

Sample of a house (class 1) and apartment (Class 2 and 4 individual unit) Certificate

Certificate Features

The NatHERS Administrator has completed major updates to the NatHERS Certificate to meet the energy efficiency requirements of the National Construction Code (NCC) 2022. New features include:

- The Whole of Home energy use performance rating
- Information on the energy bills and carbon footprints of individual appliances
- Expanded building design verification checklist for quality control
- New schedules for thermal bridging, appliances, onsite renewable energy and battery systems used for NatHERS ratings
- Improvements to the certificates usability and structure
- Name change 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 on the dwelling's key design features, building materials, appliances, onsite renewable energy and battery systems and parameters used to generate its star rating.

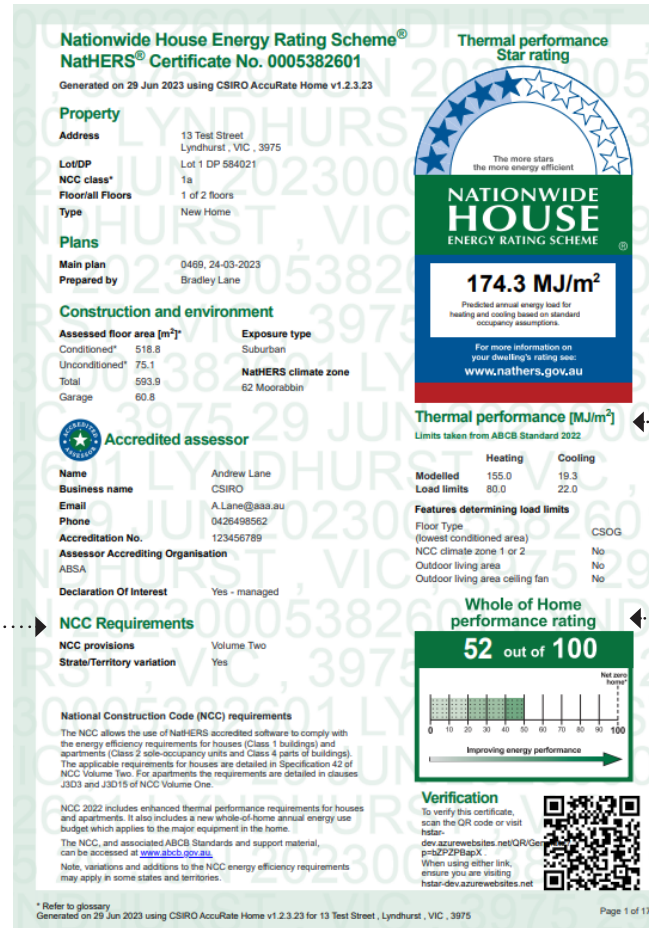
A certificate from an Accredited NatHERS Assessor includes the NatHERS logo and can be printed in colour, as shown here.

A non-accredited assessor can produce a certificate, but it does not have a NatHERS logo and can only be printed in black and white, as shown on page 3 of this guide.

All certificates include information on the dwelling's key design features, building materials, appliances, onsite renewable energy and battery systems and parameters used to generate its star rating. The certificate will leave sections blank which relate to NCC provisions that a state and territory did not choose to adopt.

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 NatHERS Certificate is for use with Chenath Engine version 3.22 and 3.23.



Nationwide House Energy Rating Scheme®
NatHERS® Certificate No. 0005382601
 Generated on 29 Jun 2023 using CSIRO AccuRate Home v1.2.3.23

Property
 Address: 13 Test Street, Lyndhurst, VIC, 3975
 Lot/DP: Lot 1 DP 584021
 NCC class*: 1a
 Floor/s: 1 of 2 floors
 Type: New Home

Plans
 Main plan: 0469, 24-03-2023
 Prepared by: Bradley Lane

Construction and environment
 Assessed floor area (m²):
 Conditioned*: 518.8
 Unconditioned*: 75.1
 Total: 593.9
 Garage: 60.8
 Exposure type: Suburban
 NatHERS climate zone: 62 Moorabbin

Accredited assessor
 Name: Andrew Lane
 Business name: CSIRO
 Email: A.Lane@aiaa.au
 Phone: 0426498562
 Accreditation No.: 123456789
 Assessor Accrediting Organisation: ABSA

Declaration Of Interest: Yes - managed

NCC Requirements
 NCC provisions: Volume Two
 State/Territory variation: Yes

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 4.2 of NCC Volume Two. For apartments the requirements are detailed in clauses J303 and J3015 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: 5 stars
 The more stars the more energy efficient

Thermal performance [MJ/m²]
 Limits taken from ABCB Standard 2022.
 Heating: 155.0
 Cooling: 19.3
 Modelling: 80.0
 Load limits: 22.0

Features determining load limits
 Floor Type: CSOG
 NCC climate zone 1 or 2: No
 Outdoor living area: No
 Outdoor living area ceiling fan: No

Whole of Home performance rating
 52 out of 100
 Net zero target

Verification
 To verify this certificate, scan the QR code or visit dev.azurewebsites.net/QR/pn6ZP2PBapX. When using either link, ensure you are visiting hstar-dev.azurewebsites.net

* Refer to glossary
 Generated on 29 Jun 2023 using CSIRO AccuRate Home v1.2.3.23 for 13 Test Street, Lyndhurst, VIC, 3975
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Thermal Performance

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. Modelled heating and cooling values show the thermal performance of the building shell. Check the NatHERS heating and cooling load limits against the ABCB Standard (2022) 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 for your location.

Whole of Home performance rating

The Whole of Home rating is a separate rating to the thermal rating. It rates the efficiency of appliances used in a new home including:

- heating and cooling
- hot water systems
- lighting
- pool/spa equipment
- cooking and plug-in appliances
- on-site energy generation and storage

The assessment builds on the thermal performance assessment rating, creating a useful energy snapshot of energy costs as well as greenhouse gas emissions. The Whole of Home rating scale ranges from 0 to 100, where 100 is a net zero energy value home, but ratings above 100 are possible. One way that a home may rate over 100 is when a home generates more energy than it uses.

NCC Requirements

The 'NCC Requirements' section shows which volume of the NCC the assessment has been done under and whether a state or territory variation to the NCC applies.

Sample of Non-Accredited Report

Certificate Features

The NatHERS Administrator has completed major updates to the NatHERS Certificate to meet energy efficiency requirements of the National Construction Code (NCC) 2022. New features include:

- The Whole of Home energy use performance rating
- Information on the energy bills and carbon footprints of individual appliances
- Expanded building design verification checklist for quality control
- New schedules for thermal bridging, appliances, onsite renewable energy and battery systems used for NatHERS ratings
- improve its usability and structure

The certificate name has 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 on the dwelling's key design features, building materials, appliances, onsite renewable energy and battery systems and parameters used to generate its star rating.

A certificate from an Accredited NatHERS Assessor includes the NatHERS logo and can be printed in colour, as shown on page 1 of this guide.

A non-accredited assessor can produce a certificate, but it does not have a NatHERS logo and can only be printed in black and white, as shown here.

All certificates include information on the dwelling's key design features, building materials, appliances, onsite renewable energy and battery systems and parameters used to generate its star rating. The certificate will leave sections blank which relate to NCC provisions that a state and territory did not choose to adopt.

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 NatHERS Certificate is for use with Chenath Engine version 3.22 and 3.23.

Residential energy rating report Non-accredited No. 0005382601
Generated on 29 Jun 2023 using CSIRO AccuRate Home v1.2.3.23

This report was created using NatHERS accredited software but the non-accredited assessor (rater) is not accredited under NatHERS and this report is not accredited as being compliant with NatHERS. Reliance on this report is accordingly at your own risk.

Property Address 13 Test Street Lyndhurst, VIC, 3975 Lot/DP Lot 1 DP 584021 NCC Class* 1a Floor/all Floors 1 of 2 floors Type New Home	Thermal performance Star rating <h1>4.4</h1> star rating 174.3 MJ/m² Predicted annual energy load for heating and cooling based on standard occupancy assumptions.
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Plans Main plan 0469, 24-03-2023 Prepared by Bradley Lane	Construction and environment Assessed floor area (m²) Conditioned* 518.8 Unconditioned** 75.1 Total 593.9 Garage 60.8 Exposure type Suburban NatHERS climate zone 62 Moorabbin
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Rater** Name Andrew Lane Business name CSIRO Email A.lane@saa.au Phone 0426498562 Declaration of Interest Yes - managed	Thermal performance [MJ/m²] Limits taken from ABCB Standard 2022 <table border="1"> <thead> <tr> <th></th> <th>Heating</th> <th>Cooling</th> </tr> </thead> <tbody> <tr> <td>Modelled</td> <td>155.0</td> <td>19.3</td> </tr> <tr> <td>Load limits</td> <td>80.0</td> <td>22.0</td> </tr> </tbody> </table> Features determining load limits Floor Type (lowest conditioned area) CSOG NCC climate zone 1 or 2 No Outdoor living area No Outdoor living area ceiling fan No		Heating	Cooling	Modelled	155.0	19.3	Load limits	80.0	22.0
	Heating	Cooling								
Modelled	155.0	19.3								
Load limits	80.0	22.0								

NCC Requirements NCC provisions Volume Two State/Territory variation Yes	Whole of Home performance rating <h1>52 out of 100</h1>
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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 J303 and J3015 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.

Verification
 To verify this certificate, scan the QR code or visit nat-her.com.au/verify
 When using either link, ensure you are visiting nat-her.com.au/verify.

* Refer to glossary. ** Refer explanatory notes.
 Generated on 29 Jun 2023 using CSIRO AccuRate Home v1.2.3.23 for 13 Test Street, Lyndhurst, VIC, 3975

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Thermal Performance

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. Modelled heating and cooling values show the thermal performance of the building shell. Check the NatHERS heating and cooling load limits against the ABCB Standard (2022) 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 for your location.

Whole of Home performance rating

The Whole of Home rating scale illustrates the annual energy use performance in context of the NCC energy use budget. The Whole of Home Performance Rating will be a separate rating out of 100.

It shows the efficiency of the appliances used in a new home including:

- heating and cooling
- hot water systems
- lighting
- pool/spa equipment
- cooking and plug-in appliances
- on-site energy generation and storage

The assessment builds on the thermal performance assessment rating and considers energy used for heating and cooling, and appliances, minus energy generated from solar panels, creating a useful energy snapshot of energy costs as well as greenhouse gas emissions. While the Whole of Home rating scale ranges from 0 to 100, where 100 is a net zero energy value home, ratings above 100 are possible. One way that a home may rate over 100 is when a home generates more energy than it uses.

NCC Requirements

The 'NCC Requirements' section provides information about which volume of the NCC the assessment has been done under and if a state or territory variation to the NCC applies.

Explanatory information about each of the NatHERS ratings is provided to ensure that users of the certificate understand what each rating is measuring.

The 'Heating and Cooling Load Limits' section is designed to ensure users of the certificate understand what the heating and cooling load limits and features determining the load limits are for the dwelling (displayed on page 1 of the Certificate).

The 'Predicted Onsite Renewable Energy Impact' section provides for a Whole of Home rating that excludes onsite renewable energy generation. It also includes information about how much energy the home is generating and exporting as well as information about the home's annual greenhouse gas emissions. This information can be used to see if the home is net zero energy and carbon.

The 'Predicted Whole of Home annual impact by appliance' section has been added to the certificate. It provides information on the home's annual energy use, greenhouse gas emissions and cost by appliance and fuel type. This information allows users to understand what impact each appliance is having on the home's annual energy use, cost and greenhouse gas emissions.

The last page of the Certificate provides explanatory notes to ensure the NatHERS rating is understood. It has been updated to include information about the new features on the certificate.

The glossary defines terms used in the NatHERS certificate.

The checklist in the 'Report Check' section gives users the tools to check that the home is being built according to the design and the information used to create the NatHERS ratings. Users are encouraged to check that they are getting what they expected at various stages of the home's design and construction and bring it up with their designer, builder or assessor if things are not going to plan.

A new thermal bridging schedule for steel framed elements has been added to the certificate. This schedule includes detailed information about the thermal bridging inputs used to create the NatHERS ratings.

Building element	Steel section dimensions (height x width, mm)	Frame spacing [mm]	Steel thickness [BMT,mm]	Normal break [R-value]
No Data Available				

New appliance, onsite renewable energy and battery schedules have been added to the certificate. These schedules include detailed information about the appliances, onsite renewable energy and battery systems that were used to create the Whole of Home performance rating.

(not applicable if a Whole of Home performance assessment is not conducted for this certificate)

Note: A flat assumption of 5W/m² is used for lighting, therefore lighting is not included in the appliance schedule.

Appliance/ system type	Location	Fuel type	Minimum efficiency/ performance	Recommended capacity
Reverse Cycle Air Conditioner - Default		Electricity	N/A	00

System Type	Orientation	System Size Or Generation Capacity
Solar PV	30.00	6.50

System Type	Size (Battery Storage Capacity)
Lithium-Ion	1



The graph key helps read the information in the pie charts.

The 'Summary of all dwellings' section provides a table showing the individual ratings for each unit in the building, as well as an average thermal rating and Whole of Home rating for the entire building.

