# Nationwide House Energy Rating Scheme®
# Class 2 Summary
# NatHERS® Certificate No. #HR-PHQ4SV-02

**Generated on 19 Feb 2025 using Hero 4.1**

## Property

| | |
|---|---|
| **Address** | 10-16 Birdwood Avenue, Cabramatta, NSW, 2166 |
| **Lot/DP** | 64//DP32233 |
| **NatHERS climate zone** | 28 - Richmond |

## Accredited assessor

| | |
|---|---|
| **Name** | Robert Romanous |
| **Business name** | Cadence Efficiency Pty Ltd |
| **Email** | robert@cadenceefficiency.com.au |
| **Phone** | +61 436359396 |
| **Accreditation No.** | 101535 |
| **Assessor Accrediting Organisation** | ABSA |

## Verification

To verify this certificate, scan the QR code or visit http://www.hero-software.com.au/pdf/HR-PHQ4SV-02. When using either link, ensure you are visiting http://www.hero-software.com.au

### National Construction Code (NCC) requirements

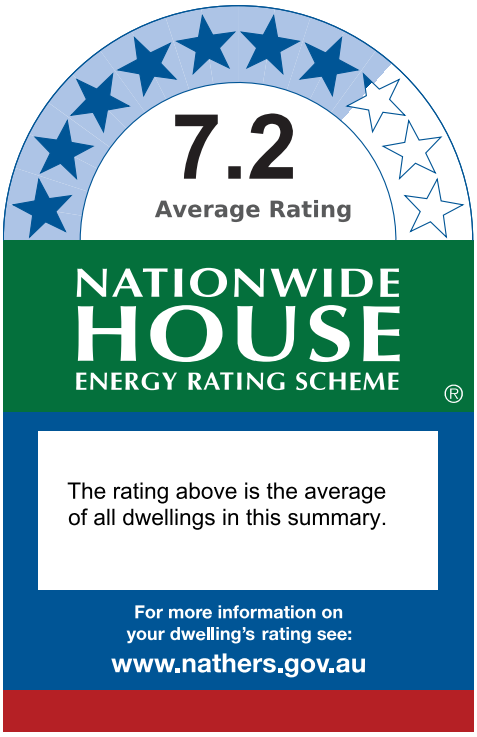
The NCC allows the use of NatHERS accredited software to comply with the energy efficiency requirements for houses (Class 1 buildings) and apartments (Class 2 sole-occupancy units and Class 4 parts of buildings). The applicable requirements for houses are detailed in Specification 42 of NCC Volume Two. For apartments the requirements are detailed in clauses J3D3 and J3D15 of NCC Volume One.

NCC 2022 includes enhanced thermal performance requirements for houses and apartments. It also includes a new whole-of-home annual energy use budget which applies to the major equipment in the home.

The NCC, and associated ABCB Standards and support material, can be accessed at www.abcb.gov.au.

Note, variations and additions to the NCC energy efficiency requirements may apply in some states and territories.

## Thermal performance Star rating




## NCC heating and cooling maximum loads MJ/m².yr

**Limits taken from ABCB Standard 2022**

| | Heating | Cooling |
|---|---|---|
| **Average load** | 36.6 | 19.2 |
| **Maximum load** | 62.4 | 41.5 |
| **Average limit** | 63.6 | 49.3 |
| **Maximum limit** | 69.7 | 54.2 |

## Whole of Home performance rating

No Whole of Home performance rating generated for this certificate or not completed for all dwellings.

## Summary of all dwellings

| Certificate number and link | Unit Number | Heating load (load limit) (MJ/m².yr) | Cooling load (load limit) (MJ/m².yr) | Total load (MJ/m².yr) | Star Rating | Whole of Home Rating |
|---|---|---|---|---|---|---|
| HR-Z110H5-02 | Unit 1 | 17.7 (70) | 11.5 (54) | 29.1 | 8.7 | n/a |
| HR-YUBZ3A-02 | Unit 10 | 50.9 (70) | 25.7 (54) | 76.6 | 6.1 | n/a |
| HR-TM9UDR-02 | Unit 11 | 24.4 (70) | 33.5 (54) | 57.9 | 7.1 | n/a |

## Summary of all dwellings

| Certificate number and link | Unit Number | Heating load (load limit) (MJ/m².yr) | Cooling load (load limit) (MJ/m².yr) | Total load (MJ/m².yr) | Star Rating | Whole of Home Rating |
|---|---|---|---|---|---|---|
| HR-IQRKG4-02 | Unit 12 | 30.1 (70) | 21.1 (54) | 51.2 | 7.4 | n/a |
| HR-RSPH9A-02 | Unit 13 | 26.7 (70) | 22.7 (54) | 49.3 | 7.6 | n/a |
| HR-K9EB4T-02 | Unit 14 | 26.0 (70) | 24.7 (54) | 50.7 | 7.5 | n/a |
| HR-GVWXMZ-02 | Unit 15 | 28.7 (70) | 18.7 (54) | 47.4 | 7.7 | n/a |
| HR-NBYNIS-02 | Unit 16 | 32.7 (70) | 41.5 (54) | 74.2 | 6.3 | n/a |
| HR-G601BA-02 | Unit 17 | 35.3 (70) | 29.8 (54) | 65.1 | 6.7 | n/a |
| HR-VFU65E-02 | Unit 18 | 48.6 (70) | 26.0 (54) | 74.5 | 6.2 | n/a |
| HR-GWMGNG-02 | Unit 2 | 40.5 (70) | 5.9 (54) | 46.4 | 7.7 | n/a |
| HR-XL8ALC-02 | Unit 3 | 34.7 (70) | 6.1 (54) | 40.8 | 8.0 | n/a |
| HR-VS9O4S-02 | Unit 4 | 34.9 (70) | 7.3 (54) | 42.2 | 7.9 | n/a |
| HR-625YE9-02 | Unit 5 | 38.3 (70) | 5.1 (54) | 43.4 | 7.9 | n/a |
| HR-JHFO2I-02 | Unit 6 | 29.5 (70) | 15.2 (54) | 44.7 | 7.8 | n/a |
| HR-N3UAAB-02 | Unit 7 | 50.0 (70) | 12.2 (54) | 62.1 | 6.9 | n/a |
| HR-TAROOY-02 | Unit 8 | 62.4 (70) | 7.6 (54) | 70.0 | 6.5 | n/a |
| HR-M12N7T-02 | Unit 9 | 47.1 (70) | 30.4 (54) | 77.5 | 6.1 | n/a |
| Averages | 18x (Total) | 36.6 | 19.2 | 55.7 | 7.2 | n/a |
| Maximum Loads and Minimum Ratings | | 62.4 | 41.5 | 77.5 | 6.1 | n/a |

# Explanatory notes

### About the ratings

The thermal performance star rating in this Certificate is the average rating of all NCC Class 2 dwellings in an apartment block. The Whole of Home performance rating in this Certificate is the lowest rating for the apartment block. Individual unit ratings are listed in the *'Summary of all dwellings'* section of this Certificate.

NatHERS ratings use computer modelling to evaluate a home's energy efficiency and performance. They use localised climate data and standard assumptions on how people use their home to predict the energy loads and societal cost. The thermal performance star rating uses the home's building specifications, layout, orientation and fabric (i.e. walls, windows, floors, roofs and ceilings) to predict the heating and cooling energy loads. The Whole of Home performance rating uses information about the home's appliances and onsite energy production and storage to estimate the homes societal cost.
For more details about an individual dwelling's assessment, refer to the individual dwelling's NatHERS Certificate (accessible via link).

### Accredited Assessors

For high quality NatHERS Certificates, always use an accredited or licenced assessor registered with an Assessor Accrediting Organisation (AAO). AAOs have strict quality assurance processes, and professional development requirements ensuring consistently high standards for assessments.

Non-accredited assessors (Raters) have no ongoing training requirements and are not quality assured.

Licensed assessors in the Australian Capital Territory (ACT) can produce assessments for regulatory purposes only, using endorsed software, as listed on the ACT licensing register.

Any queries about this report should be directed to the assessor. If the assessor is unable to address questions or concerns, contact the AAO specified on the front of this certificate.

### Disclaimer

The NatHERS Certificate format is developed by the NatHERS Administrator. However, the content in certificates is entered by the assessor. It is the assessor's responsibility to use NatHERS accredited software correctly and follow the NatHERS Technical Note to produce a NatHERS Certificate.

The predicted annual energy use, cost and greenhouse gas emissions in this NatHERS Certificate are an estimate based on an assessment of the dwelling's design by the assessor. It is not a prediction of actual energy use, cost or emissions. The information and ratings may be used to compare how other dwellings are likely to perform when used in a similar way.

Information presented in this report relies on a range of standard assumptions (both embedded in NatHERS accredited software and made by the assessor who prepared this report), including assumptions about occupancy, behaviour, appliance performance, indoor air temperature and local climate.

Not all assumptions made by the assessor while using the NatHERS accredited software tool are presented in this report and further details or data files may be available from the assessor.

## Assessor Details

| | |
|---|---|
| Name: | Robert Romanous |
| Direct Number: | (02) 8484 4086 |
| Office: | 1300 787 302 |
| AAO: | ABSA |
| Assessor Number: | 101535 |

## Assessment Details

| | |
|---|---|
| Project #: | 118400 |
| Project Name: | 10-16 Birdwood Avenue, Cabramatta West |
| Software: | HERO v4.1 |
| Date: | 04/14/2024 |
| NatHERS Certificate Number: | HR-PHQ4SV-02 |
| BASIX Certificate Number: | 1784012M_03 |

## Client Details

| | |
|---|---|
| Company Name: | McGregor Westlake Architecture |
| Contact Number: | 02) 9211 8151 |
| Contact Email: | damien@mwarchitects.com.au |

## NCC 2022 Compliance (Class 2) - Version 4 BASIX

In addition to the BASIX Commitments, building compliance is required to comply with the New South Wales state variations within the NCC 2022 - Volume 1. Specific mention is made of the following provisions:

- **J2** – Energy Efficiency,
- **J4** – Building Fabric,
- **J5** – Building Sealing,
- **J6** – Air-Conditioning and Ventilation,
- **J8** – Heated Water Supply, and
- **J9** – Energy Monitoring and On-site Distributed Energy Resources

Performance Requirement **NSW J1P5** is satisfied by complying with—

- **J3D5** and **J3D6**, for thermal breaks; and
- **J4D3**, for general thermal construction; and
- **J3D10(3)**, **J3D10(5)** and **J3D10(6)**, for floor edge insulation.
- Performance Requirement **NSW J1P6** is satisfied by complying with **Part J5** for building sealing.

Performance Requirement **NSW J1P7** is satisfied by complying with—

- **Part J6**, for air-conditioning and ventilation; and
- **J8D2**, for heated water supply; and
- **J9D3**, for facilities for energy monitoring.

Performance Requirement **NSW J1P4** is satisfied by complying with **J9D4** and **J9D5**.

| Water (Score: 40% / Target: 40%) - Pass | | Comments |
|---|---|---|
| **Rainwater Tank** | 5kL rainwater tank connected to all toilets | |
| **Common Landscape** | Lawn: 958m$^2$<br>Garden: Nil | |
| **Private Landscape** | Nil | |
| **Fire Sprinkler Systems** | Nil | |
| **Bathroom Taps** | 5 Star | |
| **Kitchen Taps** | 5 Star | |
| **Showerheads** | 4 Star (6.0-7,5L/min) | |
| **Toilet Flusher** | 4 Star | |
| **Dishwasher** | Nil | |
| **Clothes washer** | Nil | |
| End of Water | | |

| Energy (Score: 64% / Target: 62%) - Pass | | Comments |
|---|---|---|
| **Hot Water** | Individual Electric instantaneous w/ R0.6 around all piping | |
| **Dwelling Ventilation** | Bathroom fan<br>- Externally ducted w/ Interlock to light<br>Kitchen fan<br>- Externally ducted w/ manual switch<br>Laundry fan<br>- Externally ducted w/ Interlock to light or GPO | |
| **AC Cooling and Heating** | System Type – 1 Phase AC<br>Efficiency – EER/COP above 3.0 | |
| **Lighting** | Dedicated LED throughout all units | |
| **Appliances** | - Electric oven<br>- Electric cooktop<br>- Outdoor clothesline | |
| **Solar PV** | Minimum peak 15kW | |
| **Lift** | Gearless Traction w/ VVVF Motor – LED Lighting w/ link to call button | |
| | | End of Energy |

| Thermal Comfort – 7.2 Stars (Average) | |
|---|---|
| **Glazing** | |
| **Sliding / Fixed**<br>Max U-value 4.58<br>SHGC 0.45 (± 5%)<br>Single Glazed low-e Alu Frame - Clear | **Awning**<br>Max U-value 4.92<br>SHGC 0.41 (± 5%)<br>Single Glazed low-e Alu Frame – Clear |
| **Sliding / Fixed (Dwelling 9 & 17 only)**<br>Max U-value 4.10<br>SHGC 0.52 (± 5%)<br>Single Glazed low-e Alu Frame - Clear | **Awning (Dwelling 9 & 17 only)**<br>Max U-value 4.48<br>SHGC 0.36 (± 5%)<br>Single Glazed low-e Alu Frame – Clear |
| **External Walls** | |
| External Walls of Units | Additional R2.00 insulation |
| External Walls of Units (Dwelling 9 & 17 only) | Additional R2.50 insulation |
| **Internal Walls** | |
| Intertenancy Walls Between Units | Hebel – no additional insulation |
| Internal Walls Inside Units | No additional insulation modelled |
| **Unit Floors** | |
| Floors To Internal Areas | Concrete – No additional insulation |
| Floors to Ground | Concrete – No additional insulation |
| Floors To External | Concrete – Additional R2.3 insulation |
| **Unit Roof** | |
| Roof To Any Unconditioned / Outside Air | Metal Roof – Additional R3.50 ceiling insulation + R1.30 reflective roof insulation |
| End of Thermal | |