Bedroom 1	4	Downlights - LED	150	Sealed
Ensuite	1	Downlights - LED	150	Sealed
Ensuite	1	Exhaust Fans	300	Sealed
Bedroom 2	4	Downlights - LED	150	Sealed
Bath	1	Downlights - LED	150	Sealed
Bath	1	Exhaust Fans	300	Sealed
Kitchen/Living	12	Downlights - LED	150	Sealed
Kitchen/Living	1	Exhaust Fans	300	Sealed
Kitchen/Living	4	Downlights - LED	150	Sealed
Kitchen/Living	1	Exhaust Fans	300	Sealed

## Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004273967**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**7.9**



### Building features continued

#### Ceiling fans

Location	Number	Diameter (mm)
None Present		

#### Roof type

Construction	Added insulation	Roof colour
None Present		

# Nationwide House Energy Rating Scheme\* Certificate



Certificate number:

Certificate Date:

★ Star rating:

## Additional information

## Explanatory notes

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# Nationwide House Energy Rating Scheme\* Certificate



Certificate number: **0004274007**

Certificate Date: **15 Oct 2019**

★ Star rating: **8.2**

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: **20920**  
Name: **Terry Chapman**  
Organisation: **Chapman Environmental Services Pty Ltd**  
Email: **terry@basixcertificates.com.au**  
Phone: **0414 265292**  
Declaration of interest: **None**  
Software: **BERS Pro v4.3.0.2d (3.13)**  
AAO: **ABSA**

## Overview

### Dwelling details

Street: **Unit U504, 38-40 Orth St**  
Suburb: **Kingswood**  
State: **NSW** Postcode: **2747**  
Type: **New Dwelling** NCC Class: **2**  
NatHERS climate zone: **28**  
Lot/DP number: **62/36728** Exposure: **Open**

### Key construction and insulation materials

(see following pages for details)

Construction: **AAC Cavity Panel Direct Fix Concrete, Plasterboard Concrete Slab, Unit Below**  
Insulation: **R2.0 wall insulation No ceiling insulation No floor insulation**  
Glazing: **ALM-001-01 A Aluminium A SG Clear**

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

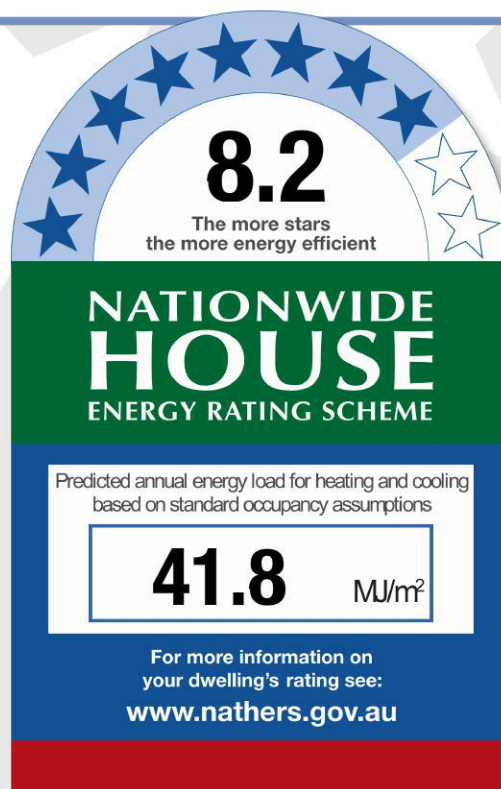
Conditioned: **74.0**  
Unconditioned: **0.0**  
Garage: **0.0**  
TOTAL: **74.0**

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

Heating: **25.4**  
Cooling: **16.4**  
TOTAL: **41.8**

### Plan documents

Plan ref/date: **1714**  
Prepared by: **AC PROJECT GROUP**



### Ceiling penetrations

(see following pages for details)

Sealed: **30**  
Unsealed: **0**  
TOTAL:\*\* **30**

\*\*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: 0004274007

Certificate Date:

15 Oct 2019

★ Star rating:

8.2



## Building features

### Window type and performance value

Window ID	Window type	U-value	SHGC
ALM-001-01 A	ALM-001-01 A Aluminium A SG Clear	6.7	0.57
ALM-002-01 A	ALM-002-01 A Aluminium B SG Clear	6.7	0.70

### Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Bedroom 1	ALM-001-01 A	n/a	2000	750	W	No Shading
Bedroom 2	ALM-001-01 A	n/a	2000	750	W	No Shading
Kitchen/Living	ALM-001-01 A	n/a	1200	940	N	No Shading
Kitchen/Living	ALM-002-01 A	n/a	2143	2600	W	No Shading
Kitchen/Living	ALM-002-01 A	n/a	2800	750	N	No Shading

### 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 (m²)	Orientation	Outdoor shade	Indoor shade/diffuser
None Present						

### External wall type

ID	Wall type	Insulation	Wall wrap or foil
EW-1	Fibro Cavity Panel Direct Fix	Bulk Insulation R2	No
EW-2	AAC Cavity Panel Direct Fix	Foil, Anti-glare one side + Bulk Insulation R2	Yes

### External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Bedroom 1	EW-1	3795	2800	S	No	1800
Bedroom 1	EW-2	3195	2800	W	No	0
Ensuite	EW-1	2090	2800	S	No	1800
Bedroom 2	EW-2	3090	2800	W	No	0
Kitchen/Living	EW-2	2595	2800	W	No	0
Kitchen/Living	EW-2	3100	2800	N	No	3400
Kitchen/Living	EW-2	3400	2800	W	No	3100
Kitchen/Living	EW-2	4000	2800	N	No	0
Entry hall	EW-1	1195	2800	S	No	1800

### Internal wall type

Wall type	Area (m²)	Insulation	Wall wrap or foil
IW-1 - Cavity wall, direct fix plasterboard, single gap	77.0	No insulation	No
IW-2 - Shaft liner party wall with	34.0	Bulk Insulation both sides of shaft liner R2	No

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# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004274007**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**8.2**



## Building features continued

plaster

### Floors

Location	Construction	Area (m <sup>2</sup> )	Sub floor ventilation	Added insulation	Covering
Bedroom 1	Concrete Slab, Unit Below 150mm	13.7	None	No Insulation	Carpet+Rubber Underlay 18mm
Ensuite	Concrete Slab, Unit Below 150mm	3.9	None	No Insulation	Ceramic Tiles 8mm
Bedroom 2	Concrete Slab, Unit Below 150mm	11.3	None	No Insulation	Carpet+Rubber Underlay 18mm
Bath	Concrete Slab, Unit Below 150mm	4.0	None	No Insulation	Ceramic Tiles 8mm
Kitchen/Living	Concrete Slab, Unit Below 150mm	30.7	None	No Insulation	Ceramic Tiles 8mm
Entry hall	Concrete Slab, Unit Below 150mm	10.7	None	No Insulation	Ceramic Tiles 8mm

### Ceiling type

Location	Construction	Added insulation	Roof space above
Bedroom 1	Concrete, Plasterboard	No insulation	No
Ensuite	Concrete, Plasterboard	No insulation	No
Bedroom 2	Concrete, Plasterboard	No insulation	No
Bath	Concrete, Plasterboard	No insulation	No
Kitchen/Living	Concrete, Plasterboard	No insulation	No
Entry hall	Concrete, Plasterboard	No insulation	No

### Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
Bedroom 1	4	Downlights - LED	150	Sealed
Ensuite	1	Downlights - LED	150	Sealed
Ensuite	1	Exhaust Fans	300	Sealed
Bedroom 2	4	Downlights - LED	150	Sealed
Bath	1	Downlights - LED	150	Sealed
Bath	1	Exhaust Fans	300	Sealed
Kitchen/Living	12	Downlights - LED	150	Sealed
Kitchen/Living	1	Exhaust Fans	300	Sealed
Entry hall	4	Downlights - LED	150	Sealed
Entry hall	1	Exhaust Fans	300	Sealed

### Ceiling fans

Location	Number	Diameter (mm)
None Present		

## Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004274007**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**8.2**



### Building features continued

#### Roof type

Construction	Added insulation	Roof colour
None Present		

# Nationwide House Energy Rating Scheme\* Certificate



Certificate number:

Certificate Date:

★ Star rating:

## Additional information

## Explanatory notes

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For more details see [www.nathers.gov.au](http://www.nathers.gov.au)

# Nationwide House Energy Rating Scheme\* Certificate



Certificate number: **0004274031**

Certificate Date: **15 Oct 2019**

★ Star rating: **8.8**

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: **20920**  
Name: **Terry Chapman**  
Organisation: **Chapman Environmental Services Pty Ltd**  
Email: **terry@basixcertificates.com.au**  
Phone: **0414 265292**  
Declaration of interest: **None**  
Software: **BERS Pro v4.3.0.2d (3.13)**  
AAO: **ABSA**

## Overview

### Dwelling details

Street: **Unit U505, 38-40 Orth St**  
Suburb: **Kingswood**  
State: **NSW** Postcode: **2747**  
Type: **New Dwelling** NCC Class: **2**  
NatHERS climate zone: **28**  
Lot/DP number: **62/36728** Exposure: **Open**

### Key construction and insulation materials

(see following pages for details)

Construction: **Cavity Brick**  
**Concrete, Plasterboard**  
**Concrete Slab, Unit Below**  
Insulation: **No wall insulation**  
**No ceiling insulation**  
**No floor insulation**  
Glazing: **ALM-001-01 A Aluminium A SG Clear**

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

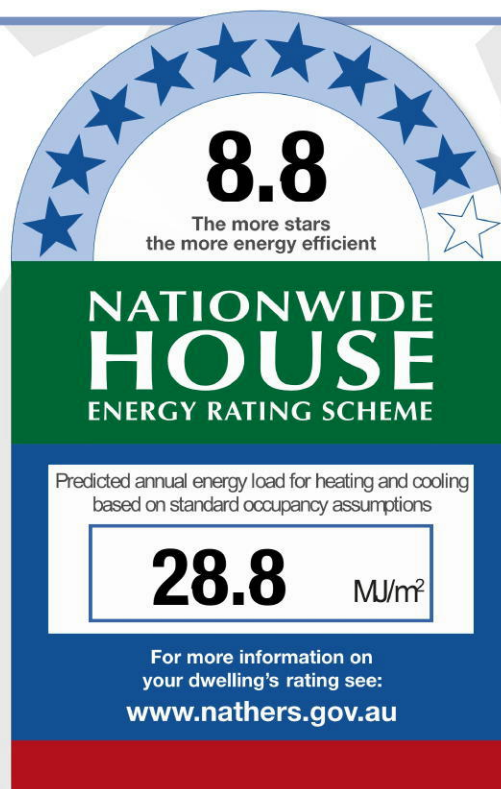
Conditioned: **76.0**  
Unconditioned: **0.0**  
Garage: **0.0**  
TOTAL: **76.0**

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

Heating: **9.5**  
Cooling: **19.3**  
TOTAL: **28.8**

### Plan documents

Plan ref/date: **1714**  
Prepared by: **AC PROJECT GROUP**



### Ceiling penetrations

(see following pages for details)

Sealed: **28**  
Unsealed: **0**  
TOTAL:\*\* **28**

\*\*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: 0004274031

Certificate Date:

15 Oct 2019

★ Star rating:

8.8



## 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

### Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Kitchen/Living	ALM-002-01 A	n/a	2143	2600	N	No Shading
Bedroom 1	ALM-001-01 A	n/a	2800	950	N	No Shading
Bedroom 1	ALM-001-01 A	n/a	2800	1200	N	No Shading
Bedroom 2	ALM-001-01 A	n/a	1200	750	N	No Shading

### 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 (m²)	Orientation	Outdoor shade	Indoor shade/diffuser
None Present						

### External wall type

ID	Wall type	Insulation	Wall wrap or foil
EW-1	Fibro Cavity Panel Direct Fix	Bulk Insulation R2	No
EW-2	Cavity Brick	No insulation	No

### External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Kitchen/Living	EW-1	4100	2800	S	No	2700
Kitchen/Living	EW-2	600	2800	W	No	4700
Kitchen/Living	EW-2	4100	2800	N	No	2000
Bedroom 1	EW-2	3200	2800	N	No	0
Bedroom 1	EW-2	2600	2800	E	No	5600
Bedroom 2	EW-2	1490	2800	N	No	2600

### Internal wall type

Wall type	Area (m²)	Insulation	Wall wrap or foil
IW-1 - Shaft liner party wall with plaster	67.0	Bulk Insulation both sides of shaft liner R2	No
IW-2 - Cavity wall, direct fix plasterboard, single gap	71.0	No insulation	No

## Floors

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# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004274031**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**8.8**



## Building features continued

Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Kitchen/Living	Concrete Slab, Unit Below 150mm	35.3	None	No Insulation	Ceramic Tiles 8mm
Bedroom 1	Concrete Slab, Unit Below 150mm	16.1	None	No Insulation	Carpet+Rubber Underlay 18mm
Ensuite	Concrete Slab, Unit Below 150mm	3.4	None	No Insulation	Ceramic Tiles 8mm
Bath	Concrete Slab, Unit Below 150mm	5.5	None	No Insulation	Ceramic Tiles 8mm
Bedroom 2	Concrete Slab, Unit Below 150mm	12.1	None	No Insulation	Carpet+Rubber Underlay 18mm
Kitchen/Living	Concrete Slab, Unit Below 150mm	3.1	None	No Insulation	Ceramic Tiles 8mm

## Ceiling type

Location	Construction	Added insulation	Roof space above
Kitchen/Living	Concrete, Plasterboard	No insulation	No
Bedroom 1	Concrete, Plasterboard	No insulation	No
Ensuite	Concrete, Plasterboard	No insulation	No
Bath	Concrete, Plasterboard	No insulation	No
Bedroom 2	Concrete, Plasterboard	No insulation	No
Kitchen/Living	Concrete, Plasterboard	No insulation	No

## Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
Kitchen/Living	12	Downlights - LED	150	Sealed
Kitchen/Living	2	Exhaust Fans	300	Sealed
Bedroom 1	5	Downlights - LED	150	Sealed
Ensuite	1	Downlights - LED	150	Sealed
Ensuite	1	Exhaust Fans	300	Sealed
Bath	1	Downlights - LED	150	Sealed
Bath	1	Exhaust Fans	300	Sealed
Bedroom 2	4	Downlights - LED	150	Sealed
Kitchen/Living	1	Downlights - LED	150	Sealed

## Ceiling fans

Location	Number	Diameter (mm)
None Present		

## Roof type

Construction	Added	Roof colour
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## Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004274031**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**8.8**



### Building features continued

#### insulation

None Present

# Nationwide House Energy Rating Scheme\* Certificate



Certificate number:

Certificate Date:

★ Star rating:

## Additional information

## Explanatory notes

### About this report

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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.

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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.

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### Contact

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# Nationwide House Energy Rating Scheme\* Certificate



Certificate number: **0004274049**

Certificate Date: **15 Oct 2019**

★ Star rating: **8.4**

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: **20920**  
Name: **Terry Chapman**  
Organisation: **Chapman Environmental Services Pty Ltd**  
Email: **terry@basixcertificates.com.au**  
Phone: **0414 265292**  
Declaration of interest: **None**  
Software: **BERS Pro v4.3.0.2d (3.13)**  
AAO: **ABSA**

## Overview

### Dwelling details

Street: **Unit U506, 38-40 Orth St**  
Suburb: **Kingswood**  
State: **NSW** Postcode: **2747**  
Type: **New Dwelling** NCC Class: **2**  
NatHERS climate zone: **28**  
Lot/DP number: **62/36728** Exposure: **Open**

### Key construction and insulation materials

(see following pages for details)

Construction: **AAC Cavity Panel Direct Fix Concrete, Plasterboard Concrete Slab, Unit Below**  
Insulation: **R2.0 wall insulation No ceiling insulation No floor insulation**  
Glazing: **ALM-001-01 A Aluminium A SG Clear**

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

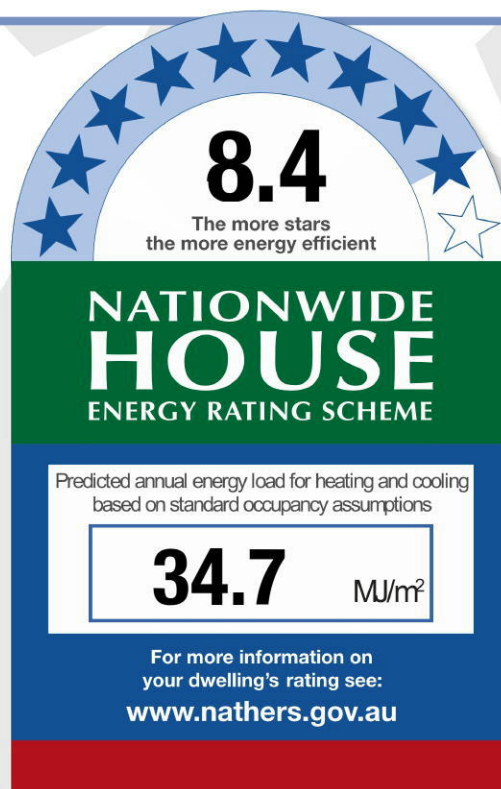
Conditioned: **96.0**  
Unconditioned: **0.0**  
Garage: **0.0**  
TOTAL: **96.0**

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

Heating: **9.9**  
Cooling: **24.8**  
TOTAL: **34.7**

## Plan documents

Plan ref/date: **1714**  
Prepared by: **AC PROJECT GROUP**



### Ceiling penetrations

(see following pages for details)

Sealed: **34**  
Unsealed: **0**  
TOTAL:\*\* **34**

\*\*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.**

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# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: 0004274049

Certificate Date:

15 Oct 2019

★ Star rating:

8.4



## 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

### Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Kitchen/Living	ALM-002-01 A	n/a	2143	2600	N	No Shading
Bedroom 3	ALM-001-01 A	n/a	2000	750	E	No Shading
Ensuite	ALM-001-01 A	n/a	2000	750	E	No Shading
Bedroom 2	ALM-001-01 A	n/a	2000	750	N	No Shading
Bedroom 2	ALM-001-01 A	n/a	2000	750	E	No Shading
Bedroom 2	ALM-001-01 A	n/a	2000	750	E	No Shading
Bedroom 1	ALM-001-01 A	n/a	2000	750	E	No Shading

### 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 (m²)	Orientation	Outdoor shade	Indoor shade/diffuser
None Present						

### External wall type

ID	Wall type	Insulation	Wall wrap or foil
EW-1	AAC Cavity Panel Direct Fix	Bulk Insulation R2	No
EW-2	Fibro Cavity Panel Direct Fix	Bulk Insulation R2	No

### External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Kitchen/Living	EW-1	4295	2800	N	No	2400
Bedroom 3	EW-1	3990	2800	E	No	0
Ensuite	EW-1	3090	2800	E	No	0
Bedroom 2	EW-1	2400	2800	W	No	4300
Bedroom 2	EW-1	3200	2800	N	No	0
Bedroom 2	EW-1	4495	2800	E	No	0
Bedroom 1	EW-1	3195	2800	E	No	0
Kitchen/Living	EW-2	2595	2800	W	No	3200

### Internal wall type

Wall type	Area (m²)	Insulation	Wall wrap or foil
IW-1 - Cavity wall, direct fix plasterboard, single gap	90.0	No insulation	No

# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004274049**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**8.4**



## Building features continued

IW-2 - Shaft liner party wall with plaster 48.0 Bulk Insulation both sides of shaft liner R2 No

## Floors

Location	Construction	Area (m <sup>2</sup> )	Sub floor ventilation	Added insulation	Covering
Kitchen/Living	Concrete Slab, Unit Below 150mm	39.5	None	No Insulation	Ceramic Tiles 8mm
Bedroom 3	Concrete Slab, Unit Below 150mm	11.6	None	No Insulation	Carpet+Rubber Underlay 18mm
Small bath	Concrete Slab, Unit Below 150mm	3.6	None	No Insulation	Ceramic Tiles 8mm
Ensuite	Concrete Slab, Unit Below 150mm	5.9	None	No Insulation	Ceramic Tiles 8mm
Bedroom 2	Concrete Slab, Unit Below 150mm	16.9	None	No Insulation	Carpet+Rubber Underlay 18mm
Bedroom 1	Concrete Slab, Unit Below 150mm	13.2	None	No Insulation	Carpet+Rubber Underlay 18mm
Kitchen/Living	Concrete Slab, Unit Below 150mm	5.1	None	No Insulation	Ceramic Tiles 8mm

## Ceiling type

Location	Construction	Added insulation	Roof space above
Kitchen/Living	Concrete, Plasterboard	No insulation	No
Bedroom 3	Concrete, Plasterboard	No insulation	No
Small bath	Concrete, Plasterboard	No insulation	No
Ensuite	Concrete, Plasterboard	No insulation	No
Bedroom 2	Concrete, Plasterboard	No insulation	No
Bedroom 1	Concrete, Plasterboard	No insulation	No
Kitchen/Living	Concrete, Plasterboard	No insulation	No

## Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
Kitchen/Living	13	Downlights - LED	150	Sealed
Kitchen/Living	1	Exhaust Fans	300	Sealed
Bedroom 3	4	Downlights - LED	150	Sealed
Small bath	1	Downlights - LED	150	Sealed
Small bath	1	Exhaust Fans	300	Sealed
Ensuite	1	Downlights - LED	150	Sealed
Ensuite	1	Exhaust Fans	300	Sealed
Bedroom 2	5	Downlights - LED	150	Sealed
Bedroom 1	4	Downlights - LED	150	Sealed
Kitchen/Living	2	Downlights - LED	150	Sealed
Kitchen/Living	1	Exhaust Fans	300	Sealed

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## Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004274049**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**8.4**



### Building features continued

#### Ceiling fans

Location	Number	Diameter (mm)
None Present		

#### Roof type

Construction	Added insulation	Roof colour
None Present		

# Nationwide House Energy Rating Scheme\* Certificate



Certificate number:

Certificate Date:

★ Star rating:

## Additional information

## Explanatory notes

### About this report

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# Nationwide House Energy Rating Scheme\* Certificate



Certificate number: **0004274080**

Certificate Date: **15 Oct 2019**

★ Star rating: **6.7**

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: **20920**  
Name: **Terry Chapman**  
Organisation: **Chapman Environmental Services Pty Ltd**  
Email: **terry@basixcertificates.com.au**  
Phone: **0414 265292**  
Declaration of interest: **None**  
Software: **BERS Pro v4.3.0.2d (3.13)**  
AAO: **ABSA**

## Overview

### Dwelling details

Street: **Unit U507, 38-40 Orth St**  
Suburb: **Kingswood**  
State: **NSW** Postcode: **2747**  
Type: **New Dwelling** NCC Class: **2**  
NatHERS climate zone: **28**  
Lot/DP number: **62/36728** Exposure: **Open**

### Key construction and insulation materials

(see following pages for details)

Construction: **AAC Cavity Panel Direct Fix Concrete, Plasterboard Concrete Slab, Unit Below**  
Insulation: **R2.0 wall insulation No ceiling insulation No floor insulation**  
Glazing: **ALM-001-01 A Aluminium A SG Clear**

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

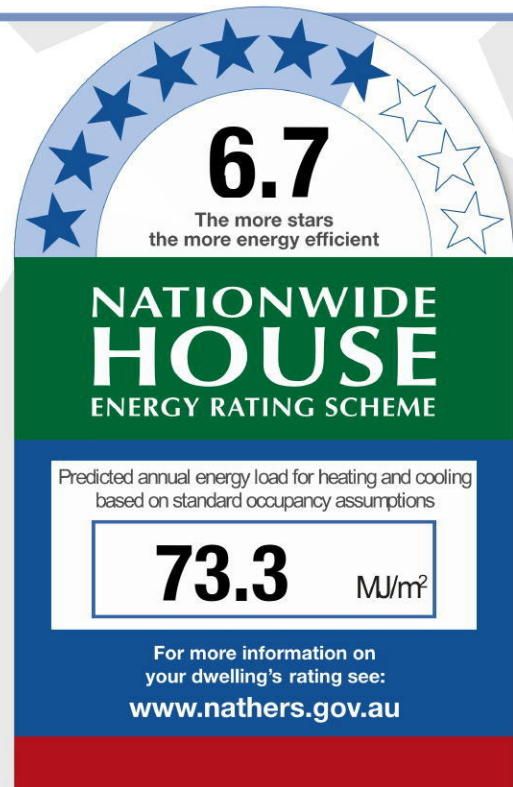
Conditioned: **52.0**  
Unconditioned: **0.0**  
Garage: **0.0**  
TOTAL: **52.0**

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

Heating: **44.3**  
Cooling: **29.1**  
TOTAL: **73.3**

## Plan documents

Plan ref/date: **1714**  
Prepared by: **AC PROJECT GROUP**



### Ceiling penetrations

(see following pages for details)

Sealed: **20**  
Unsealed: **0**  
TOTAL:\*\* **20**

\*\*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.

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# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: 0004274080

Certificate Date:

15 Oct 2019

★ Star rating:

6.7



## Building features

### Window type and performance value

Window ID	Window type	U-value	SHGC
ALM-001-01 A	ALM-001-01 A Aluminium A SG Clear	6.7	0.57
ALM-002-01 A	ALM-002-01 A Aluminium B SG Clear	6.7	0.70

### Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Kitchen/Living	ALM-001-01 A	n/a	2000	750	E	No Shading
Kitchen/Living	ALM-001-01 A	n/a	2000	750	E	No Shading
Kitchen/Living	ALM-002-01 A	n/a	2143	2600	S	No Shading
Bedroom 2	ALM-002-01 A	n/a	2143	1800	E	No Shading

### 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 <sup>2</sup> )	Orientation	Outdoor shade	Indoor shade/diffuser
None Present						

### External wall type

ID	Wall type	Insulation	Wall wrap or foil
EW-1	Fibro Cavity Panel Direct Fix	Bulk Insulation R2	No
EW-2	AAC Cavity Panel Direct Fix	Bulk Insulation R2	No

### External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Kitchen/Living	EW-1	1700	2800	N	No	0
Kitchen/Living	EW-2	3900	2800	E	No	0
Kitchen/Living	EW-2	3995	2800	S	No	2500
Kitchen/Living	EW-1	4395	2800	W	No	2000
Bedroom 2	EW-2	2500	2800	E	No	4000
Ensuite	EW-1	995	2800	W	No	2000

### Internal wall type

Wall type	Area (m <sup>2</sup> )	Insulation	Wall wrap or foil
IW-1 - Shaft liner party wall with plaster	46.0	Bulk Insulation both sides of shaft liner R2	No
IW-2 - Cavity wall, direct fix plasterboard, single gap	24.0	No insulation	No

## Floors

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# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004274080**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**6.7**

## Building features continued

Location	Construction	Area (m <sup>2</sup> )	Sub floor ventilation	Added insulation	Covering
Kitchen/Living	Concrete Slab, Unit Below 150mm	36.1	None	No Insulation	Ceramic Tiles 8mm
Bedroom 2	Concrete Slab, Unit Below 150mm	11.5	None	No Insulation	Carpet+Rubber Underlay 18mm
Ensuite	Concrete Slab, Unit Below 150mm	4.0	None	No Insulation	Ceramic Tiles 8mm

## Ceiling type

Location	Construction	Added insulation	Roof space above
Kitchen/Living	Concrete, Plasterboard	No insulation	No
Bedroom 2	Concrete, Plasterboard	No insulation	No
Ensuite	Concrete, Plasterboard	No insulation	No

## Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
Kitchen/Living	12	Downlights - LED	150	Sealed
Kitchen/Living	2	Exhaust Fans	300	Sealed
Bedroom 2	4	Downlights - LED	150	Sealed
Ensuite	1	Downlights - LED	150	Sealed
Ensuite	1	Exhaust Fans	300	Sealed

## Ceiling fans

Location	Number	Diameter (mm)
None Present		

## Roof type

Construction	Added insulation	Roof colour
None Present		

# Nationwide House Energy Rating Scheme\* Certificate



Certificate number:

Certificate Date:

★ Star rating:

## Additional information

## Explanatory notes

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# Nationwide House Energy Rating Scheme\* Certificate



Certificate number: **0004274114**

Certificate Date: **15 Oct 2019**

★ Star rating: **7.6**

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: **20920**

Name: **Terry Chapman**

Organisation: **Chapman Environmental Services Pty Ltd**

Email: **terry@basixcertificates.com.au**

Phone: **0414 265292**

Declaration  
of interest: **None**

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

AAO: **ABSA**

## Overview

### Dwelling details

Street: **Unit U508, 38-40 Orth St**

Suburb: **Kingswood**

State: **NSW**

Postcode: **2747**

Type: **New Dwelling**

NCC Class: **2**

NatHERS

climate zone: **28**

Lot/DP

number: **62/36728**

Exposure: **Open**

### Key construction and insulation materials

(see following pages for details)

Construction: **AAC Cavity Panel Direct Fix  
Concrete, Plasterboard  
Concrete Slab, Unit Below**

Insulation: **R2.0 wall insulation  
No ceiling insulation  
No floor insulation**

Glazing: **ALM-001-01 A Aluminium A SG Clear**

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

Conditioned: **70.0**

Unconditioned: **4.0**

Garage: **0.0**

TOTAL: **73.0**

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

Heating: **33.4**

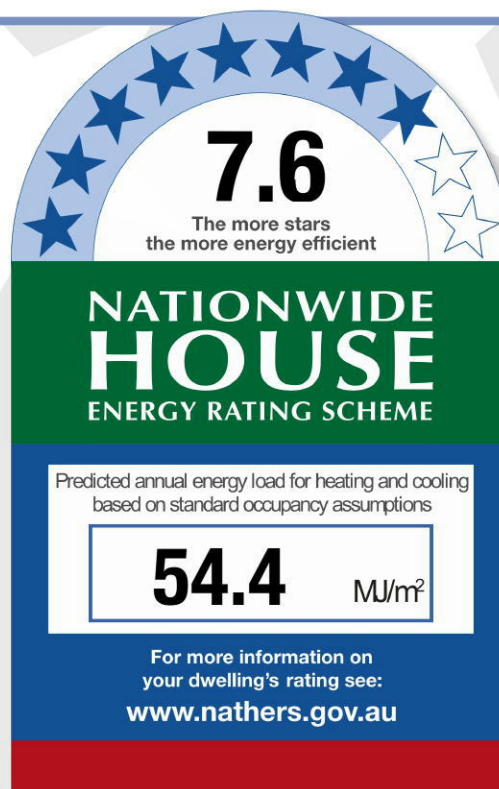
Cooling: **21.0**

TOTAL: **54.4**

### Plan documents

Plan ref/date: **1714**

Prepared by: **AC PROJECT GROUP**



### Ceiling penetrations

(see following pages for details)

Sealed: **27**

Unsealed: **0**

TOTAL:\*\* **27**

\*\*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: 0004274114

Certificate Date:

15 Oct 2019

★ Star rating:

7.6



## 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

### Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Kitchen/Living	ALM-002-01 A	n/a	2143	2600	E	No Shading
Bedroom 1	ALM-001-01 A	n/a	2000	750	E	No Shading
Bedroom 1	ALM-001-01 A	n/a	2000	750	S	No Shading
Ensuite	ALM-001-01 A	n/a	2000	750	S	No Shading
Bath	ALM-001-01 A	n/a	2000	750	S	No Shading
Bedroom 2	ALM-001-01 A	n/a	2000	750	S	No Shading

### 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 (m²)	Orientation	Outdoor shade	Indoor shade/diffuser
None Present						

### External wall type

ID	Wall type	Insulation	Wall wrap or foil
EW-1	Fibro Cavity Panel Direct Fix	Bulk Insulation R2	No
EW-2	AAC Cavity Panel Direct Fix	Bulk Insulation R2	No

### External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Kitchen/Living	EW-1	1800	2800	N	No	0
Kitchen/Living	EW-2	1300	2800	N	No	0
Kitchen/Living	EW-2	4095	2800	E	No	2400
Bedroom 1	EW-2	2400	2800	N	No	4100
Bedroom 1	EW-2	3000	2800	E	No	0
Bedroom 1	EW-2	3495	2800	S	No	0
Ensuite	EW-2	2090	2800	S	No	0
Bath	EW-2	1990	2800	S	No	0
Bedroom 2	EW-2	3695	2800	S	No	0
Bedroom 2	EW-2	2300	2800	W	No	0

### Internal wall type

Wall type	Area (m²)	Insulation	Wall wrap or foil
	42.0	Bulk Insulation both sides of shaft liner R2	No

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# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004274114**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**7.6**

## Building features continued

IW-1 - Shaft liner party wall with plaster

IW-2 - Cavity wall, direct fix plasterboard, single gap	59.0	No insulation	No
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## Floors

Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Kitchen/Living	Concrete Slab, Unit Below 150mm	41.0	None	No Insulation	Ceramic Tiles 8mm
Bedroom 1	Concrete Slab, Unit Below 150mm	12.4	None	No Insulation	Carpet+Rubber Underlay 18mm
Ensuite	Concrete Slab, Unit Below 150mm	3.7	None	No Insulation	Ceramic Tiles 8mm
Bath	Concrete Slab, Unit Below 150mm	3.5	None	No Insulation	Ceramic Tiles 8mm
Bedroom 2	Concrete Slab, Unit Below 150mm	10.8	None	No Insulation	Carpet+Rubber Underlay 18mm
Hall	Concrete Slab, Unit Below 150mm	1.9	None	No Insulation	Ceramic Tiles 8mm

## Ceiling type

Location	Construction	Added insulation	Roof space above
Kitchen/Living	Concrete, Plasterboard	No insulation	No
Bedroom 1	Concrete, Plasterboard	No insulation	No
Ensuite	Concrete, Plasterboard	No insulation	No
Bath	Concrete, Plasterboard	No insulation	No
Bedroom 2	Concrete, Plasterboard	No insulation	No
Hall	Concrete, Plasterboard	No insulation	No

## Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
Kitchen/Living	12	Downlights - LED	150	Sealed
Kitchen/Living	2	Exhaust Fans	300	Sealed
Bedroom 1	4	Downlights - LED	150	Sealed
Ensuite	1	Downlights - LED	150	Sealed
Ensuite	1	Exhaust Fans	300	Sealed
Bath	1	Downlights - LED	150	Sealed
Bath	1	Exhaust Fans	300	Sealed
Bedroom 2	4	Downlights - LED	150	Sealed
Hall	1	Downlights - LED	150	Sealed

## Ceiling fans

## Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004274114**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**7.6**



### Building features continued

Location	Number	Diameter (mm)
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None Present		
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### Roof type

Construction	Added insulation	Roof colour
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None Present		
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# Nationwide House Energy Rating Scheme\* Certificate



Certificate number:

Certificate Date:

★ Star rating:

## 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.

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### Contact

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# Nationwide House Energy Rating Scheme\* Certificate



Certificate number: **0004274130**

Certificate Date: **15 Oct 2019**

★ Star rating: **6.9**

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: **20920**  
Name: **Terry Chapman**  
Organisation: **Chapman Environmental Services Pty Ltd**  
Email: **terry@basixcertificates.com.au**  
Phone: **0414 265292**  
Declaration of interest: **None**  
Software: **BERS Pro v4.3.0.2d (3.13)**  
AAO: **ABSA**

## Overview

### Dwelling details

Street: **Unit U509, 38-40 Orth St**  
Suburb: **Kingswood**  
State: **NSW** Postcode: **2747**  
Type: **New Dwelling** NCC Class: **2**  
NatHERS climate zone: **28**  
Lot/DP number: **62/36728** Exposure: **Open**

### Key construction and insulation materials

(see following pages for details)

Construction: **Fibro Cavity Panel Direct Fix Concrete, Plasterboard Concrete Slab, Unit Below**  
Insulation: **R2.0 wall insulation No ceiling insulation No floor insulation**  
Glazing: **ALM-001-01 A Aluminium A SG Clear**

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

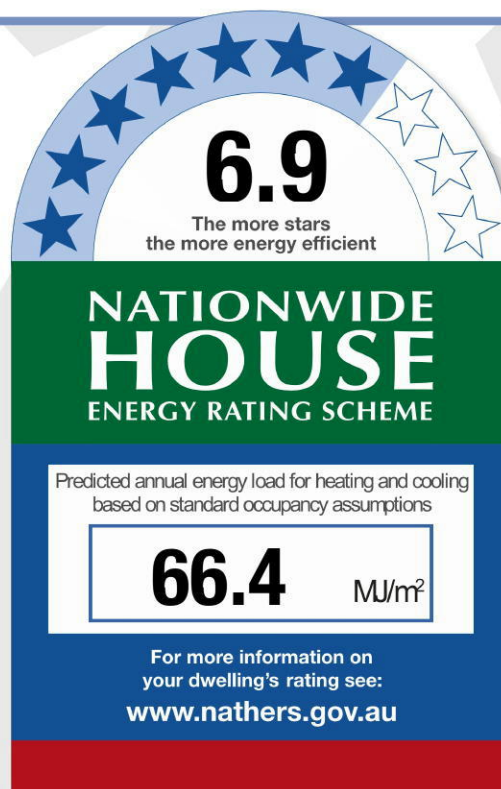
Conditioned: **69.0**  
Unconditioned: **0.0**  
Garage: **0.0**  
TOTAL: **69.0**

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

Heating: **40.6**  
Cooling: **25.9**  
TOTAL: **66.4**

### Plan documents

Plan ref/date: **1714**  
Prepared by: **AC PROJECT GROUP**



### Ceiling penetrations

(see following pages for details)

Sealed: **25**  
Unsealed: **0**  
TOTAL:\*\* **25**

\*\*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.

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



# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: 0004274130

Certificate Date:

15 Oct 2019

★ Star rating:

6.9



## Building features

### Window type and performance value

Window ID	Window type	U-value	SHGC
ALM-001-01 A	ALM-001-01 A Aluminium A SG Clear	6.7	0.57
ALM-002-01 A	ALM-002-01 A Aluminium B SG Clear	6.7	0.70

### Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Bedroom 1	ALM-001-01 A	n/a	2000	750	W	No Shading
Bedroom 1	ALM-001-01 A	n/a	2000	750	W	No Shading
Kitchen/Living	ALM-002-01 A	n/a	2100	2600	S	No Shading
Kitchen/Living	ALM-001-01 A	n/a	2000	750	W	No Shading
Kitchen/Living	ALM-001-01 A	n/a	2000	750	W	No Shading

### 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 (m²)	Orientation	Outdoor shade	Indoor shade/diffuser
None Present						

### External wall type

ID	Wall type	Insulation	Wall wrap or foil
EW-1	AAC Cavity Panel Direct Fix	Bulk Insulation R2	No
EW-2	Fibro Cavity Panel Direct Fix	Bulk Insulation R2	No

### External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Bedroom 1	EW-1	2800	2800	S	No	0
Bedroom 1	EW-1	4295	2800	W	No	0
Ensuite	EW-2	3500	2800	N	No	2300
Ensuite	EW-2	1600	2800	E	No	5600
Ensuite	EW-2	2695	2800	W	No	0
Kitchen/Living	EW-2	795	2800	E	No	1900
Kitchen/Living	EW-1	4400	2800	S	No	1300
Kitchen/Living	EW-1	5295	2800	W	No	0
Entry and hall	EW-2	1895	2800	N	No	1600
Entry and hall	EW-2	1600	2800	W	No	5400
Entry and hall	EW-2	1800	2800	N	No	2300
Entry and hall	EW-2	4105	2800	E	No	1900

### Internal wall type

# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004274130**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**6.9**



## Building features continued

Wall type	Area (m²)	Insulation	Wall wrap or foil
IW-1 - Cavity wall, direct fix plasterboard, single gap	37.0	No insulation	No
IW-2 - Shaft liner party wall with plaster	21.0	Bulk Insulation both sides of shaft liner R2	No

## Floors

Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Bedroom 1	Concrete Slab, Unit Below 150mm	13.8	None	No Insulation	Carpet+Rubber Underlay 18mm
Ensuite	Concrete Slab, Unit Below 150mm	9.2	None	No Insulation	Ceramic Tiles 8mm
Kitchen/Living	Concrete Slab, Unit Below 150mm	34.3	None	No Insulation	Ceramic Tiles 8mm
Entry and hall	Concrete Slab, Unit Below 150mm	12.1	None	No Insulation	Ceramic Tiles 8mm

## Ceiling type

Location	Construction	Added insulation	Roof space above
Bedroom 1	Concrete, Plasterboard	No insulation	No
Ensuite	Concrete, Plasterboard	No insulation	No
Kitchen/Living	Concrete, Plasterboard	No insulation	No
Entry and hall	Concrete, Plasterboard	No insulation	No

## Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
Bedroom 1	4	Downlights - LED	150	Sealed
Ensuite	2	Downlights - LED	150	Sealed
Ensuite	1	Exhaust Fans	300	Sealed
Kitchen/Living	12	Downlights - LED	150	Sealed
Kitchen/Living	1	Exhaust Fans	300	Sealed
Entry and hall	4	Downlights - LED	150	Sealed
Entry and hall	1	Exhaust Fans	300	Sealed

## Ceiling fans

Location	Number	Diameter (mm)
None Present		

## Roof type

Construction	Added insulation	Roof colour
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## Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004274130**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**6.9**



### Building features continued

None Present

# Nationwide House Energy Rating Scheme\* Certificate



Certificate number:

Certificate Date:

★ Star rating:

## Additional information

## Explanatory notes

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# Nationwide House Energy Rating Scheme\* Certificate



Certificate number: **0004273991**

Certificate Date: **15 Oct 2019**

★ Star rating: **5.9**

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## Assessor details

Accreditation number: **20920**  
Name: **Terry Chapman**  
Organisation: **Chapman Environmental Services Pty Ltd**  
Email: **terry@basixcertificates.com.au**  
Phone: **0414 265292**  
Declaration of interest: **None**  
Software: **BERS Pro v4.3.0.2d (3.13)**  
AAO: **ABSA**

## Overview

### Dwelling details

Street: **Unit U401, 38-40 Orth St**  
Suburb: **Kingswood**  
State: **NSW** Postcode: **2747**  
Type: **New Dwelling** NCC Class: **2**  
NatHERS climate zone: **28**  
Lot/DP number: **62/36728** Exposure: **Open**

### Key construction and insulation materials

(see following pages for details)

Construction: **AAC Cavity Panel Direct Fix Concrete, Plasterboard Concrete Slab, Unit Below**  
Insulation: **R2.0 wall insulation No ceiling insulation No floor insulation**  
Glazing: **ALM-002-01 A Aluminium B SG Clear**

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

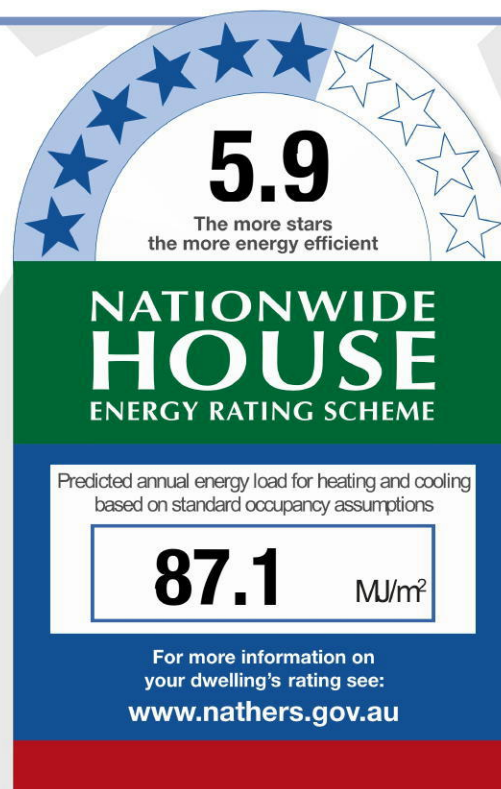
Conditioned: **73.0**  
Unconditioned: **0.0**  
Garage: **0.0**  
TOTAL: **73.0**

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

Heating: **23.7**  
Cooling: **63.3**  
TOTAL: **87.1**

### Plan documents

Plan ref/date: **1714**  
Prepared by: **AC PROJECT GROUP**



### Ceiling penetrations

(see following pages for details)

Sealed: **30**  
Unsealed: **0**  
TOTAL:\*\* **30**

\*\*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.

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



# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: 0004273991

Certificate Date:

15 Oct 2019

★ Star rating:

5.9



## 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

### Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Bedroom 1	ALM-002-01 A	n/a	2800	330	W	No Shading
Bedroom 1	ALM-001-01 A	n/a	2800	750	W	No Shading
Bedroom 1	ALM-002-01 A	n/a	2800	1350	W	No Shading
Bedroom 2	ALM-001-01 A	n/a	2000	750	W	No Shading
Bedroom 2	ALM-002-01 A	n/a	2800	750	W	No Shading
Kitchen/Living	ALM-001-01 A	n/a	2000	750	W	No Shading
Kitchen/Living	ALM-001-01 A	n/a	2100	940	N	No Shading
Kitchen/Living	ALM-002-01 A	n/a	2143	2600	W	No Shading
Kitchen/Living	ALM-002-01 A	n/a	2800	900	N	No Shading

### 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 <sup>2</sup> )	Orientation	Outdoor shade	Indoor shade/diffuser
None Present						

### External wall type

ID	Wall type	Insulation	Wall wrap or foil
EW-1	AAC Cavity Panel Direct Fix	Foil, Anti-glare one side + Bulk Insulation R2	Yes
EW-2	Fibro Cavity Panel Direct Fix	Bulk Insulation R2	No

### External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Bedroom 1	EW-1	1295	2800	S	No	0
Bedroom 1	EW-1	600	2800	W	No	0
Bedroom 1	EW-1	3900	2800	S	No	0
Bedroom 1	EW-1	3095	2800	W	No	0
Bedroom 2	EW-1	3090	2800	W	No	0
Kitchen/Living	EW-1	2495	2800	W	No	0
Kitchen/Living	EW-1	2400	2800	N	No	4100
Kitchen/Living	EW-1	4100	2800	W	No	2400
Kitchen/Living	EW-1	4000	2800	N	No	0
Kitchen/Living	EW-1	2000	2800	E	No	5200
Kitchen/Living	EW-2	2400	2800	E	No	0
Kitchen/Living	EW-1	2095	2800	S	No	0

# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: 0004273991

Certificate Date:

15 Oct 2019

★ Star rating:

5.9



## Building features continued

### Internal wall type

Wall type	Area (m²)	Insulation	Wall wrap or foil
IW-1 - Cavity wall, direct fix plasterboard, single gap	76.0	No insulation	No
IW-2 - Shaft liner party wall with plaster	28.0	Bulk Insulation both sides of shaft liner R2	No

### Floors

Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Bedroom 1	Concrete Slab, Unit Below 150mm	12.7	None	No Insulation	Carpet+Rubber Underlay 18mm
Ensuite	Concrete Slab, Unit Below 150mm	3.5	None	No Insulation	Ceramic Tiles 8mm
Bedroom 2	Concrete Slab, Unit Below 150mm	13.2	None	No Insulation	Carpet+Rubber Underlay 18mm
Bath	Concrete Slab, Unit Below 150mm	3.5	None	No Insulation	Ceramic Tiles 8mm
Kitchen/Living	Concrete Slab, Unit Below 150mm	29.6	None	No Insulation	Ceramic Tiles 8mm
Kitchen/Living	Concrete Slab, Unit Below 150mm	10.9	None	No Insulation	Ceramic Tiles 8mm

### Ceiling type

Location	Construction	Added insulation	Roof space above
Bedroom 1	Concrete, Plasterboard	No insulation	No
Ensuite	Concrete, Plasterboard	No insulation	No
Bedroom 2	Concrete, Plasterboard	No insulation	No
Bath	Concrete, Plasterboard	No insulation	No
Kitchen/Living	Concrete, Plasterboard	No insulation	No
Kitchen/Living	Concrete, Plasterboard	No insulation	No

### Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
Bedroom 1	4	Downlights - LED	150	Sealed
Ensuite	1	Downlights - LED	150	Sealed
Ensuite	1	Exhaust Fans	300	Sealed
Bedroom 2	4	Downlights - LED	150	Sealed
Bath	1	Downlights - LED	150	Sealed
Bath	1	Exhaust Fans	300	Sealed
Kitchen/Living	12	Downlights - LED	150	Sealed
Kitchen/Living	1	Exhaust Fans	300	Sealed
Kitchen/Living	4	Downlights - LED	150	Sealed
Kitchen/Living	1	Exhaust Fans	300	Sealed

## Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004273991**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**5.9**



### Building features continued

#### Ceiling fans

Location	Number	Diameter (mm)
None Present		

#### Roof type

Construction	Added insulation	Roof colour
None Present		

# Nationwide House Energy Rating Scheme\* Certificate



Certificate number:

Certificate Date:

★ Star rating:

## Additional information

## Explanatory notes

### About this report

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### Disclaimer

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# Nationwide House Energy Rating Scheme\* Certificate



Certificate number: **0004274023**

Certificate Date: **15 Oct 2019**

★ Star rating: **9.0**

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: **20920**  
Name: **Terry Chapman**  
Organisation: **Chapman Environmental Services Pty Ltd**  
Email: **terry@basixcertificates.com.au**  
Phone: **0414 265292**  
Declaration of interest: **None**  
Software: **BERS Pro v4.3.0.2d (3.13)**  
AAO: **ABSA**

## Overview

### Dwelling details

Street: **Unit U402, 38-40 Orth St**  
Suburb: **Kingswood**  
State: **NSW** Postcode: **2747**  
Type: **New Dwelling** NCC Class: **2**  
NatHERS climate zone: **28**  
Lot/DP number: **62/36728** Exposure: **Open**

### Key construction and insulation materials

(see following pages for details)

Construction: **Cavity Brick**  
**Concrete, Plasterboard**  
**Concrete Slab, Unit Below**  
Insulation: **No wall insulation**  
**No ceiling insulation**  
**No floor insulation**  
Glazing: **ALM-001-01 A Aluminium A SG Clear**

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

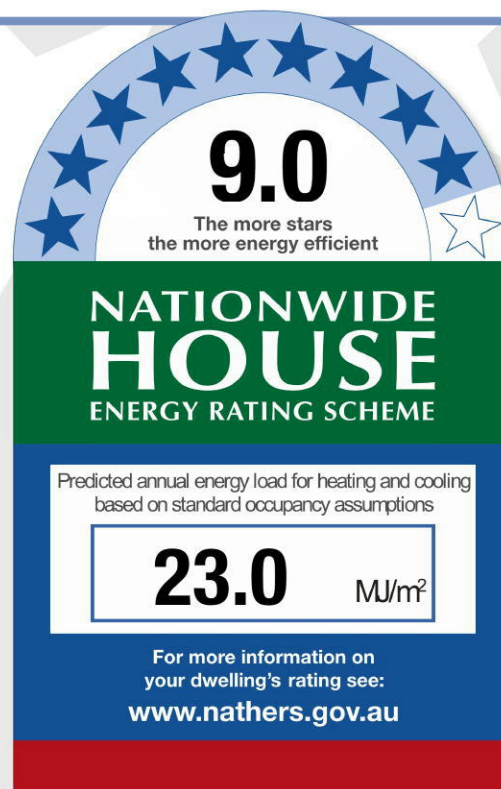
Conditioned: **75.0**  
Unconditioned: **0.0**  
Garage: **0.0**  
TOTAL: **75.0**

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

Heating: **9.2**  
Cooling: **13.8**  
TOTAL: **23.0**

### Plan documents

Plan ref/date: **1714**  
Prepared by: **AC PROJECT GROUP**



### Ceiling penetrations

(see following pages for details)

Sealed: **28**  
Unsealed: **0**  
TOTAL:\*\* **28**

\*\*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: **0004274023**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**9.0**



## 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

### Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Kitchen/Living	ALM-002-01 A	n/a	2143	2600	N	No Shading
Bedroom 1	ALM-001-01 A	n/a	2800	950	N	No Shading
Bedroom 2	ALM-001-01 A	n/a	1200	750	N	No Shading

### 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 <sup>2</sup> )	Orientation	Outdoor shade	Indoor shade/diffuser
None Present						

### External wall type

ID	Wall type	Insulation	Wall wrap or foil
EW-1	Cavity Brick	No insulation	No
EW-2	Fibro Cavity Panel Direct Fix	Bulk Insulation R2	No

### External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Kitchen/Living	EW-1	4100	2800	N	No	2000
Kitchen/Living	EW-1	600	2800	E	No	4700
Kitchen/Living	EW-2	2800	2800	S	No	2700
Bedroom 1	EW-1	2600	2800	W	No	5600
Bedroom 1	EW-1	3200	2800	N	No	0
Bedroom 2	EW-1	1490	2800	N	No	2600

### Internal wall type

Wall type	Area (m <sup>2</sup> )	Insulation	Wall wrap or foil
IW-1 - Cavity wall, direct fix plasterboard, single gap	71.0	No insulation	No
IW-2 - Shaft liner party wall with plaster	71.0	Bulk Insulation both sides of shaft liner R2	No

## Floors

# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004274023**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**9.0**



## Building features continued

Location	Construction	Area (m <sup>2</sup> )	Sub floor ventilation	Added insulation	Covering
Kitchen/Living	Concrete Slab, Unit Below 150mm	35.9	None	No Insulation	Ceramic Tiles 8mm
Bedroom 1	Concrete Slab, Unit Below 150mm	16.1	None	No Insulation	Carpet+Rubber Underlay 18mm
Ensuite	Concrete Slab, Unit Below 150mm	3.4	None	No Insulation	Ceramic Tiles 8mm
Bath	Concrete Slab, Unit Below 150mm	4.5	None	No Insulation	Ceramic Tiles 8mm
Bedroom 2	Concrete Slab, Unit Below 150mm	12.0	None	No Insulation	Carpet+Rubber Underlay 18mm
Kitchen/Living	Concrete Slab, Unit Below 150mm	3.1	None	No Insulation	Ceramic Tiles 8mm

## Ceiling type

Location	Construction	Added insulation	Roof space above
Kitchen/Living	Concrete, Plasterboard	No insulation	No
Bedroom 1	Concrete, Plasterboard	No insulation	No
Ensuite	Concrete, Plasterboard	No insulation	No
Bath	Concrete, Plasterboard	No insulation	No
Bedroom 2	Concrete, Plasterboard	No insulation	No
Kitchen/Living	Concrete, Plasterboard	No insulation	No

## Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
Kitchen/Living	12	Downlights - LED	150	Sealed
Kitchen/Living	2	Exhaust Fans	300	Sealed
Bedroom 1	5	Downlights - LED	150	Sealed
Ensuite	1	Downlights - LED	150	Sealed
Ensuite	1	Exhaust Fans	300	Sealed
Bath	1	Downlights - LED	150	Sealed
Bath	1	Exhaust Fans	300	Sealed
Bedroom 2	4	Downlights - LED	150	Sealed
Kitchen/Living	1	Downlights - LED	150	Sealed

## Ceiling fans

Location	Number	Diameter (mm)
None Present		

## Roof type

Construction	Added insulation	Roof colour
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## Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004274023**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**9.0**



### Building features continued

None Present

# Nationwide House Energy Rating Scheme\* Certificate



Certificate number:

Certificate Date:

★ Star rating:

## Additional information

## Explanatory notes

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# Nationwide House Energy Rating Scheme\* Certificate



Certificate number: **0004274056**

Certificate Date: **15 Oct 2019**

★ Star rating: **7.9**

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: **20920**  
Name: **Terry Chapman**  
Organisation: **Chapman Environmental Services Pty Ltd**  
Email: **terry@basixcertificates.com.au**  
Phone: **0414 265292**  
Declaration of interest: **None**  
Software: **BERS Pro v4.3.0.2d (3.13)**  
AAO: **ABSA**

## Overview

### Dwelling details

Street: **Unit U403, 38-40 Orth St**  
Suburb: **Kingswood**  
State: **NSW** Postcode: **2747**  
Type: **New Dwelling** NCC Class: **2**  
NatHERS climate zone: **28**  
Lot/DP number: **62/36728** Exposure: **Open**

### Key construction and insulation materials

(see following pages for details)

Construction: **AAC Cavity Panel Direct Fix Concrete, Plasterboard Concrete Slab, Unit Below**  
Insulation: **R2.0 wall insulation No ceiling insulation No floor insulation**  
Glazing: **ALM-001-01 A Aluminium A SG Clear**

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

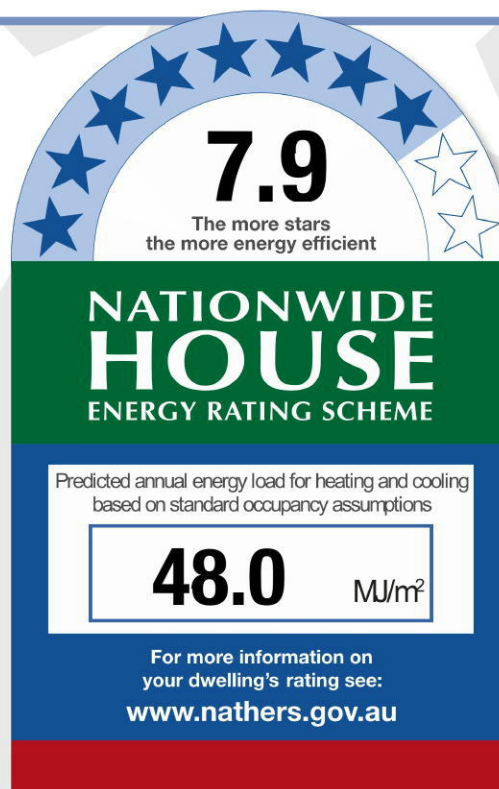
Conditioned: **73.0**  
Unconditioned: **0.0**  
Garage: **0.0**  
TOTAL: **73.0**

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

Heating: **25.2**  
Cooling: **22.8**  
TOTAL: **48.0**

### Plan documents

Plan ref/date: **1714**  
Prepared by: **AC PROJECT GROUP**



### Ceiling penetrations

(see following pages for details)

Sealed: **30**  
Unsealed: **0**  
TOTAL:\*\* **30**

\*\*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.

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



# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: 0004274056

Certificate Date:

15 Oct 2019

★ Star rating:

7.9



## Building features

### Window type and performance value

Window ID	Window type	U-value	SHGC
ALM-001-01 A	ALM-001-01 A Aluminium A SG Clear	6.7	0.57
ALM-002-01 A	ALM-002-01 A Aluminium B SG Clear	6.7	0.70

### Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Bedroom 1	ALM-001-01 A	n/a	2000	750	E	No Shading
Bedroom 2	ALM-001-01 A	n/a	2000	750	E	No Shading
Kitchen/Living	ALM-002-01 A	n/a	2800	1200	N	No Shading
Kitchen/Living	ALM-001-01 A	n/a	2800	925	N	No Shading
Kitchen/Living	ALM-002-01 A	n/a	2143	2600	E	No Shading
Kitchen/Living	ALM-001-01 A	n/a	1200	940	N	No Shading

### 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 <sup>2</sup> )	Orientation	Outdoor shade	Indoor shade/diffuser
None Present						

### External wall type

ID	Wall type	Insulation	Wall wrap or foil
EW-1	AAC Cavity Panel Direct Fix	Foil, Anti-glare one side + Bulk Insulation R2	Yes
EW-2	Fibro Cavity Panel Direct Fix	Bulk Insulation R2	No

### External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Bedroom 1	EW-1	2595	2800	E	No	0
Bedroom 1	EW-2	600	2800	E	No	0
Bedroom 1	EW-2	3495	2800	S	No	2000
Ensuite	EW-2	1895	2800	S	No	2000
Ensuite	EW-2	700	2800	W	No	1200
Bedroom 2	EW-1	3090	2800	E	No	0
Kitchen/Living	EW-1	4000	2800	N	No	0
Kitchen/Living	EW-1	3600	2800	E	No	2600
Kitchen/Living	EW-1	2600	2800	N	No	3600
Kitchen/Living	EW-1	2995	2800	E	No	0
Kitchen/Living	EW-2	1195	2800	S	No	2700

### Internal wall type

# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004274056**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**7.9**



## Building features continued

Wall type	Area (m <sup>2</sup> )	Insulation	Wall wrap or foil
IW-1 - Cavity wall, direct fix plasterboard, single gap	73.0	No insulation	No
IW-2 - Shaft liner party wall with plaster	34.0	Bulk Insulation both sides of shaft liner R2	No

## Floors

Location	Construction	Area (m <sup>2</sup> )	Sub floor ventilation	Added insulation	Covering
Bedroom 1	Concrete Slab, Unit Below 150mm	12.4	None	No Insulation	Carpet+Rubber Underlay 18mm
Ensuite	Concrete Slab, Unit Below 150mm	3.4	None	No Insulation	Ceramic Tiles 8mm
Bedroom 2	Concrete Slab, Unit Below 150mm	10.7	None	No Insulation	Carpet+Rubber Underlay 18mm
Bath	Concrete Slab, Unit Below 150mm	4.1	None	No Insulation	Ceramic Tiles 8mm
Kitchen/Living	Concrete Slab, Unit Below 150mm	31.5	None	No Insulation	Ceramic Tiles 8mm
Kitchen/Living	Concrete Slab, Unit Below 150mm	10.5	None	No Insulation	Ceramic Tiles 8mm

## Ceiling type

Location	Construction	Added insulation	Roof space above
Bedroom 1	Concrete, Plasterboard	No insulation	No
Ensuite	Concrete, Plasterboard	No insulation	No
Bedroom 2	Concrete, Plasterboard	No insulation	No
Bath	Concrete, Plasterboard	No insulation	No
Kitchen/Living	Concrete, Plasterboard	No insulation	No
Kitchen/Living	Concrete, Plasterboard	No insulation	No

## Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
Bedroom 1	4	Downlights - LED	150	Sealed
Ensuite	1	Downlights - LED	150	Sealed
Ensuite	1	Exhaust Fans	300	Sealed
Bedroom 2	4	Downlights - LED	150	Sealed
Bath	1	Downlights - LED	150	Sealed
Bath	1	Exhaust Fans	300	Sealed
Kitchen/Living	12	Downlights - LED	150	Sealed
Kitchen/Living	1	Exhaust Fans	300	Sealed
Kitchen/Living	4	Downlights - LED	150	Sealed
Kitchen/Living	1	Exhaust Fans	300	Sealed

## Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004274056**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**7.9**



### Building features continued

#### Ceiling fans

Location	Number	Diameter (mm)
None Present		

#### Roof type

Construction	Added insulation	Roof colour
None Present		

# Nationwide House Energy Rating Scheme\* Certificate



Certificate number:

Certificate Date:

★ Star rating:

## Additional information

## Explanatory notes

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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.

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# Nationwide House Energy Rating Scheme\* Certificate



Certificate number: **0004274072**

Certificate Date: **15 Oct 2019**

★ Star rating: **8.2**

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: **20920**  
Name: **Terry Chapman**  
Organisation: **Chapman Environmental Services Pty Ltd**  
Email: **terry@basixcertificates.com.au**  
Phone: **0414 265292**  
Declaration of interest: **None**  
Software: **BERS Pro v4.3.0.2d (3.13)**  
AAO: **ABSA**

## Overview

### Dwelling details

Street: **Unit U404, 38-40 Orth St**  
Suburb: **Kingswood**  
State: **NSW** Postcode: **2747**  
Type: **New Dwelling** NCC Class: **2**  
NatHERS climate zone: **28**  
Lot/DP number: **62/36728** Exposure: **Open**

### Key construction and insulation materials

(see following pages for details)

Construction: **AAC Cavity Panel Direct Fix Concrete, Plasterboard Concrete Slab, Unit Below**  
Insulation: **R2.0 wall insulation No ceiling insulation No floor insulation**  
Glazing: **ALM-001-01 A Aluminium A SG Clear**

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

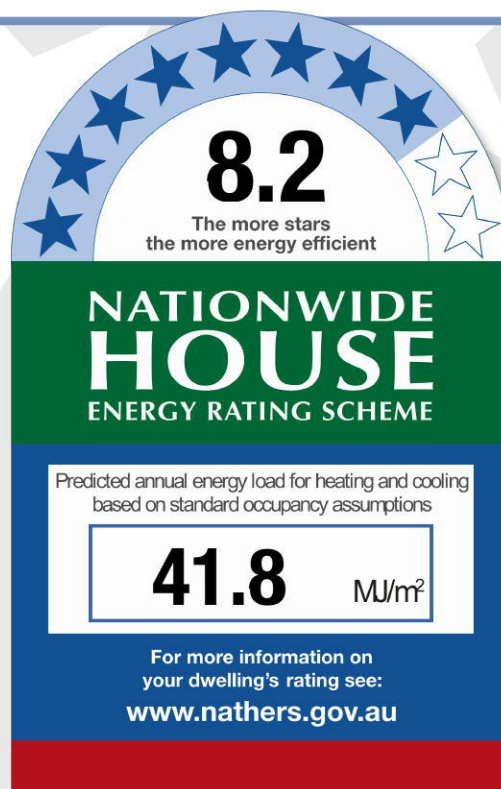
Conditioned: **74.0**  
Unconditioned: **0.0**  
Garage: **0.0**  
TOTAL: **74.0**

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

Heating: **25.6**  
Cooling: **16.2**  
TOTAL: **41.8**

### Plan documents

Plan ref/date: **1714**  
Prepared by: **AC PROJECT GROUP**



### Ceiling penetrations

(see following pages for details)

Sealed: **30**  
Unsealed: **0**  
TOTAL:\*\* **30**

\*\*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: 0004274072

Certificate Date:

15 Oct 2019

★ Star rating:

8.2



## Building features

### Window type and performance value

Window ID	Window type	U-value	SHGC
ALM-001-01 A	ALM-001-01 A Aluminium A SG Clear	6.7	0.57
ALM-002-01 A	ALM-002-01 A Aluminium B SG Clear	6.7	0.70

### Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Bedroom 1	ALM-001-01 A	n/a	2000	750	W	No Shading
Bedroom 2	ALM-001-01 A	n/a	2000	750	W	No Shading
Kitchen/Living	ALM-001-01 A	n/a	1200	940	N	No Shading
Kitchen/Living	ALM-002-01 A	n/a	2143	2600	W	No Shading
Kitchen/Living	ALM-002-01 A	n/a	2800	750	N	No Shading

### 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 (m²)	Orientation	Outdoor shade	Indoor shade/diffuser
None Present						

### External wall type

ID	Wall type	Insulation	Wall wrap or foil
EW-1	Fibro Cavity Panel Direct Fix	Bulk Insulation R2	No
EW-2	AAC Cavity Panel Direct Fix	Foil, Anti-glare one side + Bulk Insulation R2	Yes

### External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Bedroom 1	EW-1	3795	2800	S	No	1800
Bedroom 1	EW-2	3195	2800	W	No	0
Ensuite	EW-1	2090	2800	S	No	1800
Bedroom 2	EW-2	3090	2800	W	No	0
Kitchen/Living	EW-2	2595	2800	W	No	0
Kitchen/Living	EW-2	3100	2800	N	No	3400
Kitchen/Living	EW-2	3400	2800	W	No	3100
Kitchen/Living	EW-2	4000	2800	N	No	0
Entry hall	EW-1	1195	2800	S	No	1800

### Internal wall type

Wall type	Area (m²)	Insulation	Wall wrap or foil
IW-1 - Cavity wall, direct fix plasterboard, single gap	77.0	No insulation	No
IW-2 - Shaft liner party wall with	34.0	Bulk Insulation both sides of shaft liner R2	No

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# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004274072**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**8.2**



## Building features continued

plaster

### Floors

Location	Construction	Area (m <sup>2</sup> )	Sub floor ventilation	Added insulation	Covering
Bedroom 1	Concrete Slab, Unit Below 150mm	13.7	None	No Insulation	Carpet+Rubber Underlay 18mm
Ensuite	Concrete Slab, Unit Below 150mm	3.9	None	No Insulation	Ceramic Tiles 8mm
Bedroom 2	Concrete Slab, Unit Below 150mm	11.3	None	No Insulation	Carpet+Rubber Underlay 18mm
Bath	Concrete Slab, Unit Below 150mm	4.0	None	No Insulation	Ceramic Tiles 8mm
Kitchen/Living	Concrete Slab, Unit Below 150mm	30.7	None	No Insulation	Ceramic Tiles 8mm
Entry hall	Concrete Slab, Unit Below 150mm	10.7	None	No Insulation	Ceramic Tiles 8mm

### Ceiling type

Location	Construction	Added insulation	Roof space above
Bedroom 1	Concrete, Plasterboard	No insulation	No
Ensuite	Concrete, Plasterboard	No insulation	No
Bedroom 2	Concrete, Plasterboard	No insulation	No
Bath	Concrete, Plasterboard	No insulation	No
Kitchen/Living	Concrete, Plasterboard	No insulation	No
Entry hall	Concrete, Plasterboard	No insulation	No

### Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
Bedroom 1	4	Downlights - LED	150	Sealed
Ensuite	1	Downlights - LED	150	Sealed
Ensuite	1	Exhaust Fans	300	Sealed
Bedroom 2	4	Downlights - LED	150	Sealed
Bath	1	Downlights - LED	150	Sealed
Bath	1	Exhaust Fans	300	Sealed
Kitchen/Living	12	Downlights - LED	150	Sealed
Kitchen/Living	1	Exhaust Fans	300	Sealed
Entry hall	4	Downlights - LED	150	Sealed
Entry hall	1	Exhaust Fans	300	Sealed

### Ceiling fans

Location	Number	Diameter (mm)
None Present		

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## Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004274072**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**8.2**



### Building features continued

#### Roof type

Construction	Added insulation	Roof colour
None Present		

# Nationwide House Energy Rating Scheme\* Certificate



Certificate number:

Certificate Date:

★ Star rating:

## 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.

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### Contact

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# Nationwide House Energy Rating Scheme\* Certificate



Certificate number: **0004274106**

Certificate Date: **15 Oct 2019**

★ Star rating: **8.8**

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: **20920**  
Name: **Terry Chapman**  
Organisation: **Chapman Environmental Services Pty Ltd**  
Email: **terry@basixcertificates.com.au**  
Phone: **0414 265292**  
Declaration of interest: **None**  
Software: **BERS Pro v4.3.0.2d (3.13)**  
AAO: **ABSA**

## Overview

### Dwelling details

Street: **Unit U405, 38-40 Orth St**  
Suburb: **Kingswood**  
State: **NSW** Postcode: **2747**  
Type: **New Dwelling** NCC Class: **2**  
NatHERS climate zone: **28**  
Lot/DP number: **62/36728** Exposure: **Open**

### Key construction and insulation materials

(see following pages for details)

Construction: **Cavity Brick**  
**Concrete, Plasterboard**  
**Concrete Slab, Unit Below**  
Insulation: **No wall insulation**  
**No ceiling insulation**  
**No floor insulation**  
Glazing: **ALM-001-01 A Aluminium A SG Clear**

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

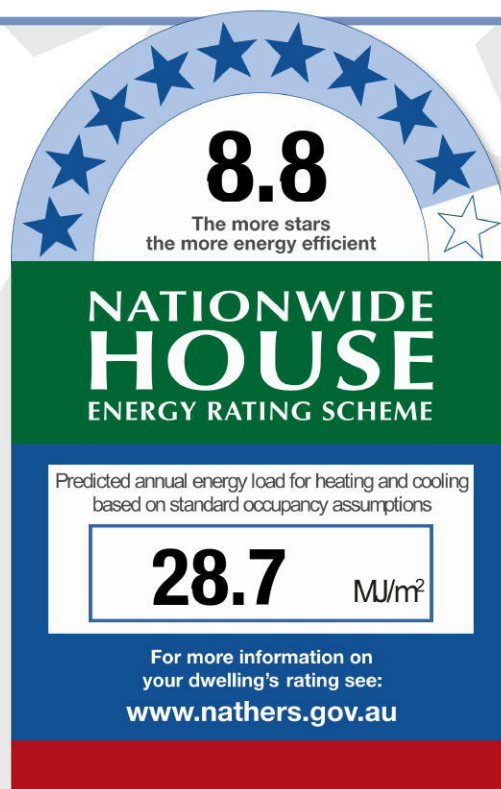
Conditioned: **76.0**  
Unconditioned: **0.0**  
Garage: **0.0**  
TOTAL: **76.0**

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

Heating: **9.3**  
Cooling: **19.4**  
TOTAL: **28.7**

## Plan documents

Plan ref/date: **1714**  
Prepared by: **AC PROJECT GROUP**



### Ceiling penetrations

(see following pages for details)

Sealed: **28**  
Unsealed: **0**  
TOTAL:\*\* **28**

\*\*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.

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



# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: 0004274106

Certificate Date:

15 Oct 2019

★ Star rating:

8.8



## 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

### Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Kitchen/Living	ALM-002-01 A	n/a	2143	2600	N	No Shading
Bedroom 1	ALM-001-01 A	n/a	2800	950	N	No Shading
Bedroom 1	ALM-001-01 A	n/a	2800	1200	N	No Shading
Bedroom 2	ALM-001-01 A	n/a	1200	750	N	No Shading

### 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 <sup>2</sup> )	Orientation	Outdoor shade	Indoor shade/diffuser
None Present						

### External wall type

ID	Wall type	Insulation	Wall wrap or foil
EW-1	Fibro Cavity Panel Direct Fix	Bulk Insulation R2	No
EW-2	Cavity Brick	No insulation	No

### External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Kitchen/Living	EW-1	4100	2800	S	No	2700
Kitchen/Living	EW-2	600	2800	W	No	4700
Kitchen/Living	EW-2	4100	2800	N	No	2000
Bedroom 1	EW-2	3200	2800	N	No	0
Bedroom 1	EW-2	2600	2800	E	No	5600
Bedroom 2	EW-2	1490	2800	N	No	2600

### Internal wall type

Wall type	Area (m <sup>2</sup> )	Insulation	Wall wrap or foil
IW-1 - Shaft liner party wall with plaster	67.0	Bulk Insulation both sides of shaft liner R2	No
IW-2 - Cavity wall, direct fix plasterboard, single gap	71.0	No insulation	No

## Floors

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# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004274106**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**8.8**



## Building features continued

Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Kitchen/Living	Concrete Slab, Unit Below 150mm	35.3	None	No Insulation	Ceramic Tiles 8mm
Bedroom 1	Concrete Slab, Unit Below 150mm	16.1	None	No Insulation	Carpet+Rubber Underlay 18mm
Ensuite	Concrete Slab, Unit Below 150mm	3.4	None	No Insulation	Ceramic Tiles 8mm
Bath	Concrete Slab, Unit Below 150mm	5.5	None	No Insulation	Ceramic Tiles 8mm
Bedroom 2	Concrete Slab, Unit Below 150mm	12.1	None	No Insulation	Carpet+Rubber Underlay 18mm
Kitchen/Living	Concrete Slab, Unit Below 150mm	3.1	None	No Insulation	Ceramic Tiles 8mm

## Ceiling type

Location	Construction	Added insulation	Roof space above
Kitchen/Living	Concrete, Plasterboard	No insulation	No
Bedroom 1	Concrete, Plasterboard	No insulation	No
Ensuite	Concrete, Plasterboard	No insulation	No
Bath	Concrete, Plasterboard	No insulation	No
Bedroom 2	Concrete, Plasterboard	No insulation	No
Kitchen/Living	Concrete, Plasterboard	No insulation	No

## Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
Kitchen/Living	12	Downlights - LED	150	Sealed
Kitchen/Living	2	Exhaust Fans	300	Sealed
Bedroom 1	5	Downlights - LED	150	Sealed
Ensuite	1	Downlights - LED	150	Sealed
Ensuite	1	Exhaust Fans	300	Sealed
Bath	1	Downlights - LED	150	Sealed
Bath	1	Exhaust Fans	300	Sealed
Bedroom 2	4	Downlights - LED	150	Sealed
Kitchen/Living	1	Downlights - LED	150	Sealed

## Ceiling fans

Location	Number	Diameter (mm)
None Present		

## Roof type

Construction	Added	Roof colour
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## Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004274106**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**8.8**



### Building features continued

#### insulation

None Present

# Nationwide House Energy Rating Scheme\* Certificate



Certificate number:

Certificate Date:

★ Star rating:

## Additional information

## Explanatory notes

### About this report

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# Nationwide House Energy Rating Scheme\* Certificate



Certificate number: **0004274163**

Certificate Date: **15 Oct 2019**

★ Star rating: **8.4**

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: **20920**  
Name: **Terry Chapman**  
Organisation: **Chapman Environmental Services Pty Ltd**  
Email: **terry@basixcertificates.com.au**  
Phone: **0414 265292**  
Declaration of interest: **None**  
Software: **BERS Pro v4.3.0.2d (3.13)**  
AAO: **ABSA**

## Overview

### Dwelling details

Street: **Unit U406, 38-40 Orth St**  
Suburb: **Kingswood**  
State: **NSW** Postcode: **2747**  
Type: **New Dwelling** NCC Class: **2**  
NatHERS climate zone: **28**  
Lot/DP number: **62/36728** Exposure: **Open**

### Key construction and insulation materials

(see following pages for details)

Construction: **AAC Cavity Panel Direct Fix Concrete, Plasterboard Concrete Slab, Unit Below**  
Insulation: **R2.0 wall insulation No ceiling insulation No floor insulation**  
Glazing: **ALM-001-01 A Aluminium A SG Clear**

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

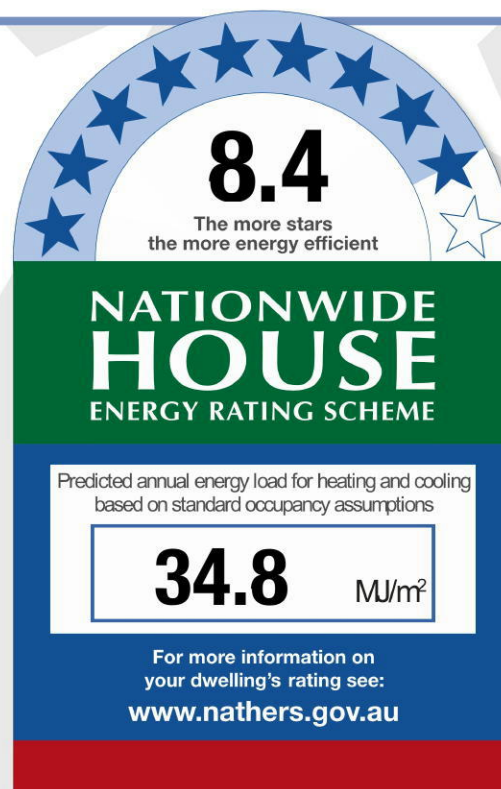
Conditioned: **96.0**  
Unconditioned: **0.0**  
Garage: **0.0**  
TOTAL: **96.0**

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

Heating: **9.7**  
Cooling: **25.2**  
TOTAL: **34.8**

### Plan documents

Plan ref/date: **1714**  
Prepared by: **AC PROJECT GROUP**



### Ceiling penetrations

(see following pages for details)

Sealed: **34**  
Unsealed: **0**  
TOTAL:\*\* **34**

\*\*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: 0004274163

Certificate Date:

15 Oct 2019

★ Star rating:

8.4



## 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

### Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Kitchen/Living	ALM-002-01 A	n/a	2143	2600	N	No Shading
Bedroom 3	ALM-001-01 A	n/a	2000	750	E	No Shading
Ensuite	ALM-001-01 A	n/a	2000	750	E	No Shading
Bedroom 2	ALM-001-01 A	n/a	2000	750	N	No Shading
Bedroom 2	ALM-001-01 A	n/a	2000	750	E	No Shading
Bedroom 2	ALM-001-01 A	n/a	2000	750	E	No Shading
Bedroom 1	ALM-001-01 A	n/a	2000	750	E	No Shading

### 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 (m²)	Orientation	Outdoor shade	Indoor shade/diffuser
None Present						

### External wall type

ID	Wall type	Insulation	Wall wrap or foil
EW-1	AAC Cavity Panel Direct Fix	Bulk Insulation R2	No
EW-2	Fibro Cavity Panel Direct Fix	Bulk Insulation R2	No

### External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Kitchen/Living	EW-1	4295	2800	N	No	2400
Bedroom 3	EW-1	3990	2800	E	No	0
Ensuite	EW-1	3090	2800	E	No	0
Bedroom 2	EW-1	2400	2800	W	No	4300
Bedroom 2	EW-1	3200	2800	N	No	0
Bedroom 2	EW-1	4495	2800	E	No	0
Bedroom 1	EW-1	3195	2800	E	No	0
Kitchen/Living	EW-2	2595	2800	W	No	3200

### Internal wall type

Wall type	Area (m²)	Insulation	Wall wrap or foil
IW-1 - Cavity wall, direct fix plasterboard, single gap	90.0	No insulation	No

# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004274163**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**8.4**



## Building features continued

IW-2 - Shaft liner party wall with plaster 48.0 Bulk Insulation both sides of shaft liner R2 No

## Floors

Location	Construction	Area (m <sup>2</sup> )	Sub floor ventilation	Added insulation	Covering
Kitchen/Living	Concrete Slab, Unit Below 150mm	39.5	None	No Insulation	Ceramic Tiles 8mm
Bedroom 3	Concrete Slab, Unit Below 150mm	11.6	None	No Insulation	Carpet+Rubber Underlay 18mm
Small bath	Concrete Slab, Unit Below 150mm	3.6	None	No Insulation	Ceramic Tiles 8mm
Ensuite	Concrete Slab, Unit Below 150mm	5.9	None	No Insulation	Ceramic Tiles 8mm
Bedroom 2	Concrete Slab, Unit Below 150mm	16.9	None	No Insulation	Carpet+Rubber Underlay 18mm
Bedroom 1	Concrete Slab, Unit Below 150mm	13.2	None	No Insulation	Carpet+Rubber Underlay 18mm
Kitchen/Living	Concrete Slab, Unit Below 150mm	5.1	None	No Insulation	Ceramic Tiles 8mm

## Ceiling type

Location	Construction	Added insulation	Roof space above
Kitchen/Living	Concrete, Plasterboard	No insulation	No
Bedroom 3	Concrete, Plasterboard	No insulation	No
Small bath	Concrete, Plasterboard	No insulation	No
Ensuite	Concrete, Plasterboard	No insulation	No
Bedroom 2	Concrete, Plasterboard	No insulation	No
Bedroom 1	Concrete, Plasterboard	No insulation	No
Kitchen/Living	Concrete, Plasterboard	No insulation	No

## Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
Kitchen/Living	13	Downlights - LED	150	Sealed
Kitchen/Living	1	Exhaust Fans	300	Sealed
Bedroom 3	4	Downlights - LED	150	Sealed
Small bath	1	Downlights - LED	150	Sealed
Small bath	1	Exhaust Fans	300	Sealed
Ensuite	1	Downlights - LED	150	Sealed
Ensuite	1	Exhaust Fans	300	Sealed
Bedroom 2	5	Downlights - LED	150	Sealed
Bedroom 1	4	Downlights - LED	150	Sealed
Kitchen/Living	2	Downlights - LED	150	Sealed
Kitchen/Living	1	Exhaust Fans	300	Sealed

## Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004274163**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**8.4**



### Building features continued

#### Ceiling fans

Location	Number	Diameter (mm)
None Present		

#### Roof type

Construction	Added insulation	Roof colour
None Present		

# Nationwide House Energy Rating Scheme\* Certificate



Certificate number:

Certificate Date:

★ Star rating:

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

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

\* Nationwide House Energy Rating Scheme (NatHERS) is an initiative of the Australian, state and territory governments.

For more details see [www.nathers.gov.au](http://www.nathers.gov.au)

# Nationwide House Energy Rating Scheme\* Certificate



Certificate number: **0004274270**

Certificate Date: **15 Oct 2019**

★ Star rating: **7.4**

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: **20920**  
Name: **Terry Chapman**  
Organisation: **Chapman Environmental Services Pty Ltd**  
Email: **terry@basixcertificates.com.au**  
Phone: **0414 265292**  
Declaration of interest: **None**  
Software: **BERS Pro v4.3.0.2d (3.13)**  
AAO: **ABSA**

## Overview

### Dwelling details

Street: **Unit U602, 38-40 Orth St**  
Suburb: **Kingswood**  
State: **NSW** Postcode: **2747**  
Type: **New Dwelling** NCC Class: **2**  
NatHERS climate zone: **28**  
Lot/DP number: **62/36728** Exposure: **Open**

### Key construction and insulation materials

(see following pages for details)

Construction: **AAC Cavity Panel Direct Fix**  
**Corrugated Iron**  
**Concrete Slab, Unit Below**  
Insulation: **R2.0 wall insulation**  
**R3.5 ceiling insulation**  
**No floor insulation**  
Glazing: **ALM-002-01 A Aluminium B SG Clear**

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

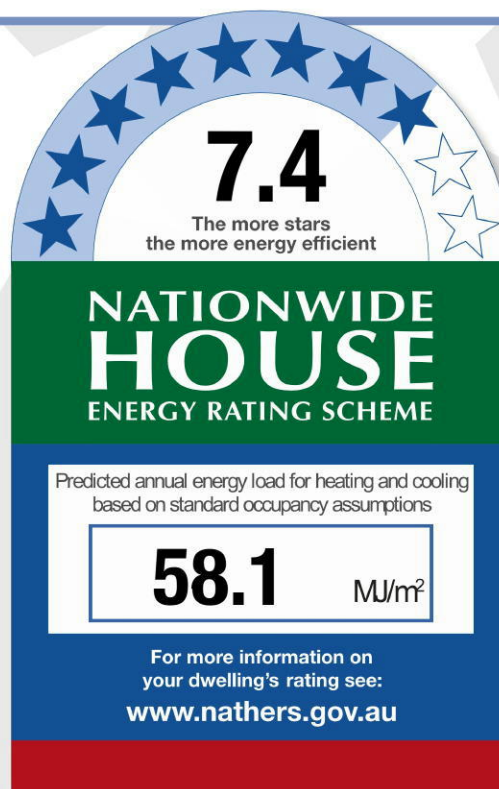
Conditioned: **86.0**  
Unconditioned: **0.0**  
Garage: **0.0**  
TOTAL: **86.0**

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

Heating: **19.3**  
Cooling: **38.9**  
TOTAL: **58.1**

### Plan documents

Plan ref/date: **1714**  
Prepared by: **AC PROJECT GROUP**



### Ceiling penetrations

(see following pages for details)

Sealed: **30**  
Unsealed: **0**  
TOTAL:\*\* **30**

\*\*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.**

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# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: 0004274270

Certificate Date:

15 Oct 2019

★ Star rating:

7.4



## 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

### Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Kitchen/Living	ALM-002-01 A	n/a	2400	2600	N	No Shading
Kitchen/Living	ALM-002-01 A	n/a	2400	2600	N	No Shading
Bedroom 1	ALM-001-01 A	n/a	1800	750	W	No Shading
Bedroom 1	ALM-002-01 A	n/a	2400	1600	N	No Shading
Ensuite	ALM-001-01 A	n/a	1800	750	W	No Shading
Bedroom 3	ALM-001-01 A	n/a	1800	750	W	No Shading

### 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 <sup>2</sup> )	Orientation	Outdoor shade	Indoor shade/diffuser
None Present						

### External wall type

ID	Wall type	Insulation	Wall wrap or foil
EW-1	AAC Cavity Panel Direct Fix	Bulk Insulation R2	No
EW-2	Fibro Cavity Panel Direct Fix	Bulk Insulation R2	No

### External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Kitchen/Living	EW-1	2195	2700	S	No	2000
Kitchen/Living	EW-1	6095	2700	N	No	500
Bedroom 1	EW-1	3695	2700	W	No	500
Bedroom 1	EW-1	3095	2700	N	No	500
Ensuite	EW-1	2690	2700	W	No	500
Bedroom 3	EW-2	3095	2700	S	No	2000
Bedroom 3	EW-1	3595	2700	W	No	500
Bath	EW-1	1990	2700	S	No	2000

### Internal wall type

Wall type	Area (m <sup>2</sup> )	Insulation	Wall wrap or foil
IW-1 - Shaft liner party wall with plaster	21.0	Bulk Insulation both sides of shaft liner R2	No
IW-2 - Concrete Panel/Blocks filled,	11.0	No Insulation	No

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# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004274270**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**7.4**



## Building features continued

plasterboard

IW-3 - Cavity wall, direct fix plasterboard, single gap

61.0

No insulation

No

## Floors

Location	Construction	Area (m <sup>2</sup> )	Sub floor ventilation	Added insulation	Covering
Kitchen/Living	Concrete Slab, Unit Below 150mm	53.1	None	No Insulation	Ceramic Tiles 8mm
Bedroom 1	Concrete Slab, Unit Below 150mm	13.4	None	No Insulation	Carpet+Rubber Underlay 18mm
Ensuite	Concrete Slab, Unit Below 150mm	4.8	None	No Insulation	Ceramic Tiles 8mm
Bedroom 3	Concrete Slab, Unit Below 150mm	10.0	None	No Insulation	Carpet+Rubber Underlay 18mm
Bath	Concrete Slab, Unit Below 150mm	4.3	None	No Insulation	Ceramic Tiles 8mm

## Ceiling type

Location	Construction	Added insulation	Roof space above
Kitchen/Living	Plasterboard	Bulk Insulation R3.5	Yes
Bedroom 1	Plasterboard	Bulk Insulation R3.5	Yes
Ensuite	Plasterboard	Bulk Insulation R3.5	Yes
Bedroom 3	Plasterboard	Bulk Insulation R3.5	Yes
Bath	Plasterboard	Bulk Insulation R3.5	Yes

## Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
Kitchen/Living	16	Downlights - LED	150	Sealed
Kitchen/Living	2	Exhaust Fans	300	Sealed
Bedroom 1	4	Downlights - LED	150	Sealed
Ensuite	1	Downlights - LED	150	Sealed
Ensuite	1	Exhaust Fans	300	Sealed
Bedroom 3	4	Downlights - LED	150	Sealed
Bath	1	Downlights - LED	150	Sealed
Bath	1	Exhaust Fans	300	Sealed

## Ceiling fans

Location	Number	Diameter (mm)
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## Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004274270**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**7.4**



### Building features continued

None Present

#### Roof type

Construction	Added insulation	Roof colour
Corrugated Iron	Bulk, Reflective Side Down, No Air Gap Above R1.3	Medium

# Nationwide House Energy Rating Scheme\* Certificate



Certificate number:

Certificate Date:

★ Star rating:

## Additional information

## Explanatory notes

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For more details see [www.nathers.gov.au](http://www.nathers.gov.au)

# Nationwide House Energy Rating Scheme\* Certificate



Certificate number: **0004274528**

Certificate Date: **15 Oct 2019**

★ Star rating: **7.4**

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: **20920**  
Name: **Terry Chapman**  
Organisation: **Chapman Environmental Services Pty Ltd**  
Email: **terry@basixcertificates.com.au**  
Phone: **0414 265292**  
Declaration of interest: **None**  
Software: **BERS Pro v4.3.0.2d (3.13)**  
AAO: **ABSA**

## Overview

### Dwelling details

Street: **Unit U603, 38-40 Orth St**  
Suburb: **Kingswood**  
State: **NSW** Postcode: **2747**  
Type: **New Dwelling** NCC Class: **2**  
NatHERS climate zone: **28**  
Lot/DP number: **62/36728** Exposure: **Open**

### Key construction and insulation materials

(see following pages for details)

Construction: **AAC Cavity Panel Direct Fix**  
**Corrugated Iron**  
**Concrete Slab, Unit Below**  
Insulation: **R2.0 wall insulation**  
**R3.5 ceiling insulation**  
**No floor insulation**  
Glazing: **ALM-002-01 A Aluminium B SG Clear**

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

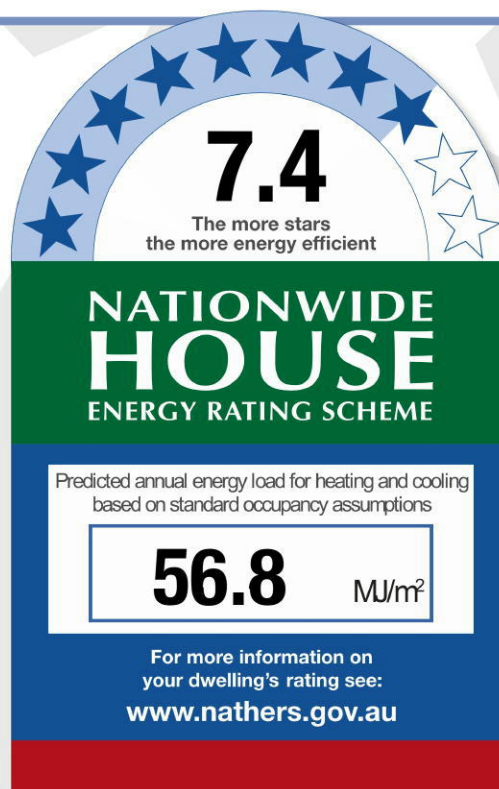
Conditioned: **89.0**  
Unconditioned: **4.0**  
Garage: **0.0**  
TOTAL: **93.0**

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

Heating: **30.0**  
Cooling: **26.7**  
TOTAL: **56.8**

### Plan documents

Plan ref/date: **1714**  
Prepared by: **AC PROJECT GROUP**



### 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.

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.**

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# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: 0004274528

Certificate Date:

15 Oct 2019

★ Star rating:

7.4



## 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

### Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Kitchen/Living	ALM-002-01 A	n/a	2400	4000	N	No Shading
Bedroom 1	ALM-002-01 A	n/a	2400	1580	N	No Shading
Bedroom 1	ALM-002-01 A	n/a	600	2400	E	No Shading
Bath	ALM-002-01 A	n/a	600	1500	E	No Shading
Bedroom 2	ALM-002-01 A	n/a	2400	1580	N	No Shading
Bedroom 3	ALM-002-01 A	n/a	600	2400	E	No Shading

### 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 (m²)	Orientation	Outdoor shade	Indoor shade/diffuser
None Present						

### External wall type

ID	Wall type	Insulation	Wall wrap or foil
EW-1	AAC Cavity Panel Direct Fix	Bulk Insulation R2	No
EW-2	Fibro Cavity Panel Direct Fix	Bulk Insulation R2	No

### External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Kitchen/Living	EW-1	5390	2700	N	No	2400
Kitchen/Living	EW-2	3100	2700	S	No	1800
Kitchen/Living	EW-2	600	2700	W	No	0
Kitchen/Living	EW-2	500	2700	S	No	0
Kitchen/Living	EW-2	1095	2700	W	No	0
Bedroom 1	EW-1	3000	2700	N	No	1400
Bedroom 1	EW-1	3600	2700	E	No	500
Bedroom 1	EW-1	600	2700	S	No	5700
Bedroom 1	EW-1	1000	2700	W	No	8500
Bath	EW-1	1990	2700	E	No	1100
Bedroom 2	EW-1	1000	2700	E	No	8900
Bedroom 2	EW-1	3100	2700	N	No	1400
Bedroom 3	EW-1	3700	2700	E	No	500
Bedroom 3	EW-1	600	2700	N	No	7000
Ensuite	EW-2	1595	2700	S	No	0
Ldry	EW-1	1095	2700	S	No	0

# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004274528**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**7.4**



## Building features continued

### Internal wall type

Wall type	Area (m <sup>2</sup> )	Insulation	Wall wrap or foil
IW-1 - Cavity wall, direct fix plasterboard, single gap	72.0	No insulation	No
IW-2 - Shaft liner party wall with plaster	35.0	Bulk Insulation both sides of shaft liner R2	No

### Floors

Location	Construction	Area (m <sup>2</sup> )	Sub floor ventilation	Added insulation	Covering
Kitchen/Living	Concrete Slab, Unit Below 150mm	44.5	None	No Insulation	Ceramic Tiles 8mm
Bedroom 1	Concrete Slab, Unit Below 150mm	10.6	None	No Insulation	Carpet+Rubber Underlay 18mm
Bath	Concrete Slab, Unit Below 150mm	4.5	None	No Insulation	Ceramic Tiles 8mm
Bedroom 2	Concrete Slab, Unit Below 150mm	15.1	None	No Insulation	Carpet+Rubber Underlay 18mm
Bedroom 3	Concrete Slab, Unit Below 150mm	10.8	None	No Insulation	Carpet+Rubber Underlay 18mm
Ensuite	Concrete Slab, Unit Below 150mm	5.5	None	No Insulation	Ceramic Tiles 8mm
Ldry	Concrete Slab, Unit Below 150mm	2.0	None	No Insulation	Ceramic Tiles 8mm

### Ceiling type

Location	Construction	Added insulation	Roof space above
Kitchen/Living	Plasterboard	Bulk Insulation R3.5	Yes
Bedroom 1	Plasterboard	Bulk Insulation R3.5	Yes
Bath	Plasterboard	Bulk Insulation R3.5	Yes
Bedroom 2	Plasterboard	Bulk Insulation R3.5	Yes
Bedroom 3	Plasterboard	Bulk Insulation R3.5	Yes
Ensuite	Plasterboard	Bulk Insulation R3.5	Yes
Ldry	Plasterboard	Bulk Insulation R3.5	Yes

### Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
Kitchen/Living	16	Downlights - LED	150	Sealed
Kitchen/Living	2	Exhaust Fans	300	Sealed
Bedroom 1	4	Downlights - LED	150	Sealed

## Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004274528**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**7.4**



### Building features continued

Bath	1	Downlights - LED	150	Sealed
Bath	1	Exhaust Fans	300	Sealed
Bedroom 2	4	Downlights - LED	150	Sealed
Bedroom 3	4	Downlights - LED	150	Sealed
Ensuite	2	Downlights - LED	150	Sealed
Ensuite	1	Exhaust Fans	300	Sealed
Ldry	1	Downlights - LED	150	Sealed
Ldry	1	Exhaust Fans	300	Sealed

### Ceiling fans

Location	Number	Diameter (mm)
None Present		

### Roof type

Construction	Added insulation	Roof colour
Corrugated Iron	Bulk, Reflective Side Down, No Air Gap Above R1.3	Medium

# Nationwide House Energy Rating Scheme\* Certificate



Certificate number:

Certificate Date:

★ Star rating:

## Additional information

## Explanatory notes

### About this report

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### General Information

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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.

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# Nationwide House Energy Rating Scheme\* Certificate



Certificate number: **0004274262**

Certificate Date: **15 Oct 2019**

★ Star rating: **5.9**

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: **20920**  
Name: **Terry Chapman**  
Organisation: **Chapman Environmental Services Pty Ltd**  
Email: **terry@basixcertificates.com.au**  
Phone: **0414 265292**  
Declaration of interest: **None**  
Software: **BERS Pro v4.3.0.2d (3.13)**  
AAO: **ABSA**

## Overview

### Dwelling details

Street: **Unit U604, 38-40 Orth St**  
Suburb: **Kingswood**  
State: **NSW** Postcode: **2747**  
Type: **New Dwelling** NCC Class: **2**  
NatHERS climate zone: **28**  
Lot/DP number: **62/36728** Exposure: **Open**

### Key construction and insulation materials

(see following pages for details)

Construction: **AAC Cavity Panel Direct Fix**  
**Corrugated Iron**  
**Concrete Slab, Unit Below**  
Insulation: **R2.0 wall insulation**  
**R3.5 ceiling insulation**  
**No floor insulation**  
Glazing: **ALM-002-01 A Aluminium B SG Clear**

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

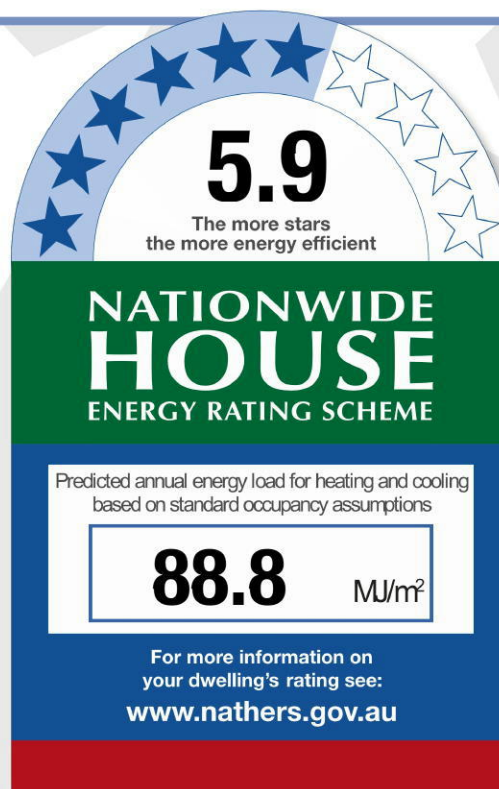
Conditioned: **81.0**  
Unconditioned: **0.0**  
Garage: **0.0**  
TOTAL: **81.0**

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

Heating: **37.7**  
Cooling: **51.0**  
TOTAL: **88.8**

### Plan documents

Plan ref/date: **1714**  
Prepared by: **AC PROJECT GROUP**



### Ceiling penetrations

(see following pages for details)

Sealed: **31**  
Unsealed: **0**  
TOTAL:\*\* **31**

\*\*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: 0004274262

Certificate Date:

15 Oct 2019

★ Star rating:

5.9



## 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

### Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Kitchen/Living	ALM-002-01 A	n/a	2400	2600	E	No Shading
Kitchen/Living	ALM-002-01 A	n/a	2400	2600	E	No Shading
Bedroom 1	ALM-002-01 A	n/a	2700	1600	E	No Shading
Bedroom 2	ALM-002-01 A	n/a	2400	2600	S	No Shading
Bedroom 2	ALM-001-01 A	n/a	2100	750	E	No Shading

### 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 (m²)	Orientation	Outdoor shade	Indoor shade/diffuser
None Present						

### External wall type

ID	Wall type	Insulation	Wall wrap or foil
EW-1	AAC Cavity Panel Direct Fix	Bulk Insulation R2	No

### External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Kitchen/Living	EW-1	6495	2700	E	No	500
Kitchen/Living	EW-1	600	2700	N	No	2500
Kitchen/Living	EW-1	2500	2700	W	No	1900
Bedroom 1	EW-1	3090	2700	E	No	500
Bedroom 2	EW-1	4600	2700	S	No	500
Bedroom 2	EW-1	2995	2700	E	No	500
Ensuite	EW-1	1690	2700	E	No	500

### Internal wall type

Wall type	Area (m²)	Insulation	Wall wrap or foil
IW-1 - Shaft liner party wall with plaster	56.0	Bulk Insulation both sides of shaft liner R2	No
IW-2 - Cavity wall, direct fix plasterboard, single gap	55.0	No insulation	No

# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004274262**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**5.9**



## Building features continued

### Floors

Location	Construction	Area (m <sup>2</sup> )	Sub floor ventilation	Added insulation	Covering
Kitchen/Living	Concrete Slab, Unit Below 150mm	44.5	None	No Insulation	Ceramic Tiles 8mm
Bath	Concrete Slab, Unit Below 150mm	3.4	None	No Insulation	Ceramic Tiles 8mm
Bedroom 1	Concrete Slab, Unit Below 150mm	10.4	None	No Insulation	Carpet+Rubber Underlay 18mm
Bedroom 2	Concrete Slab, Unit Below 150mm	17.3	None	No Insulation	Carpet+Rubber Underlay 18mm
Ensuite	Concrete Slab, Unit Below 150mm	5.6	None	No Insulation	Ceramic Tiles 8mm

### Ceiling type

Location	Construction	Added insulation	Roof space above
Kitchen/Living	Plasterboard	Bulk Insulation R3.5	Yes
Bath	Plasterboard	Bulk Insulation R3.5	Yes
Bedroom 1	Plasterboard	Bulk Insulation R3.5	Yes
Bedroom 2	Plasterboard	Bulk Insulation R3.5	Yes
Ensuite	Plasterboard	Bulk Insulation R3.5	Yes

### Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
Kitchen/Living	16	Downlights - LED	150	Sealed
Kitchen/Living	2	Exhaust Fans	300	Sealed
Bath	2	Downlights - LED	150	Sealed
Bath	1	Exhaust Fans	300	Sealed
Bedroom 1	4	Downlights - LED	150	Sealed
Bedroom 2	4	Downlights - LED	150	Sealed
Ensuite	1	Downlights - LED	150	Sealed
Ensuite	1	Exhaust Fans	300	Sealed

### Ceiling fans

Location	Number	Diameter (mm)
None Present		

### Roof type

Construction	Added	Roof colour
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## Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004274262**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**5.9**



### Building features continued

	insulation	
Corrugated Iron	Bulk, Reflective Side Down, No Air Gap Above R1.3	Medium

# Nationwide House Energy Rating Scheme\* Certificate



Certificate number:

Certificate Date:

★ Star rating:

## Additional information

## Explanatory notes

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# Nationwide House Energy Rating Scheme\* Certificate



Certificate number: **0004274288**

Certificate Date: **15 Oct 2019**

★ Star rating: **5.8**

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: **20920**  
Name: **Terry Chapman**  
Organisation: **Chapman Environmental Services Pty Ltd**  
Email: **terry@basixcertificates.com.au**  
Phone: **0414 265292**  
Declaration of interest: **None**  
Software: **BERS Pro v4.3.0.2d (3.13)**  
AAO: **ABSA**

## Overview

### Dwelling details

Street: **Unit U605, 38-40 Orth St**  
Suburb: **Kingswood**  
State: **NSW** Postcode: **2747**  
Type: **New Dwelling** NCC Class: **2**  
NatHERS climate zone: **28**  
Lot/DP number: **62/36728** Exposure: **Open**

### Key construction and insulation materials

(see following pages for details)

Construction: **AAC Cavity Panel Direct Fix**  
**Corrugated Iron**  
**Concrete Slab, Unit Below**  
Insulation: **R2.0 wall insulation**  
**R3.5 ceiling insulation**  
**No floor insulation**  
Glazing: **ALM-001-01 A Aluminium A SG Clear**

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

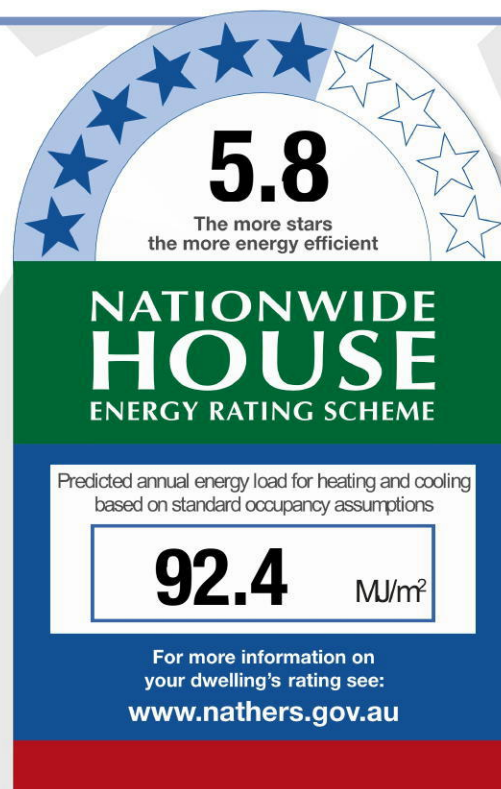
Conditioned: **84.0**  
Unconditioned: **0.0**  
Garage: **0.0**  
TOTAL: **84.0**

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

Heating: **56.8**  
Cooling: **35.6**  
TOTAL: **92.4**

### Plan documents

Plan ref/date: **1714**  
Prepared by: **AC PROJECT GROUP**



### Ceiling penetrations

(see following pages for details)

Sealed: **26**  
Unsealed: **0**  
TOTAL:\*\* **26**

\*\*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.

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



# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: 0004274288

Certificate Date:

15 Oct 2019

★ Star rating:

5.8



## 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

### Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Kitchen/Living	ALM-002-01 A	n/a	2400	2600	S	No Shading
Kitchen/Living	ALM-002-01 A	n/a	2400	2600	S	No Shading
Kitchen/Living	ALM-001-01 A	n/a	1800	750	W	No Shading
Kitchen/Living	ALM-001-01 A	n/a	1800	750	W	No Shading
Bedroom 1	ALM-001-01 A	n/a	1800	750	W	No Shading
Ensuite	ALM-001-01 A	n/a	1800	750	S	No Shading
Bedroom 2	ALM-001-01 A	n/a	1800	750	W	No Shading

### 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 (m²)	Orientation	Outdoor shade	Indoor shade/diffuser
None Present						

### External wall type

ID	Wall type	Insulation	Wall wrap or foil
EW-1	AAC Cavity Panel Direct Fix	Bulk Insulation R2	No
EW-2	Fibro Cavity Panel Direct Fix	Bulk Insulation R2	No

### External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Kitchen/Living	EW-1	1195	2700	N	No	2000
Kitchen/Living	EW-1	6900	2700	S	No	500
Kitchen/Living	EW-1	3512	2700	W	No	554
Bedroom 1	EW-1	2998	2700	W	No	607
Ensuite	EW-1	1395	2700	S	No	500
Ensuite	EW-2	2100	2700	W	No	0
Ensuite	EW-2	3500	2700	N	No	2000
Ensuite	EW-2	900	2700	E	No	5000
Ensuite	EW-2	395	2700	N	No	2900
Bath	EW-2	1395	2700	N	No	2900
Bath	EW-2	900	2700	W	No	5300
Bath	EW-2	1995	2700	N	No	2000
Bedroom 2	EW-1	3218	2700	W	No	591

# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004274288**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**5.8**



## Building features continued

### Internal wall type

Wall type	Area (m²)	Insulation	Wall wrap or foil
IW-1 - Cavity wall, direct fix plasterboard, single gap	61.0	No insulation	No
IW-2 - Shaft liner party wall with plaster	38.0	Bulk Insulation both sides of shaft liner R2	No

### Floors

Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Kitchen/Living	Concrete Slab, Unit Below 150mm	46.7	None	No Insulation	Ceramic Tiles 8mm
Bedroom 1	Concrete Slab, Unit Below 150mm	13.8	None	No Insulation	Carpet+Rubber Underlay 18mm
Ensuite	Concrete Slab, Unit Below 150mm	7.2	None	No Insulation	Ceramic Tiles 8mm
Bath	Concrete Slab, Unit Below 150mm	4.9	None	No Insulation	Ceramic Tiles 8mm
Bedroom 2	Concrete Slab, Unit Below 150mm	11.1	None	No Insulation	Carpet+Rubber Underlay 18mm

### Ceiling type

Location	Construction	Added insulation	Roof space above
Kitchen/Living	Plasterboard	Bulk Insulation R3.5	Yes
Bedroom 1	Plasterboard	Bulk Insulation R3.5	Yes
Ensuite	Plasterboard	Bulk Insulation R3.5	Yes
Bath	Plasterboard	Bulk Insulation R3.5	Yes

### Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
Kitchen/Living	12	Downlights - LED	150	Sealed
Kitchen/Living	1	Exhaust Fans	300	Sealed
Bedroom 1	4	Downlights - LED	150	Sealed
Ensuite	2	Downlights - LED	150	Sealed
Ensuite	1	Exhaust Fans	300	Sealed
Bath	1	Downlights - LED	150	Sealed
Bath	1	Exhaust Fans	300	Sealed
Bedroom 2	4	Downlights - LED	150	Sealed

### Ceiling fans

## Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0004274288**

Certificate Date:

**15 Oct 2019**

★ Star rating:

**5.8**



### Building features continued

Location	Number	Diameter (mm)
None Present		

### Roof type

Construction	Added insulation	Roof colour
Corrugated Iron	Bulk, Reflective Side Down, No Air Gap Above R1.3	Medium

# Nationwide House Energy Rating Scheme\* Certificate



Certificate number:

Certificate Date:

★ Star rating:

## Additional information

## Explanatory notes

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# Nationwide House Energy Rating Scheme\* Certificate



Certificate number: **0004274254**

Certificate Date: **15 Oct 2019**

★ Star rating: **6.8**

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## Assessor details

Accreditation number: **20920**  
Name: **Terry Chapman**  
Organisation: **Chapman Environmental Services Pty Ltd**  
Email: **terry@basixcertificates.com.au**  
Phone: **0414 265292**  
Declaration of interest: **None**  
Software: **BERS Pro v4.3.0.2d (3.13)**  
AAO: **ABSA**

## Overview

### Dwelling details

Street: **Unit U601, 38-40 Orth St**  
Suburb: **Kingswood**  
State: **NSW** Postcode: **2747**  
Type: **New Dwelling** NCC Class: **2**  
NatHERS climate zone: **28**  
Lot/DP number: **62/36728** Exposure: **Open**

### Key construction and insulation materials

(see following pages for details)

Construction: **AAC Cavity Panel Direct Fix**  
**Corrugated Iron**  
**Concrete Slab, Unit Below**  
Insulation: **R2.0 wall insulation**  
**R3.5 ceiling insulation**  
**No floor insulation**  
Glazing: **ALM-002-01 A Aluminium B SG Clear**

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

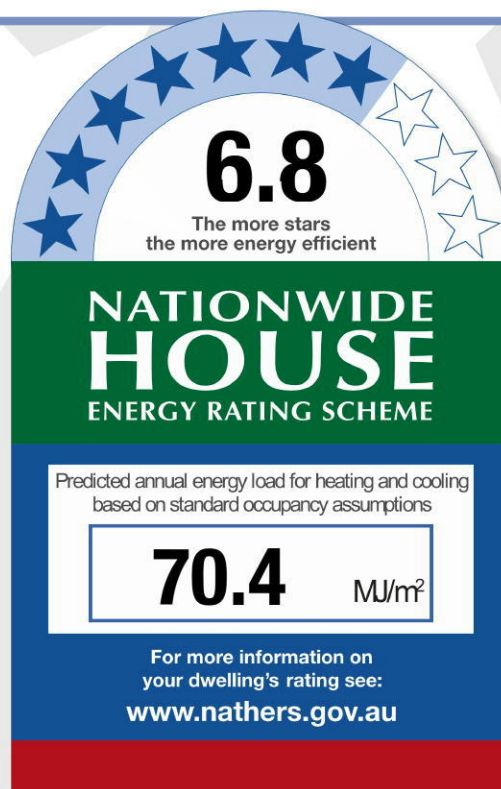
Conditioned: **91.0**  
Unconditioned: **9.0**  
Garage: **0.0**  
TOTAL: **101.0**

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

Heating: **35.5**  
Cooling: **34.9**  
TOTAL: **70.4**

## Plan documents

Plan ref/date: **1714**  
Prepared by: **AC PROJECT GROUP**



### Ceiling penetrations

(see following pages for details)

Sealed: **38**  
Unsealed: **0**  
TOTAL:\*\* **38**

\*\*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

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Certificate Date:

15 Oct 2019

★ Star rating:

6.8



## 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

### Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Kitchen/Living	ALM-002-01 A	n/a	2400	2600	N	No Shading
Kitchen/Living	ALM-002-01 A	n/a	2400	2600	N	No Shading
Bedroom 1	ALM-002-01 A	n/a	2400	1600	N	No Shading
Bedroom 1	ALM-001-01 A	n/a	1800	750	E	No Shading
Laundry	ALM-002-01 A	n/a	600	1500	S	No Shading
Bedroom 2	ALM-002-01 A	n/a	600	2400	W	No Shading
Bedroom 2	ALM-002-01 A	n/a	2400	1600	N	No Shading
Bedroom 3	ALM-001-01 A	n/a	1800	750	E	No Shading
Bath	ALM-002-01 A	n/a	600	1800	S	No Shading
Ensuite	ALM-002-01 A	n/a	600	1500	W	No Shading

### 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 <sup>2</sup> )	Orientation	Outdoor shade	Indoor shade/diffuser
None Present						

### External wall type

ID	Wall type	Insulation	Wall wrap or foil
EW-1	AAC Cavity Panel Direct Fix	Bulk Insulation R2	No
EW-2	Fibro Cavity Panel Direct Fix	Bulk Insulation R2	No

### External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Kitchen/Living	EW-1	6890	2700	N	No	1500
Kitchen/Living	EW-2	3300	2700	S	No	0
Kitchen/Living	EW-2	2200	2700	W	No	0
Bedroom 1	EW-1	1000	2700	W	No	10500
Bedroom 1	EW-1	3000	2700	N	No	500
Bedroom 1	EW-1	3395	2700	E	No	500
Laundry	EW-1	1690	2700	S	No	0
Bedroom 2	EW-2	1090	2700	S	No	0
Bedroom 2	EW-1	3695	2700	W	No	500
Bedroom 2	EW-1	3100	2700	N	No	500
Bedroom 2	EW-1	1000	2700	E	No	10400

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## Building features continued

Bedroom 3	EW-2	3990	2700	E	No	500
Bath	EW-1	3695	2700	S	No	0
Bath	EW-2	2395	2700	W	No	0
Ensuite	EW-1	1995	2700	S	No	0
Ensuite	EW-1	1895	2700	W	No	500
Kitchen/Living	EW-1	995	2700	E	No	500
Kitchen/Living	EW-1	1800	2700	E	No	2400
Kitchen/Living	EW-1	1195	2700	S	No	0

## Internal wall type

Wall type	Area (m <sup>2</sup> )	Insulation	Wall wrap or foil
IW-1 - Cavity wall, direct fix plasterboard, single gap	88.0	No insulation	No

## Floors

Location	Construction	Area (m <sup>2</sup> )	Sub floor ventilation	Added insulation	Covering
Kitchen/Living	Concrete Slab, Unit Below 150mm	45.9	None	No Insulation	Ceramic Tiles 8mm
Bedroom 1	Concrete Slab, Unit Below 150mm	10.9	None	No Insulation	Carpet+Rubber Underlay 18mm
Laundry	Concrete Slab, Unit Below 150mm	2.3	None	No Insulation	Ceramic Tiles 8mm
Bedroom 2	Concrete Slab, Unit Below 150mm	13.2	None	No Insulation	Carpet+Rubber Underlay 18mm
Bedroom 3	Concrete Slab, Unit Below 150mm	10.6	None	No Insulation	Carpet+Rubber Underlay 18mm
Bath	Concrete Slab, Unit Below 150mm	7.1	None	No Insulation	Ceramic Tiles 8mm
Ensuite	Concrete Slab, Unit Below 150mm	3.6	None	No Insulation	Ceramic Tiles 8mm
Kitchen/Living	Concrete Slab, Unit Below 150mm	7.0	None	No Insulation	Ceramic Tiles 8mm

## Ceiling type

Location	Construction	Added insulation	Roof space above
Kitchen/Living	Plasterboard	Bulk Insulation R3.5	Yes
Bedroom 1	Plasterboard	Bulk Insulation R3.5	Yes
Laundry	Plasterboard	Bulk Insulation R3.5	Yes
Bedroom 2	Plasterboard	Bulk Insulation R3.5	Yes
Bedroom 3	Plasterboard	Bulk Insulation R3.5	Yes
Bath	Plasterboard		Yes

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

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### Building features continued

		Bulk Insulation R3.5	
Ensuite	Plasterboard	Bulk Insulation R3.5	Yes
Kitchen/Living	Plasterboard	Bulk Insulation R3.5	Yes

### Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
Kitchen/Living	16	Downlights - LED	150	Sealed
Kitchen/Living	2	Exhaust Fans	300	Sealed
Bedroom 1	4	Downlights - LED	150	Sealed
Laundry	1	Downlights - LED	150	Sealed
Laundry	1	Exhaust Fans	300	Sealed
Bedroom 2	4	Downlights - LED	150	Sealed
Bedroom 3	4	Downlights - LED	150	Sealed
Bath	2	Downlights - LED	150	Sealed
Bath	1	Exhaust Fans	300	Sealed
Ensuite	2	Downlights - LED	150	Sealed
Ensuite	1	Exhaust Fans	300	Sealed

### Ceiling fans

Location	Number	Diameter (mm)
None Present		

### Roof type

Construction	Added insulation	Roof colour
Corrugated Iron	Bulk, Reflective Side Down, No Air Gap Above R1.3	Medium

# Nationwide House Energy Rating Scheme\* Certificate



Certificate number:

Certificate Date:

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

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

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For more details see [www.nathers.gov.au](http://www.nathers.gov.au)