

# Nationwide House Energy Rating Scheme\* Certificate



Certificate number: **0003344546**

Certificate Date: **13 Nov 2018**

★ 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: **20039**

Name: **David Howard**

Organisation: **Partners Energy Management**

Email: **david@partnersenergy.com.au**

Phone: **0421381005**

Declaration of interest: **The Assessor has provided design advice to the Applicant**

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

AAO: **ABSA**

## Overview

### Dwelling details

Street: **Unit TH01, 25-27 Warriewood rd**

Suburb: **Warriewood**

State: **NSW**

Postcode: **2102**

Type: **New Dwelling**

NCC Class: **1A**

NatHERS

climate zone: **56**

Lot/DP

number: **5464**

Exposure: **Suburban**

### Key construction and insulation materials

(see following pages for details)

Construction: **Fibro Cavity Panel Direct Fix  
Corrugated Iron**

Insulation: **Concrete Slab on Ground**

**R2.5 wall insulation**

**R3.5 ceiling insulation**

**No floor insulation**

Glazing: **ATB-006-03 B Al Thermally Broken B**

**DG Argon Fill High Solar Gain low-E**

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

Conditioned: **232.0**

Unconditioned: **41.0**

Garage: **41.0**

TOTAL: **273.0**

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

Heating: **17.8**

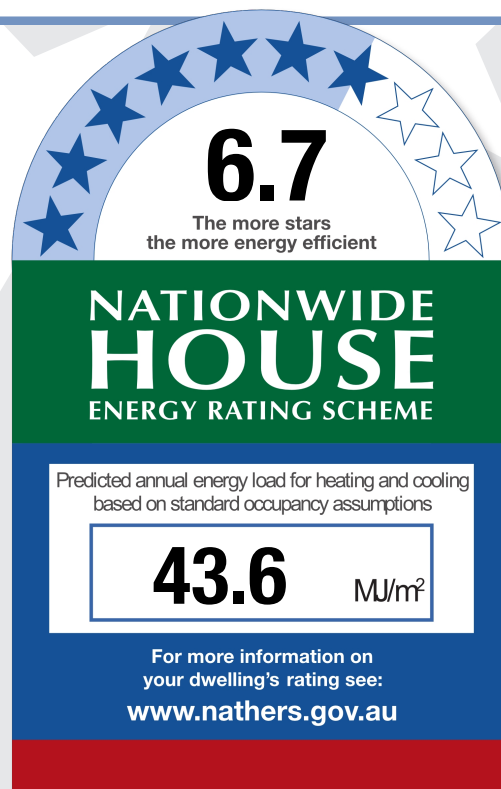
Cooling: **25.7**

TOTAL: **43.6**

### Plan documents

Plan ref/date: **Warriewood Residential Development**

Prepared by: **VIA Architects**



### Ceiling penetrations

(see following pages for details)

Sealed: **0**

Unsealed: **0**

TOTAL:\*\* **0**

\*\*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: **Unknown**

### 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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★ Star rating:

**6.7**



## Building features

### Window type and performance value

| Window ID    | Window type   | U-value | SHGC |
|--------------|---|---------|------|
| ATB-006-03 B | ATB-006-03 B Al Thermally Broken B DG Argon Fill High Solar Gain low-E -Clear | 2.9     | 0.51 |

### Window schedule

| Location       | Window ID    | Window no. | Height (mm) | Width (mm) | Orientation | Outdoor shade                       |
|----------------|--------------|------------|-------------|------------|-------------|-------------------------------------|
| Studio         | ATB-006-03 B | n/a        | 2700        | 3500       | NE          | No Shading                          |
| Studio         | ATB-006-03 B | n/a        | 2550        | 1000       | SW          | No Shading                          |
| Studio         | ATB-006-03 B | n/a        | 2550        | 1000       | NW          | No Shading                          |
| L2 Living      | ATB-006-03 B | n/a        | 2550        | 3636       | SW          | No Shading                          |
| L2 Living      | ATB-006-03 B | n/a        | 1400        | 900        | NW          | No Shading                          |
| Study          | ATB-006-03 B | n/a        | 2550        | 900        | NW          | No Shading                          |
| Kitchen/Living | ATB-006-03 B | n/a        | 2400        | 3178       | SW          | No Shading                          |
| Kitchen/Living | ATB-006-03 B | n/a        | 2700        | 2722       | NW          | No Shading                          |
| Kitchen/Living | ATB-006-03 B | n/a        | 2700        | 1000       | NW          | No Shading                          |
| Kitchen/Living | ATB-006-03 B | n/a        | 2700        | 3200       | NE          | Vertical Louvres, Horizontal Blades |
| Ens 1          | ATB-006-03 B | n/a        | 2400        | 600        | SW          | No Shading                          |
| Bedroom 1      | ATB-006-03 B | n/a        | 2400        | 3178       | SW          | No Shading                          |
| Bedroom 1      | ATB-006-03 B | n/a        | 2550        | 1000       | NW          | No Shading                          |
| Bedroom 2      | ATB-006-03 B | n/a        | 2550        | 1000       | NW          | No Shading                          |
| Bedroom 3      | ATB-006-03 B | n/a        | 2550        | 2722       | NW          | No Shading                          |
| Bedroom 3      | ATB-006-03 B | n/a        | 2550        | 1875       | NE          | 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 | Anti-glare foil with bulk no gap R2.5       | Yes               |
| EW-2 | Concrete block, lined         | Anti-glare foil with bulk no gap R1.5       | Yes               |
| EW-3 | Fibro Cavity Panel Direct Fix | Foil, Anti-glare one side, Reflective other | Yes               |

### External wall schedule

| Location  | ID   | Width (mm) | Height (mm) | Orientation | Fixed Shade | Eaves (mm) |
|-----------|------|------------|-------------|-------------|-------------|------------|
| Studio    | EW-1 | 5900       | 2700        | NE          | No          | 4400       |
| Studio    | EW-1 | 5900       | 2700        | SW          | No          | 0          |
| Studio    | EW-1 | 5000       | 2700        | NW          | No          | 0          |
| L2 Living | EW-1 | 1800       | 2550        | SW          | No          | 1800       |

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## Building features continued

|                |      |       |      |    |    |       |
|----------------|------|-------|------|----|----|-------|
| L2 Living      | EW-1 | 1800  | 2550 | SE | No | 4400  |
| L2 Living      | EW-1 | 3700  | 2550 | SW | No | 10600 |
| L2 Living      | EW-1 | 7295  | 2550 | NW | No | 0     |
| Ldry           | EW-2 | 2795  | 2550 | NE | No | 0     |
| L2 Bath        | EW-2 | 2395  | 2550 | NW | No | 0     |
| L2 Bath        | EW-2 | 2695  | 2550 | NE | No | 0     |
| Study          | EW-1 | 4890  | 2550 | NW | No | 0     |
| Garage 1       | EW-3 | 5900  | 3000 | SW | No | 0     |
| Garage 1       | EW-3 | 7300  | 3000 | NW | No | 0     |
| Garage 1       | EW-3 | 4300  | 2550 | NE | No | 2100  |
| Garage 1       | EW-3 | 1100  | 2550 | SE | No | 4200  |
| Garage 1       | EW-3 | 1600  | 2550 | NE | No | 3200  |
| WC             | EW-1 | 1595  | 2700 | SW | No | 600   |
| Kitchen/Living | EW-1 | 3895  | 2700 | SW | No | 600   |
| Kitchen/Living | EW-1 | 12800 | 2700 | NW | No | 0     |
| Kitchen/Living | EW-1 | 5500  | 2700 | NE | No | 0     |
| Ens 1          | EW-1 | 1595  | 2550 | SW | No | 1300  |
| Bedroom 1      | EW-1 | 3895  | 2550 | SW | No | 1300  |
| Bedroom 1      | EW-1 | 5395  | 2550 | NW | No | 0     |
| Bedroom 2      | EW-1 | 4190  | 2550 | NW | No | 0     |
| Bedroom 3      | EW-1 | 3795  | 2550 | NW | No | 900   |
| Bedroom 3      | EW-1 | 3295  | 2550 | NE | No | 2000  |
| L4 Bath        | EW-1 | 2195  | 2550 | NE | No | 2000  |

## Internal wall type

| Wall type   | Area (m <sup>2</sup> ) | Insulation    | Wall wrap or foil |
|---|------------------------|---------------|-------------------|
| IW-1 - Brick, plasterboard                              | 133.0                  | No Insulation | No                |
| IW-2 - Cavity wall, direct fix plasterboard, single gap | 145.0                  | No insulation | No                |

## Floors

| Location        | Construction                    | Area (m <sup>2</sup> ) | Sub floor ventilation | Added insulation   | Covering          |
|-----------------|---------------------------------|------------------------|-----------------------|--------------------|-------------------|
| Studio/Garage 1 | Timber Above Plasterboard 100mm | 29.5                   |                       | Bulk Insulation R3 | Carpet 10mm       |
| Lift L2 Main    | Concrete Slab on Ground 100mm   | 2.2                    | None                  | No Insulation      | Ceramic Tiles 8mm |
| L2 Living       | Concrete Slab on Ground 100mm   | 47.6                   | None                  | No Insulation      | Ceramic Tiles 8mm |
| Ldry            | Concrete Slab on Ground 100mm   | 3.5                    | None                  | No Insulation      | Ceramic Tiles 8mm |
| L2 Bath         | Concrete Slab on Ground 100mm   | 6.3                    | None                  | No Insulation      | Ceramic Tiles 8mm |
| Study           | Concrete Slab on Ground 100mm   | 15.7                   | None                  | No Insulation      | Ceramic Tiles 8mm |
| Garage 1        | Concrete Slab on Ground 100mm   | 41.3                   | None                  | No Insulation      | Bare              |

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## Building features continued

|                           |                                 |      |              |                                    |                   |
|---------------------------|---------------------------------|------|--------------|------------------------------------|-------------------|
| L3 Lift/Lift L2 Main      | Timber Above Plasterboard 100mm | 2.2  |              | No Insulation                      | Bare              |
| WC/L2 Living              | Timber Above Plasterboard 100mm | 3.3  |              | No Insulation                      | Ceramic Tiles 8mm |
| Kitchen/Living /L2 Living | Timber Above Plasterboard 100mm | 38.0 |              | No Insulation                      | Carpet 10mm       |
| Kitchen/Living /Ldry      | Timber Above Plasterboard 100mm | 3.6  |              | No Insulation                      | Carpet 10mm       |
| Kitchen/Living /L2 Bath   | Timber Above Plasterboard 100mm | 6.5  |              | No Insulation                      | Carpet 10mm       |
| Kitchen/Living /Study     | Timber Above Plasterboard 100mm | 16.1 |              | No Insulation                      | Carpet 10mm       |
| Ens 1/WC                  | Timber Above Plasterboard 19mm  | 3.4  |              | No Insulation                      | Carpet 10mm       |
| Ens 1                     | Suspended Timber Floor 19mm     | 0.9  | Totally Open | Bulk Insulation, Gap to Floor R2.5 | Bare              |
| L4 Lift/L3 Lift           | Timber Above Plasterboard 100mm | 2.2  |              | No Insulation                      | Bare              |
| Bedroom 1/Kitchen/Living  | Timber Above Plasterboard 100mm | 17.1 |              | No Insulation                      | Carpet 10mm       |
| Bedroom 1                 | Suspended Timber Floor 100mm    | 2.3  | Totally Open | Bulk Insulation, Gap to Floor R2.5 | Carpet 10mm       |
| Bedroom 2/Kitchen/Living  | Timber Above Plasterboard 100mm | 12.6 |              | No Insulation                      | Carpet 10mm       |
| Bedroom 3/Kitchen/Living  | Timber Above Plasterboard 100mm | 12.2 |              | No Insulation                      | Carpet 10mm       |
| L4 Bath/Kitchen/Living    | Timber Above Plasterboard 100mm | 5.5  |              | No Insulation                      | Ceramic Tiles 8mm |
| Upstairs/Kitchen/Living   | Timber Above Plasterboard 19mm  | 15.2 |              | No Insulation                      | Carpet 10mm       |

## Ceiling type

| Location     | Construction              | Added insulation     | Roof space above |
|--------------|---------------------------|----------------------|------------------|
| Studio       | Plasterboard              | Bulk Insulation R3.5 | Yes              |
| Lift L2 Main | Plasterboard              | Bulk Insulation R3   | No               |
| Lift L2 Main | Timber Above Plasterboard | No Insulation        | No               |
| L2 Living    | Plasterboard              | Bulk Insulation R3.5 | No               |
| L2 Living    | Timber Above Plasterboard | No Insulation        | No               |
| Ldry         | Plasterboard              | Bulk Insulation R3   | No               |
| Ldry         | Timber Above Plasterboard | No Insulation        | No               |
| L2 Bath      | Plasterboard              | Bulk Insulation R3   | No               |
| L2 Bath      | Timber Above Plasterboard | No Insulation        | No               |
| Study        | Plasterboard              | Bulk Insulation      | No               |



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## Building features continued

|                |                           |                      |     |
|----------------|---------------------------|----------------------|-----|
|                |                           | R3                   |     |
| Study          | Timber Above Plasterboard | No Insulation        | No  |
| Garage 1       | Plasterboard              | No insulation        | No  |
| Garage 1       | Timber Above Plasterboard | Bulk Insulation R3   | No  |
| L3 Lift        | Timber Above Plasterboard | No Insulation        | No  |
| WC             | Timber Above Plasterboard | No Insulation        | No  |
| Kitchen/Living | Timber Above Plasterboard | No Insulation        | No  |
| Ens 1          | Plasterboard              | Bulk Insulation R3.5 | Yes |
| L4 Lift        | Plasterboard              | Bulk Insulation R3   | Yes |
| Bedroom 1      | Plasterboard              | Bulk Insulation R3.5 | Yes |
| Bedroom 2      | Plasterboard              | Bulk Insulation R3.5 | Yes |
| Bedroom 3      | Plasterboard              | Bulk Insulation R3.5 | Yes |
| L4 Bath        | Plasterboard              | Bulk Insulation R3.5 | Yes |
| Upstairs       | Plasterboard              | Bulk Insulation R3   | Yes |

## Ceiling penetrations

| Location     | Number | Type | Diameter (mm) | Sealed/unsealed |
|--------------|--------|------|---------------|-----------------|
| None Present |        |      |               |                 |

## Ceiling fans

| Location     | Number | Diameter (mm) |
|--------------|--------|---------------|
| None Present |        |               |

## Roof type

| Construction           | Added insulation                               | Roof colour |
|------------------------|--|-------------|
| Corrugated Iron        | Bulk, Reflective Side Down, Anti-glare Up R1.3 | Medium      |
| Waterproofing Membrane | No Insulation, Only an Air Gap                 | Medium      |

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## Additional information

If carpet noted as floor covering it may be replaced with any type.

Due to non current Window Library the glazing descriptions may not match actual products. Only the U and SHGC values should be considered NOT the glazing descriptions.

## 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\* Certificate



Certificate number: **0003344587**

Certificate Date: **13 Nov 2018**

★ Star rating: **6.2**

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: **20039**  
Name: **David Howard**  
Organisation: **Partners Energy Management**  
Email: **david@partnersenergy.com.au**  
Phone: **0421381005**  
Declaration of interest: **The Assessor has provided design advice to the Applicant**  
Software: **BERS Pro v4.3.0.2c (3.13)**  
AAO: **ABSA**

## Overview

### Dwelling details

Street: **Unit TH02, 25-27 Warriewood rd**  
Suburb: **Warriewood**  
State: **NSW** Postcode: **2102**  
Type: **New Dwelling** NCC Class: **1A**  
NatHERS climate zone: **56**  
Lot/DP number: **5464** Exposure: **Suburban**

### Key construction and insulation materials

(see following pages for details)

Construction: **Fibro Cavity Panel Direct Fix**  
**Corrugated Iron**  
**Concrete Slab on Ground**  
Insulation: **R2.5 wall insulation**  
**R3.5 ceiling insulation**  
**No floor insulation**  
Glazing: **ATB-006-03 B Al Thermally Broken B**  
**DG Argon Fill High Solar Gain low-E**

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

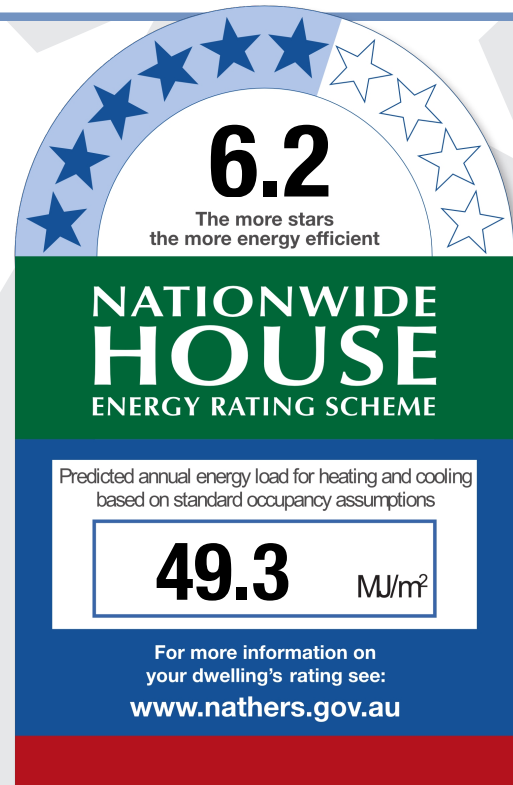
Conditioned: **232.0**  
Unconditioned: **41.0**  
Garage: **41.0**  
TOTAL: **273.0**

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

Heating: **29.5**  
Cooling: **19.8**  
TOTAL: **49.3**

### Plan documents

Plan ref/date: **Warriewood Residential Development**  
Prepared by: **VIA Architects**



### Ceiling penetrations

(see following pages for details)

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

\*\*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: **Unknown**

### 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: **0003344587**

Certificate Date:

**13 Nov 2018**

★ Star rating:

**6.2**



## Building features

### Window type and performance value

| Window ID    | Window type   | U-value | SHGC |
|--------------|---|---------|------|
| ATB-006-03 B | ATB-006-03 B AI Thermally Broken B DG Argon Fill High Solar Gain low-E -Clear | 2.9     | 0.51 |

### Window schedule

| Location       | Window ID    | Window no. | Height (mm) | Width (mm) | Orientation | Outdoor shade                       |
|----------------|--------------|------------|-------------|------------|-------------|-------------------------------------|
| Studio         | ATB-006-03 B | n/a        | 2550        | 1000       | SE          | No Shading                          |
| Studio         | ATB-006-03 B | n/a        | 2550        | 1000       | SW          | No Shading                          |
| Studio         | ATB-006-03 B | n/a        | 2700        | 3500       | NE          | No Shading                          |
| L2 Living      | ATB-006-03 B | n/a        | 1400        | 900        | SE          | No Shading                          |
| L2 Living      | ATB-006-03 B | n/a        | 2550        | 3636       | SW          | No Shading                          |
| Study          | ATB-006-03 B | n/a        | 2550        | 900        | SE          | No Shading                          |
| Kitchen/Living | ATB-006-03 B | n/a        | 2700        | 3200       | NE          | Vertical Louvres, Horizontal Blades |
| Kitchen/Living | ATB-006-03 B | n/a        | 2700        | 2722       | SE          | No Shading                          |
| Kitchen/Living | ATB-006-03 B | n/a        | 2700        | 1000       | SE          | No Shading                          |
| Kitchen/Living | ATB-006-03 B | n/a        | 2400        | 3178       | SW          | No Shading                          |
| Ens 1          | ATB-006-03 B | n/a        | 2400        | 600        | SW          | No Shading                          |
| Bedroom 1      | ATB-006-03 B | n/a        | 2550        | 1000       | SE          | No Shading                          |
| Bedroom 1      | ATB-006-03 B | n/a        | 2400        | 3178       | SW          | No Shading                          |
| Bedroom 2      | ATB-006-03 B | n/a        | 2550        | 1000       | SE          | No Shading                          |
| Bedroom 3      | ATB-006-03 B | n/a        | 2550        | 1875       | NE          | No Shading                          |
| Bedroom 3      | ATB-006-03 B | n/a        | 2550        | 2722       | SE          | 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 | Anti-glare foil with bulk no gap R2.5       | Yes               |
| EW-2 | Concrete block, lined         | Anti-glare foil with bulk no gap R1.5       | Yes               |
| EW-3 | Fibro Cavity Panel Direct Fix | Foil, Anti-glare one side, Reflective other | Yes               |

### External wall schedule

| Location  | ID   | Width (mm) | Height (mm) | Orientation | Fixed Shade | Eaves (mm) |
|-----------|------|------------|-------------|-------------|-------------|------------|
| Studio    | EW-1 | 5000       | 2700        | SE          | No          | 0          |
| Studio    | EW-1 | 5900       | 2700        | SW          | No          | 0          |
| Studio    | EW-1 | 5900       | 2700        | NE          | No          | 4400       |
| L2 Living | EW-1 | 7295       | 2550        | SE          | No          | 0          |

# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0003344587**

Certificate Date:

**13 Nov 2018**

★ Star rating:

**6.2**



## Building features continued

|                |      |       |      |    |    |       |
|----------------|------|-------|------|----|----|-------|
| L2 Living      | EW-1 | 3700  | 2550 | SW | No | 10600 |
| L2 Living      | EW-1 | 1800  | 2550 | NW | No | 4400  |
| L2 Living      | EW-1 | 1800  | 2550 | SW | No | 1800  |
| Ldry           | EW-2 | 2795  | 2550 | NE | No | 0     |
| L2 Bath        | EW-2 | 2695  | 2550 | NE | No | 0     |
| L2 Bath        | EW-2 | 2395  | 2550 | SE | No | 0     |
| Study          | EW-1 | 4890  | 2550 | SE | No | 0     |
| Garage 1       | EW-3 | 1600  | 2550 | NE | No | 3200  |
| Garage 1       | EW-3 | 1100  | 2550 | NW | No | 4200  |
| Garage 1       | EW-3 | 4300  | 2550 | NE | No | 2100  |
| Garage 1       | EW-3 | 7300  | 3000 | SE | No | 0     |
| Garage 1       | EW-3 | 5900  | 3000 | SW | No | 0     |
| WC             | EW-1 | 1595  | 2700 | SW | No | 600   |
| Kitchen/Living | EW-1 | 5500  | 2700 | NE | No | 0     |
| Kitchen/Living | EW-1 | 12800 | 2700 | SE | No | 0     |
| Kitchen/Living | EW-1 | 3895  | 2700 | SW | No | 600   |
| Ens 1          | EW-1 | 1595  | 2550 | SW | No | 1300  |
| Bedroom 1      | EW-1 | 5395  | 2550 | SE | No | 0     |
| Bedroom 1      | EW-1 | 3895  | 2550 | SW | No | 1300  |
| Bedroom 2      | EW-1 | 4190  | 2550 | SE | No | 0     |
| Bedroom 3      | EW-1 | 3295  | 2550 | NE | No | 2000  |
| Bedroom 3      | EW-1 | 3795  | 2550 | SE | No | 900   |
| L4 Bath        | EW-1 | 2195  | 2550 | NE | No | 2000  |

## Internal wall type

| Wall type   | Area (m <sup>2</sup> ) | Insulation    | Wall wrap or foil |
|---|------------------------|---------------|-------------------|
| IW-1 - Brick, plasterboard                              | 133.0                  | No Insulation | No                |
| IW-2 - Cavity wall, direct fix plasterboard, single gap | 145.0                  | No insulation | No                |

## Floors

| Location        | Construction                    | Area (m <sup>2</sup> ) | Sub floor ventilation | Added insulation   | Covering    |
|-----------------|---------------------------------|------------------------|-----------------------|--------------------|-------------|
| Studio/Garage 1 | Timber Above Plasterboard 100mm | 29.5                   |                       | Bulk Insulation R3 | Carpet 10mm |
| Lift L2 Main    | Concrete Slab on Ground 100mm   | 2.2                    | None                  | No Insulation      | Carpet 10mm |
| L2 Living       | Concrete Slab on Ground 100mm   | 47.6                   | None                  | No Insulation      | Carpet 10mm |
| Ldry            | Concrete Slab on Ground 100mm   | 3.5                    | None                  | No Insulation      | Carpet 10mm |
| L2 Bath         | Concrete Slab on Ground 100mm   | 6.3                    | None                  | No Insulation      | Carpet 10mm |
| Study           | Concrete Slab on Ground 100mm   | 15.7                   | None                  | No Insulation      | Carpet 10mm |
| Garage 1        | Concrete Slab on Ground 100mm   | 41.3                   | None                  | No Insulation      | Bare        |

# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0003344587**

Certificate Date:

**13 Nov 2018**

★ Star rating:

**6.2**



## Building features continued

|                           |                                 |      |              |                                    |             |
|---------------------------|---------------------------------|------|--------------|------------------------------------|-------------|
| L3 Lift/Lift L2 Main      | Timber Above Plasterboard 100mm | 2.2  |              | No Insulation                      | Bare        |
| WC/L2 Living              | Timber Above Plasterboard 100mm | 3.3  |              | No Insulation                      | Carpet 10mm |
| Kitchen/Living /L2 Living | Timber Above Plasterboard 100mm | 38.0 |              | No Insulation                      | Carpet 10mm |
| Kitchen/Living /Ldry      | Timber Above Plasterboard 100mm | 3.6  |              | No Insulation                      | Carpet 10mm |
| Kitchen/Living /L2 Bath   | Timber Above Plasterboard 100mm | 6.5  |              | No Insulation                      | Carpet 10mm |
| Kitchen/Living /Study     | Timber Above Plasterboard 100mm | 16.1 |              | No Insulation                      | Carpet 10mm |
| Ens 1/WC                  | Timber Above Plasterboard 19mm  | 3.4  |              | No Insulation                      | Carpet 10mm |
| Ens 1                     | Suspended Timber Floor 19mm     | 0.9  | Totally Open | Bulk Insulation, Gap to Floor R2.5 | Carpet 10mm |
| L4 Lift/L3 Lift           | Timber Above Plasterboard 100mm | 2.2  |              | No Insulation                      | Bare        |
| Bedroom 1/Kitchen/Living  | Timber Above Plasterboard 100mm | 17.1 |              | No Insulation                      | Carpet 10mm |
| Bedroom 1                 | Suspended Timber Floor 100mm    | 2.3  | Totally Open | Bulk Insulation, Gap to Floor R2.5 | Carpet 10mm |
| Bedroom 2/Kitchen/Living  | Timber Above Plasterboard 100mm | 12.6 |              | No Insulation                      | Carpet 10mm |
| Bedroom 3/Kitchen/Living  | Timber Above Plasterboard 100mm | 12.2 |              | No Insulation                      | Carpet 10mm |
| L4 Bath/Kitchen/Living    | Timber Above Plasterboard 100mm | 5.5  |              | No Insulation                      | Carpet 10mm |
| Upstairs/Kitchen/Living   | Timber Above Plasterboard 19mm  | 15.1 |              | No Insulation                      | Carpet 10mm |

## Ceiling type

| Location     | Construction              | Added insulation     | Roof space above |
|--------------|---------------------------|----------------------|------------------|
| Studio       | Plasterboard              | Bulk Insulation R3.5 | Yes              |
| Lift L2 Main | Plasterboard              | Bulk Insulation R3   | No               |
| Lift L2 Main | Timber Above Plasterboard | No Insulation        | No               |
| L2 Living    | Plasterboard              | Bulk Insulation R3.5 | No               |
| L2 Living    | Timber Above Plasterboard | No Insulation        | No               |
| Ldry         | Plasterboard              | Bulk Insulation R3   | No               |
| Ldry         | Timber Above Plasterboard | No Insulation        | No               |
| L2 Bath      | Plasterboard              | Bulk Insulation R3   | No               |
| L2 Bath      | Timber Above Plasterboard | No Insulation        | No               |
| Study        | Plasterboard              | Bulk Insulation      | No               |



# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0003344587**

Certificate Date:

**13 Nov 2018**

★ Star rating:

**6.2**



## Building features continued

|                |                           |                      |     |
|----------------|---------------------------|----------------------|-----|
|                |                           | R3                   |     |
| Study          | Timber Above Plasterboard | No Insulation        | No  |
| Garage 1       | Plasterboard              | No insulation        | No  |
| Garage 1       | Timber Above Plasterboard | Bulk Insulation R3   | No  |
| L3 Lift        | Timber Above Plasterboard | No Insulation        | No  |
| WC             | Timber Above Plasterboard | No Insulation        | No  |
| Kitchen/Living | Timber Above Plasterboard | No Insulation        | No  |
| Ens 1          | Plasterboard              | Bulk Insulation R3.5 | Yes |
| L4 Lift        | Plasterboard              | Bulk Insulation R3.5 | Yes |
| Bedroom 1      | Plasterboard              | Bulk Insulation R3.5 | Yes |
| Bedroom 2      | Plasterboard              | Bulk Insulation R3.5 | Yes |
| Bedroom 3      | Plasterboard              | Bulk Insulation R3.5 | Yes |
| L4 Bath        | Plasterboard              | Bulk Insulation R3.5 | Yes |
| Upstairs       | Plasterboard              | Bulk Insulation R3.5 | Yes |

## Ceiling penetrations

| Location     | Number | Type | Diameter (mm) | Sealed/unsealed |
|--------------|--------|------|---------------|-----------------|
| None Present |        |      |               |                 |

## Ceiling fans

| Location     | Number | Diameter (mm) |
|--------------|--------|---------------|
| None Present |        |               |

## Roof type

| Construction           | Added insulation                               | Roof colour |
|------------------------|--|-------------|
| Corrugated Iron        | Bulk, Reflective Side Down, Anti-glare Up R1.3 | Medium      |
| Waterproofing Membrane | No Insulation, Only an Air Gap                 | Medium      |

# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: 0003344587

Certificate Date: 13 Nov 2018

★ Star rating: 6.2



## Additional information

If carpet noted as floor covering it may be replaced with any type.

Due to non current Window Library the glazing descriptions may not match actual products. Only the U and SHGC values should be considered NOT the glazing descriptions.

## 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\* Certificate



Certificate number: **0003344579**

Certificate Date: **13 Nov 2018**

★ 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: **20039**  
Name: **David Howard**  
Organisation: **Partners Energy Management**  
Email: **david@partnersenergy.com.au**  
Phone: **0421381005**  
Declaration of interest: **The Assessor has provided design advice to the Applicant**  
Software: **BERS Pro v4.3.0.2c (3.13)**  
AAO: **ABSA**

## Overview

### Dwelling details

Street: **Unit TH03, 25-27 Warriewood rd**  
Suburb: **Warriewood**  
State: **NSW** Postcode: **2102**  
Type: **New Dwelling** NCC Class: **1A**  
NatHERS climate zone: **56**  
Lot/DP number: **5464** Exposure: **Suburban**

### Key construction and insulation materials

(see following pages for details)

Construction: **Fibro Cavity Panel Direct Fix**  
**Waterproofing Membrane**  
**Concrete Slab on Ground**  
Insulation: **R2.5 wall insulation**  
**R3.5 ceiling insulation**  
**No floor insulation**  
Glazing: **ATB-006-03 B Al Thermally Broken B**  
**DG Argon Fill High Solar Gain low-E**

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

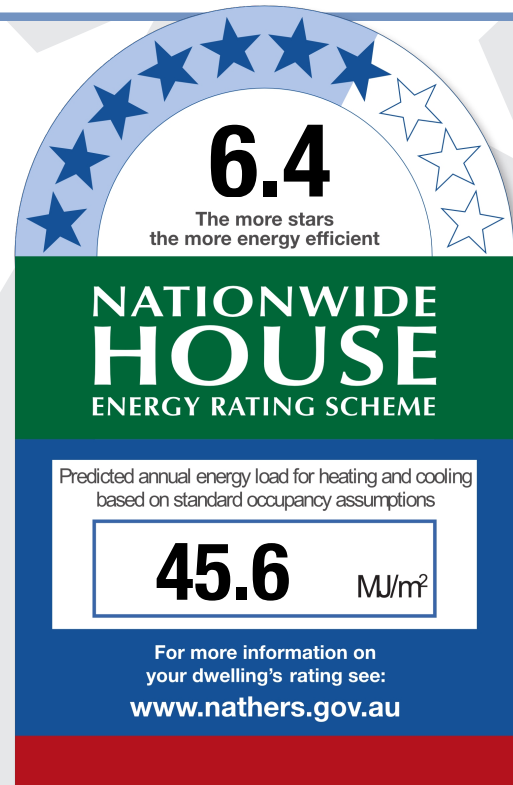
Conditioned: **226.0**  
Unconditioned: **41.0**  
Garage: **41.0**  
TOTAL: **267.0**

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

Heating: **20.4**  
Cooling: **25.2**  
TOTAL: **45.6**

### Plan documents

Plan ref/date: **Warriewood Residential Development**  
Prepared by: **VIA Architects**



### Ceiling penetrations

(see following pages for details)

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

\*\*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: **Unknown**

### 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: **0003344579**

Certificate Date:

**13 Nov 2018**

★ Star rating:

**6.4**



## Building features

### Window type and performance value

| Window ID    | Window type   | U-value | SHGC |
|--------------|---|---------|------|
| ATB-006-03 B | ATB-006-03 B AI Thermally Broken B DG Argon Fill High Solar Gain low-E -Clear | 2.9     | 0.51 |

### Window schedule

| Location       | Window ID    | Window no. | Height (mm) | Width (mm) | Orientation | Outdoor shade                       |
|----------------|--------------|------------|-------------|------------|-------------|-------------------------------------|
| Studio         | ATB-006-03 B | n/a        | 2700        | 3500       | NE          | No Shading                          |
| Studio         | ATB-006-03 B | n/a        | 2550        | 1000       | SW          | No Shading                          |
| Studio         | ATB-006-03 B | n/a        | 2550        | 1000       | NW          | No Shading                          |
| L2 Living      | ATB-006-03 B | n/a        | 2550        | 3636       | SW          | No Shading                          |
| L2 Living      | ATB-006-03 B | n/a        | 1400        | 900        | NW          | No Shading                          |
| Study          | ATB-006-03 B | n/a        | 2550        | 900        | NW          | No Shading                          |
| Kitchen/Living | ATB-006-03 B | n/a        | 2400        | 3178       | SW          | No Shading                          |
| Kitchen/Living | ATB-006-03 B | n/a        | 2700        | 2722       | NW          | No Shading                          |
| Kitchen/Living | ATB-006-03 B | n/a        | 2700        | 1000       | NW          | No Shading                          |
| Kitchen/Living | ATB-006-03 B | n/a        | 2700        | 3200       | NE          | Vertical Louvres, Horizontal Blades |
| Ens 1          | ATB-006-03 B | n/a        | 2400        | 600        | SW          | No Shading                          |
| Bedroom 1      | ATB-006-03 B | n/a        | 2400        | 3178       | SW          | No Shading                          |
| Bedroom 1      | ATB-006-03 B | n/a        | 2550        | 1000       | NW          | No Shading                          |
| Bedroom 2      | ATB-006-03 B | n/a        | 2550        | 1000       | NW          | No Shading                          |
| Bedroom 3      | ATB-006-03 B | n/a        | 2550        | 2722       | NW          | No Shading                          |
| Bedroom 3      | ATB-006-03 B | n/a        | 2550        | 1875       | NE          | 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 | Anti-glare foil with bulk no gap R2.5       | Yes               |
| EW-2 | Concrete block, lined         | Anti-glare foil with bulk no gap R1.5       | Yes               |
| EW-3 | Fibro Cavity Panel Direct Fix | Foil, Anti-glare one side, Reflective other | Yes               |

### External wall schedule

| Location     | ID   | Width (mm) | Height (mm) | Orientation | Fixed Shade | Eaves (mm) |
|--------------|------|------------|-------------|-------------|-------------|------------|
| Studio       | EW-1 | 5900       | 2700        | NE          | No          | 4400       |
| Studio       | EW-1 | 5900       | 2700        | SW          | No          | 0          |
| Studio       | EW-1 | 5000       | 2700        | NW          | No          | 0          |
| Lift L2 Main | EW-1 | 1595       | 2700        | SW          | No          | 4000       |

# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0003344579**

Certificate Date:

**13 Nov 2018**

★ Star rating:

**6.4**



## Building features continued

|                |      |       |      |    |    |       |
|----------------|------|-------|------|----|----|-------|
| L2 Living      | EW-1 | 1800  | 2550 | SE | No | 4200  |
| L2 Living      | EW-1 | 3900  | 2550 | SW | No | 10600 |
| L2 Living      | EW-1 | 7295  | 2550 | NW | No | 0     |
| Ldry           | EW-2 | 2795  | 2550 | NE | No | 0     |
| L2 Bath        | EW-2 | 2395  | 2550 | NW | No | 0     |
| L2 Bath        | EW-2 | 2695  | 2550 | NE | No | 0     |
| Study          | EW-1 | 4890  | 2550 | NW | No | 0     |
| Garage 1       | EW-3 | 5900  | 3000 | SW | No | 0     |
| Garage 1       | EW-3 | 7300  | 3000 | NW | No | 0     |
| Garage 1       | EW-3 | 4300  | 2550 | NE | No | 2100  |
| Garage 1       | EW-3 | 1100  | 2550 | SE | No | 4200  |
| Garage 1       | EW-3 | 1600  | 2550 | NE | No | 3200  |
| WC             | EW-1 | 2195  | 2700 | SE | No | 2600  |
| WC             | EW-1 | 1595  | 2700 | SW | No | 600   |
| Kitchen/Living | EW-1 | 3895  | 2700 | SW | No | 600   |
| Kitchen/Living | EW-1 | 12800 | 2700 | NW | No | 0     |
| Kitchen/Living | EW-1 | 5500  | 2700 | NE | No | 0     |
| Ens 1          | EW-1 | 1595  | 2550 | SW | No | 1900  |
| Bedroom 1      | EW-1 | 3895  | 2550 | SW | No | 1900  |
| Bedroom 1      | EW-1 | 4795  | 2550 | NW | No | 0     |
| Bedroom 2      | EW-1 | 4190  | 2550 | NW | No | 0     |
| Bedroom 3      | EW-1 | 3795  | 2550 | NW | No | 900   |
| Bedroom 3      | EW-1 | 3295  | 2550 | NE | No | 2000  |
| L4 Bath        | EW-1 | 2195  | 2550 | NE | No | 2000  |

## Internal wall type

| Wall type   | Area (m²) | Insulation    | Wall wrap or foil |
|---|-----------|---------------|-------------------|
| IW-1 - Brick, plasterboard                              | 126.0     | No Insulation | No                |
| IW-2 - Cavity wall, direct fix plasterboard, single gap | 139.0     | No insulation | No                |

## Floors

| Location        | Construction                    | Area (m²) | Sub floor ventilation | Added insulation   | Covering          |
|-----------------|---------------------------------|-----------|-----------------------|--------------------|-------------------|
| Studio/Garage 1 | Timber Above Plasterboard 100mm | 29.5      |                       | Bulk Insulation R3 | Carpet 10mm       |
| Lift L2 Main    | Concrete Slab on Ground 100mm   | 2.3       | None                  | No Insulation      | Ceramic Tiles 8mm |
| L2 Living       | Concrete Slab on Ground 100mm   | 44.5      | None                  | No Insulation      | Ceramic Tiles 8mm |
| Ldry            | Concrete Slab on Ground 100mm   | 3.5       | None                  | No Insulation      | Ceramic Tiles 8mm |
| L2 Bath         | Concrete Slab on Ground 100mm   | 6.3       | None                  | No Insulation      | Ceramic Tiles 8mm |
| Study           | Concrete Slab on Ground 100mm   | 15.7      | None                  | No Insulation      | Ceramic Tiles 8mm |

# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0003344579**

Certificate Date:

**13 Nov 2018**

★ Star rating:

**6.4**



## Building features continued

|                           |                                 |      |              |  |                   |
|---------------------------|---------------------------------|------|--------------|--|-------------------|
| Garage 1                  | Concrete Slab on Ground 100mm   | 41.3 | None         | No Insulation                              | Bare              |
| L3 Lift/Lift L2 Main      | Timber Above Plasterboard 100mm | 2.2  |              | No Insulation                              | Bare              |
| WC                        | Suspended Timber Floor 19mm     | 3.3  | Totally Open | Bulk Insulation in Contact with Floor R2.5 | Ceramic Tiles 8mm |
| Kitchen/Living /L2 Living | Timber Above Plasterboard 100mm | 38.0 |              | No Insulation                              | Carpet 10mm       |
| Kitchen/Living /Ldry      | Timber Above Plasterboard 100mm | 3.6  |              | No Insulation                              | Carpet 10mm       |
| Kitchen/Living /L2 Bath   | Timber Above Plasterboard 100mm | 6.5  |              | No Insulation                              | Carpet 10mm       |
| Kitchen/Living /Study     | Timber Above Plasterboard 100mm | 16.1 |              | No Insulation                              | Carpet 10mm       |
| Ens 1/WC                  | Timber Above Plasterboard 19mm  | 3.3  |              | No Insulation                              | Carpet 10mm       |
| L4 Lift/L3 Lift           | Timber Above Plasterboard 100mm | 2.2  |              | No Insulation                              | Bare              |
| Bedroom 1/Kitchen/Living  | Timber Above Plasterboard 100mm | 17.0 |              | No Insulation                              | Carpet 10mm       |
| Bedroom 2/Kitchen/Living  | Timber Above Plasterboard 100mm | 12.6 |              | No Insulation                              | Carpet 10mm       |
| Bedroom 3/Kitchen/Living  | Timber Above Plasterboard 100mm | 12.2 |              | No Insulation                              | Carpet 10mm       |
| L4 Bath/Kitchen/Living    | Timber Above Plasterboard 100mm | 5.5  |              | No Insulation                              | Ceramic Tiles 8mm |
| Upstairs/Kitchen/Living   | Timber Above Plasterboard 19mm  | 15.2 |              | No Insulation                              | Carpet 10mm       |

## Ceiling type

| Location     | Construction              | Added insulation     | Roof space above |
|--------------|---------------------------|----------------------|------------------|
| Studio       | Plasterboard              | Bulk Insulation R3.5 | No               |
| Lift L2 Main | Plasterboard              | Bulk Insulation R3   | No               |
| Lift L2 Main | Timber Above Plasterboard | No Insulation        | No               |
| L2 Living    | Plasterboard              | Bulk Insulation R3.5 | No               |
| L2 Living    | Timber Above Plasterboard | No Insulation        | No               |
| Ldry         | Plasterboard              | Bulk Insulation R3   | No               |
| Ldry         | Timber Above Plasterboard | No Insulation        | No               |
| L2 Bath      | Plasterboard              | Bulk Insulation R3   | No               |
| L2 Bath      | Timber Above Plasterboard | No Insulation        | No               |
| Study        | Plasterboard              | Bulk Insulation R3   | No               |
| Study        | Timber Above Plasterboard | No Insulation        | No               |
| Garage 1     | Plasterboard              | No insulation        | No               |
| Garage 1     | Timber Above Plasterboard | Bulk Insulation R3   | No               |



## Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0003344579**

Certificate Date:

**13 Nov 2018**

★ Star rating:

**6.4**

### Building features continued

|                |                           |                      |     |
|----------------|---------------------------|----------------------|-----|
| L3 Lift        | Timber Above Plasterboard | No Insulation        | No  |
| WC             | Timber Above Plasterboard | No Insulation        | No  |
| Kitchen/Living | Timber Above Plasterboard | No Insulation        | No  |
| Ens 1          | Plasterboard              | Bulk Insulation R3.5 | Yes |
| L4 Lift        | Plasterboard              | Bulk Insulation R3   | Yes |
| Bedroom 1      | Plasterboard              | Bulk Insulation R3.5 | Yes |
| Bedroom 2      | Plasterboard              | Bulk Insulation R3.5 | Yes |
| Bedroom 3      | Plasterboard              | Bulk Insulation R3.5 | Yes |
| L4 Bath        | Plasterboard              | Bulk Insulation R3.5 | Yes |
| Upstairs       | Plasterboard              | Bulk Insulation R3   | Yes |

### Ceiling penetrations

| Location     | Number | Type | Diameter (mm) | Sealed/unsealed |
|--------------|--------|------|---------------|-----------------|
| None Present |        |      |               |                 |

### Ceiling fans

| Location     | Number | Diameter (mm) |
|--------------|--------|---------------|
| None Present |        |               |

### Roof type

| Construction           | Added insulation                               | Roof colour |
|------------------------|--|-------------|
| Waterproofing Membrane | No Insulation, Only an Air Gap                 | Medium      |
| Corrugated Iron        | Bulk, Reflective Side Down, Anti-glare Up R1.3 | Medium      |

# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: 0003344579

Certificate Date: 13 Nov 2018

★ Star rating: 6.4



## Additional information

If carpet noted as floor covering it may be replaced with any type.

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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).

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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### 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

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# Nationwide House Energy Rating Scheme\* Certificate



Certificate number: **0003344603**

Certificate Date: **13 Nov 2018**

★ Star rating: **6.1**

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: **20039**  
Name: **David Howard**  
Organisation: **Partners Energy Management**  
Email: **david@partnersenergy.com.au**  
Phone: **0421381005**  
Declaration of interest: **The Assessor has provided design advice to the Applicant**  
Software: **BERS Pro v4.3.0.2c (3.13)**  
AAO: **ABSA**

## Overview

### Dwelling details

Street: **Unit TH04, 25-27 Warriewood rd**  
Suburb: **Warriewood**  
State: **NSW** Postcode: **2102**  
Type: **New Dwelling** NCC Class: **1A**  
NatHERS climate zone: **56**  
Lot/DP number: **5464** Exposure: **Suburban**

### Key construction and insulation materials

(see following pages for details)

Construction: **Fibro Cavity Panel Direct Fix**  
**Corrugated Iron**  
**Concrete Slab on Ground**  
Insulation: **R2.5 wall insulation**  
**R3.5 ceiling insulation**  
**No floor insulation**  
Glazing: **ATB-006-03 B Al Thermally Broken B**  
**DG Argon Fill High Solar Gain low-E**

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

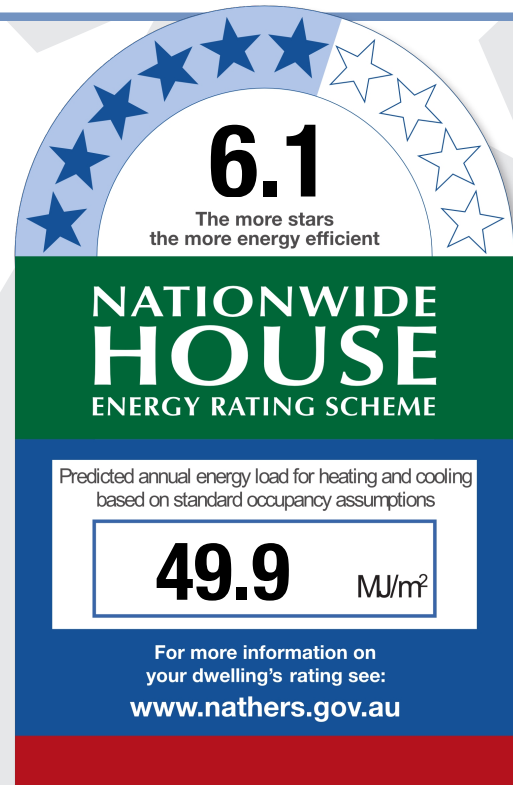
Conditioned: **198.0**  
Unconditioned: **43.0**  
Garage: **39.0**  
TOTAL: **240.0**

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

Heating: **29.3**  
Cooling: **20.6**  
TOTAL: **49.9**

### Plan documents

Plan ref/date: **Warriewood Residential Development**  
Prepared by: **VIA Architects**



### Ceiling penetrations

(see following pages for details)

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

\*\*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: **Unknown**

### 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: **0003344603**

Certificate Date:

**13 Nov 2018**

★ Star rating:

**6.1**



## Building features

### Window type and performance value

| Window ID    | Window type   | U-value | SHGC |
|--------------|---|---------|------|
| ATB-006-03 B | ATB-006-03 B Al Thermally Broken B DG Argon Fill High Solar Gain low-E -Clear | 2.9     | 0.51 |

### Window schedule

| Location       | Window ID    | Window no. | Height (mm) | Width (mm) | Orientation | Outdoor shade                       |
|----------------|--------------|------------|-------------|------------|-------------|-------------------------------------|
| Studio         | ATB-006-03 B | n/a        | 2550        | 1000       | SE          | No Shading                          |
| Studio         | ATB-006-03 B | n/a        | 2550        | 1000       | SW          | No Shading                          |
| Studio         | ATB-006-03 B | n/a        | 2700        | 3500       | NE          | No Shading                          |
| L2 Living      | ATB-006-03 B | n/a        | 1400        | 900        | SE          | No Shading                          |
| L2 Living      | ATB-006-03 B | n/a        | 2550        | 3636       | SW          | No Shading                          |
| Study          | ATB-006-03 B | n/a        | 2550        | 900        | SE          | No Shading                          |
| Kitchen/Living | ATB-006-03 B | n/a        | 2700        | 3200       | NE          | Vertical Louvres, Horizontal Blades |
| Kitchen/Living | ATB-006-03 B | n/a        | 2700        | 2722       | SE          | No Shading                          |
| Kitchen/Living | ATB-006-03 B | n/a        | 2700        | 1000       | SE          | No Shading                          |
| Kitchen/Living | ATB-006-03 B | n/a        | 2400        | 3178       | SW          | No Shading                          |
| Bath           | ATB-006-03 B | n/a        | 2550        | 1000       | SW          | No Shading                          |
| Bedroom 1      | ATB-006-03 B | n/a        | 2550        | 1000       | SE          | No Shading                          |
| Bedroom 1      | ATB-006-03 B | n/a        | 2550        | 600        | SW          | No Shading                          |
| Bedroom 2      | ATB-006-03 B | n/a        | 2550        | 1000       | SE          | No Shading                          |
| Bedroom 3      | ATB-006-03 B | n/a        | 2550        | 1875       | NE          | No Shading                          |
| Bedroom 3      | ATB-006-03 B | n/a        | 2550        | 2722       | SE          | 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 | Anti-glare foil with bulk no gap R2.5       | Yes               |
| EW-2 | Concrete block, lined         | Anti-glare foil with bulk no gap R1.5       | Yes               |
| EW-3 | Fibro Cavity Panel Direct Fix | Foil, Anti-glare one side, Reflective other | Yes               |

### External wall schedule

| Location  | ID   | Width (mm) | Height (mm) | Orientation | Fixed Shade | Eaves (mm) |
|-----------|------|------------|-------------|-------------|-------------|------------|
| Studio    | EW-1 | 4904       | 2700        | SE          | No          | 0          |
| Studio    | EW-1 | 5794       | 2700        | SW          | No          | 0          |
| Studio    | EW-1 | 5794       | 2700        | NE          | No          | 4322       |
| L2 Living | EW-2 | 2995       | 2550        | NE          | No          | 0          |

# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0003344603**

Certificate Date:

**13 Nov 2018**

★ Star rating:

**6.1**



## Building features continued

|                |      |       |      |    |    |       |
|----------------|------|-------|------|----|----|-------|
| L2 Living      | EW-1 | 5995  | 2550 | SE | No | 0     |
| L2 Living      | EW-1 | 3900  | 2550 | SW | No | 13550 |
| L2 Living      | EW-1 | 2000  | 2550 | NW | No | 4200  |
| L2 Living      | EW-1 | 1600  | 2550 | SW | No | 2000  |
| L2 Bath        | EW-2 | 2495  | 2550 | NE | No | 0     |
| L2 Bath        | EW-2 | 1695  | 2550 | SE | No | 0     |
| Study          | EW-1 | 3690  | 2550 | SE | No | 0     |
| Garage 1       | EW-3 | 1523  | 2550 | NE | No | 2173  |
| Garage 1       | EW-3 | 854   | 2550 | NW | No | 1630  |
| Garage 1       | EW-3 | 4272  | 2550 | NE | No | 1337  |
| Garage 1       | EW-3 | 6964  | 3000 | SE | No | 0     |
| Garage 1       | EW-3 | 5887  | 3000 | SW | No | 0     |
| WC             | EW-1 | 895   | 2700 | SW | No | 2000  |
| Kitchen/Living | EW-1 | 5500  | 2700 | NE | No | 0     |
| Kitchen/Living | EW-1 | 11400 | 2700 | SE | No | 0     |
| Kitchen/Living | EW-1 | 4595  | 2700 | SW | No | 2000  |
| Bath           | EW-1 | 1795  | 2550 | SW | No | 50    |
| Bedroom 1      | EW-1 | 3795  | 2550 | SE | No | 0     |
| Bedroom 1      | EW-1 | 3695  | 2550 | SW | No | 25    |
| Bedroom 2      | EW-1 | 4190  | 2550 | SE | No | 0     |
| Bedroom 3      | EW-1 | 3295  | 2550 | NE | No | 2000  |
| Bedroom 3      | EW-1 | 3795  | 2550 | SE | No | 900   |
| Ens            | EW-1 | 2195  | 2550 | NE | No | 2000  |

## Internal wall type

| Wall type   | Area (m <sup>2</sup> ) | Insulation    | Wall wrap or foil |
|---|------------------------|---------------|-------------------|
| IW-1 - Brick, plasterboard                              | 116.0                  | No Insulation | No                |
| IW-2 - Cavity wall, direct fix plasterboard, single gap | 101.0                  | No insulation | No                |

## Floors

| Location                  | Construction                    | Area (m <sup>2</sup> ) | Sub floor ventilation | Added insulation   | Covering    |
|---------------------------|---------------------------------|------------------------|-----------------------|--------------------|-------------|
| Studio/Garage 1           | Timber Above Plasterboard 100mm | 28.4                   |                       | Bulk Insulation R3 | Carpet 10mm |
| L2 Living                 | Concrete Slab on Ground 100mm   | 42.2                   | None                  | No Insulation      | Carpet 10mm |
| L2 Bath                   | Concrete Slab on Ground 100mm   | 4.1                    | None                  | No Insulation      | Carpet 10mm |
| Study                     | Concrete Slab on Ground 100mm   | 12.1                   | None                  | No Insulation      | Carpet 10mm |
| Garage 1                  | Concrete Slab on Ground 100mm   | 39.4                   | None                  | No Insulation      | Bare        |
| WC                        | Concrete Slab on Ground 100mm   | 1.7                    | None                  | No Insulation      | Carpet 10mm |
| Kitchen/Living /L2 Living | Timber Above Plasterboard 100mm | 42.6                   |                       | No Insulation      | Carpet 10mm |

# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0003344603**

Certificate Date:

**13 Nov 2018**

★ Star rating:

**6.1**



## Building features continued

|                          |                                 |      |              |                                    |             |
|--------------------------|---------------------------------|------|--------------|------------------------------------|-------------|
| Kitchen/Living /L2 Bath  | Timber Above Plasterboard 100mm | 4.2  |              | No Insulation                      | Carpet 10mm |
| Kitchen/Living /Study    | Timber Above Plasterboard 100mm | 12.6 |              | No Insulation                      | Carpet 10mm |
| Kitchen/Living           | Concrete Slab on Ground 100mm   | 1.4  | None         | No Insulation                      | Carpet 10mm |
| Bath/WC                  | Timber Above Plasterboard 100mm | 1.7  |              | No Insulation                      | Bare        |
| Bath/Kitchen/Living      | Timber Above Plasterboard 100mm | 3.1  |              | No Insulation                      | Bare        |
| Bath                     | Concrete Slab on Ground 100mm   | 0.7  | None         | Bulk Insulation, Gap to Floor R2.5 | Carpet 10mm |
| Bedroom 1/Kitchen/Living | Timber Above Plasterboard 100mm | 11.4 |              | No Insulation                      | Carpet 10mm |
| Bedroom 1                | Suspended Timber Floor 100mm    | 1.4  | Totally Open | Bulk Insulation, Gap to Floor R2.5 | Carpet 10mm |
| Bedroom 2/Kitchen/Living | Timber Above Plasterboard 100mm | 12.6 |              | No Insulation                      | Carpet 10mm |
| Bedroom 3/Kitchen/Living | Timber Above Plasterboard 19mm  | 12.2 |              | No Insulation                      | Carpet 10mm |
| Ens/Kitchen/Living       | Timber Above Plasterboard 100mm | 5.5  |              | No Insulation                      | Carpet 10mm |
| Upstairs/Kitchen/Living  | Timber Above Plasterboard 100mm | 14.0 |              | No Insulation                      | Carpet 10mm |

## Ceiling type

| Location       | Construction              | Added insulation     | Roof space above |
|----------------|---------------------------|----------------------|------------------|
| Studio         | Plasterboard              | Bulk Insulation R3.5 | Yes              |
| L2 Living      | Plasterboard              | Bulk Insulation R3.5 | No               |
| L2 Living      | Timber Above Plasterboard | No Insulation        | No               |
| L2 Bath        | Plasterboard              | Bulk Insulation R3   | No               |
| L2 Bath        | Timber Above Plasterboard | No Insulation        | No               |
| Study          | Plasterboard              | Bulk Insulation R3   | No               |
| Study          | Timber Above Plasterboard | No Insulation        | No               |
| Garage 1       | Plasterboard              | No insulation        | No               |
| Garage 1       | Timber Above Plasterboard | Bulk Insulation R3   | No               |
| WC             | Timber Above Plasterboard | No Insulation        | No               |
| Kitchen/Living | Timber Above Plasterboard | No Insulation        | No               |
| Bath           | Plasterboard              | Bulk Insulation R3.5 | Yes              |
| Bedroom 1      | Plasterboard              | Bulk Insulation R3.5 | Yes              |
| Bedroom 2      | Plasterboard              |                      | Yes              |



## Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0003344603**

Certificate Date:

**13 Nov 2018**

★ Star rating:

**6.1**



### Building features continued

|           |              |                      |     |
|-----------|--------------|----------------------|-----|
|           |              | Bulk Insulation R3.5 |     |
| Bedroom 3 | Plasterboard | Bulk Insulation R3.5 | Yes |
| Ens       | Plasterboard | Bulk Insulation R3.5 | Yes |
| Upstairs  | Plasterboard | Bulk Insulation R3.5 | Yes |

### Ceiling penetrations

| Location     | Number | Type | Diameter (mm) | Sealed/unsealed |
|--------------|--------|------|---------------|-----------------|
| None Present |        |      |               |                 |

### Ceiling fans

| Location     | Number | Diameter (mm) |
|--------------|--------|---------------|
| None Present |        |               |

### Roof type

| Construction           | Added insulation                               | Roof colour |
|------------------------|--|-------------|
| Corrugated Iron        | Bulk, Reflective Side Down, Anti-glare Up R1.3 | Medium      |
| Waterproofing Membrane | No Insulation, Only an Air Gap                 | Medium      |

# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: 0003344603

Certificate Date: 13 Nov 2018

★ Star rating: 6.1



## Additional information

If carpet noted as floor covering it may be replaced with any type.

Due to non current Window Library the glazing descriptions may not match actual products. Only the U and SHGC values should be considered NOT the glazing descriptions.

## 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: **0003344637**

Certificate Date: **13 Nov 2018**

★ 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: **20039**  
Name: **David Howard**  
Organisation: **Partners Energy Management**  
Email: **david@partnersenergy.com.au**  
Phone: **0421381005**  
Declaration of interest: **The Assessor has provided design advice to the Applicant**  
Software: **BERS Pro v4.3.0.2c (3.13)**

AAO: **ABSA**

## Overview

### Dwelling details

Street: **Unit TH05, 25-27 Warriewood rd**  
Suburb: **Warriewood**  
State: **NSW** Postcode: **2102**  
Type: **New Dwelling** NCC Class: **1A**  
NatHERS climate zone: **56**  
Lot/DP number: **5464** Exposure: **Suburban**

### Key construction and insulation materials

(see following pages for details)

Construction: **Fibro Cavity Panel Direct Fix**  
**Corrugated Iron**  
**Concrete Slab on Ground**  
Insulation: **R2.5 wall insulation**  
**R3.5 ceiling insulation**  
**No floor insulation**  
Glazing: **ATB-006-03 B Al Thermally Broken B**  
**DG Argon Fill High Solar Gain low-E**

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

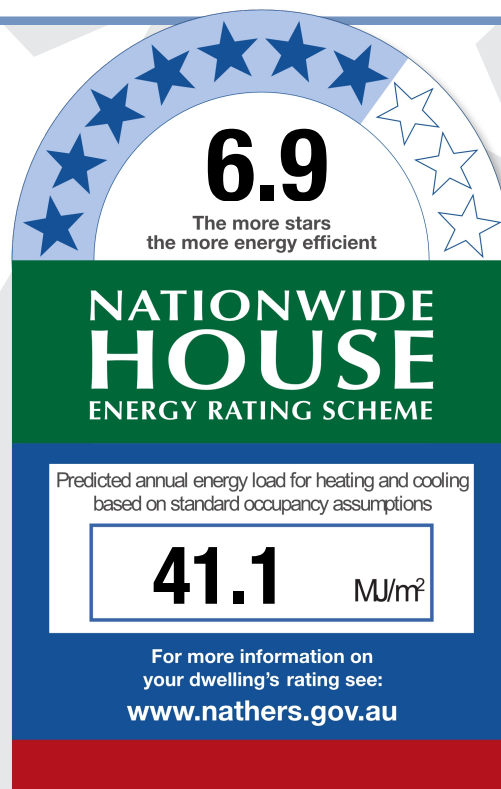
Conditioned: **198.0**  
Unconditioned: **43.0**  
Garage: **39.0**  
TOTAL: **240.0**

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

Heating: **18.1**  
Cooling: **23.0**  
TOTAL: **41.1**

### Plan documents

Plan ref/date: **Warriewood Residential Development**  
Prepared by: **VIA Architects**



### Ceiling penetrations

(see following pages for details)

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

\*\*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: **Unknown**

### 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: **0003344637**

Certificate Date:

**13 Nov 2018**

★ Star rating:

**6.9**



## Building features

### Window type and performance value

| Window ID    | Window type   | U-value | SHGC |
|--------------|---|---------|------|
| ATB-006-03 B | ATB-006-03 B AI Thermally Broken B DG Argon Fill High Solar Gain low-E -Clear | 2.9     | 0.51 |

### Window schedule

| Location       | Window ID    | Window no. | Height (mm) | Width (mm) | Orientation | Outdoor shade                       |
|----------------|--------------|------------|-------------|------------|-------------|-------------------------------------|
| Studio         | ATB-006-03 B | n/a        | 2700        | 3500       | E           | No Shading                          |
| Studio         | ATB-006-03 B | n/a        | 2550        | 1000       | W           | No Shading                          |
| Studio         | ATB-006-03 B | n/a        | 2550        | 1000       | N           | No Shading                          |
| L2 Living      | ATB-006-03 B | n/a        | 2550        | 3636       | W           | No Shading                          |
| L2 Living      | ATB-006-03 B | n/a        | 1400        | 900        | N           | No Shading                          |
| Study          | ATB-006-03 B | n/a        | 2550        | 900        | N           | No Shading                          |
| Kitchen/Living | ATB-006-03 B | n/a        | 2400        | 3178       | W           | No Shading                          |
| Kitchen/Living | ATB-006-03 B | n/a        | 2700        | 2722       | N           | No Shading                          |
| Kitchen/Living | ATB-006-03 B | n/a        | 2700        | 1000       | N           | No Shading                          |
| Kitchen/Living | ATB-006-03 B | n/a        | 2700        | 3200       | E           | Vertical Louvres, Horizontal Blades |
| Bath           | ATB-006-03 B | n/a        | 2550        | 1000       | W           | No Shading                          |
| Bedroom 1      | ATB-006-03 B | n/a        | 2550        | 600        | W           | No Shading                          |
| Bedroom 1      | ATB-006-03 B | n/a        | 2550        | 1000       | N           | No Shading                          |
| Bedroom 2      | ATB-006-03 B | n/a        | 2550        | 1000       | N           | No Shading                          |
| Bedroom 3      | ATB-006-03 B | n/a        | 2550        | 2722       | N           | No Shading                          |
| Bedroom 3      | ATB-006-03 B | n/a        | 2550        | 1875       | 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 | Anti-glare foil with bulk no gap R2.5       | Yes               |
| EW-2 | Concrete block, lined         | Anti-glare foil with bulk no gap R1.5       | Yes               |
| EW-3 | Fibro Cavity Panel Direct Fix | Foil, Anti-glare one side, Reflective other | Yes               |

### External wall schedule

| Location  | ID   | Width (mm) | Height (mm) | Orientation | Fixed Shade | Eaves (mm) |
|-----------|------|------------|-------------|-------------|-------------|------------|
| Studio    | EW-1 | 5794       | 2700        | E           | No          | 4322       |
| Studio    | EW-1 | 5794       | 2700        | W           | No          | 0          |
| Studio    | EW-1 | 4904       | 2700        | N           | No          | 0          |
| L2 Living | EW-1 | 1600       | 2550        | W           | No          | 2000       |

# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0003344637**

Certificate Date:

**13 Nov 2018**

★ Star rating:

**6.9**



## Building features continued

|                |      |       |      |    |    |       |
|----------------|------|-------|------|----|----|-------|
| L2 Living      | EW-1 | 2000  | 2550 | S  | No | 4200  |
| L2 Living      | EW-1 | 3900  | 2550 | W  | No | 13550 |
| L2 Living      | EW-1 | 5995  | 2550 | N  | No | 0     |
| L2 Living      | EW-2 | 2995  | 2550 | E  | No | 0     |
| L2 Bath        | EW-2 | 1695  | 2550 | N  | No | 0     |
| L2 Bath        | EW-2 | 2495  | 2550 | E  | No | 0     |
| Study          | EW-1 | 3690  | 2550 | N  | No | 0     |
| Garage 1       | EW-3 | 5887  | 3000 | W  | No | 0     |
| Garage 1       | EW-3 | 6964  | 3000 | N  | No | 0     |
| Garage 1       | EW-3 | 4272  | 2550 | E  | No | 1337  |
| Garage 1       | EW-3 | 854   | 2550 | S  | No | 1630  |
| Garage 1       | EW-3 | 1523  | 2550 | SE | No | 2173  |
| WC             | EW-1 | 895   | 2700 | W  | No | 2000  |
| Kitchen/Living | EW-1 | 4595  | 2700 | W  | No | 2000  |
| Kitchen/Living | EW-1 | 11400 | 2700 | N  | No | 0     |
| Kitchen/Living | EW-1 | 5500  | 2700 | E  | No | 0     |
| Bath           | EW-1 | 1795  | 2550 | W  | No | 50    |
| Bedroom 1      | EW-1 | 3695  | 2550 | W  | No | 25    |
| Bedroom 1      | EW-1 | 3795  | 2550 | N  | No | 0     |
| Bedroom 2      | EW-1 | 4190  | 2550 | N  | No | 0     |
| Bedroom 3      | EW-1 | 3795  | 2550 | N  | No | 900   |
| Bedroom 3      | EW-1 | 3295  | 2550 | E  | No | 2000  |
| Ens            | EW-1 | 2195  | 2550 | E  | No | 2000  |

## Internal wall type

| Wall type   | Area (m <sup>2</sup> ) | Insulation    | Wall wrap or foil |
|---|------------------------|---------------|-------------------|
| IW-1 - Brick, plasterboard                              | 116.0                  | No Insulation | No                |
| IW-2 - Cavity wall, direct fix plasterboard, single gap | 101.0                  | No insulation | No                |

## Floors

| Location                  | Construction                    | Area (m <sup>2</sup> ) | Sub floor ventilation | Added insulation   | Covering    |
|---------------------------|---------------------------------|------------------------|-----------------------|--------------------|-------------|
| Studio/Garage 1           | Timber Above Plasterboard 100mm | 28.4                   |                       | Bulk Insulation R3 | Carpet 10mm |
| L2 Living                 | Concrete Slab on Ground 100mm   | 42.2                   | None                  | No Insulation      | Carpet 10mm |
| L2 Bath                   | Concrete Slab on Ground 100mm   | 4.1                    | None                  | No Insulation      | Carpet 10mm |
| Study                     | Concrete Slab on Ground 100mm   | 12.1                   | None                  | No Insulation      | Carpet 10mm |
| Garage 1                  | Concrete Slab on Ground 100mm   | 39.4                   | None                  | No Insulation      | Bare        |
| WC                        | Concrete Slab on Ground 100mm   | 1.7                    | None                  | No Insulation      | Carpet 10mm |
| Kitchen/Living /L2 Living | Timber Above Plasterboard 100mm | 42.6                   |                       | No Insulation      | Carpet 10mm |

# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0003344637**

Certificate Date:

**13 Nov 2018**

★ Star rating:

**6.9**



## Building features continued

|                          |                                 |      |              |                                    |             |
|--------------------------|---------------------------------|------|--------------|------------------------------------|-------------|
| Kitchen/Living /L2 Bath  | Timber Above Plasterboard 100mm | 4.2  |              | No Insulation                      | Carpet 10mm |
| Kitchen/Living /Study    | Timber Above Plasterboard 100mm | 12.6 |              | No Insulation                      | Carpet 10mm |
| Kitchen/Living           | Concrete Slab on Ground 100mm   | 1.4  | None         | No Insulation                      | Carpet 10mm |
| Bath/WC                  | Timber Above Plasterboard 100mm | 1.7  |              | No Insulation                      | Bare        |
| Bath/Kitchen/Living      | Timber Above Plasterboard 100mm | 3.1  |              | No Insulation                      | Bare        |
| Bath                     | Concrete Slab on Ground 100mm   | 0.7  | None         | Bulk Insulation, Gap to Floor R2.5 | Carpet 10mm |
| Bedroom 1/Kitchen/Living | Timber Above Plasterboard 100mm | 11.4 |              | No Insulation                      | Carpet 10mm |
| Bedroom 1                | Suspended Timber Floor 100mm    | 1.4  | Totally Open | Bulk Insulation, Gap to Floor R2.5 | Carpet 10mm |
| Bedroom 2/Kitchen/Living | Timber Above Plasterboard 100mm | 12.6 |              | No Insulation                      | Carpet 10mm |
| Bedroom 3/Kitchen/Living | Timber Above Plasterboard 19mm  | 12.2 |              | No Insulation                      | Carpet 10mm |
| Ens/Kitchen/Living       | Timber Above Plasterboard 100mm | 5.5  |              | No Insulation                      | Carpet 10mm |
| Upstairs/Kitchen/Living  | Timber Above Plasterboard 100mm | 14.1 |              | No Insulation                      | Carpet 10mm |

## Ceiling type

| Location       | Construction              | Added insulation     | Roof space above |
|----------------|---------------------------|----------------------|------------------|
| Studio         | Plasterboard              | Bulk Insulation R3.5 | Yes              |
| L2 Living      | Plasterboard              | Bulk Insulation R3.5 | No               |
| L2 Living      | Timber Above Plasterboard | No Insulation        | No               |
| L2 Bath        | Plasterboard              | Bulk Insulation R3   | No               |
| L2 Bath        | Timber Above Plasterboard | No Insulation        | No               |
| Study          | Plasterboard              | Bulk Insulation R3   | No               |
| Study          | Timber Above Plasterboard | No Insulation        | No               |
| Garage 1       | Plasterboard              | No insulation        | No               |
| Garage 1       | Timber Above Plasterboard | Bulk Insulation R3   | No               |
| WC             | Timber Above Plasterboard | No Insulation        | No               |
| Kitchen/Living | Timber Above Plasterboard | No Insulation        | No               |
| Bath           | Plasterboard              | Bulk Insulation R3.5 | Yes              |
| Bedroom 1      | Plasterboard              | Bulk Insulation R3.5 | Yes              |
| Bedroom 2      | Plasterboard              |                      | Yes              |



## Nationwide House Energy Rating Scheme\* Certificate

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Certificate Date:

**13 Nov 2018**

★ Star rating:

**6.9**



### Building features continued

|           |              |                      |     |
|-----------|--------------|----------------------|-----|
|           |              | Bulk Insulation R3.5 |     |
| Bedroom 3 | Plasterboard | Bulk Insulation R3.5 | Yes |
| Ens       | Plasterboard | Bulk Insulation R3.5 | Yes |
| Upstairs  | Plasterboard | Bulk Insulation R3.5 | Yes |

### Ceiling penetrations

| Location     | Number | Type | Diameter (mm) | Sealed/unsealed |
|--------------|--------|------|---------------|-----------------|
| None Present |        |      |               |                 |

### Ceiling fans

| Location     | Number | Diameter (mm) |
|--------------|--------|---------------|
| None Present |        |               |

### Roof type

| Construction           | Added insulation                               | Roof colour |
|------------------------|--|-------------|
| Corrugated Iron        | Bulk, Reflective Side Down, Anti-glare Up R1.3 | Medium      |
| Waterproofing Membrane | No Insulation, Only an Air Gap                 | Medium      |

# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: 0003344637

Certificate Date: 13 Nov 2018

★ Star rating: 6.9



## Additional information

If carpet noted as floor covering it may be replaced with any type.

Due to non current Window Library the glazing descriptions may not match actual products. Only the U and SHGC values should be considered NOT the glazing descriptions.

## Explanatory notes

### About this report

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### General Information

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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).

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\* Certificate



Certificate number: **0003344629**

Certificate Date: **13 Nov 2018**

★ 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: **20039**

Name: **David Howard**

Organisation: **Partners Energy Management**

Email: **david@partnersenergy.com.au**

Phone: **0421381005**

Declaration of interest: **The Assessor has provided design advice to the Applicant**

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

AAO: **ABSA**

## Overview

### Dwelling details

Street: **Unit TH06, 25-27 Warriewood rd**

Suburb: **Warriewood**

State: **NSW**

Postcode: **2102**

Type: **New Dwelling**

NCC Class: **1A**

NatHERS

climate zone: **56**

Lot/DP

number: **5464**

Exposure: **Suburban**

### Key construction and insulation materials

(see following pages for details)

Construction: **Fibro Cavity Panel Direct Fix  
Corrugated Iron**

Insulation: **Concrete Slab on Ground**

**R2.5 wall insulation**

**R3.5 ceiling insulation**

**R2.5 floor insulation**

Glazing: **ATB-006-03 B Al Thermally Broken B  
DG Argon Fill High Solar Gain low-E**

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

Conditioned: **198.0**

Unconditioned: **43.0**

Garage: **39.0**

TOTAL: **240.0**

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

Heating: **32.2**

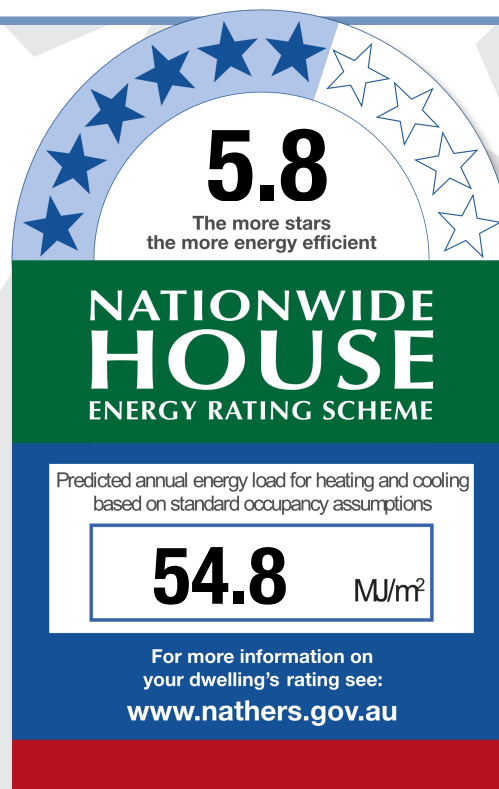
Cooling: **22.6**

TOTAL: **54.8**

### Plan documents

Plan ref/date: **Warriewood Residential Development**

Prepared by: **VIA Architects**



### Ceiling penetrations

(see following pages for details)

Sealed: **0**

Unsealed: **0**

TOTAL:\*\* **0**

\*\*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: **Unknown**

### 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: **0003344629**

Certificate Date:

**13 Nov 2018**

★ Star rating:

**5.8**



## Building features

### Window type and performance value

| Window ID    | Window type   | U-value | SHGC |
|--------------|---|---------|------|
| ATB-006-03 B | ATB-006-03 B AI Thermally Broken B DG Argon Fill High Solar Gain low-E -Clear | 2.9     | 0.51 |

### Window schedule

| Location       | Window ID    | Window no. | Height (mm) | Width (mm) | Orientation | Outdoor shade                       |
|----------------|--------------|------------|-------------|------------|-------------|-------------------------------------|
| Studio         | ATB-006-03 B | n/a        | 2550        | 1000       | S           | No Shading                          |
| Studio         | ATB-006-03 B | n/a        | 2550        | 1000       | W           | No Shading                          |
| Studio         | ATB-006-03 B | n/a        | 2700        | 3500       | E           | No Shading                          |
| L2 Living      | ATB-006-03 B | n/a        | 1400        | 900        | S           | No Shading                          |
| L2 Living      | ATB-006-03 B | n/a        | 2550        | 3636       | W           | No Shading                          |
| Study          | ATB-006-03 B | n/a        | 2550        | 900        | S           | No Shading                          |
| Kitchen/Living | ATB-006-03 B | n/a        | 2700        | 3200       | E           | Vertical Louvres, Horizontal Blades |
| Kitchen/Living | ATB-006-03 B | n/a        | 2700        | 2722       | S           | No Shading                          |
| Kitchen/Living | ATB-006-03 B | n/a        | 2700        | 1000       | S           | No Shading                          |
| Kitchen/Living | ATB-006-03 B | n/a        | 2400        | 3178       | W           | No Shading                          |
| Bath           | ATB-006-03 B | n/a        | 2550        | 1000       | W           | No Shading                          |
| Bedroom 1      | ATB-006-03 B | n/a        | 2550        | 1000       | S           | No Shading                          |
| Bedroom 1      | ATB-006-03 B | n/a        | 2550        | 600        | W           | No Shading                          |
| Bedroom 2      | ATB-006-03 B | n/a        | 2550        | 1000       | S           | No Shading                          |
| Bedroom 3      | ATB-006-03 B | n/a        | 2550        | 1875       | E           | No Shading                          |
| Bedroom 3      | ATB-006-03 B | n/a        | 2550        | 2722       | 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 | Anti-glare foil with bulk no gap R2.5       | Yes               |
| EW-2 | Concrete block, lined         | Anti-glare foil with bulk no gap R1.5       | Yes               |
| EW-3 | Fibro Cavity Panel Direct Fix | Foil, Anti-glare one side, Reflective other | Yes               |

### External wall schedule

| Location  | ID   | Width (mm) | Height (mm) | Orientation | Fixed Shade | Eaves (mm) |
|-----------|------|------------|-------------|-------------|-------------|------------|
| Studio    | EW-1 | 4904       | 2700        | S           | No          | 0          |
| Studio    | EW-1 | 5794       | 2700        | W           | No          | 0          |
| Studio    | EW-1 | 5794       | 2700        | E           | No          | 4322       |
| L2 Living | EW-2 | 2995       | 2550        | E           | No          | 0          |

# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0003344629**

Certificate Date:

**13 Nov 2018**

★ Star rating:

**5.8**



## Building features continued

|                |      |       |      |    |    |       |
|----------------|------|-------|------|----|----|-------|
| L2 Living      | EW-1 | 5995  | 2550 | S  | No | 0     |
| L2 Living      | EW-1 | 3900  | 2550 | W  | No | 13550 |
| L2 Living      | EW-1 | 2000  | 2550 | N  | No | 4200  |
| L2 Living      | EW-1 | 1600  | 2550 | W  | No | 2000  |
| L2 Bath        | EW-2 | 2495  | 2550 | E  | No | 0     |
| L2 Bath        | EW-2 | 1695  | 2550 | S  | No | 0     |
| Study          | EW-1 | 3690  | 2550 | S  | No | 0     |
| Garage 1       | EW-3 | 1523  | 2550 | NE | No | 3102  |
| Garage 1       | EW-3 | 854   | 2550 | N  | No | 1598  |
| Garage 1       | EW-3 | 4272  | 2550 | E  | No | 2238  |
| Garage 1       | EW-3 | 6964  | 3000 | S  | No | 0     |
| Garage 1       | EW-3 | 5887  | 3000 | W  | No | 0     |
| WC             | EW-1 | 895   | 2700 | W  | No | 1700  |
| Kitchen/Living | EW-1 | 5500  | 2700 | E  | No | 0     |
| Kitchen/Living | EW-1 | 11400 | 2700 | S  | No | 0     |
| Kitchen/Living | EW-1 | 4595  | 2700 | W  | No | 1700  |
| Bath           | EW-1 | 1795  | 2550 | W  | No | 50    |
| Bedroom 1      | EW-1 | 3795  | 2550 | S  | No | 0     |
| Bedroom 1      | EW-1 | 3695  | 2550 | W  | No | 25    |
| Bedroom 2      | EW-1 | 4190  | 2550 | S  | No | 0     |
| Bedroom 3      | EW-1 | 3295  | 2550 | E  | No | 2000  |
| Bedroom 3      | EW-1 | 3795  | 2550 | S  | No | 900   |
| Ens            | EW-1 | 2195  | 2550 | E  | No | 2000  |

## Internal wall type

| Wall type   | Area (m <sup>2</sup> ) | Insulation    | Wall wrap or foil |
|---|------------------------|---------------|-------------------|
| IW-1 - Brick, plasterboard                              | 116.0                  | No Insulation | No                |
| IW-2 - Cavity wall, direct fix plasterboard, single gap | 101.0                  | No insulation | No                |

## Floors

| Location        | Construction                    | Area (m <sup>2</sup> ) | Sub floor ventilation | Added insulation                           | Covering          |
|-----------------|---------------------------------|------------------------|-----------------------|--|-------------------|
| Studio/Garage 1 | Timber Above Plasterboard 100mm | 28.4                   |                       | Bulk Insulation R3                         | Carpet 10mm       |
| L2 Living       | Concrete Slab on Ground 100mm   | 42.2                   | None                  | No Insulation                              | Carpet 10mm       |
| L2 Bath         | Concrete Slab on Ground 100mm   | 4.1                    | None                  | No Insulation                              | Ceramic Tiles 8mm |
| Study           | Concrete Slab on Ground 100mm   | 12.1                   | None                  | No Insulation                              | Carpet 10mm       |
| Garage 1        | Concrete Slab on Ground 100mm   | 39.4                   | None                  | No Insulation                              | Bare              |
| WC              | Suspended Timber Floor 19mm     | 1.7                    | Very Open             | Bulk Insulation in Contact with Floor R2.5 | Carpet 10mm       |
|                 |                                 | 42.6                   |                       | No Insulation                              | Carpet 10mm       |

# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0003344629**

Certificate Date:

**13 Nov 2018**

★ Star rating:

**5.8**



## Building features continued

|                           |                                 |      |              |  |             |
|---------------------------|---------------------------------|------|--------------|--|-------------|
| Kitchen/Living /L2 Living | Timber Above Plasterboard 19mm  |      |              |  |             |
| Kitchen/Living /L2 Bath   | Timber Above Plasterboard 19mm  | 4.2  |              | No Insulation                              | Carpet 10mm |
| Kitchen/Living /Study     | Timber Above Plasterboard 19mm  | 12.6 |              | No Insulation                              | Carpet 10mm |
| Kitchen/Living            | Suspended Timber Floor 19mm     | 1.4  | Very Open    | Bulk Insulation in Contact with Floor R2.5 | Carpet 10mm |
| Bath/WC                   | Timber Above Plasterboard 100mm | 1.7  |              | No Insulation                              | Bare        |
| Bath/Kitchen/Living       | Timber Above Plasterboard 100mm | 3.1  |              | No Insulation                              | Bare        |
| Bath                      | Concrete Slab on Ground 100mm   | 0.7  | None         | Bulk Insulation, Gap to Floor R2.5         | Carpet 10mm |
| Bedroom 1/Kitchen/Living  | Timber Above Plasterboard 100mm | 11.4 |              | No Insulation                              | Carpet 10mm |
| Bedroom 1                 | Suspended Timber Floor 100mm    | 1.4  | Totally Open | Bulk Insulation, Gap to Floor R2.5         | Carpet 10mm |
| Bedroom 2/Kitchen/Living  | Timber Above Plasterboard 100mm | 12.6 |              | No Insulation                              | Carpet 10mm |
| Bedroom 3/Kitchen/Living  | Timber Above Plasterboard 19mm  | 12.2 |              | No Insulation                              | Carpet 10mm |
| Ens/Kitchen/Living        | Timber Above Plasterboard 100mm | 5.5  |              | No Insulation                              | Carpet 10mm |
| Upstairs/Kitchen/Living   | Timber Above Plasterboard 100mm | 14.0 |              | No Insulation                              | Carpet 10mm |

## Ceiling type

| Location       | Construction              | Added insulation     | Roof space above |
|----------------|---------------------------|----------------------|------------------|
| Studio         | Plasterboard              | Bulk Insulation R3.5 | Yes              |
| L2 Living      | Plasterboard              | Bulk Insulation R3.5 | No               |
| L2 Living      | Timber Above Plasterboard | No Insulation        | No               |
| L2 Bath        | Plasterboard              | Bulk Insulation R3   | No               |
| L2 Bath        | Timber Above Plasterboard | No Insulation        | No               |
| Study          | Plasterboard              | Bulk Insulation R3   | No               |
| Study          | Timber Above Plasterboard | No Insulation        | No               |
| Garage 1       | Plasterboard              | No insulation        | No               |
| Garage 1       | Timber Above Plasterboard | Bulk Insulation R3   | No               |
| WC             | Timber Above Plasterboard | No Insulation        | No               |
| Kitchen/Living | Timber Above Plasterboard | No Insulation        | No               |
| Bath           | Plasterboard              | Bulk Insulation R3.5 | Yes              |
| Bedroom 1      | Plasterboard              | Bulk Insulation      | Yes              |



## Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0003344629**

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★ Star rating:

**5.8**



### Building features continued

|           |              |                      |     |
|-----------|--------------|----------------------|-----|
|           |              | R3.5                 |     |
| Bedroom 2 | Plasterboard | Bulk Insulation R3.5 | Yes |
| Bedroom 3 | Plasterboard | Bulk Insulation R3.5 | Yes |
| Ens       | Plasterboard | Bulk Insulation R3.5 | Yes |
| Upstairs  | Plasterboard | Bulk Insulation R3.5 | Yes |

### Ceiling penetrations

| Location     | Number | Type | Diameter (mm) | Sealed/unsealed |
|--------------|--------|------|---------------|-----------------|
| None Present |        |      |               |                 |

### Ceiling fans

| Location     | Number | Diameter (mm) |
|--------------|--------|---------------|
| None Present |        |               |

### Roof type

| Construction           | Added insulation                               | Roof colour |
|------------------------|--|-------------|
| Corrugated Iron        | Bulk, Reflective Side Down, Anti-glare Up R1.3 | Medium      |
| Waterproofing Membrane | No Insulation, Only an Air Gap                 | Medium      |

# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: 0003344629

Certificate Date: 13 Nov 2018

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## Additional information

If carpet noted as floor covering it may be replaced with any type.

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### 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

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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\* Certificate



Certificate number: **0003344660**

Certificate Date: **13 Nov 2018**

★ 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: **20039**  
Name: **David Howard**  
Organisation: **Partners Energy Management**  
Email: **david@partnersenergy.com.au**  
Phone: **0421381005**  
Declaration of interest: **The Assessor has provided design advice to the Applicant**  
Software: **BERS Pro v4.3.0.2c (3.13)**  
AAO: **ABSA**

## Overview

### Dwelling details

Street: **Unit TH07, 25-27 Warriewood rd**  
Suburb: **Warriewood**  
State: **NSW** Postcode: **2102**  
Type: **New Dwelling** NCC Class: **1A**  
NatHERS climate zone: **56**  
Lot/DP number: **5464** Exposure: **Suburban**

### Key construction and insulation materials

(see following pages for details)

Construction: **Fibro Cavity Panel Direct Fix**  
**Corrugated Iron**  
**Concrete Slab on Ground**  
Insulation: **R2.5 wall insulation**  
**R3.5 ceiling insulation**  
**No floor insulation**  
Glazing: **ATB-006-03 B Al Thermally Broken B**  
**DG Argon Fill High Solar Gain low-E**

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

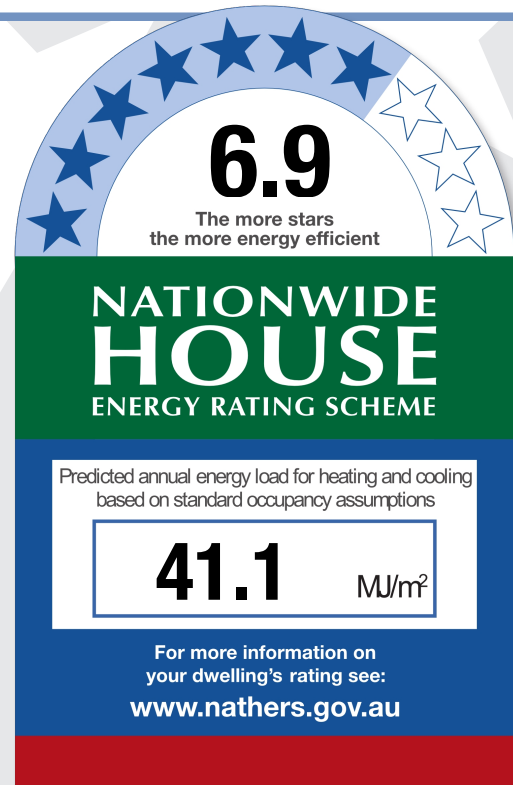
Conditioned: **198.0**  
Unconditioned: **43.0**  
Garage: **39.0**  
TOTAL: **240.0**

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

Heating: **18.1**  
Cooling: **23.0**  
TOTAL: **41.1**

### Plan documents

Plan ref/date: **Warriewood Residential Development**  
Prepared by: **VIA Architects**



### Ceiling penetrations

(see following pages for details)

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

\*\*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: **Unknown**

### Window selection - default windows only

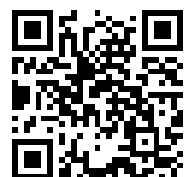
Note on allowable window values:  
Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

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: **0003344660**

Certificate Date:

**13 Nov 2018**

★ Star rating:

**6.9**



## Building features

### Window type and performance value

| Window ID    | Window type   | U-value | SHGC |
|--------------|---|---------|------|
| ATB-006-03 B | ATB-006-03 B AI Thermally Broken B DG Argon Fill High Solar Gain low-E -Clear | 2.9     | 0.51 |

### Window schedule

| Location       | Window ID    | Window no. | Height (mm) | Width (mm) | Orientation | Outdoor shade                       |
|----------------|--------------|------------|-------------|------------|-------------|-------------------------------------|
| Studio         | ATB-006-03 B | n/a        | 2700        | 3500       | E           | No Shading                          |
| Studio         | ATB-006-03 B | n/a        | 2550        | 1000       | W           | No Shading                          |
| Studio         | ATB-006-03 B | n/a        | 2550        | 1000       | N           | No Shading                          |
| L2 Living      | ATB-006-03 B | n/a        | 2550        | 3636       | W           | No Shading                          |
| L2 Living      | ATB-006-03 B | n/a        | 1400        | 900        | N           | No Shading                          |
| Study          | ATB-006-03 B | n/a        | 2550        | 900        | N           | No Shading                          |
| Kitchen/Living | ATB-006-03 B | n/a        | 2400        | 3178       | W           | No Shading                          |
| Kitchen/Living | ATB-006-03 B | n/a        | 2700        | 2722       | N           | No Shading                          |
| Kitchen/Living | ATB-006-03 B | n/a        | 2700        | 1000       | N           | No Shading                          |
| Kitchen/Living | ATB-006-03 B | n/a        | 2700        | 3200       | E           | Vertical Louvres, Horizontal Blades |
| Bath           | ATB-006-03 B | n/a        | 2550        | 1000       | W           | No Shading                          |
| Bedroom 1      | ATB-006-03 B | n/a        | 2550        | 600        | W           | No Shading                          |
| Bedroom 1      | ATB-006-03 B | n/a        | 2550        | 1000       | N           | No Shading                          |
| Bedroom 2      | ATB-006-03 B | n/a        | 2550        | 1000       | N           | No Shading                          |
| Bedroom 3      | ATB-006-03 B | n/a        | 2550        | 2722       | N           | No Shading                          |
| Bedroom 3      | ATB-006-03 B | n/a        | 2550        | 1875       | 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 | Anti-glare foil with bulk no gap R2.5       | Yes               |
| EW-2 | Concrete block, lined         | Anti-glare foil with bulk no gap R1.5       | Yes               |
| EW-3 | Fibro Cavity Panel Direct Fix | Foil, Anti-glare one side, Reflective other | Yes               |

### External wall schedule

| Location  | ID   | Width (mm) | Height (mm) | Orientation | Fixed Shade | Eaves (mm) |
|-----------|------|------------|-------------|-------------|-------------|------------|
| Studio    | EW-1 | 5794       | 2700        | E           | No          | 4322       |
| Studio    | EW-1 | 5794       | 2700        | W           | No          | 0          |
| Studio    | EW-1 | 4904       | 2700        | N           | No          | 0          |
| L2 Living | EW-1 | 1600       | 2550        | W           | No          | 2000       |

# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0003344660**

Certificate Date:

**13 Nov 2018**

★ Star rating:

**6.9**



## Building features continued

|                |      |       |      |    |    |       |
|----------------|------|-------|------|----|----|-------|
| L2 Living      | EW-1 | 2000  | 2550 | S  | No | 4200  |
| L2 Living      | EW-1 | 3900  | 2550 | W  | No | 13550 |
| L2 Living      | EW-1 | 5995  | 2550 | N  | No | 0     |
| L2 Living      | EW-2 | 2995  | 2550 | E  | No | 0     |
| L2 Bath        | EW-2 | 1695  | 2550 | N  | No | 0     |
| L2 Bath        | EW-2 | 2495  | 2550 | E  | No | 0     |
| Study          | EW-1 | 3690  | 2550 | N  | No | 0     |
| Garage 1       | EW-3 | 5887  | 3000 | W  | No | 0     |
| Garage 1       | EW-3 | 6964  | 3000 | N  | No | 0     |
| Garage 1       | EW-3 | 4272  | 2550 | E  | No | 1337  |
| Garage 1       | EW-3 | 854   | 2550 | S  | No | 1630  |
| Garage 1       | EW-3 | 1523  | 2550 | SE | No | 2173  |
| WC             | EW-1 | 895   | 2700 | W  | No | 2000  |
| Kitchen/Living | EW-1 | 4595  | 2700 | W  | No | 2000  |
| Kitchen/Living | EW-1 | 11400 | 2700 | N  | No | 0     |
| Kitchen/Living | EW-1 | 5500  | 2700 | E  | No | 0     |
| Bath           | EW-1 | 1795  | 2550 | W  | No | 50    |
| Bedroom 1      | EW-1 | 3695  | 2550 | W  | No | 25    |
| Bedroom 1      | EW-1 | 3795  | 2550 | N  | No | 0     |
| Bedroom 2      | EW-1 | 4190  | 2550 | N  | No | 0     |
| Bedroom 3      | EW-1 | 3795  | 2550 | N  | No | 900   |
| Bedroom 3      | EW-1 | 3295  | 2550 | E  | No | 2000  |
| Ens            | EW-1 | 2195  | 2550 | E  | No | 2000  |

## Internal wall type

| Wall type   | Area (m <sup>2</sup> ) | Insulation    | Wall wrap or foil |
|---|------------------------|---------------|-------------------|
| IW-1 - Brick, plasterboard                              | 116.0                  | No Insulation | No                |
| IW-2 - Cavity wall, direct fix plasterboard, single gap | 101.0                  | No insulation | No                |

## Floors

| Location                  | Construction                    | Area (m <sup>2</sup> ) | Sub floor ventilation | Added insulation   | Covering    |
|---------------------------|---------------------------------|------------------------|-----------------------|--------------------|-------------|
| Studio/Garage 1           | Timber Above Plasterboard 100mm | 28.4                   |                       | Bulk Insulation R3 | Carpet 10mm |
| L2 Living                 | Concrete Slab on Ground 100mm   | 42.2                   | None                  | No Insulation      | Carpet 10mm |
| L2 Bath                   | Concrete Slab on Ground 100mm   | 4.1                    | None                  | No Insulation      | Carpet 10mm |
| Study                     | Concrete Slab on Ground 100mm   | 12.1                   | None                  | No Insulation      | Carpet 10mm |
| Garage 1                  | Concrete Slab on Ground 100mm   | 39.4                   | None                  | No Insulation      | Bare        |
| WC                        | Concrete Slab on Ground 100mm   | 1.7                    | None                  | No Insulation      | Carpet 10mm |
| Kitchen/Living /L2 Living | Timber Above Plasterboard 100mm | 42.6                   |                       | No Insulation      | Carpet 10mm |

# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0003344660**

Certificate Date:

**13 Nov 2018**

★ Star rating:

**6.9**



## Building features continued

|                          |                                 |      |              |                                    |             |
|--------------------------|---------------------------------|------|--------------|------------------------------------|-------------|
| Kitchen/Living /L2 Bath  | Timber Above Plasterboard 100mm | 4.2  |              | No Insulation                      | Carpet 10mm |
| Kitchen/Living /Study    | Timber Above Plasterboard 100mm | 12.6 |              | No Insulation                      | Carpet 10mm |
| Kitchen/Living           | Concrete Slab on Ground 100mm   | 1.4  | None         | No Insulation                      | Carpet 10mm |
| Bath/WC                  | Timber Above Plasterboard 100mm | 1.7  |              | No Insulation                      | Bare        |
| Bath/Kitchen/Living      | Timber Above Plasterboard 100mm | 3.1  |              | No Insulation                      | Bare        |
| Bath                     | Concrete Slab on Ground 100mm   | 0.7  | None         | Bulk Insulation, Gap to Floor R2.5 | Carpet 10mm |
| Bedroom 1/Kitchen/Living | Timber Above Plasterboard 100mm | 11.4 |              | No Insulation                      | Carpet 10mm |
| Bedroom 1                | Suspended Timber Floor 100mm    | 1.4  | Totally Open | Bulk Insulation, Gap to Floor R2.5 | Carpet 10mm |
| Bedroom 2/Kitchen/Living | Timber Above Plasterboard 100mm | 12.6 |              | No Insulation                      | Carpet 10mm |
| Bedroom 3/Kitchen/Living | Timber Above Plasterboard 19mm  | 12.2 |              | No Insulation                      | Carpet 10mm |
| Ens/Kitchen/Living       | Timber Above Plasterboard 100mm | 5.5  |              | No Insulation                      | Carpet 10mm |
| Upstairs/Kitchen/Living  | Timber Above Plasterboard 100mm | 14.1 |              | No Insulation                      | Carpet 10mm |

## Ceiling type

| Location       | Construction              | Added insulation     | Roof space above |
|----------------|---------------------------|----------------------|------------------|
| Studio         | Plasterboard              | Bulk Insulation R3.5 | Yes              |
| L2 Living      | Plasterboard              | Bulk Insulation R3.5 | No               |
| L2 Living      | Timber Above Plasterboard | No Insulation        | No               |
| L2 Bath        | Plasterboard              | Bulk Insulation R3   | No               |
| L2 Bath        | Timber Above Plasterboard | No Insulation        | No               |
| Study          | Plasterboard              | Bulk Insulation R3   | No               |
| Study          | Timber Above Plasterboard | No Insulation        | No               |
| Garage 1       | Plasterboard              | No insulation        | No               |
| Garage 1       | Timber Above Plasterboard | Bulk Insulation R3   | No               |
| WC             | Timber Above Plasterboard | No Insulation        | No               |
| Kitchen/Living | Timber Above Plasterboard | No Insulation        | No               |
| Bath           | Plasterboard              | Bulk Insulation R3.5 | Yes              |
| Bedroom 1      | Plasterboard              | Bulk Insulation R3.5 | Yes              |
| Bedroom 2      | Plasterboard              |                      | Yes              |



## Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0003344660**

Certificate Date:

**13 Nov 2018**

★ Star rating:

**6.9**



### Building features continued

|           |              |                      |     |
|-----------|--------------|----------------------|-----|
|           |              | Bulk Insulation R3.5 |     |
| Bedroom 3 | Plasterboard | Bulk Insulation R3.5 | Yes |
| Ens       | Plasterboard | Bulk Insulation R3.5 | Yes |
| Upstairs  | Plasterboard | Bulk Insulation R3.5 | Yes |

### Ceiling penetrations

| Location     | Number | Type | Diameter (mm) | Sealed/unsealed |
|--------------|--------|------|---------------|-----------------|
| None Present |        |      |               |                 |

### Ceiling fans

| Location     | Number | Diameter (mm) |
|--------------|--------|---------------|
| None Present |        |               |

### Roof type

| Construction           | Added insulation                               | Roof colour |
|------------------------|--|-------------|
| Corrugated Iron        | Bulk, Reflective Side Down, Anti-glare Up R1.3 | Medium      |
| Waterproofing Membrane | No Insulation, Only an Air Gap                 | Medium      |

# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: 0003344660

Certificate Date: 13 Nov 2018

★ Star rating: 6.9



## Additional information

If carpet noted as floor covering it may be replaced with any type.

Due to non current Window Library the glazing descriptions may not match actual products. Only the U and SHGC values should be considered NOT the glazing descriptions.

## 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.

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# Nationwide House Energy Rating Scheme\* Certificate



Certificate number: **0003344645**

Certificate Date: **13 Nov 2018**

★ 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: **20039**

Name: **David Howard**

Organisation: **Partners Energy Management**

Email: **david@partnersenergy.com.au**

Phone: **0421381005**

Declaration of interest: **The Assessor has provided design advice to the Applicant**

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

AAO: **ABSA**

## Overview

### Dwelling details

Street: **Unit TH08, 25-27 Warriewood rd**

Suburb: **Warriewood**

State: **NSW**

Postcode: **2102**

Type: **New Dwelling**

NCC Class: **1A**

NatHERS

climate zone: **56**

Lot/DP

number: **5464**

Exposure: **Suburban**

### Key construction and insulation materials

(see following pages for details)

Construction: **Fibro Cavity Panel Direct Fix  
Corrugated Iron**

Insulation: **Concrete Slab on Ground**

**R2.5 wall insulation**

**R3.5 ceiling insulation**

**R2.5 floor insulation**

Glazing: **ATB-006-03 B Al Thermally Broken B  
DG Argon Fill High Solar Gain low-E**

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

Conditioned: **198.0**

Unconditioned: **43.0**

Garage: **39.0**

TOTAL: **240.0**

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

Heating: **32.2**

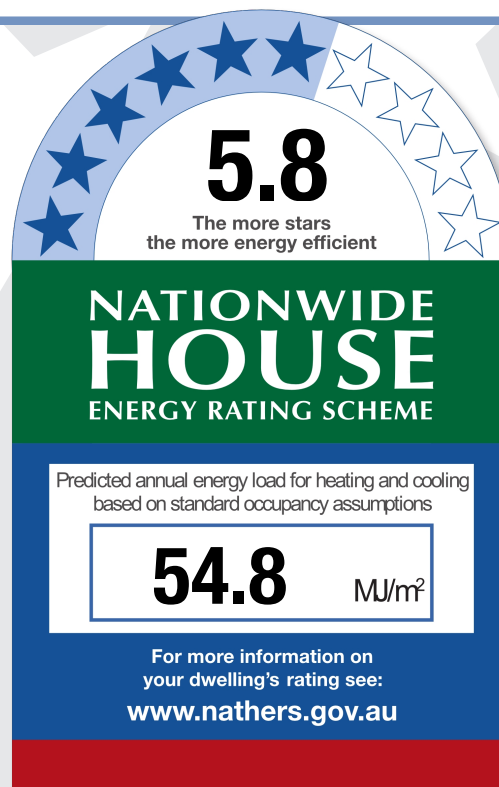
Cooling: **22.6**

TOTAL: **54.8**

### Plan documents

Plan ref/date: **Warriewood Residential Development**

Prepared by: **VIA Architects**



### Ceiling penetrations

(see following pages for details)

Sealed: **0**

Unsealed: **0**

TOTAL:\*\* **0**

\*\*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: **Unknown**

### 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: **0003344645**

Certificate Date:

**13 Nov 2018**

★ Star rating:

**5.8**



## Building features

### Window type and performance value

| Window ID    | Window type   | U-value | SHGC |
|--------------|---|---------|------|
| ATB-006-03 B | ATB-006-03 B AI Thermally Broken B DG Argon Fill High Solar Gain low-E -Clear | 2.9     | 0.51 |

### Window schedule

| Location       | Window ID    | Window no. | Height (mm) | Width (mm) | Orientation | Outdoor shade                       |
|----------------|--------------|------------|-------------|------------|-------------|-------------------------------------|
| Studio         | ATB-006-03 B | n/a        | 2550        | 1000       | S           | No Shading                          |
| Studio         | ATB-006-03 B | n/a        | 2550        | 1000       | W           | No Shading                          |
| Studio         | ATB-006-03 B | n/a        | 2700        | 3500       | E           | No Shading                          |
| L2 Living      | ATB-006-03 B | n/a        | 1400        | 900        | S           | No Shading                          |
| L2 Living      | ATB-006-03 B | n/a        | 2550        | 3636       | W           | No Shading                          |
| Study          | ATB-006-03 B | n/a        | 2550        | 900        | S           | No Shading                          |
| Kitchen/Living | ATB-006-03 B | n/a        | 2700        | 3200       | E           | Vertical Louvres, Horizontal Blades |
| Kitchen/Living | ATB-006-03 B | n/a        | 2700        | 2722       | S           | No Shading                          |
| Kitchen/Living | ATB-006-03 B | n/a        | 2700        | 1000       | S           | No Shading                          |
| Kitchen/Living | ATB-006-03 B | n/a        | 2400        | 3178       | W           | No Shading                          |
| Bath           | ATB-006-03 B | n/a        | 2550        | 1000       | W           | No Shading                          |
| Bedroom 1      | ATB-006-03 B | n/a        | 2550        | 1000       | S           | No Shading                          |
| Bedroom 1      | ATB-006-03 B | n/a        | 2550        | 600        | W           | No Shading                          |
| Bedroom 2      | ATB-006-03 B | n/a        | 2550        | 1000       | S           | No Shading                          |
| Bedroom 3      | ATB-006-03 B | n/a        | 2550        | 1875       | E           | No Shading                          |
| Bedroom 3      | ATB-006-03 B | n/a        | 2550        | 2722       | 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 | Anti-glare foil with bulk no gap R2.5       | Yes               |
| EW-2 | Concrete block, lined         | Anti-glare foil with bulk no gap R1.5       | Yes               |
| EW-3 | Fibro Cavity Panel Direct Fix | Foil, Anti-glare one side, Reflective other | Yes               |

### External wall schedule

| Location  | ID   | Width (mm) | Height (mm) | Orientation | Fixed Shade | Eaves (mm) |
|-----------|------|------------|-------------|-------------|-------------|------------|
| Studio    | EW-1 | 4904       | 2700        | S           | No          | 0          |
| Studio    | EW-1 | 5794       | 2700        | W           | No          | 0          |
| Studio    | EW-1 | 5794       | 2700        | E           | No          | 4322       |
| L2 Living | EW-2 | 2995       | 2550        | E           | No          | 0          |

# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0003344645**

Certificate Date:

**13 Nov 2018**

★ Star rating:

**5.8**



## Building features continued

|                |      |       |      |    |    |       |
|----------------|------|-------|------|----|----|-------|
| L2 Living      | EW-1 | 5995  | 2550 | S  | No | 0     |
| L2 Living      | EW-1 | 3900  | 2550 | W  | No | 13550 |
| L2 Living      | EW-1 | 2000  | 2550 | N  | No | 4200  |
| L2 Living      | EW-1 | 1600  | 2550 | W  | No | 2000  |
| L2 Bath        | EW-2 | 2495  | 2550 | E  | No | 0     |
| L2 Bath        | EW-2 | 1695  | 2550 | S  | No | 0     |
| Study          | EW-1 | 3690  | 2550 | S  | No | 0     |
| Garage 1       | EW-3 | 1523  | 2550 | NE | No | 3102  |
| Garage 1       | EW-3 | 854   | 2550 | N  | No | 1598  |
| Garage 1       | EW-3 | 4272  | 2550 | E  | No | 2238  |
| Garage 1       | EW-3 | 6964  | 3000 | S  | No | 0     |
| Garage 1       | EW-3 | 5887  | 3000 | W  | No | 0     |
| WC             | EW-1 | 895   | 2700 | W  | No | 1700  |
| Kitchen/Living | EW-1 | 5500  | 2700 | E  | No | 0     |
| Kitchen/Living | EW-1 | 11400 | 2700 | S  | No | 0     |
| Kitchen/Living | EW-1 | 4595  | 2700 | W  | No | 1700  |
| Bath           | EW-1 | 1795  | 2550 | W  | No | 50    |
| Bedroom 1      | EW-1 | 3795  | 2550 | S  | No | 0     |
| Bedroom 1      | EW-1 | 3695  | 2550 | W  | No | 25    |
| Bedroom 2      | EW-1 | 4190  | 2550 | S  | No | 0     |
| Bedroom 3      | EW-1 | 3295  | 2550 | E  | No | 2000  |
| Bedroom 3      | EW-1 | 3795  | 2550 | S  | No | 900   |
| Ens            | EW-1 | 2195  | 2550 | E  | No | 2000  |

## Internal wall type

| Wall type   | Area (m <sup>2</sup> ) | Insulation    | Wall wrap or foil |
|---|------------------------|---------------|-------------------|
| IW-1 - Brick, plasterboard                              | 116.0                  | No Insulation | No                |
| IW-2 - Cavity wall, direct fix plasterboard, single gap | 101.0                  | No insulation | No                |

## Floors

| Location        | Construction                    | Area (m <sup>2</sup> ) | Sub floor ventilation | Added insulation                           | Covering          |
|-----------------|---------------------------------|------------------------|-----------------------|--|-------------------|
| Studio/Garage 1 | Timber Above Plasterboard 100mm | 28.4                   |                       | Bulk Insulation R3                         | Carpet 10mm       |
| L2 Living       | Concrete Slab on Ground 100mm   | 42.2                   | None                  | No Insulation                              | Carpet 10mm       |
| L2 Bath         | Concrete Slab on Ground 100mm   | 4.1                    | None                  | No Insulation                              | Ceramic Tiles 8mm |
| Study           | Concrete Slab on Ground 100mm   | 12.1                   | None                  | No Insulation                              | Carpet 10mm       |
| Garage 1        | Concrete Slab on Ground 100mm   | 39.4                   | None                  | No Insulation                              | Bare              |
| WC              | Suspended Timber Floor 19mm     | 1.7                    | Very Open             | Bulk Insulation in Contact with Floor R2.5 | Carpet 10mm       |
|                 |                                 | 42.6                   |                       | No Insulation                              | Carpet 10mm       |

# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0003344645**

Certificate Date:

**13 Nov 2018**

★ Star rating:

**5.8**



## Building features continued

|                           |                                 |      |              |  |             |
|---------------------------|---------------------------------|------|--------------|--|-------------|
| Kitchen/Living /L2 Living | Timber Above Plasterboard 19mm  |      |              |  |             |
| Kitchen/Living /L2 Bath   | Timber Above Plasterboard 19mm  | 4.2  |              | No Insulation                              | Carpet 10mm |
| Kitchen/Living /Study     | Timber Above Plasterboard 19mm  | 12.6 |              | No Insulation                              | Carpet 10mm |
| Kitchen/Living            | Suspended Timber Floor 19mm     | 1.4  | Very Open    | Bulk Insulation in Contact with Floor R2.5 | Carpet 10mm |
| Bath/WC                   | Timber Above Plasterboard 100mm | 1.7  |              | No Insulation                              | Bare        |
| Bath/Kitchen/Living       | Timber Above Plasterboard 100mm | 3.1  |              | No Insulation                              | Bare        |
| Bath                      | Concrete Slab on Ground 100mm   | 0.7  | None         | Bulk Insulation, Gap to Floor R2.5         | Carpet 10mm |
| Bedroom 1/Kitchen/Living  | Timber Above Plasterboard 100mm | 11.4 |              | No Insulation                              | Carpet 10mm |
| Bedroom 1                 | Suspended Timber Floor 100mm    | 1.4  | Totally Open | Bulk Insulation, Gap to Floor R2.5         | Carpet 10mm |
| Bedroom 2/Kitchen/Living  | Timber Above Plasterboard 100mm | 12.6 |              | No Insulation                              | Carpet 10mm |
| Bedroom 3/Kitchen/Living  | Timber Above Plasterboard 19mm  | 12.2 |              | No Insulation                              | Carpet 10mm |
| Ens/Kitchen/Living        | Timber Above Plasterboard 100mm | 5.5  |              | No Insulation                              | Carpet 10mm |
| Upstairs/Kitchen/Living   | Timber Above Plasterboard 100mm | 14.0 |              | No Insulation                              | Carpet 10mm |

## Ceiling type

| Location       | Construction              | Added insulation     | Roof space above |
|----------------|---------------------------|----------------------|------------------|
| Studio         | Plasterboard              | Bulk Insulation R3.5 | Yes              |
| L2 Living      | Plasterboard              | Bulk Insulation R3.5 | No               |
| L2 Living      | Timber Above Plasterboard | No Insulation        | No               |
| L2 Bath        | Plasterboard              | Bulk Insulation R3   | No               |
| L2 Bath        | Timber Above Plasterboard | No Insulation        | No               |
| Study          | Plasterboard              | Bulk Insulation R3   | No               |
| Study          | Timber Above Plasterboard | No Insulation        | No               |
| Garage 1       | Plasterboard              | No insulation        | No               |
| Garage 1       | Timber Above Plasterboard | Bulk Insulation R3   | No               |
| WC             | Timber Above Plasterboard | No Insulation        | No               |
| Kitchen/Living | Timber Above Plasterboard | No Insulation        | No               |
| Bath           | Plasterboard              | Bulk Insulation R3.5 | Yes              |
| Bedroom 1      | Plasterboard              | Bulk Insulation      | Yes              |



## Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0003344645**

Certificate Date:

**13 Nov 2018**

★ Star rating:

**5.8**



### Building features continued

|           |              |                      |     |  |
|-----------|--------------|----------------------|-----|--|
|           |              | R3.5                 |     |  |
| Bedroom 2 | Plasterboard | Bulk Insulation R3.5 | Yes |  |
| Bedroom 3 | Plasterboard | Bulk Insulation R3.5 | Yes |  |
| Ens       | Plasterboard | Bulk Insulation R3.5 | Yes |  |
| Upstairs  | Plasterboard | Bulk Insulation R3.5 | Yes |  |

### Ceiling penetrations

| Location     | Number | Type | Diameter (mm) | Sealed/unsealed |
|--------------|--------|------|---------------|-----------------|
| None Present |        |      |               |                 |

### Ceiling fans

| Location     | Number | Diameter (mm) |
|--------------|--------|---------------|
| None Present |        |               |

### Roof type

| Construction           | Added insulation                               | Roof colour |
|------------------------|--|-------------|
| Corrugated Iron        | Bulk, Reflective Side Down, Anti-glare Up R1.3 | Medium      |
| Waterproofing Membrane | No Insulation, Only an Air Gap                 | Medium      |

# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: 0003344645

Certificate Date: 13 Nov 2018

★ Star rating: 5.8



## Additional information

If carpet noted as floor covering it may be replaced with any type.

Due to non current Window Library the glazing descriptions may not match actual products. Only the U and SHGC values should be considered NOT the glazing descriptions.

## 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\* Certificate



Certificate number: **0003344652**

Certificate Date: **13 Nov 2018**

★ 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: **20039**  
Name: **David Howard**  
Organisation: **Partners Energy Management**  
Email: **david@partnersenergy.com.au**  
Phone: **0421381005**  
Declaration of interest: **The Assessor has provided design advice to the Applicant**  
Software: **BERS Pro v4.3.0.2c (3.13)**  
AAO: **ABSA**

## Overview

### Dwelling details

Street: **Unit TH09, 25-27 Warriewood rd**  
Suburb: **Warriewood**  
State: **NSW** Postcode: **2102**  
Type: **New Dwelling** NCC Class: **1A**  
NatHERS climate zone: **56**  
Lot/DP number: **5464** Exposure: **Suburban**

### Key construction and insulation materials

(see following pages for details)

Construction: **Fibro Cavity Panel Direct Fix**  
**Corrugated Iron**  
**Concrete Slab on Ground**  
Insulation: **R2.5 wall insulation**  
**R3.5 ceiling insulation**  
**No floor insulation**  
Glazing: **ATB-006-03 B Al Thermally Broken B**  
**DG Argon Fill High Solar Gain low-E**

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

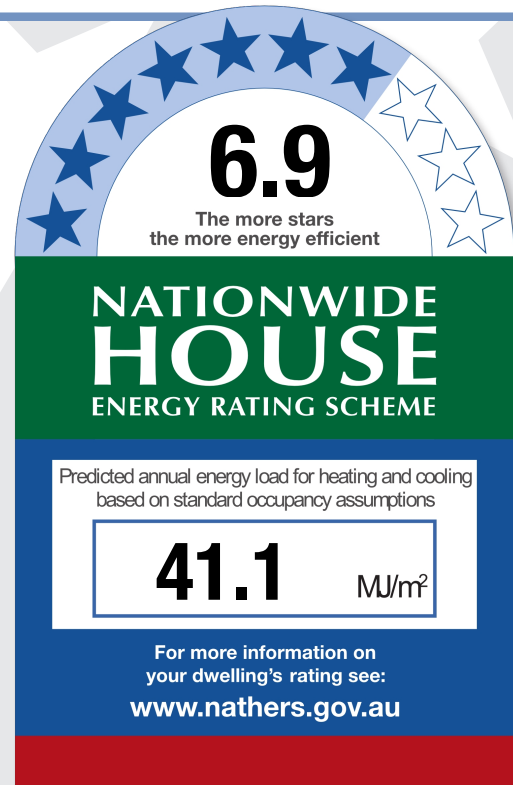
Conditioned: **198.0**  
Unconditioned: **43.0**  
Garage: **39.0**  
TOTAL: **240.0**

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

Heating: **18.1**  
Cooling: **23.0**  
TOTAL: **41.1**

### Plan documents

Plan ref/date: **Warriewood Residential Development**  
Prepared by: **VIA Architects**



### Ceiling penetrations

(see following pages for details)

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

\*\*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: **Unknown**

### Window selection - default windows only

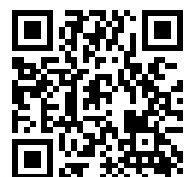
Note on allowable window values:  
Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

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: **0003344652**

Certificate Date:

**13 Nov 2018**

★ Star rating:

**6.9**



## Building features

### Window type and performance value

| Window ID    | Window type   | U-value | SHGC |
|--------------|---|---------|------|
| ATB-006-03 B | ATB-006-03 B AI Thermally Broken B DG Argon Fill High Solar Gain low-E -Clear | 2.9     | 0.51 |

### Window schedule

| Location       | Window ID    | Window no. | Height (mm) | Width (mm) | Orientation | Outdoor shade                       |
|----------------|--------------|------------|-------------|------------|-------------|-------------------------------------|
| Studio         | ATB-006-03 B | n/a        | 2700        | 3500       | E           | No Shading                          |
| Studio         | ATB-006-03 B | n/a        | 2550        | 1000       | W           | No Shading                          |
| Studio         | ATB-006-03 B | n/a        | 2550        | 1000       | N           | No Shading                          |
| L2 Living      | ATB-006-03 B | n/a        | 2550        | 3636       | W           | No Shading                          |
| L2 Living      | ATB-006-03 B | n/a        | 1400        | 900        | N           | No Shading                          |
| Study          | ATB-006-03 B | n/a        | 2550        | 900        | N           | No Shading                          |
| Kitchen/Living | ATB-006-03 B | n/a        | 2400        | 3178       | W           | No Shading                          |
| Kitchen/Living | ATB-006-03 B | n/a        | 2700        | 2722       | N           | No Shading                          |
| Kitchen/Living | ATB-006-03 B | n/a        | 2700        | 1000       | N           | No Shading                          |
| Kitchen/Living | ATB-006-03 B | n/a        | 2700        | 3200       | E           | Vertical Louvres, Horizontal Blades |
| Bath           | ATB-006-03 B | n/a        | 2550        | 1000       | W           | No Shading                          |
| Bedroom 1      | ATB-006-03 B | n/a        | 2550        | 600        | W           | No Shading                          |
| Bedroom 1      | ATB-006-03 B | n/a        | 2550        | 1000       | N           | No Shading                          |
| Bedroom 2      | ATB-006-03 B | n/a        | 2550        | 1000       | N           | No Shading                          |
| Bedroom 3      | ATB-006-03 B | n/a        | 2550        | 2722       | N           | No Shading                          |
| Bedroom 3      | ATB-006-03 B | n/a        | 2550        | 1875       | 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 | Anti-glare foil with bulk no gap R2.5       | Yes               |
| EW-2 | Concrete block, lined         | Anti-glare foil with bulk no gap R1.5       | Yes               |
| EW-3 | Fibro Cavity Panel Direct Fix | Foil, Anti-glare one side, Reflective other | Yes               |

### External wall schedule

| Location  | ID   | Width (mm) | Height (mm) | Orientation | Fixed Shade | Eaves (mm) |
|-----------|------|------------|-------------|-------------|-------------|------------|
| Studio    | EW-1 | 5794       | 2700        | E           | No          | 4322       |
| Studio    | EW-1 | 5794       | 2700        | W           | No          | 0          |
| Studio    | EW-1 | 4904       | 2700        | N           | No          | 0          |
| L2 Living | EW-1 | 1600       | 2550        | W           | No          | 2000       |

# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0003344652**

Certificate Date:

**13 Nov 2018**

★ Star rating:

**6.9**



## Building features continued

|                |      |       |      |    |    |       |
|----------------|------|-------|------|----|----|-------|
| L2 Living      | EW-1 | 2000  | 2550 | S  | No | 4200  |
| L2 Living      | EW-1 | 3900  | 2550 | W  | No | 13550 |
| L2 Living      | EW-1 | 5995  | 2550 | N  | No | 0     |
| L2 Living      | EW-2 | 2995  | 2550 | E  | No | 0     |
| L2 Bath        | EW-2 | 1695  | 2550 | N  | No | 0     |
| L2 Bath        | EW-2 | 2495  | 2550 | E  | No | 0     |
| Study          | EW-1 | 3690  | 2550 | N  | No | 0     |
| Garage 1       | EW-3 | 5887  | 3000 | W  | No | 0     |
| Garage 1       | EW-3 | 6964  | 3000 | N  | No | 0     |
| Garage 1       | EW-3 | 4272  | 2550 | E  | No | 1337  |
| Garage 1       | EW-3 | 854   | 2550 | S  | No | 1630  |
| Garage 1       | EW-3 | 1523  | 2550 | SE | No | 2173  |
| WC             | EW-1 | 895   | 2700 | W  | No | 2000  |
| Kitchen/Living | EW-1 | 4595  | 2700 | W  | No | 2000  |
| Kitchen/Living | EW-1 | 11400 | 2700 | N  | No | 0     |
| Kitchen/Living | EW-1 | 5500  | 2700 | E  | No | 0     |
| Bath           | EW-1 | 1795  | 2550 | W  | No | 50    |
| Bedroom 1      | EW-1 | 3695  | 2550 | W  | No | 25    |
| Bedroom 1      | EW-1 | 3795  | 2550 | N  | No | 0     |
| Bedroom 2      | EW-1 | 4190  | 2550 | N  | No | 0     |
| Bedroom 3      | EW-1 | 3795  | 2550 | N  | No | 900   |
| Bedroom 3      | EW-1 | 3295  | 2550 | E  | No | 2000  |
| Ens            | EW-1 | 2195  | 2550 | E  | No | 2000  |

## Internal wall type

| Wall type   | Area (m <sup>2</sup> ) | Insulation    | Wall wrap or foil |
|---|------------------------|---------------|-------------------|
| IW-1 - Brick, plasterboard                              | 116.0                  | No Insulation | No                |
| IW-2 - Cavity wall, direct fix plasterboard, single gap | 101.0                  | No insulation | No                |

## Floors

| Location                  | Construction                    | Area (m <sup>2</sup> ) | Sub floor ventilation | Added insulation   | Covering    |
|---------------------------|---------------------------------|------------------------|-----------------------|--------------------|-------------|
| Studio/Garage 1           | Timber Above Plasterboard 100mm | 28.4                   |                       | Bulk Insulation R3 | Carpet 10mm |
| L2 Living                 | Concrete Slab on Ground 100mm   | 42.2                   | None                  | No Insulation      | Carpet 10mm |
| L2 Bath                   | Concrete Slab on Ground 100mm   | 4.1                    | None                  | No Insulation      | Carpet 10mm |
| Study                     | Concrete Slab on Ground 100mm   | 12.1                   | None                  | No Insulation      | Carpet 10mm |
| Garage 1                  | Concrete Slab on Ground 100mm   | 39.4                   | None                  | No Insulation      | Bare        |
| WC                        | Concrete Slab on Ground 100mm   | 1.7                    | None                  | No Insulation      | Carpet 10mm |
| Kitchen/Living /L2 Living | Timber Above Plasterboard 100mm | 42.6                   |                       | No Insulation      | Carpet 10mm |

# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0003344652**

Certificate Date:

**13 Nov 2018**

★ Star rating:

**6.9**



## Building features continued

|                          |                                 |      |              |                                    |             |
|--------------------------|---------------------------------|------|--------------|------------------------------------|-------------|
| Kitchen/Living /L2 Bath  | Timber Above Plasterboard 100mm | 4.2  |              | No Insulation                      | Carpet 10mm |
| Kitchen/Living /Study    | Timber Above Plasterboard 100mm | 12.6 |              | No Insulation                      | Carpet 10mm |
| Kitchen/Living           | Concrete Slab on Ground 100mm   | 1.4  | None         | No Insulation                      | Carpet 10mm |
| Bath/WC                  | Timber Above Plasterboard 100mm | 1.7  |              | No Insulation                      | Bare        |
| Bath/Kitchen/Living      | Timber Above Plasterboard 100mm | 3.1  |              | No Insulation                      | Bare        |
| Bath                     | Concrete Slab on Ground 100mm   | 0.7  | None         | Bulk Insulation, Gap to Floor R2.5 | Carpet 10mm |
| Bedroom 1/Kitchen/Living | Timber Above Plasterboard 100mm | 11.4 |              | No Insulation                      | Carpet 10mm |
| Bedroom 1                | Suspended Timber Floor 100mm    | 1.4  | Totally Open | Bulk Insulation, Gap to Floor R2.5 | Carpet 10mm |
| Bedroom 2/Kitchen/Living | Timber Above Plasterboard 100mm | 12.6 |              | No Insulation                      | Carpet 10mm |
| Bedroom 3/Kitchen/Living | Timber Above Plasterboard 19mm  | 12.2 |              | No Insulation                      | Carpet 10mm |
| Ens/Kitchen/Living       | Timber Above Plasterboard 100mm | 5.5  |              | No Insulation                      | Carpet 10mm |
| Upstairs/Kitchen/Living  | Timber Above Plasterboard 100mm | 14.1 |              | No Insulation                      | Carpet 10mm |

## Ceiling type

| Location       | Construction              | Added insulation     | Roof space above |
|----------------|---------------------------|----------------------|------------------|
| Studio         | Plasterboard              | Bulk Insulation R3.5 | Yes              |
| L2 Living      | Plasterboard              | Bulk Insulation R3.5 | No               |
| L2 Living      | Timber Above Plasterboard | No Insulation        | No               |
| L2 Bath        | Plasterboard              | Bulk Insulation R3   | No               |
| L2 Bath        | Timber Above Plasterboard | No Insulation        | No               |
| Study          | Plasterboard              | Bulk Insulation R3   | No               |
| Study          | Timber Above Plasterboard | No Insulation        | No               |
| Garage 1       | Plasterboard              | No insulation        | No               |
| Garage 1       | Timber Above Plasterboard | Bulk Insulation R3   | No               |
| WC             | Timber Above Plasterboard | No Insulation        | No               |
| Kitchen/Living | Timber Above Plasterboard | No Insulation        | No               |
| Bath           | Plasterboard              | Bulk Insulation R3.5 | Yes              |
| Bedroom 1      | Plasterboard              | Bulk Insulation R3.5 | Yes              |
| Bedroom 2      | Plasterboard              |                      | Yes              |



## Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0003344652**

Certificate Date:

**13 Nov 2018**

★ Star rating:

**6.9**



### Building features continued

|           |              |                      |     |
|-----------|--------------|----------------------|-----|
|           |              | Bulk Insulation R3.5 |     |
| Bedroom 3 | Plasterboard | Bulk Insulation R3.5 | Yes |
| Ens       | Plasterboard | Bulk Insulation R3.5 | Yes |
| Upstairs  | Plasterboard | Bulk Insulation R3.5 | Yes |

### Ceiling penetrations

| Location     | Number | Type | Diameter (mm) | Sealed/unsealed |
|--------------|--------|------|---------------|-----------------|
| None Present |        |      |               |                 |

### Ceiling fans

| Location     | Number | Diameter (mm) |
|--------------|--------|---------------|
| None Present |        |               |

### Roof type

| Construction           | Added insulation                               | Roof colour |
|------------------------|--|-------------|
| Corrugated Iron        | Bulk, Reflective Side Down, Anti-glare Up R1.3 | Medium      |
| Waterproofing Membrane | No Insulation, Only an Air Gap                 | Medium      |

# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: 0003344652

Certificate Date: 13 Nov 2018

★ Star rating: 6.9



## Additional information

If carpet noted as floor covering it may be replaced with any type.

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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\* Certificate



Certificate number: **0003344694**

Certificate Date: **13 Nov 2018**

★ 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: **20039**  
Name: **David Howard**  
Organisation: **Partners Energy Management**  
Email: **david@partnersenergy.com.au**  
Phone: **0421381005**  
Declaration of interest: **The Assessor has provided design advice to the Applicant**  
Software: **BERS Pro v4.3.0.2c (3.13)**  
AAO: **ABSA**

## Overview

### Dwelling details

Street: **Unit TH10, 25-27 Warriewood rd**  
Suburb: **Warriewood**  
State: **NSW** Postcode: **2102**  
Type: **New Dwelling** NCC Class: **1A**  
NatHERS climate zone: **56**  
Lot/DP number: **5464** Exposure: **Suburban**

### Key construction and insulation materials

(see following pages for details)

Construction: **Fibro Cavity Panel Direct Fix**  
**Corrugated Iron**  
**Concrete Slab on Ground**  
Insulation: **R2.5 wall insulation**  
**R3.5 ceiling insulation**  
**R2.5 floor insulation**  
Glazing: **ATB-006-03 B Al Thermally Broken B**  
**DG Argon Fill High Solar Gain low-E**

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

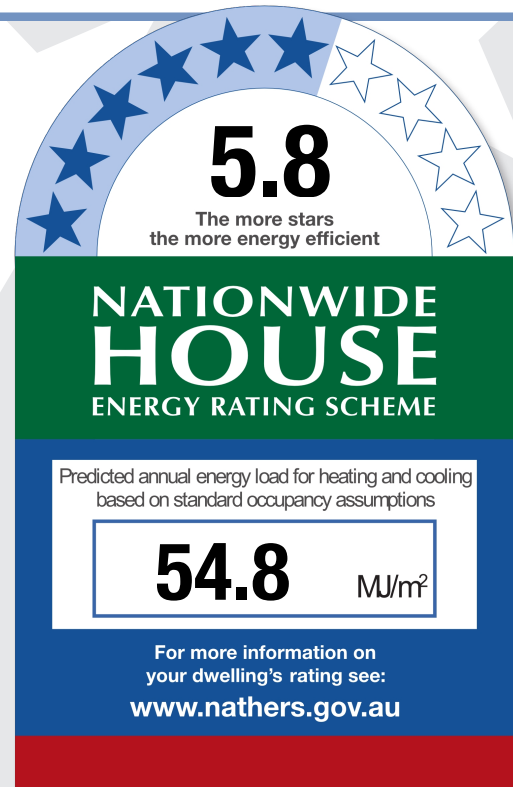
Conditioned: **198.0**  
Unconditioned: **43.0**  
Garage: **39.0**  
TOTAL: **240.0**

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

Heating: **32.2**  
Cooling: **22.6**  
TOTAL: **54.8**

## Plan documents

Plan ref/date: **Warriewood Residential Development**  
Prepared by: **VIA Architects**



### Ceiling penetrations

(see following pages for details)

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

\*\*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: **Unknown**

### Window selection - default windows only

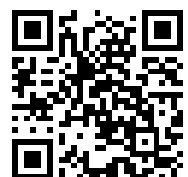
Note on allowable window values:  
Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

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: **0003344694**

Certificate Date:

**13 Nov 2018**

★ Star rating:

**5.8**



## Building features

### Window type and performance value

| Window ID    | Window type   | U-value | SHGC |
|--------------|---|---------|------|
| ATB-006-03 B | ATB-006-03 B AI Thermally Broken B DG Argon Fill High Solar Gain low-E -Clear | 2.9     | 0.51 |

### Window schedule

| Location       | Window ID    | Window no. | Height (mm) | Width (mm) | Orientation | Outdoor shade                       |
|----------------|--------------|------------|-------------|------------|-------------|-------------------------------------|
| Studio         | ATB-006-03 B | n/a        | 2550        | 1000       | S           | No Shading                          |
| Studio         | ATB-006-03 B | n/a        | 2550        | 1000       | W           | No Shading                          |
| Studio         | ATB-006-03 B | n/a        | 2700        | 3500       | E           | No Shading                          |
| L2 Living      | ATB-006-03 B | n/a        | 1400        | 900        | S           | No Shading                          |
| L2 Living      | ATB-006-03 B | n/a        | 2550        | 3636       | W           | No Shading                          |
| Study          | ATB-006-03 B | n/a        | 2550        | 900        | S           | No Shading                          |
| Kitchen/Living | ATB-006-03 B | n/a        | 2700        | 3200       | E           | Vertical Louvres, Horizontal Blades |
| Kitchen/Living | ATB-006-03 B | n/a        | 2700        | 2722       | S           | No Shading                          |
| Kitchen/Living | ATB-006-03 B | n/a        | 2700        | 1000       | S           | No Shading                          |
| Kitchen/Living | ATB-006-03 B | n/a        | 2400        | 3178       | W           | No Shading                          |
| Bath           | ATB-006-03 B | n/a        | 2550        | 1000       | W           | No Shading                          |
| Bedroom 1      | ATB-006-03 B | n/a        | 2550        | 1000       | S           | No Shading                          |
| Bedroom 1      | ATB-006-03 B | n/a        | 2550        | 600        | W           | No Shading                          |
| Bedroom 2      | ATB-006-03 B | n/a        | 2550        | 1000       | S           | No Shading                          |
| Bedroom 3      | ATB-006-03 B | n/a        | 2550        | 1875       | E           | No Shading                          |
| Bedroom 3      | ATB-006-03 B | n/a        | 2550        | 2722       | 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 | Anti-glare foil with bulk no gap R2.5       | Yes               |
| EW-2 | Concrete block, lined         | Anti-glare foil with bulk no gap R1.5       | Yes               |
| EW-3 | Fibro Cavity Panel Direct Fix | Foil, Anti-glare one side, Reflective other | Yes               |

### External wall schedule

| Location  | ID   | Width (mm) | Height (mm) | Orientation | Fixed Shade | Eaves (mm) |
|-----------|------|------------|-------------|-------------|-------------|------------|
| Studio    | EW-1 | 4904       | 2700        | S           | No          | 0          |
| Studio    | EW-1 | 5794       | 2700        | W           | No          | 0          |
| Studio    | EW-1 | 5794       | 2700        | E           | No          | 4322       |
| L2 Living | EW-2 | 2995       | 2550        | E           | No          | 0          |

# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0003344694**

Certificate Date:

**13 Nov 2018**

★ Star rating:

**5.8**



## Building features continued

|                |      |       |      |    |    |       |
|----------------|------|-------|------|----|----|-------|
| L2 Living      | EW-1 | 5995  | 2550 | S  | No | 0     |
| L2 Living      | EW-1 | 3900  | 2550 | W  | No | 13550 |
| L2 Living      | EW-1 | 2000  | 2550 | N  | No | 4200  |
| L2 Living      | EW-1 | 1600  | 2550 | W  | No | 2000  |
| L2 Bath        | EW-2 | 2495  | 2550 | E  | No | 0     |
| L2 Bath        | EW-2 | 1695  | 2550 | S  | No | 0     |
| Study          | EW-1 | 3690  | 2550 | S  | No | 0     |
| Garage 1       | EW-3 | 1523  | 2550 | NE | No | 3102  |
| Garage 1       | EW-3 | 854   | 2550 | N  | No | 1598  |
| Garage 1       | EW-3 | 4272  | 2550 | E  | No | 2238  |
| Garage 1       | EW-3 | 6964  | 3000 | S  | No | 0     |
| Garage 1       | EW-3 | 5887  | 3000 | W  | No | 0     |
| WC             | EW-1 | 895   | 2700 | W  | No | 1700  |
| Kitchen/Living | EW-1 | 5500  | 2700 | E  | No | 0     |
| Kitchen/Living | EW-1 | 11400 | 2700 | S  | No | 0     |
| Kitchen/Living | EW-1 | 4595  | 2700 | W  | No | 1700  |
| Bath           | EW-1 | 1795  | 2550 | W  | No | 50    |
| Bedroom 1      | EW-1 | 3795  | 2550 | S  | No | 0     |
| Bedroom 1      | EW-1 | 3695  | 2550 | W  | No | 25    |
| Bedroom 2      | EW-1 | 4190  | 2550 | S  | No | 0     |
| Bedroom 3      | EW-1 | 3295  | 2550 | E  | No | 2000  |
| Bedroom 3      | EW-1 | 3795  | 2550 | S  | No | 900   |
| Ens            | EW-1 | 2195  | 2550 | E  | No | 2000  |

## Internal wall type

| Wall type   | Area (m <sup>2</sup> ) | Insulation    | Wall wrap or foil |
|---|------------------------|---------------|-------------------|
| IW-1 - Brick, plasterboard                              | 116.0                  | No Insulation | No                |
| IW-2 - Cavity wall, direct fix plasterboard, single gap | 101.0                  | No insulation | No                |

## Floors

| Location        | Construction                    | Area (m <sup>2</sup> ) | Sub floor ventilation | Added insulation                           | Covering          |
|-----------------|---------------------------------|------------------------|-----------------------|--|-------------------|
| Studio/Garage 1 | Timber Above Plasterboard 100mm | 28.4                   |                       | Bulk Insulation R3                         | Carpet 10mm       |
| L2 Living       | Concrete Slab on Ground 100mm   | 42.2                   | None                  | No Insulation                              | Carpet 10mm       |
| L2 Bath         | Concrete Slab on Ground 100mm   | 4.1                    | None                  | No Insulation                              | Ceramic Tiles 8mm |
| Study           | Concrete Slab on Ground 100mm   | 12.1                   | None                  | No Insulation                              | Carpet 10mm       |
| Garage 1        | Concrete Slab on Ground 100mm   | 39.4                   | None                  | No Insulation                              | Bare              |
| WC              | Suspended Timber Floor 19mm     | 1.7                    | Very Open             | Bulk Insulation in Contact with Floor R2.5 | Carpet 10mm       |
|                 |                                 | 42.6                   |                       | No Insulation                              | Carpet 10mm       |

# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0003344694**

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**5.8**



## Building features continued

|                           |                                 |      |              |  |             |
|---------------------------|---------------------------------|------|--------------|--|-------------|
| Kitchen/Living /L2 Living | Timber Above Plasterboard 19mm  |      |              |  |             |
| Kitchen/Living /L2 Bath   | Timber Above Plasterboard 19mm  | 4.2  |              | No Insulation                              | Carpet 10mm |
| Kitchen/Living /Study     | Timber Above Plasterboard 19mm  | 12.6 |              | No Insulation                              | Carpet 10mm |
| Kitchen/Living            | Suspended Timber Floor 19mm     | 1.4  | Very Open    | Bulk Insulation in Contact with Floor R2.5 | Carpet 10mm |
| Bath/WC                   | Timber Above Plasterboard 100mm | 1.7  |              | No Insulation                              | Bare        |
| Bath/Kitchen/Living       | Timber Above Plasterboard 100mm | 3.1  |              | No Insulation                              | Bare        |
| Bath                      | Concrete Slab on Ground 100mm   | 0.7  | None         | Bulk Insulation, Gap to Floor R2.5         | Carpet 10mm |
| Bedroom 1/Kitchen/Living  | Timber Above Plasterboard 100mm | 11.4 |              | No Insulation                              | Carpet 10mm |
| Bedroom 1                 | Suspended Timber Floor 100mm    | 1.4  | Totally Open | Bulk Insulation, Gap to Floor R2.5         | Carpet 10mm |
| Bedroom 2/Kitchen/Living  | Timber Above Plasterboard 100mm | 12.6 |              | No Insulation                              | Carpet 10mm |
| Bedroom 3/Kitchen/Living  | Timber Above Plasterboard 19mm  | 12.2 |              | No Insulation                              | Carpet 10mm |
| Ens/Kitchen/Living        | Timber Above Plasterboard 100mm | 5.5  |              | No Insulation                              | Carpet 10mm |
| Upstairs/Kitchen/Living   | Timber Above Plasterboard 100mm | 14.0 |              | No Insulation                              | Carpet 10mm |

## Ceiling type

| Location       | Construction              | Added insulation     | Roof space above |
|----------------|---------------------------|----------------------|------------------|
| Studio         | Plasterboard              | Bulk Insulation R3.5 | Yes              |
| L2 Living      | Plasterboard              | Bulk Insulation R3.5 | No               |
| L2 Living      | Timber Above Plasterboard | No Insulation        | No               |
| L2 Bath        | Plasterboard              | Bulk Insulation R3   | No               |
| L2 Bath        | Timber Above Plasterboard | No Insulation        | No               |
| Study          | Plasterboard              | Bulk Insulation R3   | No               |
| Study          | Timber Above Plasterboard | No Insulation        | No               |
| Garage 1       | Plasterboard              | No insulation        | No               |
| Garage 1       | Timber Above Plasterboard | Bulk Insulation R3   | No               |
| WC             | Timber Above Plasterboard | No Insulation        | No               |
| Kitchen/Living | Timber Above Plasterboard | No Insulation        | No               |
| Bath           | Plasterboard              | Bulk Insulation R3.5 | Yes              |
| Bedroom 1      | Plasterboard              | Bulk Insulation      | Yes              |



## Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0003344694**

Certificate Date:

**13 Nov 2018**

★ Star rating:

**5.8**



### Building features continued

|           |              |                      |     |  |
|-----------|--------------|----------------------|-----|--|
|           |              | R3.5                 |     |  |
| Bedroom 2 | Plasterboard | Bulk Insulation R3.5 | Yes |  |
| Bedroom 3 | Plasterboard | Bulk Insulation R3.5 | Yes |  |
| Ens       | Plasterboard | Bulk Insulation R3.5 | Yes |  |
| Upstairs  | Plasterboard | Bulk Insulation R3.5 | Yes |  |

### Ceiling penetrations

| Location     | Number | Type | Diameter (mm) | Sealed/unsealed |
|--------------|--------|------|---------------|-----------------|
| None Present |        |      |               |                 |

### Ceiling fans

| Location     | Number | Diameter (mm) |
|--------------|--------|---------------|
| None Present |        |               |

### Roof type

| Construction           | Added insulation                               | Roof colour |
|------------------------|--|-------------|
| Corrugated Iron        | Bulk, Reflective Side Down, Anti-glare Up R1.3 | Medium      |
| Waterproofing Membrane | No Insulation, Only an Air Gap                 | Medium      |

# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: 0003344694

Certificate Date: 13 Nov 2018

★ Star rating: 5.8



## Additional information

If carpet noted as floor covering it may be replaced with any type.

Due to non current Window Library the glazing descriptions may not match actual products. Only the U and SHGC values should be considered NOT the glazing descriptions.

## 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.

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# Nationwide House Energy Rating Scheme\* Certificate



Certificate number: **0003344678**

Certificate Date: **13 Nov 2018**

★ Star rating: **4.9**

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## Assessor details

Accreditation number: **20039**  
Name: **David Howard**  
Organisation: **Partners Energy Management**  
Email: **david@partnersenergy.com.au**  
Phone: **0421381005**  
Declaration of interest: **The Assessor has provided design advice to the Applicant**  
Software: **BERS Pro v4.3.0.2c (3.13)**  
AAO: **ABSA**

## Overview

### Dwelling details

Street: **Unit TH11, 25-27 Warriewood rd**  
Suburb: **Warriewood**  
State: **NSW** Postcode: **2102**  
Type: **New Dwelling** NCC Class: **1A**  
NatHERS climate zone: **56**  
Lot/DP number: **5464** Exposure: **Suburban**

### Key construction and insulation materials

(see following pages for details)

Construction: **Fibro Cavity Panel Direct Fix**  
**Corrugated Iron**  
**Concrete Slab on Ground**  
Insulation: **R2.5 wall insulation**  
**R3.5 ceiling insulation**  
**No floor insulation**  
Glazing: **ATB-006-03 B Al Thermally Broken B**  
**DG Argon Fill High Solar Gain low-E**

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

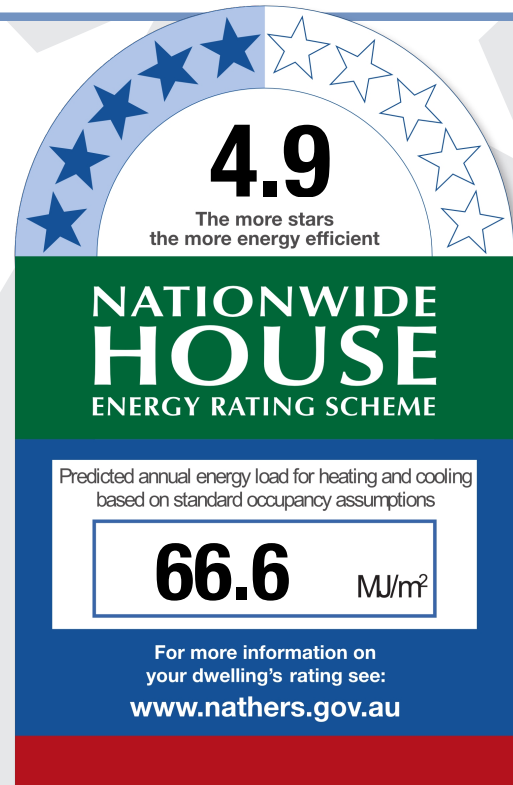
Conditioned: **200.0**  
Unconditioned: **46.0**  
Garage: **41.0**  
TOTAL: **246.0**

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

Heating: **40.7**  
Cooling: **25.9**  
TOTAL: **66.6**

### Plan documents

Plan ref/date: **Warriewood Residential Development**  
Prepared by: **VIA Architects**



### Ceiling penetrations

(see following pages for details)

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

\*\*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: **Unknown**

### 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: **0003344678**

Certificate Date:

**13 Nov 2018**

★ Star rating:

**4.9**



## Building features

### Window type and performance value

| Window ID    | Window type   | U-value | SHGC |
|--------------|---|---------|------|
| ATB-006-03 B | ATB-006-03 B AI Thermally Broken B DG Argon Fill High Solar Gain low-E -Clear | 2.9     | 0.51 |
| ATB-006-04 B | ATB-006-04 B AI Thermally Broken B DG Argon Fill Low Solar Gain low-E -Clear  | 3.0     | 0.26 |

### Window schedule

| Location       | Window ID    | Window no. | Height (mm) | Width (mm) | Orientation | Outdoor shade                       |
|----------------|--------------|------------|-------------|------------|-------------|-------------------------------------|
| Living         | ATB-006-03 B | n/a        | 2550        | 1000       | S           | No Shading                          |
| Living         | ATB-006-03 B | n/a        | 2550        | 3636       | W           | No Shading                          |
| Living         | ATB-006-04 B | n/a        | 2550        | 1000       | N           | No Shading                          |
| Study          | ATB-006-03 B | n/a        | 1400        | 1000       | S           | No Shading                          |
| Kitchen/Living | ATB-006-04 B | n/a        | 2550        | 1000       | N           | No Shading                          |
| Kitchen/Living | ATB-006-03 B | n/a        | 2700        | 3100       | E           | Vertical Louvres, Horizontal Blades |
| Kitchen/Living | ATB-006-03 B | n/a        | 2700        | 2700       | S           | No Shading                          |
| Kitchen/Living | ATB-006-03 B | n/a        | 2550        | 1000       | S           | No Shading                          |
| Kitchen/Living | ATB-006-03 B | n/a        | 2400        | 3100       | W           | Vertical Louvres, Horizontal Blades |
| Bath           | ATB-006-03 B | n/a        | 750         | 1000       | W           | No Shading                          |
| Bedroom 1      | ATB-006-03 B | n/a        | 2550        | 1000       | S           | No Shading                          |
| Bedroom 1      | ATB-006-03 B | n/a        | 2550        | 600        | W           | No Shading                          |
| Bedroom 2      | ATB-006-03 B | n/a        | 1400        | 900        | S           | No Shading                          |
| Bedroom 3      | ATB-006-03 B | n/a        | 2550        | 1875       | E           | No Shading                          |
| Bedroom 3      | ATB-006-03 B | n/a        | 2550        | 2700       | S           | No Shading                          |
| Ens            | ATB-006-04 B | n/a        | 850         | 1025       | N           | No Shading                          |
| Upstairs       | ATB-006-04 B | n/a        | 2400        | 1000       | N           | No Shading                          |
| Studio         | ATB-006-04 B | n/a        | 2550        | 1000       | N           | No Shading                          |
| Studio         | ATB-006-03 B | n/a        | 2550        | 3500       | E           | No Shading                          |
| Studio         | ATB-006-03 B | n/a        | 2550        | 1000       | SW          | 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 | Concrete block, lined         | Anti-glare foil with bulk no gap R1.5 | Yes               |
| EW-2 | Fibro Cavity Panel Direct Fix | Anti-glare foil with bulk no gap R2.5 | Yes               |

### External wall schedule

# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0003344678**

Certificate Date:

**13 Nov 2018**

★ Star rating:

**4.9**



## Building features continued

| Location       | ID   | Width (mm) | Height (mm) | Orientation | Fixed Shade | Eaves (mm) |
|----------------|------|------------|-------------|-------------|-------------|------------|
| Living         | EW-1 | 2995       | 2550        | E           | No          | 0          |
| Living         | EW-2 | 5995       | 2550        | S           | No          | 0          |
| Living         | EW-2 | 3900       | 2550        | W           | No          | 2000       |
| Living         | EW-2 | 2000       | 2550        | N           | No          | 1600       |
| Living         | EW-2 | 1600       | 2550        | W           | No          | 4000       |
| Living         | EW-2 | 9400       | 2700        | N           | No          | 0          |
| Grd Bath       | EW-1 | 2495       | 2550        | E           | No          | 0          |
| Grd Bath       | EW-1 | 1695       | 2550        | S           | No          | 0          |
| Study          | EW-2 | 3690       | 1200        | S           | No          | 0          |
| Study          | EW-1 | 3690       | 1350        | S           | No          | 0          |
| WC             | EW-2 | 895        | 2700        | W           | No          | 400        |
| WC             | EW-2 | 1995       | 2700        | N           | No          | 0          |
| Kitchen/Living | EW-2 | 9395       | 2700        | N           | No          | 0          |
| Kitchen/Living | EW-2 | 5500       | 2700        | E           | No          | 1400       |
| Kitchen/Living | EW-2 | 11400      | 2700        | S           | No          | 600        |
| Kitchen/Living | EW-2 | 4595       | 2700        | W           | No          | 400        |
| Bath           | EW-2 | 3195       | 2550        | N           | No          | 0          |
| Bath           | EW-2 | 1795       | 2550        | W           | No          | 0          |
| Bedroom 1      | EW-2 | 3795       | 2550        | S           | No          | 25         |
| Bedroom 1      | EW-2 | 3695       | 2550        | W           | No          | 0          |
| Bedroom 2      | EW-2 | 4190       | 2550        | S           | No          | 50         |
| Bedroom 3      | EW-2 | 3295       | 2550        | E           | No          | 1400       |
| Bedroom 3      | EW-2 | 3795       | 2550        | S           | No          | 75         |
| Ens            | EW-2 | 2595       | 2550        | N           | No          | 0          |
| Ens            | EW-2 | 2195       | 2550        | E           | No          | 1400       |
| Upstairs       | EW-2 | 5990       | 2550        | N           | No          | 0          |
| Garage 1       | EW-2 | 5738       | 2550        | SW          | No          | 25         |
| Garage 1       | EW-2 | 6277       | 2550        | N           | No          | 0          |
| Garage 1       | EW-2 | 1616       | 2550        | E           | No          | 3208       |
| Garage 1       | EW-2 | 949        | 2550        | N           | No          | 1636       |
| Garage 1       | EW-2 | 4254       | 2550        | NE          | No          | 2206       |
| Garage 1       | EW-2 | 7280       | 2550        | S           | No          | 0          |
| Studio WC      | EW-2 | 1388       | 2550        | W           | No          | 25         |
| Studio WC      | EW-2 | 2595       | 2550        | SE          | No          | 25         |
| Studio         | EW-2 | 5070       | 2550        | N           | No          | 0          |
| Studio         | EW-2 | 5794       | 2550        | E           | No          | 4267       |
| Studio         | EW-2 | 2372       | 2550        | S           | No          | 56         |
| Studio         | EW-2 | 4433       | 2550        | SW          | No          | 25         |

## Internal wall type

| Wall type   | Area (m²) | Insulation    | Wall wrap or foil |
|---|-----------|---------------|-------------------|
| IW-1 - Cavity wall, direct fix plasterboard, single gap | 111.0     | No insulation | No                |

# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0003344678**

Certificate Date:

**13 Nov 2018**

★ Star rating:

**4.9**



## Building features continued

### Floors

| Location                 | Construction                    | Area (m²) | Sub floor ventilation | Added insulation                           | Covering          |
|--------------------------|---------------------------------|-----------|-----------------------|--|-------------------|
| Living                   | Concrete Slab on Ground 100mm   | 42.2      | None                  | No Insulation                              | Ceramic Tiles 8mm |
| Grd Bath                 | Concrete Slab on Ground 100mm   | 4.1       | None                  | No Insulation                              | Ceramic Tiles 8mm |
| Study                    | Concrete Slab on Ground 100mm   | 12.1      | None                  | No Insulation                              | Ceramic Tiles 8mm |
| WC                       | Suspended Timber Floor 19mm     | 1.7       | Very Open             | Bulk Insulation in Contact with Floor R2.5 | Ceramic Tiles 8mm |
| Kitchen/Living /Living   | Timber Above Plasterboard 19mm  | 42.6      |                       | No Insulation                              | Carpet 10mm       |
| Kitchen/Living /Grd Bath | Timber Above Plasterboard 19mm  | 4.2       |                       | No Insulation                              | Carpet 10mm       |
| Kitchen/Living /Study    | Timber Above Plasterboard 19mm  | 12.6      |                       | No Insulation                              | Carpet 10mm       |
| Kitchen/Living           | Suspended Timber Floor 19mm     | 1.4       | Very Open             | Bulk Insulation in Contact with Floor R2.5 | Carpet 10mm       |
| Bath/WC                  | Timber Above Plasterboard 19mm  | 1.7       |                       | No Insulation                              | Ceramic Tiles 8mm |
| Bath/Kitchen/Living      | Timber Above Plasterboard 19mm  | 3.1       |                       | No Insulation                              | Ceramic Tiles 8mm |
| Bath                     | Suspended Timber Floor 19mm     | 0.7       | Totally Open          | Bulk Insulation, Gap to Floor R2.5         | Ceramic Tiles 8mm |
| Bedroom 1/Kitchen/Living | Timber Above Plasterboard 100mm | 11.4      |                       | No Insulation                              | Carpet 10mm       |
| Bedroom 1                | Suspended Timber Floor 100mm    | 1.4       | Totally Open          | Bulk Insulation, Gap to Floor R2.5         | Carpet 10mm       |
| Bedroom 2/Kitchen/Living | Timber Above Plasterboard 100mm | 12.6      |                       | No Insulation                              | Carpet 10mm       |
| Bedroom 3/Kitchen/Living | Timber Above Plasterboard 100mm | 12.2      |                       | No Insulation                              | Carpet 10mm       |
| Ens/Kitchen/Living       | Timber Above Plasterboard 100mm | 5.5       |                       | No Insulation                              | Ceramic Tiles 8mm |
| Upstairs/Kitchen/Living  | Timber Above Plasterboard 19mm  | 14.0      |                       | No Insulation                              | Carpet 10mm       |
| Garage 1                 | Concrete Slab on Ground 100mm   | 40.6      | None                  | No Insulation                              | Bare              |
| Studio WC/Garage         | Timber Above Plasterboard 100mm | 3.1       |                       | Bulk Insulation R3                         | Ceramic Tiles 8mm |
| Studio/Garage 1          | Timber Above Plasterboard 100mm | 25.4      |                       | Bulk Insulation R3                         | Carpet 10mm       |

### Ceiling type

| Location | Construction | Added insulation     | Roof space above |
|----------|--------------|----------------------|------------------|
| Living   | Plasterboard | Bulk Insulation R3.5 | No               |



# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0003344678**

Certificate Date:

**13 Nov 2018**

★ Star rating:

**4.9**



## Building features continued

|                |                           |                      |     |
|----------------|---------------------------|----------------------|-----|
| Living         | Timber Above Plasterboard | No Insulation        | No  |
| Grd Bath       | Plasterboard              | Bulk Insulation R3   | No  |
| Grd Bath       | Timber Above Plasterboard | No Insulation        | No  |
| Study          | Plasterboard              | Bulk Insulation R3   | No  |
| Study          | Timber Above Plasterboard | No Insulation        | No  |
| WC             | Timber Above Plasterboard | No Insulation        | No  |
| Kitchen/Living | Timber Above Plasterboard | No Insulation        | No  |
| Bath           | Plasterboard              | Bulk Insulation R3.5 | Yes |
| Bedroom 1      | Plasterboard              | Bulk Insulation R3.5 | Yes |
| Bedroom 2      | Plasterboard              | Bulk Insulation R3.5 | Yes |
| Bedroom 3      | Plasterboard              | Bulk Insulation R3.5 | Yes |
| Ens            | Plasterboard              | Bulk Insulation R3.5 | Yes |
| Upstairs       | Plasterboard              | Bulk Insulation R3.5 | Yes |
| Garage 1       | Plasterboard              | No insulation        | No  |
| Garage 1       | Timber Above Plasterboard | Bulk Insulation R3   | No  |
| Studio WC      | Plasterboard              | Bulk Insulation R3.5 | Yes |
| Studio         | Plasterboard              | Bulk Insulation R3.5 | Yes |

## Ceiling penetrations

| Location     | Number | Type | Diameter (mm) | Sealed/unsealed |
|--------------|--------|------|---------------|-----------------|
| None Present |        |      |               |                 |

## Ceiling fans

| Location     | Number | Diameter (mm) |
|--------------|--------|---------------|
| None Present |        |               |

## Roof type

| Construction           | Added insulation                               | Roof colour |
|------------------------|--|-------------|
| Waterproofing Membrane | No Insulation, Only an Air Gap                 | Medium      |
| Corrugated Iron        | Bulk, Reflective Side Down, Anti-glare Up R1.3 | Medium      |

# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: 0003344678

Certificate Date: 13 Nov 2018

★ Star rating: 4.9



## Additional information

If carpet noted as floor covering it may be replaced with any type.

Due to non current Window Library the glazing descriptions may not match actual products. Only the U and SHGC values should be considered NOT the glazing descriptions.

## 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\* Certificate



Certificate number: **0003344702**

Certificate Date: **13 Nov 2018**

★ Star rating: **5.1**

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: **20039**

Name: **David Howard**

Organisation: **Partners Energy Management**

Email: **david@partnersenergy.com.au**

Phone: **0421381005**

Declaration of interest: **The Assessor has provided design advice to the Applicant**

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

AAO: **ABSA**

## Overview

### Dwelling details

Street: **Unit TH12, 25-27 Warriewood rd**

Suburb: **Warriewood**

State: **NSW**

Postcode: **2102**

Type: **New Dwelling**

NCC Class: **1A**

NatHERS

climate zone: **56**

Lot/DP

number: **5464**

Exposure: **Suburban**

### Key construction and insulation materials

(see following pages for details)

Construction: **Fibro Cavity Panel Direct Fix  
Corrugated Iron**

Insulation: **Concrete Slab on Ground**

**R2.5 wall insulation**

**R3.0 ceiling insulation**

**No floor insulation**

Glazing: **ATB-005-04 B AI Thermally Broken A  
DG Argon Fill Low Solar Gain low-E**

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

Conditioned: **194.0**

Unconditioned: **58.0**

Garage: **41.0**

TOTAL: **252.0**

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

Heating: **39.2**

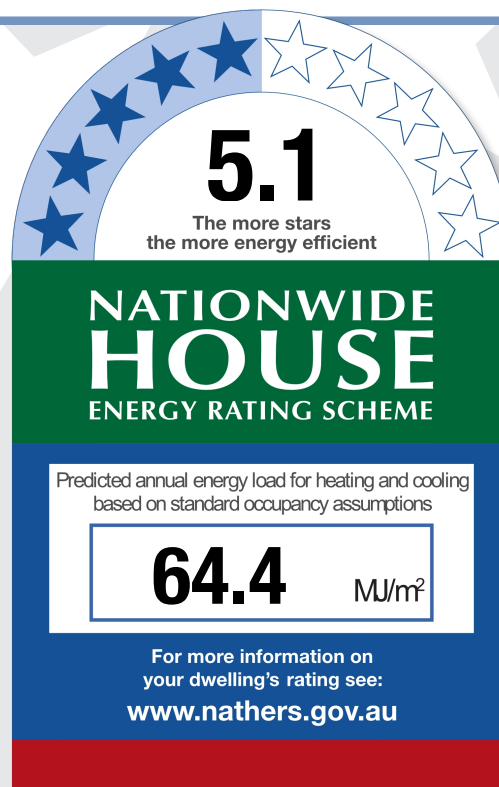
Cooling: **25.2**

TOTAL: **64.4**

### Plan documents

Plan ref/date: **Warriewood Residential Development**

Prepared by: **VIA Architects**



### Ceiling penetrations

(see following pages for details)

Sealed: **0**

Unsealed: **0**

TOTAL:\*\* **0**

\*\*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: **Unknown**

### 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: **0003344702**

Certificate Date:

**13 Nov 2018**

★ Star rating:

**5.1**



## Building features

### Window type and performance value

| Window ID    | Window type  | U-value | SHGC |
|--------------|--|---------|------|
| ATB-005-04 B | ATB-005-04 B AI Thermally Broken A DG Argon Fill Low Solar Gain low-E -Clear | 3.0     | 0.27 |

### Window schedule

| Location       | Window ID    | Window no. | Height (mm) | Width (mm) | Orientation | Outdoor shade                       |
|----------------|--------------|------------|-------------|------------|-------------|-------------------------------------|
| Bath/Ldry      | ATB-005-04 B | n/a        | 2550        | 1345       | N           | No Shading                          |
| Downstairs     | ATB-005-04 B | n/a        | 2100        | 2100       | W           | No Shading                          |
| Pantry         | ATB-005-04 B | n/a        | 1500        | 1000       | E           | No Shading                          |
| WC             | ATB-005-04 B | n/a        | 1500        | 1100       | E           | No Shading                          |
| Kitchen/Living | ATB-005-04 B | n/a        | 1500        | 2913       | S           | No Shading                          |
| Kitchen/Living | ATB-005-04 B | n/a        | 1500        | 1942       | S           | No Shading                          |
| Kitchen/Living | ATB-005-04 B | n/a        | 1500        | 2400       | W           | No Shading                          |
| Kitchen/Living | ATB-005-04 B | n/a        | 2700        | 4900       | W           | Vertical Louvres, Horizontal Blades |
| Kitchen/Living | ATB-005-04 B | n/a        | 2700        | 3100       | N           | No Shading                          |
| Kitchen/Living | ATB-005-04 B | n/a        | 2550        | 1345       | N           | No Shading                          |
| Kitchen/Living | ATB-005-04 B | n/a        | 2550        | 1100       | E           | No Shading                          |
| Kitchen/Living | ATB-005-04 B | n/a        | 2550        | 1100       | E           | No Shading                          |
| Ens            | ATB-005-04 B | n/a        | 1000        | 1200       | E           | No Shading                          |
| Bedroom 1      | ATB-005-04 B | n/a        | 2700        | 4900       | W           | No Shading                          |
| Bedroom 1      | ATB-005-04 B | n/a        | 2700        | 3100       | N           | No Shading                          |
| Bedroom 2      | ATB-005-04 B | n/a        | 2550        | 1345       | N           | No Shading                          |
| Bedroom 3      | ATB-005-04 B | n/a        | 2700        | 900        | E           | No Shading                          |
| Bedroom 3      | ATB-005-04 B | n/a        | 2700        | 900        | E           | No Shading                          |
| Upstairs       | ATB-005-04 B | n/a        | 1000        | 2200       | E           | No Shading                          |
| Upstairs       | ATB-005-04 B | n/a        | 2700        | 900        | 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 | Anti-glare foil with bulk no gap R2.5 | Yes               |
| EW-2 | Concrete block, lined         | Anti-glare foil with bulk no gap R1.5 | Yes               |

### External wall schedule

| Location | ID   | Width (mm) | Height (mm) | Orientation | Fixed Shade | Eaves (mm) |
|----------|------|------------|-------------|-------------|-------------|------------|
| Garage 1 | EW-1 | 6100       | 2550        | W           | No          | 0          |

# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0003344702**

Certificate Date:

**13 Nov 2018**

★ Star rating:

**5.1**



## Building features continued

|                |      |       |      |   |    |      |
|----------------|------|-------|------|---|----|------|
| Garage 1       | EW-1 | 5600  | 2550 | N | No | 0    |
| Garage 1       | EW-1 | 5800  | 2550 | S | No | 0    |
| Bath/Ldry      | EW-1 | 1895  | 2550 | W | No | 0    |
| Bath/Ldry      | EW-1 | 3895  | 2550 | N | No | 0    |
| Downstairs     | EW-2 | 2095  | 2550 | N | No | 0    |
| Downstairs     | EW-2 | 10900 | 2550 | E | No | 2600 |
| Downstairs     | EW-1 | 5800  | 2550 | S | No | 0    |
| Downstairs     | EW-1 | 2895  | 2550 | W | No | 1400 |
| Pantry         | EW-1 | 2195  | 2700 | S | No | 0    |
| Pantry         | EW-1 | 3095  | 2700 | E | No | 1500 |
| WC             | EW-1 | 2290  | 2700 | E | No | 1500 |
| Kitchen/Living | EW-1 | 4995  | 2700 | S | No | 0    |
| Kitchen/Living | EW-1 | 2900  | 2700 | W | No | 0    |
| Kitchen/Living | EW-1 | 2300  | 2700 | S | No | 0    |
| Kitchen/Living | EW-1 | 4900  | 2700 | W | No | 2300 |
| Kitchen/Living | EW-1 | 3500  | 2700 | N | No | 1400 |
| Kitchen/Living | EW-1 | 3100  | 2700 | W | No | 0    |
| Kitchen/Living | EW-1 | 6000  | 2700 | N | No | 0    |
| Kitchen/Living | EW-1 | 5495  | 2700 | E | No | 1500 |
| Ens            | EW-1 | 3095  | 2700 | S | No | 0    |
| Ens            | EW-1 | 2095  | 2700 | E | No | 0    |
| WIR            | EW-1 | 2895  | 2700 | W | No | 0    |
| WIR            | EW-1 | 4095  | 2700 | S | No | 0    |
| Bedroom 1      | EW-1 | 4900  | 2700 | W | No | 1700 |
| Bedroom 1      | EW-1 | 3500  | 2700 | N | No | 1300 |
| Bedroom 1      | EW-1 | 2300  | 2700 | S | No | 0    |
| Bedroom 2      | EW-1 | 3095  | 2700 | W | No | 0    |
| Bedroom 2      | EW-1 | 3895  | 2700 | N | No | 0    |
| Bedroom 3      | EW-1 | 3390  | 2700 | E | No | 0    |
| Upstairs       | EW-1 | 2095  | 2700 | N | No | 0    |
| Upstairs       | EW-1 | 5395  | 2700 | E | 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 | 21.0                   | Bulk Insulation, No Air Gap R2 | No                |
| IW-2 - Cavity wall, direct fix plasterboard, single gap | 118.0                  | No insulation                  | No                |

## Floors

| Location  | Construction                  | Area (m <sup>2</sup> ) | Sub floor ventilation | Added insulation | Covering          |
|-----------|-------------------------------|------------------------|-----------------------|------------------|-------------------|
| Garage 1  | Concrete Slab on Ground 100mm | 41.1                   | None                  | No Insulation    | Bare              |
| Bath/Ldry | Concrete Slab on Ground 100mm | 12.1                   | None                  | No Insulation    | Ceramic Tiles 8mm |

# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0003344702**

Certificate Date:

**13 Nov 2018**

★ Star rating:

**5.1**



## Building features continued

|                            |                                 |      |           |  |                   |
|----------------------------|---------------------------------|------|-----------|--|-------------------|
| Downstairs                 | Concrete Slab on Ground 100mm   | 44.4 | None      | No Insulation                              | Ceramic Tiles 8mm |
| Pantry/Downstairs          | Timber Above Plasterboard 100mm | 6.6  |           | No Insulation                              | Carpet 10mm       |
| WC/Downstairs              | Timber Above Plasterboard 100mm | 4.8  |           | No Insulation                              | Carpet 10mm       |
| Kitchen/Living /Garage 1   | Timber Above Plasterboard 19mm  | 24.4 |           | Bulk Insulation R2.5                       | Carpet 10mm       |
| Kitchen/Living /Bath/Ldry  | Timber Above Plasterboard 19mm  | 12.5 |           | No Insulation                              | Carpet 10mm       |
| Kitchen/Living /Downstairs | Timber Above Plasterboard 19mm  | 32.9 |           | No Insulation                              | Carpet 10mm       |
| Kitchen/Living             | Suspended Timber Floor 19mm     | 4.0  | Very Open | Bulk Insulation in Contact with Floor R2.5 | Carpet 10mm       |
| Ens/Pantry                 | Timber Above Plasterboard 100mm | 4.5  |           | No Insulation                              | Carpet 10mm       |
| Ens/Kitchen/Living         | Timber Above Plasterboard 100mm | 1.8  |           | No Insulation                              | Carpet 10mm       |
| WIR/Kitchen/Living         | Timber Above Plasterboard 100mm | 11.0 |           | No Insulation                              | Carpet 10mm       |
| Bedroom 1/Kitchen/Living   | Timber Above Plasterboard 100mm | 21.7 |           | No Insulation                              | Carpet 10mm       |
| Bedroom 2/Kitchen/Living   | Timber Above Plasterboard 100mm | 11.8 |           | No Insulation                              | Carpet 10mm       |
| Bedroom 3/Pantry           | Timber Above Plasterboard 100mm | 2.1  |           | No Insulation                              | Carpet 10mm       |
| Bedroom 3/WC               | Timber Above Plasterboard 100mm | 4.9  |           | No Insulation                              | Carpet 10mm       |
| Bedroom 3/Kitchen/Living   | Timber Above Plasterboard 100mm | 3.1  |           | No Insulation                              | Carpet 10mm       |
| Bath/Kitchen/Living        | Timber Above Plasterboard 100mm | 5.1  |           | No Insulation                              | Carpet 10mm       |
| Upstairs/Kitchen/Living    | Timber Above Plasterboard 100mm | 17.4 |           | No Insulation                              | Carpet 10mm       |

## Ceiling type

| Location       | Construction              | Added insulation     | Roof space above |
|----------------|---------------------------|----------------------|------------------|
| Garage 1       | Plasterboard              | No insulation        | No               |
| Garage 1       | Timber Above Plasterboard | Bulk Insulation R2.5 | No               |
| Bath/Ldry      | Timber Above Plasterboard | No Insulation        | No               |
| Downstairs     | Timber Above Plasterboard | No Insulation        | No               |
| Pantry         | Timber Above Plasterboard | No Insulation        | No               |
| WC             | Timber Above Plasterboard | No Insulation        | No               |
| Kitchen/Living | Timber Above Plasterboard | No Insulation        | No               |
| Ens            | Plasterboard              | Bulk Insulation R3.5 | Yes              |
| WIR            | Plasterboard              | Bulk Insulation R3.5 | Yes              |
| Bedroom 1      | Plasterboard              | Bulk Insulation      | Yes              |



## Nationwide House Energy Rating Scheme\* Certificate

Certificate number: **0003344702**

Certificate Date:

**13 Nov 2018**

★ Star rating:

**5.1**



### Building features continued

|           |              |                 |     |
|-----------|--------------|-----------------|-----|
| Bedroom 2 | Plasterboard | R3.5            |     |
|           |              | Bulk Insulation | Yes |
| Bedroom 3 | Plasterboard | R3.5            |     |
|           |              | Bulk Insulation | Yes |
| Bath      | Plasterboard | R3.5            |     |
|           |              | Bulk Insulation | Yes |
| Upstairs  | Plasterboard | R3.5            |     |
|           |              | Bulk Insulation | Yes |

### Ceiling penetrations

| Location     | Number | Type | Diameter (mm) | Sealed/unsealed |
|--------------|--------|------|---------------|-----------------|
| None Present |        |      |               |                 |

### Ceiling fans

| Location     | Number | Diameter (mm) |
|--------------|--------|---------------|
| None Present |        |               |

### Roof type

| Construction           | Added insulation                               | Roof colour |
|------------------------|--|-------------|
| Waterproofing Membrane | No Insulation, Only an Air Gap                 | Medium      |
| Corrugated Iron        | Bulk, Reflective Side Down, Anti-glare Up R1.3 | Medium      |

# Nationwide House Energy Rating Scheme\* Certificate

Certificate number: 0003344702

Certificate Date: 13 Nov 2018

★ Star rating: 5.1



## Additional information

If carpet noted as floor covering it may be replaced with any type.

Due to non current Window Library the glazing descriptions may not match actual products. Only the U and SHGC values should be considered NOT the glazing descriptions.

## 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)