Nationwide House Energy Rating Scheme[®] NatHERS[®] Certificate No. Q718R3X73I

Generated on 1 Apr 2025 using FirstRate5: 5.5.5a (3.22)

Property

Address

Lot/DP NCC Class* Floor/all Floors Type Granny, 23 Forest Way , Frenchs Forest, NSW, 2086 B/-/DP377587 Class 1a New Home

Plans

Main plan26/03/2025Prepared byRS

Construction and environment

Assessed floor area [m²]*Conditioned*43.3Unconditioned*6.9Total50.2Garage-

Exposure type suburban NatHERS climate zone 56 Mascot AMO

Accredited assessor

Name	Pranab chakma
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Phone	0490511593
Accreditation No.	101225
Assessor Accrediting Orga	nisation
ABSA	
Declaration of interest	No

NCC Requirements

NCC provisions Volume 2 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 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



NATIONWIDE HOUSE ENERGY RATING SCHEME

R

29.2 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

Thermal performance [MJ/m²] Limits taken from ABCB Standard 2022

	Heating	Cooling
Modelled	12.6	16.6
Load limits	N/A	N/A

Features determining load limits

Floor type	N/A
(lowest conditioned area)	
NCC climate zone 1 or 2	N/A
Outdoor living area	N/A
Outdoor living area ceiling fan	N/A

Whole of Home performance rating

No Whole of Home performance rating generated for this certificate

Verification

To verify this certificate, scan the QR code or visit https://w ww.fr5.com.au/QRCodeLand ing?PublicId=Q718R3X73I When using either link, ensure you are visiting www.fr5.com.au.



About the ratings

Thermal performance rating

NatHERS thermal software models the expected heating and cooling energy loads using information about the design, construction, climate and common patterns of household use. The thermal performance rating (shown as a star rating on this Certificate) does not take into account appliances, apart from the airflow impacts from ceiling fans.

Whole of Home performance rating

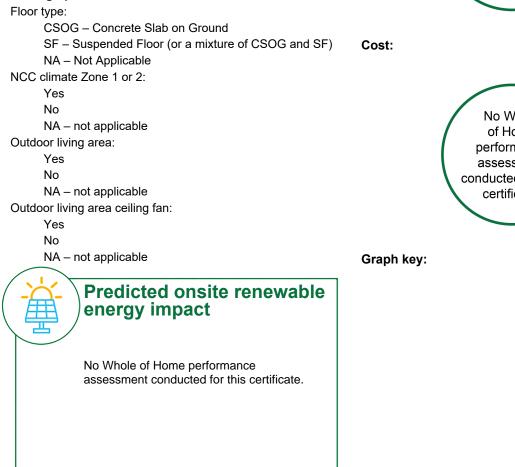
NatHERS Whole of Home software uses the heating and cooling energy loads combined with the energy performance of the home's appliances (heating, cooling, hot water, lighting, pool/spa pump and onsite renewable energy generation and storage) and models the expected energy value* of the whole home. The Whole of Home performance rating is shown as a score out of 100 on this Certificate.

Heating & Cooling Load Limits

Additional information

In some locations under the NCC NatHERS pathway, separate heating and cooling load limits may apply. Minimum required star ratings in northern parts of Australia may also be affected by the presence or absence of an outdoor living area and/or an outdoor living area ceiling fan. Refer to the ABCB NatHERS heating and cooling load limits Standard 2022 for details or contact the relevant local building regulating authority, noting that State and Territory variations may also apply.

Setting options:



*Refer to glossary.

Predicted Whole of Home annual impact by appliance

Shows the contribution each appliance has on the home's annual energy use, greenhouse gas emissions and cost without solar

Energy use:



Greenhouse gas emissions:

No Whole of Home performance assessment conducted for this certificate.

No Whole of Home performance assessment conducted for this certificate.



Certificate check	Approval	stage	Construc stage	tion	
The checklist covers important items impacting the dwelling's ratings. It is recommended that the accuracy of the whole certificate is checked.	Assessor checked	Consent authority/ surveyor checked	Builder checked	Consent authority/ surveyor checked	Occupancy/other
Note: The boxes indicate when and who should check each item. It is not mandatory to complete this checklist.	Assess	Consen surveyc	Builder	Consen surveyc	Occupa
Genuine certificate check					
Does this Certificate match the one available at the web address or QR code verification link on the front page?					
Does the NatHERS certificate number on the NatHERS-stamped plans match the number on this Certificate?					
Thermal performance check	1	1	1		
Windows and glazed doors					
Does the window size, opening type and location shown on the NatHERS- stamped plans or as installed match what is shown in ' <i>Window and glazed door</i> <i>schedule</i> ' and ' <i>Roof window schedule</i> ' tables on this Certificate?					
Does the installed windows meet the substitution tolerances (AFRC* based SHGC* and U-values*) as shown in the <i>'Window and glazed door type and performance'</i> and <i>'Roof window type and performance'</i> tables on this Certificate?					
External walls					
Does the external wall bulk insulation (R-value) shown on the NatHERS-stamped plans or as installed match what is shown in the External wall type table on this Certificate?					
Does the external wall shade (colour) match what is shown in the 'External wall type' table on this Certificate?					
Floor					
Does the floor insulation (R-value) shown on the NatHERS-stamped plans or as installed match what is shown in the ' <i>Floor type</i> ' table on this certificate?					
Ceiling penetrations*					
Does the <i>'quantity'</i> and <i>'type'</i> of ceiling penetrations* (e.g. downlights, exhaust fans, etc) shown on the NatHERS-stamped plans or as installed match what is shown in the <i>'Ceiling penetrations'</i> table on this Certificate?					
Ceiling		1			
Does the ceiling insulation (R-value) shown on the NatHERS-stamped plans or as installed match what is shown in the ' <i>Ceiling type</i> ' table on this Certificate?					
Roof					
Does the external roof shade (colour) on the NatHERS stamped plans or as installed match what is shown in the <i>'Roof type'</i> table on this Certificate?					
Apartment entrance doors (NCC Class 2 assessments only)					
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 type (terrain) (shown on page 1) been applied? For example, it is unlikely that a ground-floor apartment is "exposed" or a top floor high-rise apartment is "protected".					
Heating and cooling load limits*					
Do the load limits settings (shown on page 1) match the values in the ABCB Standard 2022: NAtHERS heating and cooling load limits for the appropriate climate zone?					



	Approval	stage	Construc stage	tion	
Certificate check Continued	Assessor checked	Consent authority/ surveyor checked	Builder checked	Consent authority/ surveyor checked	Occupancy/other
Additional NCC requirements for thermal performance (not included	in the Na	tHERS a	ssessme	nt)	
Thermal bridging					
Does the dwelling meet the NCC requirement for thermal bridging?					
Insulation installation method			,		
Has the insulation been installed according to the NCC requirements?					
Building sealing		1	1		
Does the dwelling meet the NCC requirements for Building Sealing?					
Whole of Home performance check (not applicable if a Whole of Home perf	ormance a	ssessment	is not con	ducted)	
Appliances					
Does the cooling appliance/s type, location and efficiency/performance shown on the NatHERS-stamped plans or as installed match the location and minimum efficiency/performance requirements shown in the Appliance schedule on this Certificate?					
Does the heating appliance/s type, location and efficiency/performance shown on the NatHERS-stamped plans or installed, match the location and minimum efficiency/performance requirements shown in the ' <i>Appliance schedule</i> ' on this Certificate?					
Does the hot water system type and efficiency/performance shown on the NatHERS-stamped plans or as installed match the location and minimum efficiency/performance requirements shown in the ' <i>Appliance schedule</i> ' on this Certificate?					
Does the pool pump efficiency/performance shown on the NatHERS-stamped plans or as installed match the minimum efficiency/performance requirements shown in the ' <i>Appliance schedule</i> ' on this Certificate?					
Does the onsite renewable energy system type, orientation and system size or generation capacity shown on the NatHERS stamped plans or installed match the 'Onsite Renewable Energy schedule' on this Certificate?					
Additional NCC Requirements for Services (not included in the Nath	ERS asse	essment)			
Does the lighting meet the artificial lighting requirements specified in the NCC?					
Does the hot water system meet the additional requirements specified in the NCC?					
Provisional values* check					
Have provisional values* been used in the assessment and, if so, are they noted in 'Additional notes' table below?					
Other NCC requirements					

Note: This Certificate only covers the energy efficiency requirements in the NCC. Additional requirements that must also be satisfied include, but are not limited to: condensation, structural and fire safety requirements and any state or territory variations to the NCC energy efficiency requirements.

Additional notes

- 1. Roof colour to be as per certificate
- 2. All insulation type may be replaced with similar R-value
- 3. All window type may be replaced with similar u-value and SHGC



Room schedule

Room	Zone Type	Area [m ²]
Bedroom 1	bedroom	10.8
Bedroom 2	bedroom	10.9
Unconditioned 3	unconditioned	3.1
Unconditioned 4	unconditioned	3.9
Kitchen/Living 5	kitchen	21.6

Window and glazed door type and performance

Default* windows

				Substitution to	lerance ranges
Window ID	Window description	Maximum U-value*	SHGC*	SHGC lower limit	SHGC upper limit
ALM-002-01 A	Aluminium B SG Clear	6.7	0.7	0.66	0.74
Custom* windows	5				
				Substitution to	lerance ranges
Window ID	Window description	Maximum U-value*	SHGC*	SHGC lower limit	SHGC upper limit
No Data Availah	le				

No Data Available

Window and glazed door schedule

Location	Window ID	Window no.	Height [mm]	Width [mm]	Window type	Opening %	Orientation	Window shading device*
Bedroom 1	ALM-002-01 A	SD2	2400	2000	sliding	30.0	E	No
Bedroom 2	ALM-002-01 A	W3	1200	2100	sliding	45.0	E	No
Unconditioned 3	ALM-002-01 A	W2	1500	750	sliding	0.0	Ν	No
Unconditioned 4	ALM-002-01 A	W4	600	750	sliding	45.0	S	No
Kitchen/Living 5	ALM-002-01 A	W1	600	1800	fixed	0.0	Ν	No
Kitchen/Living 5	ALM-002-01 A	SD1	2400	2000	sliding	45.0	W	No

Roof window* type and performance value

Default* roof windows

			Substitution to	erance ranges
Window description	Maximum U-value*	SHGC*	SHGC lower limit	SHGC upper limit
			Substitution to	erance ranges
Window description	Maximum U-value*	SHGC*	SHGC lower limit	SHGC upper limit
		Window description U-value*	Window description U-value* SHGC* Maximum	Maximum U-value* SHGC* SHGC lower limit Maximum Substitution to SHGC lower limit



No Data Available

Roof window* schedule

Location	Window ID	Window no.	Opening %	Area [m²]	Width [mm]	Orientatio			Indoor shade
No Data Ava	ailable								
Skylight* Skylight ID	* type and pe	rformance	Skylight c	loscrintio	'n	Skyli	aht shaft	reflectanc	` 0
No Data Ava	ailable		Okylight C	escriptio	'II		gint shan	Teneotant	
Skylight*	* schedule								
Skylight*		light ID	Skylight No.	Skylight length [ı			Orient- ation	Outdoor shade	Diffuse

Location	Height [mm]	Width [mm]	Opening %	Orientation
No Data Available				

External wall type

Wall ID	Wall type	Solar absorptance		Bulk insulation [R-value]	Reflective wall wrap*
1	FR5 - Brick Veneer	0.5	Medium	Glass fibre batt: R2.0 (R2.0)	Yes

External wall schedule

Location	Wall ID	Height [mm]	Width [mm]	Orientation	Horizontal shading feature* maximum projection [mm]	Vertical shading feature* (yes/no)
Bedroom 1	1	2700	3609	S	650	Yes
Bedroom 1	1	2700	3001	E	624	Yes
Bedroom 2	1	2700	3009	E	620	Yes
Bedroom 2	1	2700	3617	Ν	482	Yes
Unconditioned 3	1	2700	1611	Ν	483	Yes
Unconditioned 4	1	2700	2004	S	646	Yes
Kitchen/Living 5	1	2700	2705	S	657	Yes
Kitchen/Living 5	1	2700	3115	Ν	480	Yes
Kitchen/Living 5	1	2700	1715	W	631	Yes
Kitchen/Living 5	1	2700	4365	W	2124	Yes

Internal wall type

Wall ID Wall type Area [m²]

Bulk insulation

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7.1 Star Rating as of 1 Apr 2025



1

FR5 - Internal Plasterboard Stud Wall

46.6

Floor type

Location	Construction	Area [m²]	Sub-floor ventilation	Added insulation [R-value]	Covering
Bedroom 1	FR5 - CSOG: Slab on Ground	10.8	Enclosed	R0.0	Carpet
Bedroom 2	FR5 - CSOG: Slab on Ground	10.9	Enclosed	R0.0	Carpet
Unconditioned 3	FR5 - CSOG: Slab on Ground	3.1	Enclosed	R0.0	Tiles
Unconditioned 4	FR5 - CSOG: Slab on Ground	3.9	Enclosed	R0.0	Tiles
Kitchen/Living 5	FR5 - CSOG: Slab on Ground	21.6	Enclosed	R0.0	Tiles

Ceiling type

Location	Construction material/type	Bulk insulation R-value [may include edge batt values]	Reflective wrap*
Bedroom 1	Plasterboard	R4.0	Yes
Bedroom 2	Plasterboard	R4.0	Yes
Unconditioned 3	Plasterboard	R4.0	Yes
Unconditioned 4	Plasterboard	R4.0	Yes
Kitchen/Living 5	Plasterboard	R4.0	Yes

Ceiling penetrations*

			Height	Width	
Location	Quantity	Туре	[mm]	[mm]	Sealed/unsealed
Bedroom 1	2	Downlights	90	90	Sealed
Bedroom 2	2	Downlights	90	90	Sealed
Unconditioned 3	1	Exhaust Fans	250	250	Sealed
Unconditioned 4	1	Exhaust Fans	250	250	Sealed
Kitchen/Living 5	4	Downlights	90	90	Sealed
Kitchen/Living 5	1	Exhaust Fans	250	250	Sealed

Ceiling fans

Location	Quantity	Diameter [mm]
No Data Available		

Roof type

	Added insulation	1	
Construction	[R-value]	Solar absorptance	Roof shade [colour]
Cont:Attic-Continuous	1.3	0.5	Medium



Thermal bridging schedule for steel frame elements

Steel section dimensions

Building element

[height x width, mm]

Frame spacing [mm]

Steel thickness [BMT,mm] Thermal break [R-value]

No Data Available

Appliance *schedule*

(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.

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Appliance/ system type	Location	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Whole of Home performa	ance assessment		icate.	
Heating system				
			Minimum efficiency/	Recommended
Appliance/ system type	Location	Fuel type	performance	capacity
No Whole of Home performa	ance assessment	conducted for this certif	icate.	
Hot water system				
		Minimum		
		efficiency/	Hot Water CER	Assessed dail
Appliance/ system type	Fuel type	performance	Zone Zone 3	STC load
No Whole of Home performa	ance assessment	conducted for this certif	icate.	
Pool/spa equipment				
			Minimum efficiency/	Recommended
Appliance/ system type		Fuel type	performance	capacity
No Whole of Home performa	ance assessment	conducted for this certif	icate.	
Appliance/ system type No Whole of Home performa	ance assessment		performance	

 System type
 Orientation
 System size or generation capacity

 No Whole of Home performance assessment conducted for this certificate.
 Image: Construction of the sector of the

Battery schedule

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

System type	Size [battery storage capacity]
No Whole of Home performance assessment conducted for this certificate.	

7.1 Star Rating as of 1 Apr 2025

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Explanatory Notes

About this report

NatHERS ratings are a reliable guide for comparing different dwelling designs and to demonstrate that designs meet the energy efficiency requirements in the National Construction Code.

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 heating and cooling energy loads and energy value* of the whole home. 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 generation and storage to estimate the homes energy value*.

The actual energy loads, cost and greenhouse gas emissions of a home may vary from that predicted. This is because the assumptions will not always match the actual occupant usage patterns. For example, the number of occupants and how people use their appliances will vary. Energy efficient homes use less energy, are warmer on cool days, cooler on hot days and cost less to run.

Accredited assessors

For quality assured 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.

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 the certificate 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 load, 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 using the NatHERS accredited software tool are presented in this report and further details or data files may be obtained from the assessor.

Glossary

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Annual energy load	the predicted amount of energy required for heating and cooling, based on standard occupancy assumptions.
AFRC	Australian Fenestration Rating Council
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, range hoods, chimneys and flues. Excludes fixtures attached to the ceiling with small holes through the ceiling for wiring, e.g. ceiling fans; pendant lights, and heating and cooling ducts.
Conditioned	a zone within a dwelling that is expected to require heating and cooling based on standard occupancy assumptions. In some circumstances it will include garages.
СОР	Coefficient of performance
Custom windows	windows listed in NatHERS software that are available on the market in Australia and have a WERS (Window Energy Rating Scheme) rating.
Default windows	windows that are representative of a specific type of window product and whose properties have been derived by statistical methods.
EER	Energy Efficiency Ratio, measure of how much cooling can be achieved by an air conditioner for a single kWh of electricity input
Energy use	This is your homes rating without solar or batteries.
Energy value	The net cost to society including, but not limited to, costs to the building user, the environment and energy networks (as defined in the ABCB Housing Provisions Standard).
Entrance door	these signify ventilation benefits in the modelling software and must not be modelled as a door when opening to a minimally ventilate corridor in a Class 2 building.
Exposure category – expose	d terrain with no obstructions e.g. flat grazing land, ocean-frontage, desert, exposed high-rise unit (usually above 10 floors).
Exposure category – open	terrain with few obstructions at a similar height e.g. grasslands with few well scattered obstructions below 10m, farmland with scattered sheds, lightly vegetated bush blocks, elevated units (e.g. above 3 floors).
Exposure category –	terrain with numerous, closely spaced obstructions below 10m e.g. suburban housing, heavily vegetated bushland areas.
suburban	
Exposure category –	terrain with numerous, closely spaced obstructions over 10 m e.g. city and industrial areas.
protected	
Horizontal shading feature	provides shading to the building in the horizontal plane, e.g. eaves, verandahs, pergolas, carports, or overhangs or balconies from upper levels.
National Construction Code	the NCC groups buildings by their function and use, and assigns a classification code. NatHERS software models NCC Class 1, 2 or
(NCC) Class	4 buildings and attached Class 10a buildings. Definitions can be found at www.abcb.gov.au.
Net zero home	a home that achieves a net zero energy value*.
Opening percentage	the openability percentage or operable (moveable) area of doors or windows that is used in ventilation calculations.
Provisional value	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 'medium' must be modelled. Acceptable provisional values are outlined in the NatHERS Technical Note and can be found at www.nathers.gov.au
Recommended capacity	this is the capacity or size of equipment that is recommended by NatHERS to achieve the desired comfort conditions in the zone or zones serviced. This is a recommendation and the final selection sizing should be confirmed by a suitably qualified person.
Reflective wrap (also known	
as foil)	properties.
Roof window	for NatHERS this is typically an operable window (i.e. can be opened), will have a plaster or similar light well if there is an attic space and generally does not have a diffuser.
Shading features	includes neighbouring buildings, fences, and wing walls, but excludes eaves.
Solar heat gain coefficient (SHGC)	the fraction of incident solar radiation admitted through a window, both directly transmitted as well as absorbed and subsequently released inward. SHGC is expressed as a number between 0 and 1. The lower a window's SHGC, the less solar heat it transmits.
Skylight (also known as roof lights)	for NatHERS this is typically a moulded unit with flexible reflective tubing (light well) and a diffuser at ceiling level.

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7.1 Star Rating as of 1 Apr 2025

