



A guide to the NatHERS Certificate

Certificate Features

The NatHERS Administrator has completed major updates to the NatHERS Certificate to improve its usability and structure. The Certificate name has also changed from the 'Universal Certificate' to the 'NatHERS Certificate'.

The new NatHERS Certificate provides a comprehensive and uniform approach to displaying important home energy rating assessment information. The Certificate comes in two formats:

1. A Certificate displaying the NatHERS logo that can be printed in colour (pictured) - produced by NatHERS accredited assessors.
2. A Certificate without the NatHERS logo that is only available in black and white - produced by non-accredited assessors.

All Certificates include information on the dwelling's key design features, building materials and parameters used to generate its star rating.

The NatHERS Certificate allows builders, certifiers and regulatory authorities to quickly confirm that the building has been built to the design on which the energy rating assessment is based.

The new NatHERS Certificate will come into use as software tools transition to the newest version of the NatHERS software (Chenath Engine version 3.21).

Each Certificate is unique. A watermark of the address and Certificate number is visible on the first page.

The title of the Certificate will include a unique number, date the Certificate was generated and the software and version used.

Property details give the basic information about the dwelling. Check these details match the stamped drawing documentation.

'Construction and environment' provides information on the size of the dwelling assessed, the climate zone and the exposure category best describing the terrain surrounding the dwelling. Ensure these match the dwelling. For information on exposure categories, see the assessor handbook.

Nationwide House Energy Rating Scheme
NatHERS Certificate No. 0004466397
Generated on 22 Feb 2020 using CSIRO AccuRate Sustainability V2.4.3.13

Property
Address: Unit 1, 37 Graham Road, Highett, VIC, 3190
Lot/DP: Lot of DP 442528, 10Y
NCC Class*: 1a
Type: New Home

Plans
Main Plan: rtr
Prepared by: d

Construction and environment
Assessed floor area (m²)*: Conditioned* 250.0, Unconditioned* 0.0, Total 250.0
Garage: Garage
Exposure Type: Suburban
NATHERS climate zone: 62

Thermal performance
Heating: 106.7 MJ/m²
Cooling: 12.3 MJ/m²

6.0
The more stars the more energy efficient

NATIONWIDE HOUSE ENERGY RATING SCHEME
119.0 MJ/m²
Predicted annual energy load for heating and cooling based on standard occupancy assumptions.
For more information on your dwelling's rating see: www.nathers.gov.au

Accredited assessor
Name: John Smith
Business name: NA
Email: john.smith@na.com.au
Phone: 03 955 5555
Accreditation No.: 3333
Assessor Accrediting Organisation: HERA
Declaration of interest: Yes - managed

About the rating
NatHERS software models the expected thermal energy loads using information about the design and construction, climate and common patterns of household use. The software does not take into account appliances, apart from the airflow impacts from ceiling fans.

Verification
To verify this certificate, scan the QR code or visit nathers.gov.au/QR/Generate?p=BHb0VGP. When using either link, ensure you are visiting nathers.gov.au

National Construction Code (NCC) requirements
The NCC's requirements for NatHERS-rated houses are detailed in 3.12.0(a)(i) and 3.12.5 of the NCC Volume Two. For apartments the requirements are detailed in J0.2 and J5 to J8 of the NCC Volume One. In NCC 2019, these requirements include minimum star ratings and separate heating and cooling load limits that need to be met by buildings and apartments through the NatHERS assessment. Requirements additional to the NatHERS assessment that must also be satisfied include, but are not limited to: insulation installation methods, thermal breaks, building sealing, water heating and pumping, and artificial lighting requirements. The NCC and NatHERS Heating and Cooling Load Limits (Australian Building Codes Board Standard) are available at www.abcb.gov.au. State and territory variations and additions to the NCC may also apply.

* Refer to glossary.
Generated on 22 Feb 2020 using CSIRO AccuRate Sustainability V2.4.3.13 for Unit 1, 37 Graham Road, Highett, VIC, 3190
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The NatHERS Logo is present on Certificates completed by Accredited NatHERS assessors.

While it's not compulsory to be accredited in all states and territories, the logo allows anyone to easily verify that the person rating a home is skilled in completing NatHERS ratings. Certificates without the logo were completed by a rater without NatHERS accreditation.

Embedded within this logo will be the 'Star Rating'. This number is the dwelling's rating shown as a score out of 10. The more stars the home has, the less heating or cooling will be required to keep the home comfortable.

The 'Thermal performance' figures indicate how much heating or cooling is expected to be required each year to keep a home within a comfortable range.

Check the NatHERS heating and cooling load limits against the ABCB Standard (2019.1) to see if they comply with heating and cooling load regulations. States and territories have different requirements so you will need to check what is appropriate within your jurisdiction.

Scan the QR code with your smart device or enter the weblink into a browser to check the online Certificate aligns with the one submitted. Each Certificate is stored on databases run by the software provider.

The 'Accredited assessor' section indicates that the assessor is a member of an Assessor Accrediting Organisation (AAO). An AAO provides quality assurance, on-going training and confirms professional indemnity insurance is held by the assessor. Non-accredited assessors do not necessarily have these industry safeguards. You will need to be comfortable the assessment was conducted by a sufficiently experienced person and meets the requirements of the state or territory. Note: states and territories have different requirements on whether or not NatHERS ratings must be completed by an accredited assessor, so you will need to check what is appropriate within your jurisdiction.

NatHERS Certificate: other pages

The other pages of the NatHERS Certificate provide construction details applied to conduct the assessment. Each specification can have a significant impact on the heat loss and gain in a dwelling, and change the star rating of the dwelling. Check that these details are the same as the dwellings documentation submitted for the assessment.

The Certificate provides guidance on how to conduct a spot check of some important items impacting the dwelling's rating.

0004466397 NatHERS Certificate 6.0 Star Rating as of 22 Feb 2020

Certificate check
Ensure the dwelling is designed and then built as per the NatHERS Certificate. While you need to check the accuracy of the whole Certificate, the following spot check covers some important items impacting the dwelling's rating.

General certificate
Does this Certificate match the one available at the web address or QR code in the verification box on the front page? Does the set of NatHERS-stamped plans for the dwelling have a Certificate number on the stamp that matches this Certificate?

Ceiling penetrations*
Does the 'number' and 'type' of ceiling penetrations (e.g. downlights, exhaust fans, etc) shown on the stamped plans or installed, match what is shown in this Certificate?

Windows
Does the installed window meet the substitution tolerances (SHGC and U-value) and window type, of the window shown on this Certificate?

Apartment entrance doors
Does the 'External Door Schedule' show apartment entrance doors? Please note that an "external door" between the modelled dwelling and a shared space, such as an enclosed corridor or foyer, should not be included in the assessment (because it overstates the possible ventilation) and would invalidate the Certificate.

Exposure*
Has the appropriate exposure level (remain) been applied? For example, it is unlikely that a ground-floor apartment is "exposed" or a top floor high-rise apartment is "protected".

Provisional values
Have provisional values been used in the assessment and, if so, noted in "additional notes" below?

Additional notes
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Window and glazed door type and performance

Default** windows

Window ID	Window Description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
ALM001-01 A	Aluminium A SG Clear	6.70	0.57	0.54	1.11
ALM005-01 A	Aluminium B DG Argon Fill Clear-Clear	4.50	0.61	0.58	1.19

Custom** windows

Window ID	Window Description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
No Data Available					

* Refer to glossary
Generated on 22 Feb 2020 using CSIRO AccuRate Sustainability V2.4.3.15 for Unit 1, 37 Graham Road, Hght, VIC, 3100

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Additional notes by the assessor may include potential conflicts of interest, provisional values where actual values are not known, use of an alternative climate zone

The last page of the Certificate provides explanatory notes to ensure the NatHERS rating is understood.

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Explanatory notes

About this report
A NatHERS report is a comprehensive, dynamic computer modelling evaluation of a home, using the floorplans, elevations and specifications to describe an energy load. It addresses the building layout, orientation and fabric (ie walls, windows, floors, roofs and ceilings), but does not cover the water or energy use of appliances or energy production of solar panels.
Ratings are based on unique climate zones where the home is located and are generated using standard assumptions, including occupancy patterns and thermostat settings. The actual energy consumption of a home may vary significantly from the predicted energy load, as the assumptions used in the rating and model affect usage patterns. For example, the number of occupants and personal heating or cooling preferences will vary.
While the figures are an indicative guide to energy use, they can be used as a valuable guide to comparing different dwellings designs and to determine that the requirements for energy efficiency requirements in the National Construction Code. Homes that are energy efficient use less energy, are warmer and more comfortable on days and cool less to run. The higher the star rating the more thermally efficient the dwelling is.

Disclaimer
ANCO has 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 an ongoing training requirement.
Any questions or concerns about the report should be directed to the assessor in the first instance. If the assessor is unable to resolve these questions or concerns, the ANCO is provided on the front of this certificate should be contacted.

Accredited assessors
To ensure the NatHERS Certificate is of a high quality, assessors can be accredited or licensed assessors. NatHERS accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).
Australian Quality Tiers (AQT) licensed assessors may only produce assessments for regulatory purposes (applications for or after they have a licence endorsement. Licence endorsements can be confirmed on the ACT licensing register.

Glossary

Annual energy load
The predicted amount of energy required for heating and cooling based on standard occupancy assumptions.

Assessed floor area
The floor area modelled in the software for the purpose of the NatHERS assessment. Note, this may not be consistent with the floor area in the design documents.

Ceiling penetrations
Features that require a penetration to the ceiling, including downlights, vents, exhaust fans, rangehoods, chimes and fans. Excludes features that require a penetration to the ceiling for wiring (eg ceiling fans, pendant lights) and heating and cooling ducts.

Conditioned
A space within a building that is supported through heating and cooling based on standard occupancy assumptions. It does not encompass 1 will include pergolas.

Custom windows
Windows that are not NatHERS software that are available on the market in Australia and have a VBER/Window Energy Rating Scheme rating.

Default windows
Windows that are representative of a specific type of window product and whose properties have been defined by standard software.

Entrance door
Those apply ventilation benefits in the modelling software and must not be modelled as a door when opening to a directly ventilated corridor or a clean air zone.

Exposure category - exposed
Remain with no distribution (eg full ground level, ocean frontage, direct, east-facing high rise unit (level above 10 floors).

Exposure category - remain
Remain with no distribution in a similar way to exposed, but with roof-enclosed distribution below 10th floor level with sub-slab shafts, lightly vegetated bush blocks, elevated units (eg above 3 floors).

Exposure category - suburban
Remain with no distribution, closely spaced distribution below 10th floor, suburban houses, heavily vegetated landscape areas.

Exposure category - protected
Remain with no distribution, closely spaced distribution over 10th floor and landscaped areas.

Horizontal shading feature
Provides shading to the building in the horizontal plane, eg, eaves, verandahs, pergolas, carports, or overhangs or balconies from upper levels.

National Construction Code
The NCC governs buildings by their function and use, and assigns a classification code. NatHERS software models NCC Class 1, 2 or 4 buildings and deemed cases. The building reference can be found at www.dcb.gov.au.

Overhang percentage
The overhang percentage or overhang provides shade to a window that is used in ventilation calculations.
An assumed value that does not represent an actual value. For example, if the wall colour is unspecified in the documentation, a provisional value of redwood must be modelled. Acceptable provisional values are outlined in the NatHERS Technical Note and can be found at www.nathers.gov.au.

Provisional value
A value used in the assessment where the actual value is not known or is not available.

Reflective wrap (also known as foil)
Can be applied to walls, roofs and ceilings. When combined with an appropriate airgap and airleakage seal, it provides insulative properties.

Roof window
For NatHERS this is typically an operable window (ie, can be opened), with a glazing or single light wall. It has an air gap, and generally does not have a sill/floor.

Shading device
A device fixed to a window that provides shading (eg, window awnings or screens but excludes blinds).

Shading features
Includes neighbouring buildings, fences, and eaves/walls, but excludes screens.

Solar heat gain coefficient (SHGC)
The fraction of incident solar radiation admitted through a window, both directly transmitted as well as absorbed and subsequently re-radiated inward. SHGC is expressed as a number between 0 and 1. The lower the SHGC, the less solar heat is transmitted.

Single light (also known as roof light)
For NatHERS this is typically a non-vented wall with flexible reflective shading, light wall and an offset air ceiling level.

Unconditioned
A space within a dwelling that is assessed to not require heating and cooling based on standard occupancy assumptions.

Vertical shading features
Provides shading to the building in the vertical plane and can be parallel or perpendicular to the adjacent building facade. Includes privacy screens, other walls in the building facade walls, fences, other shading, vegetation (provided to adjacent building facade).

* Refer to glossary
Generated on 22 Feb 2020 using CSIRO AccuRate Sustainability V2.4.3.15 for Unit 1, 37 Graham Road, Hght, VIC, 3100

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The glossary defines terms used in the NatHERS Certificate.

NatHERS summary Certificate

Scan the QR code or enter the weblink into a browser to check the online Certificate aligns with the one submitted. Each Certificate is stored on databases run by the software provider.

Nationwide House Energy Rating Scheme — Class 2 summary
NatHERS Certificate No. 0004245390

Generated on 2019-03-28 using BERS Pro v4.4.0.1 (3.21)

Property
Address: Unit A2, 200 Hstar Avenue, Ellendale, QLD, 7140
Lot/DP: NatHERS climate zone 65

Accredited assessor
Helen Reich
Energy Inspection
admin@energyinspection.com.au
041321123

Accreditation No. TEST123
Assessor Accrediting Organisation HERA

6.3 Average Rating

The rating above is the average of all dwellings in the summary.

Verification
To verify this certificate, scan the QR code or visit hstar-dev.azurewebsites.net/QR/Generate?pv=PRWAAMT. When using either link, ensure you are visiting hstar-dev.azurewebsites.net

Summary of all dwellings

Certificate number and link	Unit Number	Heating load (MJ/m ²)	Cooling load (MJ/m ²)	Total load (MJ/m ²)	Star rating
0004245387-01		174.4	1.5	175.9	6.3
	Average	174.4	1.5	175.9	6.3

National Construction Code (NCC) requirements
The NCC's requirements for NatHERS-rated buildings are detailed in 3.12.0(a)(ii) and 3.12.5 of the NCC Volume Two. For apartments the requirements are detailed in 3.12.2 and 3.12.5 of the NCC Volume One.
In NCC 2019, these requirements include minimum star ratings and separate heating and cooling load limits that need to be met by buildings and apartments through the NatHERS assessment. Requirements additional to the NatHERS assessment that must also be satisfied include, but are not limited to, insulation installation methods, thermal breaks, building sealing, water heating and piping, and artificial lighting requirements. The NCC and NatHERS Heating and Cooling Load Limits (Australian Building Codes Board Standard) are available at www.dcb.gov.au. State and territory variations and additions to the NCC may also apply.

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

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The Class 2 summary Certificate provides a list showing the individual ratings for each unit in the building, as well as an average rating for the entire building.