



SUSTAINABLE DESIGN ASSESSMENT

Client: LGH Landholdings 20 Pty Ltd

Project: 123-129 Erskine Street, Middle Park

Subject: Sustainable Design Assessment

Date: 17/07/2026

Project Number: GIW25017

Revision: K

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Introduction

The following Sustainable Design Assessment (SDA) has been prepared for the proposed multi-residential development at 123-129 Erskine Street, Middle Park. This assessment responds to the following clauses:

- City of Port Phillip Planning Scheme - Clause 15.01-2L-02 Environmentally Sustainable Development.
- City of Port Phillip Planning Scheme - Clause 19.03-3L Stormwater management (water sensitive urban design)
- City of Port Phillip Planning Scheme - Clause 53.18 (Stormwater Management in Urban Development)
- Victoria Planning Provisions VC216 – 15.01-2S.

The development has been assessed using the Built Environment Sustainability Scorecard (BESS) tool. The BESS tool addresses nine key environmental categories as follows:

- | | | |
|--------------|--------------|-----------------|
| • Management | • Stormwater | • Waste |
| • Water | • IEQ | • Urban Ecology |
| • Energy | • Transport | • Innovation |

Sources of Information

The Sustainable Design Assessment (SDA) is based on the following documentation:

Architectural Drawings by: Cera Stribley
Job/Project No: 25178
Drawing No: TP.0000, TP.0100, TP.0200 – TP.0202, TP.0300, TP.1000 – TP.1001, TP.1100 – TP.1104, TP.1110, TP.2000, TP.2100 – TP.2102, TP.3000 – TP.3001, TP.4000, TP.5000 – TP.5004, TP.5050, TP.6000, TP.6100, TP.6500, TP.8000 – TP.08006

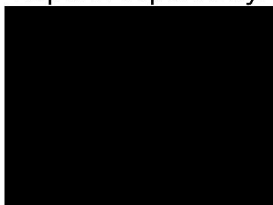
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Revision History

Revision Number	Date Issued	Author	Approved	Comments
A	17/10/2025			Draft
B	30/10/2025			2 nd Draft
C	31/10/2025			3 rd Draft
D	26/03/2026			4 th Draft
E	27/03/2026			Final
F	30/03/2026			Final
G	02/04/2026			Final
H	09/04/2026			Final
I	10/04/2026			Final
J	13/07/2026			Final
K	17/07/2026			Final

Report Prepared by:



Report Approved by:



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Great Design Fast Track

The proposed development at 123-129 Erskine Street, Middle Park will be submitted to the Department of Transport and Planning (DTP) under the Great Design Fast Track approval pathway. This entails a suitable response to the 7 design principles including: neighbourly, welcoming, landscaped, sustainable, healthy, adaptable and good value homes. This Sustainable Management Plan responds specifically to principle 5: Sustainable Homes.

Mandatory Requirements

The following mandatory requirements are met by the development:

Mandatory requirement	Design Response
An average Nationwide House Energy Rating Scheme (NatHERS) rating of at least 8.0 stars, and no less than 6.5 stars for an individual apartment. Townhouses must achieve a NatHERS rating of no less than 7.5 stars.	The apartments are currently achieving an 8 Star average with no unit below 6.5 Stars. Refer Appendix B for Preliminary FirstRate5 Results and Certificates.
All dwellings proposed need to provide effective natural ventilation, which includes cross ventilation, single sided ventilation or mechanically assisted ventilation.	100% of the development's apartments are effectively naturally ventilated. Refer BESS IEQ. 88% (7 out of 8) of the apartments are effectively cross ventilated with windows on opposite or adjacent facades. 12% (1 out of 8) of the apartments (G01) are mechanically assisted naturally ventilated, delivering fresh air rates of between 2.5 - 5 L/s/m².

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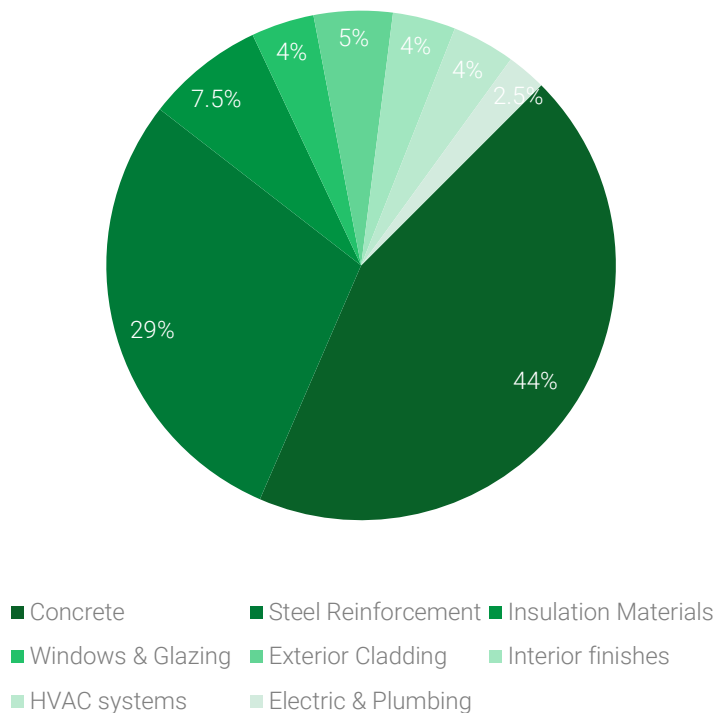
Sustainable Homes Principle 01 Lifecycle Decarbonisation

Lifecycle decarbonization involves systematically reducing or eliminating carbon emissions across all phases of a building's lifespan - from material extraction and construction through operation to eventual demolition and material recovery. The main focus of the proposed initiatives will be on reducing embodied carbon as the remaining phases will be suitably addressed in principle 2-6.

Embodied Carbon

A typical mid-rise mixed-use development in Melbourne, Australia has an embodied carbon footprint of 420-450kgCO₂/m².

More than half of the embodied carbon is associated with the structural components (concrete and structural steel) of the development.



GDFT Initiatives

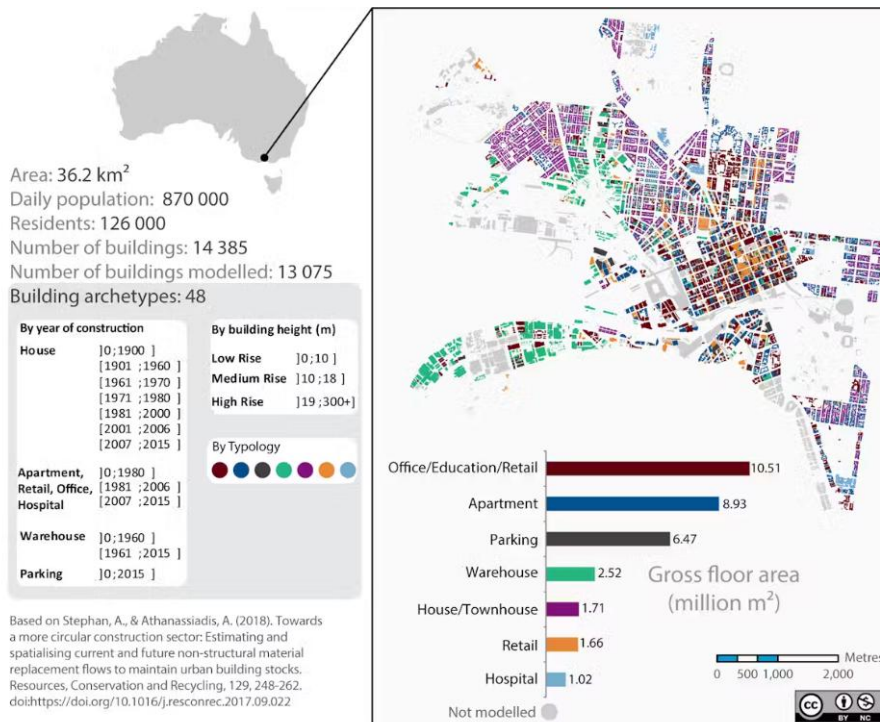
- Reuse of the existing heritage façade reduces the virgin material used.
- The development is all electric and supports the transition to zero carbon homes with no fossil fuels being burnt on site.
- 1 EV charging station will be installed at practical completion and all remaining carparking spaces will be delivered as EV ready.

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Sustainable Homes Principle 02 Material Circularity

Material circularity focuses on designing buildings as material banks that can continuously contribute resources to the urban economy rather than prematurely becoming waste at end-of-building-life. Through the creation of circular material flows, both within the building and the wider environment, the use of virgin materials will be reduced as well as associated greenhouse gas emissions.



Urban Mining

Based on Research conducted by Melbourne University on a sample set of 13,075 case studies, City of Melbourne has a stock of 1.5 million tonnes of materials in every square kilometre. Replacing worn materials to maintain this built stock is estimated to require 26 thousand tonnes of materials every year.

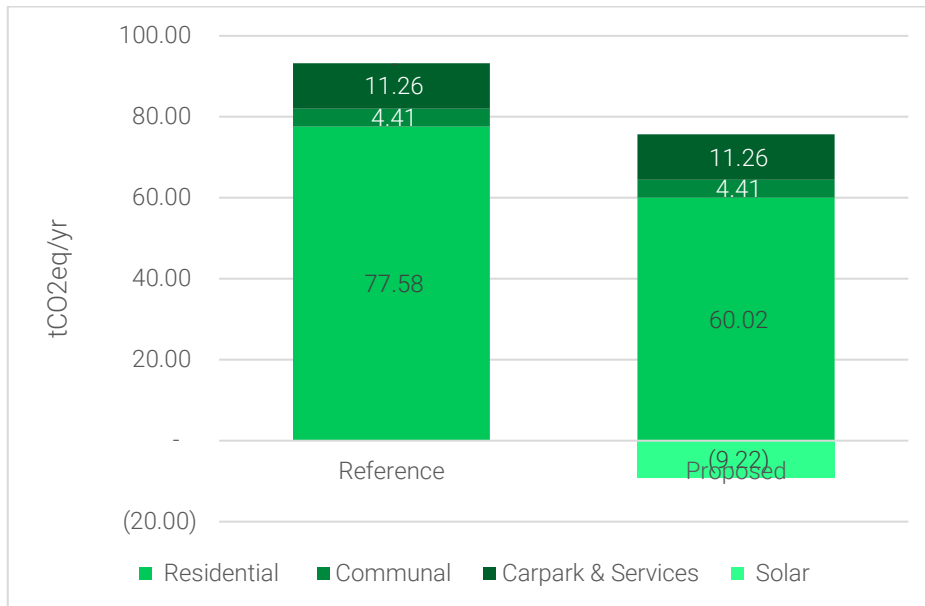
GDFT Initiatives

- Retention and reuse of the existing façade elements where feasible, significantly reducing the demand for new materials.
- Where timber is to be used, such timbers are to be FSC or PEFC certified.

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Sustainable Homes Principle 03 Net-Positive Energy

Net-positive energy is achieved by designing buildings that generate more renewable energy than they consume annually, contributing excess clean energy back to Victoria's electricity grid while achieving carbon neutrality in operations.



GHG Emission Reduction

The proposed development will achieve 26.79tCO₂ emission reduction compared to a NCC 2022 DtS building without the application of GreenPower.

GDFT Initiatives

- Achieving an 8 Star average energy rating result with no unit below 6.5 Stars.
- The 8kWp PV array uses all of the suitable roof area making the most of the site's solar potential. Maximising on-site renewable energy generation will reduce the developments electricity demand and reduce operational carbon emissions.
- VRV / VRF systems with a COP of 3.4 are to be installed to the apartments.
- No fossil fuels are burnt on-site avoiding additional operation carbon emissions.

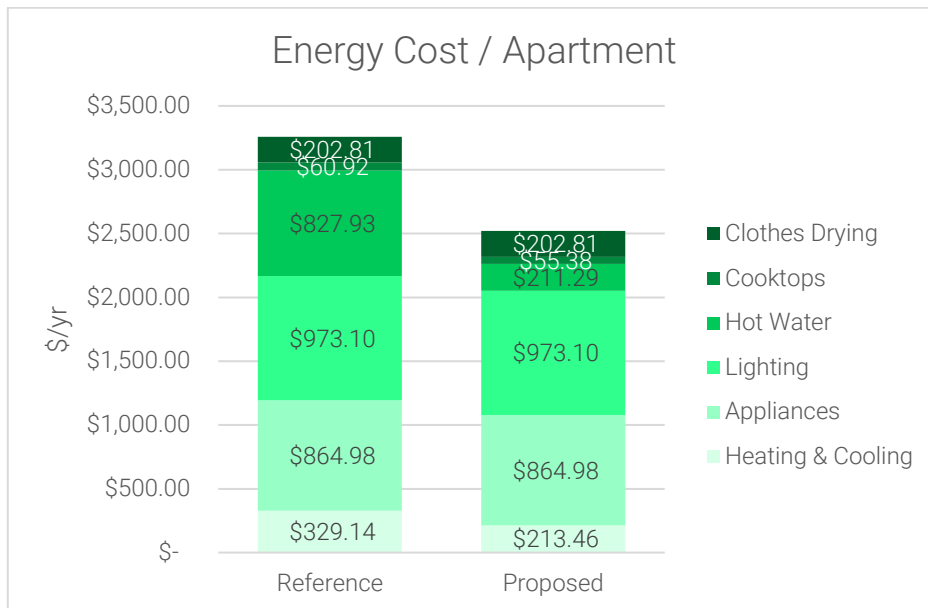
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Sustainable Homes Principle 04 High-Performing Thermal Envelope

Combining appropriate passive design responses with a highly efficient thermal envelope will result in significant energy and cost saving for end-users. This will be carefully balanced to meet the provision of best practice daylight amenity and thermal comfort.



Energy Cost Reduction

On average occupants will save \$737 on an annual basis on their energy expenses compared to a NCC 2022 DtS reference scenario.

Compared to the existing building stock in the area, the occupant will save approximately \$1,443 on an annual basis.

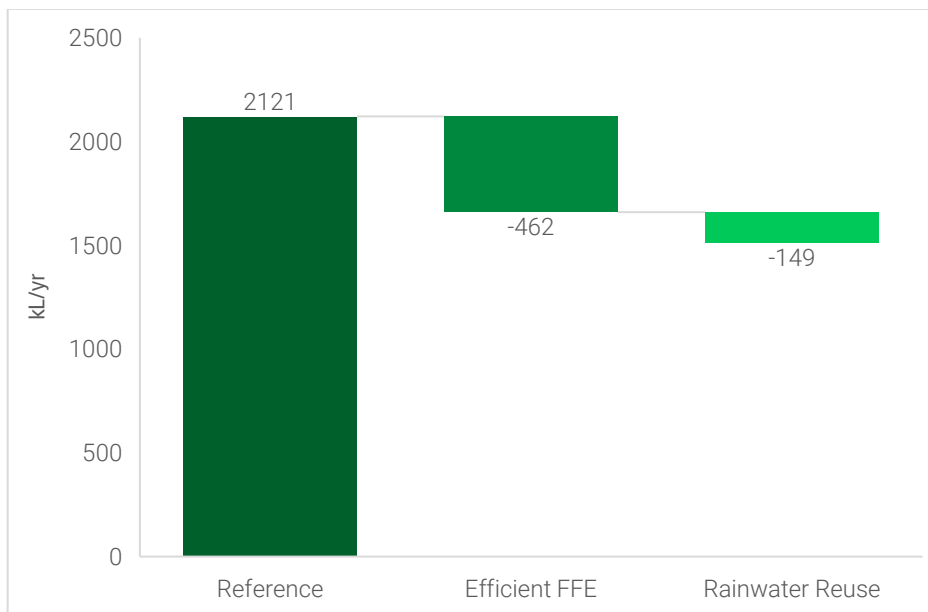
GDFT Initiatives

- Energy efficient design achieving an average of 8 star NatHERS rating, with no unit below 6.5 stars, reducing heating and cooling demand. The increased thermal performance makes the homes more comfortable to live and cost less to operate.
- The apartments will be built to achieve a high level of air tightness to improve energy performance and reduce drafts. Air permeability testing will be undertaken for a selection of homes with a target of 10 m³/hr.m² or less.
- A balanced shading strategy including balcony overhangs, light wells and retractable awnings has been adopted to limit summer solar heat gains.

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Sustainable Homes Principle 05 Water Resilience

Integrating water systems that suitably respond to Melbourne's current and future climate, will future-proof the development and assist in creating a resilient urban water system. The inclusion of stormwater management systems, efficient fittings and fixtures and low-water demand / native vegetation will significantly reduce the potable water demand of developments and reduce pressure on the local water systems.



Potable Water Reduction

The development reduces the potable water demand by 22% through the introduction of water efficient fittings and fixtures. A further 7% reduction in potable water is achieved through the introduction of a 5,000kL rainwater tank.

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GDFT Initiatives

- Each home will be fitted with water efficient fixtures and fittings.
- Stormwater will be pre-treated to remove pollutants and sediment before being discharged into the stormwater network.
- A 5,000-litre rainwater water tank will collect rainwater from all roof areas which is connected to ground floor to level 1 WCs and landscape irrigation.
- >80% of fire test water (e.g. hydrant pump test water or SCV annubar test) is to be reused on site.

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Sustainable Homes Principle 06 No Waste to Landfill

The inclusion of comprehensive waste reduction, diversion and collection strategies that support contractors, occupants and tenants to successfully divert generated waste from landfill will reduce the environmental impact and operational cost of waste management. With the eventual aim to create systems that are equipped to support zero waste operations and a circular economy.



Waste and Resource Recovery Strategy 2030

City of Melbourne has devised a strategy to produce less waste and maximises the life of materials through reuse, recycling and recovery - working towards a circular economy.

The focus of the strategy is centred around three pillars: reduce, collect and recover. With the end goal of achieving their key 2030 targets.

GDFT Initiatives

- Waste generated on site from demolition and construction activities will be sorted and diverted to their relevant waste streams to be recycled or reused. The development is targeting the diversion of 90% it's demolition and construction waste from landfill.
- The development will provide dedicated waste bins for general, recycling, green, and glass waste to support effective waste separation and minimise landfill contribution. Clearly labelled and conveniently located, these bins will promote responsible waste management practices among residents and users.

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ESD Assessment

The project achieves a total BESS score of 75% with no mandatory category (IEQ, Energy, Water, Stormwater) below 50%. This figure represents a percentage improvement over a benchmark project. A score of 50% and higher equates to 'best practice' and is an effective pass of the BESS tool. A score of 70% and higher equates to BESS 'excellence' and exists as a higher benchmark in the tool.

The following ESD initiatives will be implemented in the proposed development at 123-129 Erskine Street, Middle Park. All initiatives are to be suitably incorporated in the project documentation i.e. architectural, landscape, hydraulics and civil engineering.

BESS Category	ESD Initiatives
Management	- GIW to undertake ESD pre-app with City of Port Phillip Council prior to the referral process. - A Building User's Guide will be provided to the residents explaining the correct use of installed fittings and fixtures, equipment and building systems. - Individual electricity and cold-water metering is to be provided to each apartment and communal areas.
Water	- Water efficient fixtures are applied throughout: - WELS 4 Star Toilets - WELS 6 Star Taps - WELS 4 Star Showerheads - WELS 5 Star Dishwashers - Water collected from top roof and lower heritage roof will be directed into a 5,000-litre rainwater tank connected to ground floor to level 1 WC and landscape irrigation. Refer Appendix A – WSUD Response. - All stormwater run-off will be directed through an Atlan FlowFilter prior to leaving the site. Refer Appendix A – WSUD Response. - Landscape irrigation demand will be connected to the rainwater tank.
Energy	- The proposed development will target an average 8 Stars NatHERS rating with no unit achieving below 6.5 Stars as per the Great Design Fastrack (GDFT) requirements. Refer Appendix B – Preliminary Energy Rating results and FirstRate5 Certificates. - The proposed development will be all electric, with no gas connection. - External lighting will be controlled by motion detectors. - Lighting power density shall be as follows: - Dwelling: No greater than average 5W/m² - Veranda/balcony/terrace: No greater than average 3W/m²

BESS Category	ESD Initiatives
	○ Back of house and indoor car parks: No greater than average 5W/m² • Hot water is to be provided via a centralised electric heat pump hot water system. • VRV / VRF systems with a COP of 3.4 are to be installed to the residential areas. • An 8kW Solar PV system will be located on the roof of the proposed development. A solshare system will be introduced to distribute the generate energy to the dwellings. Refer Appendix C – Renewable Energy • Carpark ventilation fans are to be controlled by CO sensors.
Stormwater	• A compliant MUSIC result is achieved. Refer Appendix A – WSUD Response for mark-up of collection and impervious areas, MUSIC results and maintenance manual.
IEQ	• Daylight modelling has been conducted for a representative sample of apartments. The summary result is as follows: ○ 85% of living areas achieving the BESS best practice daylight standards ○ 100% of bedrooms achieving the BESS best practice daylight standards. • Shading strategy: ○ Ground to L2 living area windows are shaded by the terrace slab above. ○ Perimeter north-east-facing windows at Ground Floor to Level 2 are recessed by 0.2-0.3 m. ○ North, north-east, east and west facing living area windows at level 3 and all north, north-east and west facing living area windows at level 4 are shaded by a slab extension of 0.3-0.45 m and 0.3-0.45 m deep vertical columns. ○ North, north-east, east and west facing windows adjacent to the POS at level 3 are to be provided with external operable shading. ○ West facing living area windows adjacent to the POS at level 4 are to be provided with external operable shading. ○ South-west facing windows at Levels 3 and 4 are provided with 0.45-0.95 m deep vertical columns and a slab extension of 0.45-0.95 m. • All of the development's living and bedroom areas are effectively naturally ventilated with windows on opposite or adjacent facades, effectively single sided ventilated or mechanically assisted where required. • Low VOC and low formaldehyde products are to be applied internally.

BESS Category	ESD Initiatives
	• 8 secure bike parking spaces are located at basement. • 2 visitor bicycle spaces are located outside. • The proposed development is in close proximity of 96 tram line and 606 bus route. • Provisions for future EV charging point is provided for each dwelling • One charging point for electrical vehicles is integrated in the proposed development.
Materials	• The design will seek to limit the use of high embodied energy metal finishes. • The building's steel (by mass) is to be sourced from a Responsible Steel Maker. • Where timber is to be used, such timbers are to be FSC or PEFC certified. • Permanent formwork, pipes, flooring, blinds and cables in the project will seek to comply with the following: ○ Meet the GBCA's Best Practice Guidelines for PVC. or; ○ The supplier holds a valid ISO140001 certification. • The project will incorporate products that meet the transparency and sustainability requirements where deemed appropriate.
Waste	• At least 90% of the waste generated during construction and demolition has been diverted from landfill. • Composting / green waste facilities will be provided at basement waste room. • General and recycling waste options will be accessible to all occupants. • Kitchen joinery is to provide appropriate spatial allowance for food and organics, general and recycling waste collection.
Urban Ecology	• 25% of the development site will be covered by vegetation. • 33.5m² of communal area is provided on the ground floor. • The proposed development includes a green wall / roof. • Roofs are to have a Solar Reflectance Index (SRI) of minimum 80.
Innovation	• A sample of apartments (2-3) will be selected for air tightness testing to verify if the building envelope is correctly sealed. • An ESD professional will be engaged to undertake ESD as-built verification reporting before practical completion.

Appendices

Appendix A - WSUD Response

Site layout Plan

The following architectural mark-up illustrates the rainwater collection and impervious areas of the proposed development site.

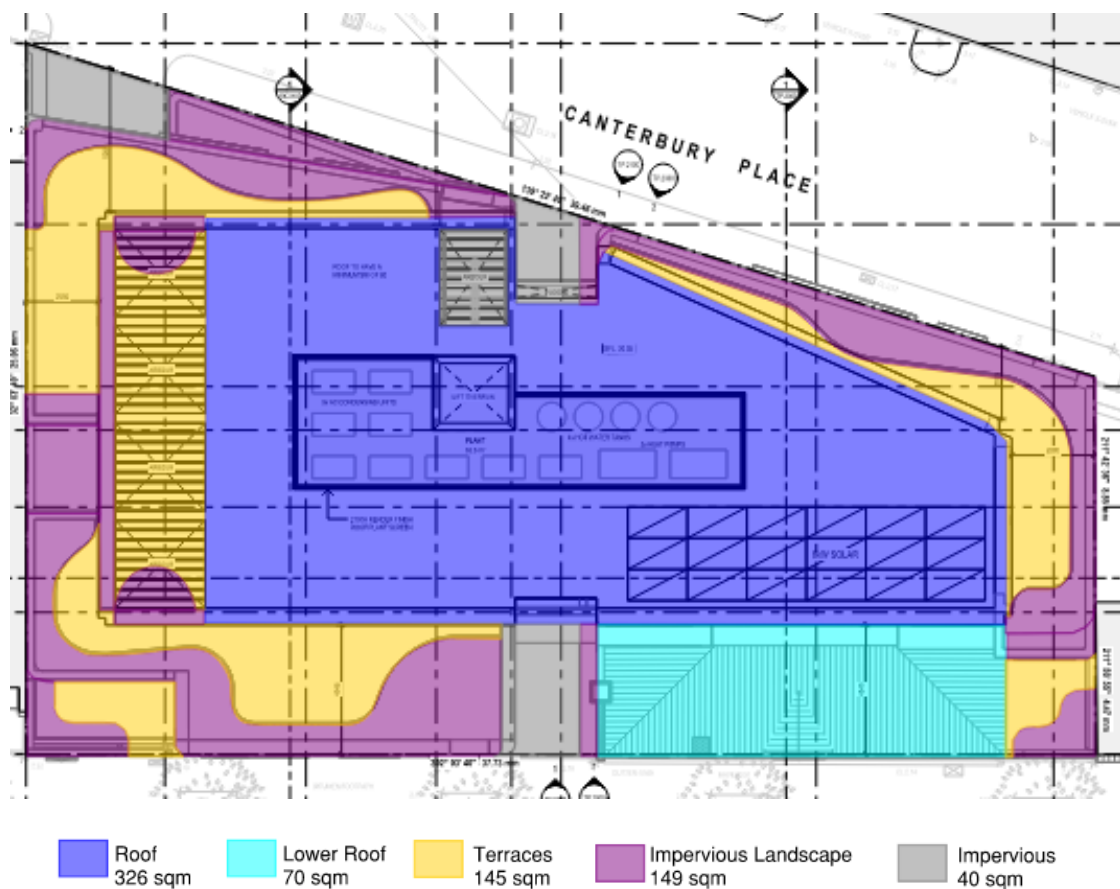


Figure 1 - Mark-up of water catchment and impervious areas

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Weather File

Rainfall Station	Time Step
Melbourne City	6 minutes

Demand Inputs

The 5,000 litre rainwater tanks are to be connected to ground floor to level 1 WCs and landscape irrigation. The following demand assumptions have been included in the modelling:

Toilet Flushing																									
Assumptions	- Total number of bedrooms: 12 20L per day per occupant for toilet flushing.																								
Volume (kL/yr)	87.6kL																								
Landscape Irrigation																									
Assumptions	184 m² - Monthly demand adjustment has been applied as follows: <table> <tr><td>Jan</td><td>15%</td></tr> <tr><td>Feb</td><td>13%</td></tr> <tr><td>Mar</td><td>7%</td></tr> <tr><td>Apr</td><td>7%</td></tr> <tr><td>May</td><td>7%</td></tr> <tr><td>Jun</td><td>3%</td></tr> <tr><td>Jul</td><td>3%</td></tr> <tr><td>Aug</td><td>3%</td></tr> <tr><td>Sep</td><td>9%</td></tr> <tr><td>Oct</td><td>9%</td></tr> <tr><td>Nov</td><td>9%</td></tr> <tr><td>Dec</td><td>15%</td></tr> </table>	Jan	15%	Feb	13%	Mar	7%	Apr	7%	May	7%	Jun	3%	Jul	3%	Aug	3%	Sep	9%	Oct	9%	Nov	9%	Dec	15%
Jan	15%																								
Feb	13%																								
Mar	7%																								
Apr	7%																								
May	7%																								
Jun	3%																								
Jul	3%																								
Aug	3%																								
Sep	9%																								
Oct	9%																								
Nov	9%																								
Dec	15%																								
Volume (kL/yr)	188kL																								

MUSIC Model

A compliant MUSIC model result is achieved with the following WSUD initiatives:

- Rainwater collection off the all-roof areas are directed into a 5,000-litre rainwater tank connected to ground floor to level 1 WC's and landscape irrigation.
- Prior to the LPOD an Atlan FlowFilter will be installed to filter the rainwater before entering the stormwater system.

The development demonstrates an improvement on the stormwater quality performance objectives as outlined in the Urban Stormwater Best Practice Environmental Management Guidelines (Victoria

Stormwater Committee, 1999) for reduction in total suspended solids (TSS), total phosphorus (TP) and total nitrogen (TN) loads. Refer Figure 2 and Table 1 below for the stormwater quality performance objectives and results.

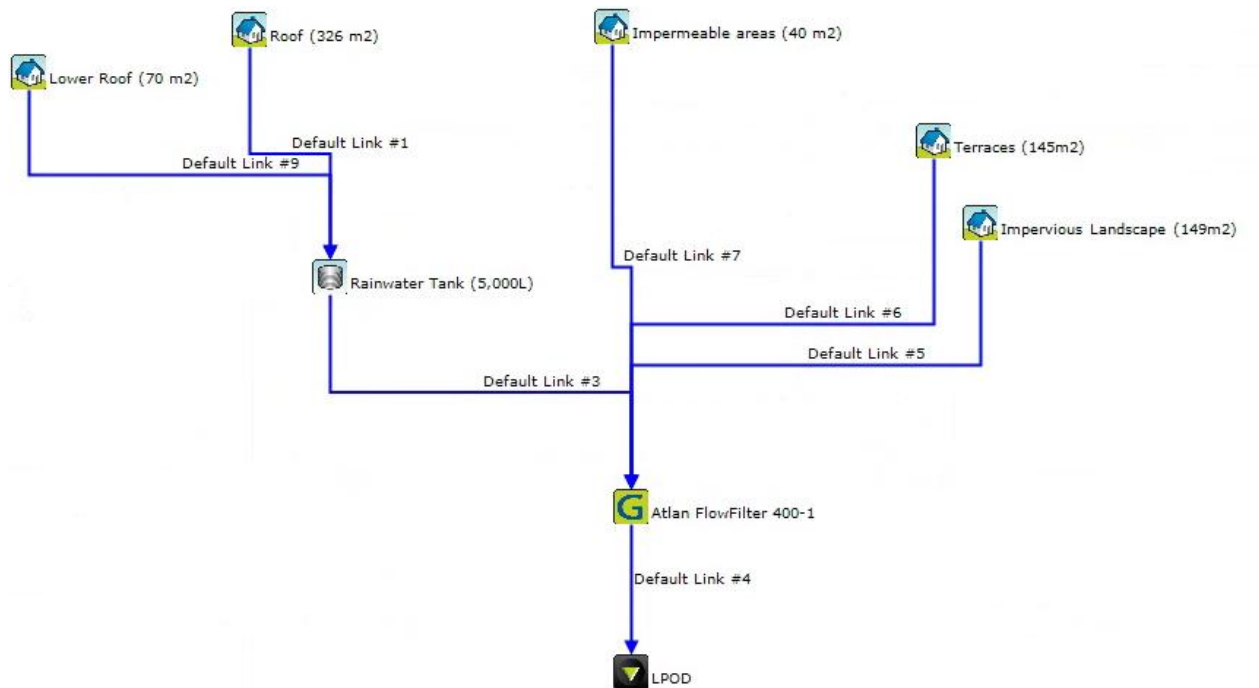


Figure 2 – MUSIC Model

	CSIRO performance objectives (reduction %)	123-129 Erskine St, Middle Park (reduction %)
Suspended Solids	80%	83.31%
Total Nitrogen	45%	58.75%
Total Phosphorus	45%	70.15%
Gross Pollutants	70%	99.22%

Table 1 - Stormwater quality performance objectives

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WSUD Strategy

The development will include the provision of a 5,000-litre rainwater tank. The rainwater tank is to be connected to ground floor to level 1 WCs and landscape irrigation.

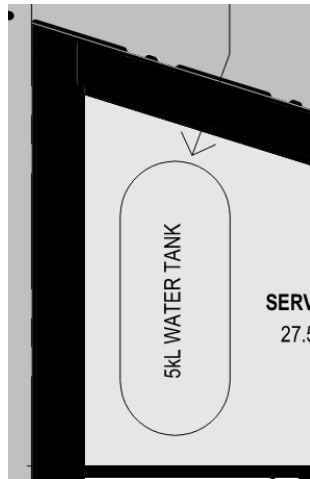


Figure 3 – Location Rainwater Tank

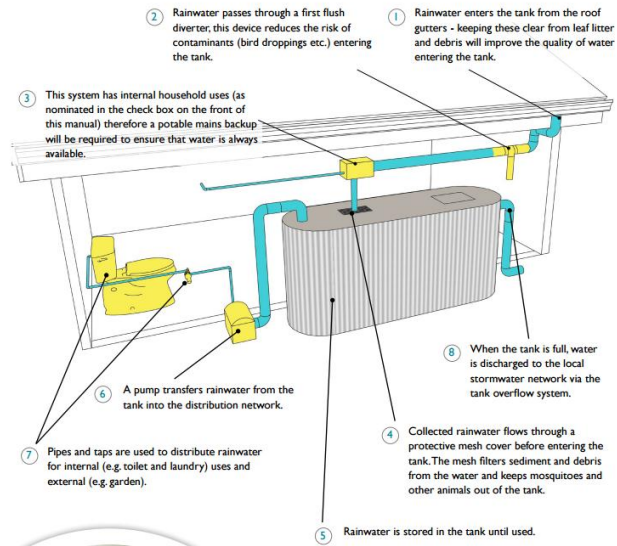


Figure 4 – Cross-section Tank
(City of Port Phillip)

Prior to the LPOD an Atlan FlowFilter will be installed to treat all stormwater leaving the site.

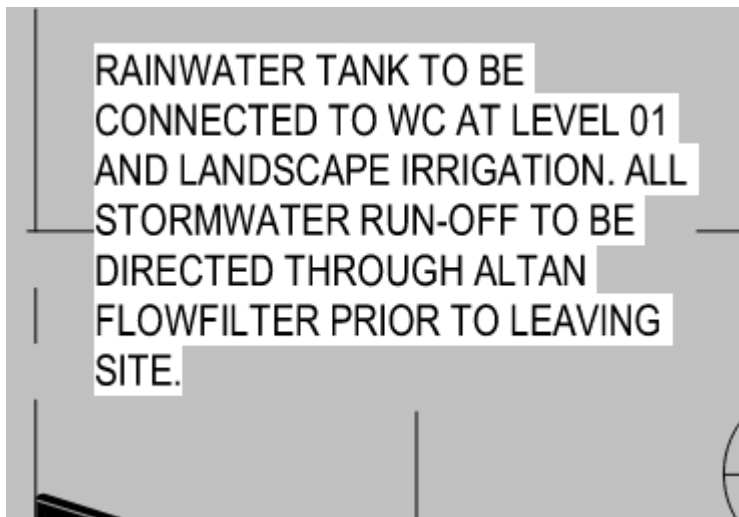


Figure 5 – Location Atlan FlowFilter

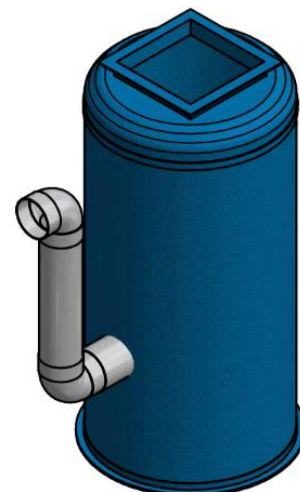


Figure 6 – Atlan FlowFilter

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Rainwater Reuse

Inputs

Catchment Area	396 sqm
Number of Bedrooms	12
Bin Washout	No
Irrigation Area	180 sqm
Tank Capacity	5,000 Litre

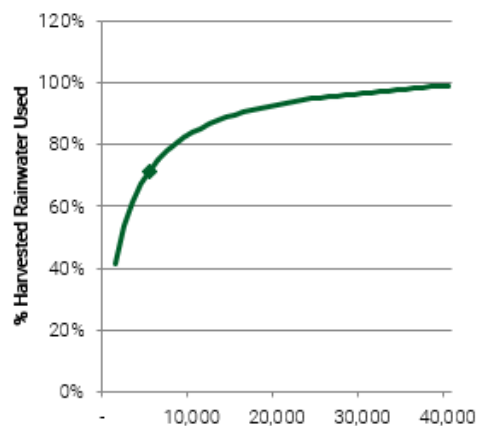
Outputs

% Served by Rainwater	41.8%
% Harvested Rainwater Used	76.1%
Total Potable Water Saved	87,799 Litre

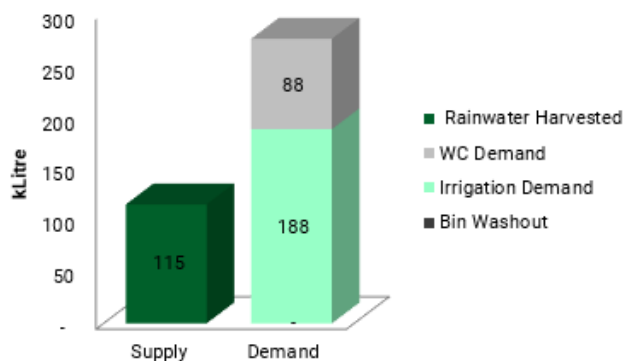
Rainwater Balance (Monthly Averages)

Month	Rainwater Harvested (L)	Irrigation Demand (L)	WC Demand (L)	Bin Washout (L)
Jan	7,968	27,849	7,440	0
Feb	9,382	25,228	6,720	0
Mar	8,054	12,941	7,440	0
Apr	9,191	12,389	7,200	0
May	9,063	12,783	7,440	0
Jun	9,157	5,825	7,200	0
Jul	7,626	5,935	7,440	0
Aug	9,688	5,935	7,440	0
Sep	10,749	17,027	7,200	0
Oct	10,704	17,349	7,440	0
Nov	13,388	16,920	7,200	0
Dec	10,362	28,065	7,440	0
Total	115,332	188,247	87,600	0
Equivalent STORM tool		26		0

Tank Sizing



Supply-Demand



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Site Management Statement

Prevention of litter, sediments and pollution entering the stormwater system in the construction phase is to be addressed through introduction of the following initiatives:

- Buffer strips to pervert stormwater runoff.
- Gravel sausage filters at stormwater inlets to prevent silt, mud or any other site contaminant from entering the stormwater system.
- Silt fences under grates at surface entry inlets to prevent sediment from entering the stormwater system.
- Temporary rumble grids to vibrate mud and dirt off vehicles prior to leaving the site.
- The site is to be kept clean from any loose rubbish or rubble.
- Introduction of offsite construction for building elements where deemed appropriate.

The builder is to include these initiatives in the construction management plan and address these during site induction of relevant contractors.

Maintenance Program

The following maintenance requirements are to be programmed to ensure the rainwater tank operates effectively:

Item	Description	Maintenance Interval
Gutters and downpipes	Eave and box gutters are to be inspected and cleaned to prevent large debris from being washed into rainwater tank.	3 monthly
First flush system (as applicable)	Inspect and clean excess sediment from diverter chamber to prevent blockages.	3 monthly
Tank contents	Siphon the tank to inspect contents. If sludge is present, a plumber will be required to drain tank contents and clean the tank.	2 to 3 years
Tank structure	Inspect tank externally for leaks	Yearly
Pump system	Inspect pump wiring, plumbing and check for smooth operation.	6 monthly
Plumbing	Plumbing and fixtures connected to the rainwater tank is to be inspected for leaks.	Yearly

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The following maintenance requirements are to be programmed to ensure the Atlan Flowfilter operates effectively:

- Atlan Flowfilter are to be located for ease of accessible and such that the system can be reached by vehicles.
- Every 3 months the inlets and outlets is to be cleared of accumulated sediments.
- The Atlan Flowfilter is to be cleaned on a regular basis using conventional vacuum suction equipment.
- Filter inserts are easily interchangeable and are to be replaced every 6 months or earlier as deemed necessary.
- Plumbing connected to the Atlan Flowfilter is to be inspected for leaks on a yearly basis.

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Appendix B – Preliminary Energy Rating Results

The National Construction Code (NCC) Class 2 – Sole Occupancy Unit(s) residential building component is to be designed in accordance with NCC Section J (2022) NatHERS requirements. The residential units must achieve an average 8.0 Star rating, with no unit achieving below 6.5 Stars.

Further to this the development will need to comply with the following heating and cooling load limits:

Climate Zone	Heating load limits (MJ/m2)	Cooling load limits (MJ/m2)
21 Melbourne RO	Maximum: 55	Maximum: 30 (BADS)

The apartments are currently achieving an 8.0 Star average. The below sample ratings demonstrate the development's ability to achieve these requirements.

Apartment No.	ACE Total MJ/M2	ACE Heating MJ/M2	ACE Cooling MJ/M2	ACE NCFA	Star Rating
G01	42.2	35.5	6.7	181.4	8.1
G02	32.4	21.9	10.5	183.5	8.6
L101	33.4	24.9	8.5	243.8	8.5
L102	42.9	28.6	14.3	237.4	8.1
L201	39	24.6	14.4	238.3	8.3
L202	36	26.1	9.9	187.9	8.4
L301	59.7	38.6	21.1	293.2	7.1
L401	67.5	45.1	22.4	252.7	6.7
Average	44.1	30.7	13.5	227.3	8.0

Construction assumptions for preliminary FirstRate5 ratings are listed below. Note, these assumptions are based on the sample of apartments assessed and may vary throughout the development. These assumptions are not to be relied upon for any other purpose beyond Town Planning assessment.

Element	Material	Insulation Value
Floor (where exposed below) L1 to L4	Suspended Concrete Slab	R3.65
Floor (where exposed to carpark below) GL	Suspended Concrete Slab	R4.6
Floor (where exposed above)	Suspended Concrete Slab	R3.65
External Walls	Concrete	R2.7

Element	Material	Insulation Value
	Brick (Heritage Walls)	R2.7
Internal Walls	Concrete	R2.7
Roof	Concrete	R4.6 above the slab
Fixed Windows (GL to L1)	Thermally broken, Aluminium framed, Double glazed, Argon filled, Low-E, Clear	Total System: - U-Value: 2.09 - SHGC: 0.51
Sliding Doors (GL to L1)	Thermally broken, Aluminium framed, Double glazed, Argon filled, Low-E, Clear	Total System: - U-Value: 2.93 - SHGC: 0.49
Awning Windows (GL to L1)	Thermally broken, Aluminium framed, Double glazed, Argon filled, Low-E, Clear	Total System: - U-Value: 2.51 - SHGC: 0.47
Hinged Door / Casement Door (GL to L1)	Thermally broken, Aluminium framed, Double glazed, Argon filled, Low-E, Clear	Total System: - U-Value: 2.46 - SHGC: 0.36
Fixed Windows (L2 to L4)	Thermally broken, Aluminium framed, Double glazed, Argon filled, Low-E, Clear	Total System: - U-Value: 1.48 - SHGC: 0.39
Sliding Doors (L2 to L4)	Thermally broken, Aluminium framed, Double glazed, Argon filled, Low-E, Clear	Total System: - U-Value: 2.07 - SHGC: 0.35
Awning Windows (L2 to L4)	Thermally broken, Aluminium framed, Double glazed, Argon filled, Low-E, Clear	Total System: - U-Value: 1.67 - SHGC: 0.3

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**ADVERTISED
PLAN**

Nationwide House Energy Rating Scheme® NatHERS® Certificate

Generated on 27 Mar 2026 using FirstRate5: 5.5.5a (3.22)

Property

Address G01, 123-129 Erskine St,
Middle Park, VIC, 3206

Lot/DP N/A

NCC Class* Class 2

Floor/all Floors Type New Home

Plans

Main plan N/A

Prepared by Cera Stribley Pty. Ltd.

Construction and environment

Assessed floor area [m²]*

Conditioned* 181.4

Unconditioned* 4.8

Total 186.2

Garage -

Exposure type

suburban

NatHERS climate zone

21 Melbourne RO



Accredited assessor

Name Gary Wertheimer

Business name GIW Environmental Solutions

Email gary@giw.com.au

Phone 0390445111

Accreditation No. DMN/10/2024

Assessor Accrediting Organisation Design Matters National

Declaration of interest No

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NCC Requirements

NCC provisions Volume 1

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



42.3 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	35.5	6.7
Load limits	55	38
Features determining load limits		
Floor type		N/A
(lowest conditioned area)		
NCC climate zone 1 or 2		N
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 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. If contact the relevant local building regulating authority, noting that State and Territory variations may also apply.

Setting options:

Floor type:

CSOG – Concrete Slab on Ground

SF – Suspended Floor (or a mixture of CSOG and SF)

NA – Not Applicable

NCC climate Zone 1 or 2:

Yes

No

NA – not applicable

Outdoor living area:

Yes

No

NA – not applicable

Outdoor living area ceiling fan:

Yes

No

NA – not applicable

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:

No Whole of Home performance assessment conducted for this certificate.

Greenhouse gas emissions:

No Whole of Home performance assessment conducted for this certificate.

No Whole of Home performance assessment conducted for this certificate.

Graph key:



Predicted onsite renewable energy impact

No Whole of Home performance assessment conducted for this certificate.

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Certificate check

The checklist covers important items impacting the dwelling's ratings. It is recommended that the accuracy of the whole certificate is checked.

Note: The boxes indicate when and who should check each item. It is not mandatory to complete this checklist.

	Approval stage		Construction stage		
	Assessor checked	Consent authority/ surveyor checked	Builder checked	Consent authority/ surveyor checked	Occupancy/other
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					
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 'Window and glazed door schedule' and 'Roof window schedule' tables on this Certificate?	☐	☐	☐	☐	☐
Does the installed windows meet the substitution tolerances (AFRC* based SHGC* and U-values*) as shown in the 'Window and glazed door type and performance' and 'Roof window type and performance' 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 'Floor type' table on this certificate?	☐	☐	☐	☐	☐
Ceiling penetrations*					
Does the 'quantity' and 'type' of ceiling penetrations* (e.g. downlights, exhaust fans, etc) shown on the NatHERS-stamped plans or as installed match what is shown in the 'Ceiling penetrations' table on this Certificate?	☐	☐	☐	☐	☐
Ceiling					
Does the ceiling insulation (R-value) shown on the NatHERS-stamped plans or as installed match what is shown in the 'Ceiling type' 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 'Roof type' 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?	☐	☐	☐	☐	☐

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Certificate check

Continued

Approval stage		Construction stage		
Assessor checked	Consent authority/surveyor checked	Builder checked	Consent authority/surveyor checked	Occupancy/other

Additional NCC requirements for thermal performance (not included in the NatHERS assessment)

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

Does the dwelling meet the NCC requirements for Building Sealing?

☐ ☐ ☐ ☐

Whole of Home performance check (not applicable if a Whole of Home performance assessment is not conducted)

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 'Appliance schedule' on this Certificate?

☐ ☐ ☐ ☐ ☐

Does the hot water system type and efficiency/performance shown on the NatHERS-stamped plans or as installed match the minimum efficiency/performance requirements shown in the 'Appliance schedule' 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 'Appliance schedule' 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 NatHERS assessment)

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

Room schedule

Room	Zone Type	Area [m²]
Carpark	basementCarPark	680.9
Entry	dayTime	8.7
Living/Kitchen	kitchen	61.5
Direct ACESS	dayTime	5.4
Wine Cellar	dayTime	3.2
Study	dayTime	6.4
Pantry	dayTime	2.8
Powder Room	dayTime	2.8
Laundry	dayTime	2.8
Ensuite	nightTime	11.2
WIR	nightTime	9.8
Bedroom 1	bedroom	16.7
Hall	dayTime	13.5
Bedroom 2	bedroom	12.7
Ensuite 2	nightTime	5
Bathroom	unconditioned	4.8
Bedroom 3	bedroom	18.9

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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
No Data Available					

Custom* windows

Window ID	Window description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
THC-010-21 A	Series EC95 TB Sliding Door DG 4mmEnTech-12Ar-4mmClr	2.93	0.49	0.47	0.51
THC-033-07 B	EC45TB Fixed Window TPS Spacer DG 6ET/12Ar/6	2.09	0.51	0.48	0.54
THC-023-03 B	Series EC35TB Awning Window DG 4ET-12Ar-4	2.51	0.47	0.45	0.49
THC-024-04 B	Series EC65TB Casement Window DG 6ET/12Ar/6	2.46	0.36	0.34	0.38

Window and glazed door schedule

Location	Window ID	Window no.	Height [mm]	Width [mm]	Window type	Opening %	Orientation	Window shading device*
Living/Kitchen	THC-010-21 A	Opening 56	2700	2800	sliding	45.0	NE	No
Living/Kitchen	THC-010-21 A	Opening 55	2700	3790	sliding	45.0	NE	No
Study	THC-033-07 B	Opening 74	2700	3700	fixed	0.0	NE	No
WIR	THC-033-07 B	Opening 69	1800	1650	fixed	0.0	SW	No
Bedroom 1	THC-010-21 A	Opening 90	3000	1500	sliding	30.0	NW	No
Bedroom 1	THC-023-03 B	Opening 70	2200	1500	awning	90.0	SW	No
Bedroom 2	THC-010-21 A	Opening 71	3000	2400	sliding	45.0	SW	No
Bedroom 3	THC-024-04 B	Opening 73	3000	1200	casement	90.0	SW	No
Bedroom 3	THC-010-21 A	Opening 72	3000	1500	sliding	45.0	SE	No

Roof window* type and performance value

Default* roof windows

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

Custom* roof windows

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

Roof window* schedule

Location	Window ID	Window no.	Opening %	Area [m ²]	Width [mm]	Orientation	Outdoor shade	Indoor shade
No Data Available								

Skylight* type and performance

Skylight ID	Skylight description	Skylight shaft reflectance
No Data Available		

Skylight* schedule

Location	Skylight ID	Skylight No.	Skylight shaft length [mm]	Area [m ²]	Orientation	Outdoor shade	Diffuser
No Data Available							

External door schedule

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

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External wall type

Wall ID	Wall type	Solar absorptance	Wall shade [colour]	Bulk insulation [R-value]	Reflective wall wrap*
1	GIW Tests - Retaining	0.5	Medium		No
2	123-129 - R2.7 Semi-exposed Concrete Wall	0.5	Medium	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R2.7)	No
3	123-129 - R2.7 External Concrete Wall	0.5	Medium	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R2.7)	No
4	123-129 - R2.7 Double Brick Finished	0.5	Medium	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R2.7)	No

External wall schedule

Location	Wall ID	Height [mm]	Width [mm]	Orientation	Horizontal shading feature* maximum projection [mm]	Vertical shading feature* (yes/no)
Carpark	1	3200	24229	NW	0	No
Carpark	1	3200	36792	SW	0	No
Carpark	1	3200	12796	SE	0	No
Carpark	1	3200	38529	NE	0	No
Entry	2	3200	594	SE	0	No
Entry	2	3200	1484	SE	0	No
Entry	2	3200	1158	NE	0	No
Living/Kitchen	3	3200	8994	NW	4817	Yes
Living/Kitchen	2	3200	4617	SE	0	No
Living/Kitchen	3	3200	4485	NE	3222	Yes
Living/Kitchen	3	3200	4546	NE	3222	Yes
Direct Access	2	3200	2709	SE	0	No
Study	3	3200	1351	NW	0	Yes
Study	3	3200	4935	NE	13204	Yes
Ensuite	2	3200	3183	SE	0	No
WIR	4	3200	2536	SW	0	No
WIR	3	3200	4660	SE	2975	Yes
Bedroom 1	3	3200	2339	NW	3008	Yes
Bedroom 1	4	3200	3198	SW	0	No
Bedroom 2	3	3200	3294	SW	2652	Yes
Ensuite 2	3	3200	1898	NW	0	Yes
Bathroom	3	3200	1808	NW	0	No
Bedroom 3	3	3200	3514	NW	0	Yes

Bedroom 3	3	3200	4371	SW	0	No
Bedroom 3	4	3200	374	SE	2902	No
Bedroom 3	3	3200	353	SE	3002	No
Bedroom 3	3	3200	1947	SE	3005	Yes

Internal wall type

Wall ID	Wall type	Area [m²]	Bulk insulation
1	FR5 - Internal Plasterboard Stud Wall	239.7	

Floor type

Location	Construction	Area [m²]	Sub-floor ventilation	Added insulation [R-value]	Covering
Carpark	FR5 - 250mm concrete slab	28.7	Enclosed	R0.0	none
Carpark	FR5 - 250mm concrete slab	128	Enclosed	R0.0	none
Carpark	FR5 - CSOG: Slab on Ground	184.9	Enclosed	R0.0	none
Carpark	FR5 - CSOG: Slab on Ground	274.7	Enclosed	R0.0	none
Carpark	FR5 - CSOG: Slab on Ground	43.8	Enclosed	R0.0	none
Carpark	FR5 - CSOG: Slab on Ground	20.3	Enclosed	R0.0	none
Entry	FR5 - 250mm concrete slab	19.7	Enclosed	R4.6	Timber
Living/Kitchen	FR5 - 250mm concrete slab	60.1	Enclosed	R4.6	Timber
Living/Kitchen	FR5 - 250mm concrete slab	11.4	Enclosed	R4.6	Timber
Direct Access	FR5 - 250mm concrete slab	5.4	Enclosed	R4.6	Timber
Wine Cellar	FR5 - 250mm concrete slab	3.2	Enclosed	R4.6	Timber
Study	FR5 - 250mm concrete slab	6.4	Enclosed	R4.6	Timber
Pantry	FR5 - 250mm concrete slab	2.8	Enclosed	R4.6	Timber
Powder Room	FR5 - 250mm concrete slab	2.8	Enclosed	R4.6	Tiles
Laundry	FR5 - 250mm concrete slab	2.8	Enclosed	R4.6	Tiles
Ensuite	FR5 - 250mm concrete slab	11.2	Enclosed	R4.6	Tiles
WIR	FR5 - 250mm concrete slab	9.8	Enclosed	R4.6	Carpet
Bedroom 1	FR5 - 250mm concrete slab	2.6	Enclosed	R4.6	Carpet
Bedroom 1	FR5 - 250mm concrete slab	14.1	Enclosed	R4.6	Carpet
Hall	FR5 - 250mm concrete slab	13.5	Enclosed	R4.6	Timber
Bedroom 2	FR5 - 250mm concrete slab	12.7	Enclosed	R4.6	Carpet
Ensuite 2	FR5 - 250mm concrete slab	5	Enclosed	R4.6	Tiles
Bathroom	FR5 - 250mm concrete slab	4.8	Enclosed	R4.6	Tiles
Bedroom 3	FR5 - 250mm concrete slab	18.9	Enclosed	R4.6	Carpet

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Ceiling type

Location	Construction material/type	Bulk insulation R-value [may include edge batt values]	Reflective wrap*
Carpark	FR5 - 250mm concrete slab	R4.6	No
Carpark	Plasterboard	R0.0	No
Carpark	FR5 - 250mm concrete slab	R4.6	No
Carpark	Plasterboard	R0.0	No
Carpark	Plasterboard	R0.0	No
Living/Kitchen	Plasterboard	R3.6	No
Bedroom 1	Plasterboard	R3.6	No

Ceiling penetrations*

Location	Quantity	Type	Height [mm]	Width [mm]	Sealed/unsealed
Entry	22	Downlights	80	80	Sealed
Living/Kitchen	24	Downlights	90	90	Sealed
Living/Kitchen	1	Exhaust Fans	250	250	Sealed
Direct Access	2	Downlights	80	80	Sealed
Wine Cellar	1	Downlights	80	80	Sealed
Study	1	Downlights	80	80	Sealed
Pantry	1	Downlights	80	80	Sealed
Powder Room	1	Downlights	80	80	Sealed
Powder Room	1	Exhaust Fans	250	250	Sealed
Laundry	1	Downlights	80	80	Sealed
Laundry	1	Exhaust Fans	250	250	Sealed
Ensuite	4	Downlights	80	80	Sealed
Ensuite	1	Exhaust Fans	250	250	Sealed
WIR	4	Downlights	80	80	Sealed
Bedroom 1	6	Downlights	80	80	Sealed
Hall	5	Downlights	80	80	Sealed
Bedroom 2	4	Downlights	80	80	Sealed
Ensuite 2	2	Downlights	80	80	Sealed
Ensuite 2	1	Exhaust Fans	250	250	Sealed
Bathroom	1	Downlights	80	80	Sealed
Bathroom	1	Exhaust Fans	250	250	Sealed
Bedroom 3	7	Downlights	80	80	Sealed

Ceiling fans

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Location	Quantity	Diameter [mm]
No Data Available		

Roof type

Construction	Added insulation [R-value]	Solar absorptance	Roof shade [colour]
Slab:Slab - Suspended Slab : 200mm: 200mm Suspended Slab	0.0	0.5	Medium
Slab:Slab - Suspended Slab : 250mm: 250mm Suspended Slab	0.0	0.5	Medium

Thermal bridging *schedule for steel frame elements*

Building element	Steel section dimensions [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.

Cooling system

Appliance/ system type	Location	Minimum efficiency/ performance	Recommended capacity
No Whole of Home performance assessment conducted for this certificate.			

Heating system

Appliance/ system type	Location	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Whole of Home performance assessment conducted for this certificate.				

Hot water system

Appliance/ system type	Fuel type	Minimum efficiency/ performance	Hot Water CER Zone	Zone 3 STC	Assessed daily load
No Whole of Home performance assessment conducted for this certificate.					

Pool/spa equipment

Appliance/ system type	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Whole of Home performance assessment conducted for this certificate.			

Onsite renewable energy *schedule*

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

System type	Orientation	System size or generation capacity
No Whole of Home performance assessment conducted for this certificate.		

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.

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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

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 be occupied and heated or cooled on standard occupancy assumptions. In some circumstances it will include garages.
COP	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 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 ventilated corridor in a Class 2 building.
Exposure category – exposed	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 – suburban	terrain with numerous, closely spaced obstructions below 10m e.g. suburban housing, heavily vegetated bushland areas.
Exposure category – protected	terrain with numerous, closely spaced obstructions over 10 m e.g. city and industrial areas.
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 (NCC) Class	the NCC groups buildings by their function and use, and assigns a classification code. NatHERS software models NCC Class 1, 2 or 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)	can be applied to walls, roofs and ceilings. When combined with an appropriate air gap and emissivity value, it provides insulative 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.

*Refer to glossary.

STCs	Small-scale Technology Certificates, certificates created by the REC registry for renewable energy technologies that may be bought and sold as part of the Small-scale Renewable Energy Scheme operated by the Clean Energy Regulatory
Thermal breaks	are materials with an R-value greater than or equal to 0.2 that must separate the metal frame from the cladding. This includes, but is not limited to, materials such as timber battens greater than or equal to 20mm thick, continuous thermal breaks such as polystyrene insulation sheeting, plastic strips or furring channels.
U-value	the rate of heat transfer through a window. The lower the U-value, the better the insulating ability.
Unconditioned	a zone within a dwelling that is assumed 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 subject wall/window. Includes privacy screens, other walls in the building (wing walls), fences, other buildings, vegetation (protected or listed heritage trees).
Window shading device	a device fixed to windows that provides shading e.g. window awnings or screens but excludes horizontal* or vertical shading features* (eg eaves and balconies)

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Nationwide House Energy Rating Scheme® NatHERS® Certificate

Generated on 27 Mar 2026 using FirstRate5: 5.5.5a (3.22)

Property

Address G02, 123-129 Erskine St,
Middle Park, VIC, 3206

Lot/DP N/A

NCC Class* Class 2

Floor/all Floors

Type New Home

Plans

Main plan N/A

Prepared by Cera Stribley Pty. Ltd.

Construction and environment

Assessed floor area [m²]*

Conditioned* 183.5

Unconditioned* 2.3

Total 185.8

Garage -

Exposure type

suburban

NatHERS climate zone

21 Melbourne RO



Accredited assessor

Name Gary Wertheimer

Business name GIW Environmental Solutions

Email gary@giw.com.au

Phone 0390445111

Accreditation No. DMN/10/2024

Assessor Accrediting Organisation Design Matters National

Declaration of interest No

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NCC Requirements

NCC provisions Volume 1

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



Thermal performance [MJ/m²]

Limits taken from ABCB Standard 2022

	Heating	Cooling
Modelled	21.9	10.5
Load limits	55	38

Features determining load limits

Floor type	N/A
(lowest conditioned area)	
NCC climate zone 1 or 2	N
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 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. If contact the relevant local building regulating authority, noting that State and Territory variations may also apply.

Setting options:

Floor type:

CSOG – Concrete Slab on Ground

SF – Suspended Floor (or a mixture of CSOG and SF)

NA – Not Applicable

NCC climate Zone 1 or 2:

Yes

No

NA – not applicable

Outdoor living area:

Yes

No

NA – not applicable

Outdoor living area ceiling fan:

Yes

No

NA – not applicable

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:

No Whole of Home performance assessment conducted for this certificate.

Greenhouse gas emissions:

No Whole of Home performance assessment conducted for this certificate.

No Whole of Home performance assessment conducted for this certificate.

Graph key:



Predicted onsite renewable energy impact

No Whole of Home performance assessment conducted for this certificate.

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The checklist covers important items impacting the dwelling's ratings. It is recommended that the accuracy of the whole certificate is checked.

Note: The boxes indicate when and who should check each item. It is not mandatory to complete this checklist.

Certificate check	Approval stage		Construction stage		
	Assessor checked	Consent authority/surveyor checked	Builder checked	Consent authority/surveyor checked	Occupancy/other
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					
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 'Window and glazed door schedule' and 'Roof window schedule' tables on this Certificate?	☐	☐	☐	☐	☐
Does the installed windows meet the substitution tolerances (AFRC* based SHGC* and U-values*) as shown in the 'Window and glazed door type and performance' and 'Roof window type and performance' 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 'Floor type' table on this certificate?	☐	☐	☐	☐	☐
Ceiling penetrations*					
Does the 'quantity' and 'type' of ceiling penetrations* (e.g. downlights, exhaust fans, etc) shown on the NatHERS-stamped plans or as installed match what is shown in the 'Ceiling penetrations' table on this Certificate?	☐	☐	☐	☐	☐
Ceiling					
Does the ceiling insulation (R-value) shown on the NatHERS-stamped plans or as installed match what is shown in the 'Ceiling type' 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 'Roof type' 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?	☐	☐	☐	☐	☐

Certificate check

Continued

Approval stage		Construction stage		
Assessor checked	Consent authority/surveyor checked	Builder checked	Consent authority/surveyor checked	Occupancy/other

Additional NCC requirements for thermal performance (not included in the NatHERS assessment)

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

Does the dwelling meet the NCC requirements for Building Sealing?

☐
☐
☐
☐

Whole of Home performance check (not applicable if a Whole of Home performance assessment is not conducted)

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 'Appliance schedule' on this Certificate?

☐
☐
☐
☐
☐

Does the hot water system type and efficiency/performance shown on the NatHERS-stamped plans or as installed match the minimum efficiency/performance requirements shown in the 'Appliance schedule' 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 'Appliance schedule' 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 NatHERS assessment)

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

Room schedule

Room	Zone Type	Area [m²]
Carpark	basementCarPark	680.4
Living	kitchen	48.6
Butlers Kitchen	dayTime	11.6
Wine Cellar	dayTime	2.7
Study	dayTime	9.4
Closet	dayTime	2.2
Powder Room	unconditioned	2.3
Bathroom	nightTime	10.5
WIR	nightTime	11.8
Entry/Corridor	dayTime	23.1
Bed 3 WIR	dayTime	2.5
Bedroom 3	bedroom	19.7
Bed 2 WIR	dayTime	2.5
Bedroom 2	bedroom	14.9
Ensuite 2	nightTime	4.2
Bedroom 1	bedroom	15.6
Ensuite 1	nightTime	4.3

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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
No Data Available					

Custom* windows

Window ID	Window description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
THC-010-21 A	Series EC95 TB Sliding Door DG 4mmEnTech-12Ar-4mmClr	2.93	0.49	0.47	0.51
THC-033-07 B	EC45TB Fixed Window TPS Spacer DG 6ET/12Ar/6	2.09	0.51	0.48	0.54
THC-023-03 B	Series EC35TB Awning Window DG 4ET-12Ar-4	2.51	0.47	0.45	0.49
THC-024-04 B	Series EC65TB Casement Window DG 6ET/12Ar/6	2.46	0.36	0.34	0.38

Window and glazed door schedule

Location	Window ID	Window no.	Height [mm]	Width [mm]	Window type	Opening %	Orientation	Window shading device*
Living	THC-010-21 A	Opening 27	2800	6000	sliding	45.0	NE	No
Butlers Kitchen	THC-010-21 A	Opening 55	2800	3000	sliding	45.0	NE	No
Study	THC-033-07 B	Opening 56	1800	1800	fixed	0.0	NE	No
Bathroom	THC-033-07 B	Opening 80	2700	1250	fixed	0.0	SW	No
WIR	THC-023-03 B	Opening 60	3100	1050	awning	60.0	SW	No
Bedroom 3	THC-023-03 B	Opening 59	3100	1050	awning	60.0	SW	No
Bedroom 3	THC-024-04 B	Opening 81	2700	1000	casement	90.0	SE	No
Bedroom 3	THC-033-07 B	Opening 94	2700	300	fixed	0.0	SE	No
Bedroom 2	THC-023-03 B	Opening 93	3100	1050	awning	60.0	SW	No
Bedroom 1	THC-023-03 B	Opening 58	3100	1050	awning	60.0	SW	No

Roof window* type and performance value

Default* roof windows

Window ID	Window description	Maximum U-value*	SHGC*
No Data Available			

Substitution tolerance ranges

SHGC lower limit SHGC upper limit

Custom* roof windows

Window ID	Window description	Maximum U-value	SHGC*
No Data Available			

Substitution tolerance ranges

SHGC lower limit SHGC upper limit

Roof window* schedule

Location	Window ID	Window no.	Opening %	Area [m ²]	Width [mm]	Orientation	Outdoor shade	Indoor shade
No Data Available								

Skylight* type and performance

Skylight ID	Skylight description	Skylight shaft reflectance
No Data Available		

Skylight* schedule

Location	Skylight ID	Skylight No.	Skylight shaft length [mm]	Area [m ²]	Orientation	Outdoor shade	Diffuser
No Data Available							

External door schedule

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

External wall type

Wall ID	Wall type	Solar absorptance	Wall shade [colour]	Bulk insulation [R-value]	Reflective wall wrap*
1	GIW Tests - Retaining	0.5	Medium		No
2	123-129 - R2.7 External Concrete Wall	0.5	Medium	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R2.7)	No
3	123-129 - R2.7 Semi-exposed Concrete Wall	0.5	Medium	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R2.7)	No

External wall schedule

Location	Wall ID	Height [mm]	Width [mm]	Orientation	Horizontal shading feature* maximum projection [mm]	Vertical shading feature* (yes/no)
Carpark	1	3200	24136	NW	0	No
Carpark	1	3200	36737	SW	0	No
Carpark	1	3200	13015	SE	0	No
Carpark	1	3200	38168	NE	0	No
Living	2	3200	6899	NE	4437	Yes
Butlers Kitchen	3	3200	5495	NW	0	No
Butlers Kitchen	2	3200	3788	SW	0	Yes
Wine Cellar	3	3200	1101	NW	0	No
Wine Cellar	3	3200	1200	SW	0	No
Study	3	3200	4203	SE	0	No
Study	2	3200	1929	NE	0	No
Study	2	3200	585	NW	11677	Yes
Study	2	3200	266	NE	4690	Yes
Bathroom	2	3200	3074	SW	2146	Yes
WIR	2	3200	4846	NW	0	Yes
WIR	2	3200	1011	SW	0	No
WIR	2	3300	1082	SW	0	No
WIR	2	3200	204	SW	0	No
WIR	3	3200	903	NE	0	No
WIR	3	3200	621	NW	0	No
Entry/Corridor	3	3200	1494	NW	0	No
Entry/Corridor	3	3200	1633	SE	0	No
Bedroom 3	2	3200	533	SW	0	No
Bedroom 3	2	3300	1067	SW	0	No
Bedroom 3	2	3200	1872	SW	0	No
Bedroom 3	2	3300	2110	SE	2773	Yes

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NatHERS Certificate

8.6 Star Rating as of 27 Mar 2026

Bed 2 WIR	3	3200	2462	SE	0	No
Bedroom 2	2	3200	2073	NW	2837	Yes
Bedroom 2	2	3200	2430	SW	0	No
Bedroom 2	2	3300	1089	SW	0	No
Bedroom 2	2	3200	194	SW	0	No
Bedroom 1	2	3200	484	SW	0	No
Bedroom 1	2	3300	1080	SW	0	No
Bedroom 1	2	3200	2317	SW	0	No
Bedroom 1	2	3200	3001	SE	0	No
Bedroom 1	3	3200	1318	NE	0	No
Ensuite 1	3	3200	1842	NE	0	No
Ensuite 1	2	3200	2348	SE	0	Yes

Internal wall type

Wall ID	Wall type	Area [m²]	Bulk insulation
1	FR5 - Internal Plasterboard Stud Wall	254.2	

Floor type

Location	Construction	Area [m²]	Sub-floor ventilation	Added insulation [R-value]	Covering
Carpark	FR5 - CSOG: Slab on Ground	40.1	Enclosed	R0.0	none
Carpark	FR5 - 250mm concrete slab	36.8	Enclosed	R0.0	none
Carpark	FR5 - 250mm concrete slab	11.9	Enclosed	R0.0	none
Carpark	FR5 - CSOG: Slab on Ground	26.8	Enclosed	R0.0	none
Carpark	FR5 - CSOG: Slab on Ground	433.3	Enclosed	R0.0	none
Living	FR5 - 250mm concrete slab	46.9	Enclosed	R4.6	Timber
Living	FR5 - 250mm concrete slab	1.7	Enclosed	R4.6	Timber
Butlers Kitchen	FR5 - 250mm concrete slab	10.7	Enclosed	R4.6	Timber
Butlers Kitchen	FR5 - 250mm concrete slab	0.9	Enclosed	R4.6	Timber
Wine Cellar	FR5 - 250mm concrete slab	2.7	Enclosed	R4.6	Timber
Study	FR5 - 250mm concrete slab	9.4	Enclosed	R4.6	Timber
Closet	FR5 - 250mm concrete slab	2.2	Enclosed	R4.6	Timber
Powder Room	FR5 - 250mm concrete slab	2.3	Enclosed	R4.6	Tiles
Bathroom	FR5 - 250mm concrete slab	10.5	Enclosed	R4.6	Tiles
WIR	FR5 - 250mm concrete slab	11.8	Enclosed	R4.6	Carpet
Entry/Corridor	FR5 - 250mm concrete slab	23.1	Enclosed	R4.6	Timber
Bed 3 WIR	FR5 - 250mm concrete slab	2.5	Enclosed	R4.6	Timber
Bedroom 3	FR5 - 250mm concrete slab	19.7	Enclosed	R4.6	Carpet

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Bed 2 WIR	FR5 - 250mm concrete slab	2.5	Enclosed	R4.6	Timber
Bedroom 2	FR5 - 250mm concrete slab	14.9	Enclosed	R4.6	Carpet
Ensuite 2	FR5 - 250mm concrete slab	4.2	Enclosed	R4.6	Tiles
Bedroom 1	FR5 - 250mm concrete slab	8.1	Enclosed	R4.6	Carpet
Bedroom 1	FR5 - 250mm concrete slab	7.5	Enclosed	R4.6	Carpet
Ensuite 1	FR5 - 250mm concrete slab	4.3	Enclosed	R4.6	Tiles

Ceiling type

Location	Construction material/type	Bulk insulation R-value [may include edge batt values]	Reflective wrap*
Carpark	Plasterboard	R0.0	No
Carpark	FR5 - 250mm concrete slab	R4.6	No
Carpark	Plasterboard	R0.0	No
Living	Plasterboard	R3.6	No
Butlers Kitchen	Plasterboard	R3.6	No
Bedroom 1	Plasterboard	R3.6	No

Ceiling penetrations*

Location	Quantity	Type	Height [mm]	Width [mm]	Sealed/unsealed
Living	19	Downlights	80	80	Sealed
Living	1	Downlights	250	250	Sealed
Butlers Kitchen	4	Downlights	80	80	Sealed
Wine Cellar	1	Downlights	80	80	Sealed
Study	2	Downlights	80	80	Sealed
Closet	1	Downlights	80	80	Sealed
Powder Room	1	Downlights	80	80	Sealed
Powder Room	1	Exhaust Fans	250	250	Sealed
Bathroom	1	Exhaust Fans	250	250	Sealed
Bathroom	4	Downlights	80	80	Sealed
WIR	4	Downlights	80	80	Sealed
Entry/Corridor	9	Downlights	80	80	Sealed
Bed 3 WIR	1	Downlights	80	80	Sealed
Bedroom 3	7	Downlights	80	80	Sealed
Bed 2 WIR	1	Downlights	80	80	Sealed
Bedroom 2	5	Downlights	80	80	Sealed
Ensuite 2	1	Exhaust Fans	250	250	Sealed
Ensuite 2	1	Downlights	80	80	Sealed
Bedroom 1	6	Downlights	80	80	Sealed
Ensuite 1	1	Downlights	80	80	Sealed

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Ensuite 1	1	Exhaust Fans	250	250	Sealed
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Ceiling fans

Location	Quantity	Diameter [mm]
No Data Available		

Roof type

Construction	Added insulation [R-value]	Solar absorptance	Roof shade [colour]
Slab:Slab - Suspended Slab : 250mm: 250mm Suspended Slab	0.0	0.5	Medium

Thermal bridging schedule for steel frame elements

Building element	Steel section dimensions [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, where lighting is not included in the appliance schedule.

Cooling system

Appliance/ system type	Location	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Whole of Home performance assessment conducted for this certificate.				

Heating system

Appliance/ system type	Location	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Whole of Home performance assessment conducted for this certificate.				

Hot water system

Appliance/ system type	Fuel type	Minimum efficiency/ performance	Hot Water CER Zone	Zone 3 STC	Assessed daily load
No Whole of Home performance assessment conducted for this certificate.					

Pool/spa equipment

Appliance/ system type	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Whole of Home performance assessment conducted for this certificate.			

Onsite renewable energy schedule

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

System type	Orientation	System size or generation capacity
-------------	-------------	------------------------------------

No Whole of Home performance assessment conducted for this certificate.

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.

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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

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 be occupied and heated or cooled on standard occupancy assumptions. In some circumstances it will include garages.
COP	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 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 ventilated corridor in a Class 2 building.
Exposure category – exposed	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 – suburban	terrain with numerous, closely spaced obstructions below 10m e.g. suburban housing, heavily vegetated bushland areas.
Exposure category – protected	terrain with numerous, closely spaced obstructions over 10 m e.g. city and industrial areas.
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 (NCC) Class	the NCC groups buildings by their function and use, and assigns a classification code. NatHERS software models NCC Class 1, 2 or 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)	can be applied to walls, roofs and ceilings. When combined with an appropriate air gap and emissivity value, it provides insulative 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.

*Refer to glossary.

STCs	Small-scale Technology Certificates, certificates created by the REC registry for renewable energy technologies that may be bought and sold as part of the Small-scale Renewable Energy Scheme operated by the Clean Energy Regulatory
Thermal breaks	are materials with an R-value greater than or equal to 0.2 that must separate the metal frame from the cladding. This includes, but is not limited to, materials such as timber battens greater than or equal to 20mm thick, continuous thermal breaks such as polystyrene insulation sheeting, plastic strips or furring channels.
U-value	the rate of heat transfer through a window. The lower the U-value, the better the insulating ability.
Unconditioned	a zone within a dwelling that is assumed 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 subject wall/window. Includes privacy screens, other walls in the building (wing walls), fences, other buildings, vegetation (protected or listed heritage trees).
Window shading device	a device fixed to windows that provides shading e.g. window awnings or screens but excludes horizontal* or vertical shading features* (eg eaves and balconies)

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Nationwide House Energy Rating Scheme® NatHERS® Certificate

Generated on 27 Mar 2026 using FirstRate5: 5.5.5a (3.22)

Property

Address 101, 123-129 Erskine St,
Middle Park, VIC, 3206

Lot/DP N/A

NCC Class* Class 2

Floor/all Floors

Type New Home

Plans

Main plan N/A

Prepared by Cera Stribley Pty. Ltd.

Construction and environment

Assessed floor area [m²]*

Conditioned* 243.8

Unconditioned* 6.6

Total 250.4

Garage -

Exposure type

suburban

NatHERS climate zone

21 Melbourne RO



Accredited assessor

Name Gary Wertheimer

Business name GIW Environmental Solutions

Email gary@giv.com.au

Phone 0390445111

Accreditation No. DMN/10/2024

Assessor Accrediting Organisation Design Matters National

Declaration of interest No

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NCC Requirements

NCC provisions Volume 1

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



33.4 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	24.9	8.5
Load limits	55	38

Features determining load limits

Floor type	N/A
(lowest conditioned area)	
NCC climate zone 1 or 2	N
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 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. If contact the relevant local building regulating authority, noting that State and Territory variations may also apply.

Setting options:

Floor type:

CSOG – Concrete Slab on Ground

SF – Suspended Floor (or a mixture of CSOG and SF)

NA – Not Applicable

NCC climate Zone 1 or 2:

Yes

No

NA – not applicable

Outdoor living area:

Yes

No

NA – not applicable

Outdoor living area ceiling fan:

Yes

No

NA – not applicable

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:

No Whole of Home performance assessment conducted for this certificate.

Greenhouse gas emissions:

No Whole of Home performance assessment conducted for this certificate.

No Whole of Home performance assessment conducted for this certificate.

Graph key:



Predicted onsite renewable energy impact

No Whole of Home performance assessment conducted for this certificate.

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The checklist covers important items impacting the dwelling's ratings. It is recommended that the accuracy of the whole certificate is checked.

Note: The boxes indicate when and who should check each item. It is not mandatory to complete this checklist.

Approval stage		Construction stage		
Assessor checked	Consent authority/ surveyor checked	Builder checked	Consent authority/ surveyor checked	Occupancy/other

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?

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 'Window and glazed door schedule' and 'Roof window schedule' tables on this Certificate?

Does the installed windows meet the substitution tolerances (AFRC* based SHGC* and U-values*) as shown in the 'Window and glazed door type and performance' and 'Roof window type and performance' tables on this Certificate?

Does the external wall bulk insulation (R-value) shown on the manufacturer's 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?

Does the floor insulation (R-value) shown on the NatHERS stamped plans or as installed match what is shown in the 'Floor type' table of this certificate?

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

Does the ceiling insulation (R-value) shown on the NatHERS-stamped plans or as installed match what is shown in the 'Ceiling type' table on this Certificate?

Does the external roof shade (colour) on the NatHERS stamped plans or as installed match what is shown in the 'Roof type' table on this Certificate?

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.

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".

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?

Page 3 of 12

Certificate check

Continued

Approval stage		Construction stage		
Assessor checked	Consent authority/surveyor checked	Builder checked	Consent authority/surveyor checked	Occupancy/other

Additional NCC requirements for thermal performance (not included in the NatHERS assessment)

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

Does the dwelling meet the NCC requirements for Building Sealing?

☐ ☐ ☐ ☐

Whole of Home performance check (not applicable if a Whole of Home performance assessment is not conducted)

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 'Appliance schedule' on this Certificate?

☐ ☐ ☐ ☐ ☐

Does the hot water system type and efficiency/performance shown on the NatHERS-stamped plans or as installed match the minimum efficiency/performance requirements shown in the 'Appliance schedule' 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 'Appliance schedule' 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 NatHERS assessment)

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

Room schedule

Room	Zone Type	Area [m²]
Kitchen/Living 1	kitchen	74
Butlers Pantry	dayTime	15.1
Study	dayTime	11.2
Powder Room	dayTime	4.8
Hall	dayTime	9.5
Direct Access	dayTime	13.6
Ensuite 3	nightTime	6
Laundry	unconditioned	6.6
WIR 3	nightTime	5.7
Bedroom 3	bedroom	10.7
Ensuite	nightTime	11.7
Ensuite 2	nightTime	6.1
Living	living	21.1
Bedroom 2	bedroom	12.7
Bedroom 1	bedroom	24.3
WIR	nightTime	17.2

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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
No Data Available					

Custom* windows

Window ID	Window description	Maximum	SHGC*	Substitution tolerance ranges	
		U-value*		SHGC lower limit	SHGC upper limit
THC-033-07 B	EC45TB Fixed Window TPS Spacer DG 6ET/12Ar/6	2.09	0.51	0.48	0.54
THC-010-21 A	Series EC95 TB Sliding Door DG 4mmEnTech-12Ar-4mmClr	2.93	0.49	0.47	0.51
THC-023-03 B	Series EC35TB Awning Window DG 4ET-12Ar-4	2.51	0.47	0.45	0.49
THC-024-04 B	Series EC65TB Casement Window DG 6ET/12Ar/6	2.46	0.36	0.34	0.38

Window and glazed door schedule

Location	Window ID	Window no.	Height [mm]	Width [mm]	Window type	Opening %	Orientation	Window shading device*
Kitchen/Living 1	THC-033-07 B	Opening 56	1500	2600	fixed	0.0	NW	No
Kitchen/Living 1	THC-010-21 A	Opening 53	2700	4600	sliding	45.0	NE	No
Kitchen/Living 1	THC-010-21 A	Opening 54	2700	1950	sliding	45.0	NE	No
Kitchen/Living 1	THC-033-07 B	Opening 69	2700	1700	fixed	0.0	SW	No
Kitchen/Living 1	THC-033-07 B	Opening 70	2100	2000	fixed	0.0	NE	No
Kitchen/Living 1	THC-023-03 B	Opening 93	2100	1000	awning	90.0	NE	No
Study	THC-033-07 B	Opening 68	2700	1500	fixed	0.0	NW	No
Study	THC-024-04 B	Opening 71	2700	1000	casement	90.0	NW	No
Ensuite 3	THC-033-07 B	Opening 66	2700	1000	fixed	0.0	NE	No
Bedroom 3	THC-023-03 B	Opening 65	1950	1100	awning	90.0	SW	No
Living	THC-023-03 B	Opening 63	3100	1450	awning	60.0	SE	No
Bedroom 2	THC-010-21 A	Opening 60	3200	2900	sliding	45.0	SW	No
Bedroom 1	THC-023-03 B	Opening 59	3100	1450	awning	60.0	NW	No
Bedroom 1	THC-023-03 B	Opening 61	2050	1600	awning	90.0	SW	No
WIR	THC-033-07 B	Opening 62	1550	1380	fixed	0.0	SW	No

Roof window* type and performance value

Default* roof windows

Window ID	Window description	Maximum U-value*	SHGC*
No Data Available			

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Substitution tolerance ranges

SHGC lower limit	SHGC upper limit
------------------	------------------

Custom* roof windows

Window ID	Window description	Maximum U-value*	SHGC*
No Data Available			

Substitution tolerance ranges

SHGC lower limit	SHGC upper limit
------------------	------------------

Roof window* schedule

Location	Window ID	Window no.	Opening %	Area [m²]	Width [mm]	Orientation	Outdoor shade	Indoor shade
No Data Available								

Skylight* type and performance

Skylight ID	Skylight description	Skylight shaft reflectance
No Data Available		

Skylight* schedule

Location	Skylight ID	Skylight No.	Skylight shaft length [mm]	Area [m²]	Orient-ation	Outdoor shade	Diffuser
----------	-------------	--------------	----------------------------	-----------	--------------	---------------	----------

No Data
Available

External door *schedule*

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

External wall *type*

Wall ID	Wall type	Solar absorptance	Wall shade [colour]	Bulk insulation [R-value]	Reflective wall wrap*
1	123-129 - R2.7 External Concrete Wall	0.5	Medium	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R2.7)	No
2	123-129 - R2.7 Double Brick Finished	0.5	Medium	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R2.7)	No
3	123-129 - R2.7 Semi-exposed Concrete Wall	0.5	Medium	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R2.7)	No

External wall *schedule*

Location	Wall ID	Height [mm]	Width [mm]	Orientation	Horizontal shading feature* maximum projection [mm]	Vertical shading feature* (yes/no)
Kitchen/Living 1	1	3200	8396	NE	4733	Yes
Kitchen/Living 1	1	3200	8396	NE	4733	Yes
Kitchen/Living 1	2	3200	5873	NW	0	Yes
Kitchen/Living 1	1	3200	2345	SW	0	Yes
Kitchen/Living 1	1	3200	246	SW	0	Yes
Kitchen/Living 1	2	3200	3906	NE	0	No
Butlers Pantry	3	3200	5767	SE	0	No
Butlers Pantry	2	3200	1721	NE	0	No
Study	1	3200	2709	NW	0	Yes
Direct Access	3	3200	5055	SE	0	No
Ensuite 3	2	3200	2385	NW	0	Yes
Ensuite 3	1	3200	2518	NE	0	Yes
Laundry	1	3200	426	NW	0	Yes
WIR 3	2	3200	1910	NW	0	Yes
Bedroom 3	2	3200	2452	NW	0	Yes
Bedroom 3	1	3200	1117	NW	0	No
Bedroom 3	1	3200	2992	SW	0	No
Ensuite	3	3200	697	NE	0	No
Living	1	3200	1592	SW	0	No

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Living	2	3200	302	SE	0	No
Living	2	3200	1511	SW	0	No
Living	1	3200	1600	SE	3260	Yes
Living	1	3200	441	SW	1981	Yes
Bedroom 2	1	3200	2966	SW	1981	Yes
Bedroom 1	1	3200	1613	NW	3281	Yes
Bedroom 1	2	3200	4280	SW	0	No
WIR	3	3200	1804	NE	0	No
WIR	2	3200	2381	SW	0	No
WIR	1	3200	4470	SE	0	Yes
WIR	3	3200	3555	SE	0	No

Internal wall type

Wall ID	Wall type	Area [m²]	Bulk insulation
1	FR5 - Internal Plasterboard Stud Wall	287.3	

Floor type

Location	Construction	Sub-floor Area [m²]	Sub-floor Ventilation	Added insulation [R-value]	Covering
Kitchen/Living 1	FR5 - 250mm concrete slab	6.1	Elevated	R3.6	Timber
Kitchen/Living 1	FR5 - 250mm concrete slab	40.0	Enclosed	R0.0	Timber
Kitchen/Living 1	FR5 - 250mm concrete slab	27.9	Elevated	R3.6	Timber
Butlers Pantry	FR5 - 250mm concrete slab	12.4	Enclosed	R0.0	Timber
Butlers Pantry	FR5 - 250mm concrete slab	2.7	Elevated	R3.6	Timber
Study	FR5 - 250mm concrete slab	6.4	Enclosed	R0.0	Timber
Study	FR5 - 250mm concrete slab	4.7	Elevated	R3.6	Timber
Powder Room	FR5 - 250mm concrete slab	4.8	Enclosed	R0.0	Tiles
Hall	FR5 - 250mm concrete slab	9.5	Enclosed	R0.0	Timber
Direct Access	FR5 - 250mm concrete slab	13.6	Enclosed	R0.0	Timber
Ensuite 3	FR5 - 250mm concrete slab	6	Enclosed	R0.0	Tiles
Laundry	FR5 - 250mm concrete slab	6.6	Enclosed	R0.0	Tiles
WIR 3	FR5 - 250mm concrete slab	5.7	Enclosed	R0.0	Carpet
Bedroom 3	FR5 - 250mm concrete slab	7.3	Enclosed	R0.0	Carpet
Bedroom 3	FR5 - 250mm concrete slab	3.3	Enclosed	R0.0	Carpet
Ensuite	FR5 - 250mm concrete slab	11.7	Enclosed	R0.0	Tiles
Ensuite 2	FR5 - 250mm concrete slab	6.1	Enclosed	R0.0	Tiles
Living	FR5 - 250mm concrete slab	3.4	Elevated	R3.6	Timber
Living	FR5 - 250mm concrete slab	3.9	Enclosed	R0.0	Timber
Living	FR5 - 250mm concrete slab	13.8	Enclosed	R0.0	Timber
Bedroom 2	FR5 - 250mm concrete slab	12.7	Enclosed	R0.0	Carpet

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Bedroom 1	FR5 - 250mm concrete slab	24.3	Enclosed	R0.0	Carpet
WIR	FR5 - 250mm concrete slab	10.8	Elevated	R3.6	Carpet
WIR	FR5 - 250mm concrete slab	6.5	Enclosed	R0.0	Carpet

Ceiling type

Location	Construction material/type	Bulk insulation R-value [may include edge batt values]	Reflective wrap*
Bedroom 3	Plasterboard	R3.6	No
Living	Plasterboard	R3.6	No

Ceiling penetrations*

Location	Quantity	Type	Height [mm]	Width [mm]	Sealed/unsealed
Kitchen/Living 1	28	Downlights	80	80	Sealed
Kitchen/Living 1	1	Exhaust Fans	250	250	Sealed
Butlers Pantry	3	Downlights	80	80	Sealed
Study	4	Downlights	80	80	Sealed
Powder Room	2	Downlights	80	80	Sealed
Powder Room	1	Exhaust Fans	250	250	Sealed
Hall	4	Downlights	80	80	Sealed
Direct Access	5	Downlights	80	80	Sealed
Ensuite 3	1	Downlights	80	80	Sealed
Ensuite 3	1	Exhaust Fans	250	250	Sealed
Laundry	1	Downlights	80	80	Sealed
Laundry	1	Exhaust Fans	250	250	Sealed
WIR 3	2	Downlights	80	80	Sealed
Bedroom 3	4	Downlights	80	80	Sealed
Ensuite	4	Downlights	80	80	Sealed
Ensuite	1	Exhaust Fans	250	250	Sealed
Ensuite 2	2	Downlights	80	80	Sealed
Ensuite 2	1	Exhaust Fans	250	250	Sealed
Living	8	Downlights	80	80	Sealed
Bedroom 2	5	Downlights	80	80	Sealed
Bedroom 1	9	Downlights	80	80	Sealed
WIR	6	Downlights	80	80	Sealed

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Ceiling fans

Location	Quantity	Diameter [mm]
No Data Available		

Roof type

Construction	Added insulation [R-value]	Solar absorptance	Roof shade [colour]
Slab:Slab - Suspended Slab : 250mm: 250mm Suspended Slab	0.0	0.5	Medium

Thermal bridging *schedule for steel frame elements*

Building element	Steel section dimensions [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.

Cooling system

Appliance/ system type	Location	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Whole of Home performance assessment conducted for this certificate.				

Heating system

Appliance/ system type	Location	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Whole of Home performance assessment conducted for this certificate.				

Hot water system

Appliance/ system type	Fuel type	Minimum efficiency/ performance	Hot Water CER Zone	Zone 3 STC	Assessed daily load
No Whole of Home performance assessment conducted for this certificate.					

Pool/spa equipment

Appliance/ system type	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Whole of Home performance assessment conducted for this certificate.			

Onsite renewable energy *schedule*

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

System type	Orientation	System size or generation capacity
No Whole of Home performance assessment conducted for this certificate.		

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.	

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

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 be occupied and heated or cooled on standard occupancy assumptions. In some circumstances it will include garages.
COP	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 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 ventilated corridor in a Class 2 building.
Exposure category – exposed	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 – suburban	terrain with numerous, closely spaced obstructions below 10m e.g. suburban housing, heavily vegetated bushland areas.
Exposure category – protected	terrain with numerous, closely spaced obstructions over 10 m e.g. city and industrial areas.
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 (NCC) Class	the NCC groups buildings by their function and use, and assigns a classification code. NatHERS software models NCC Class 1, 2 or 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)	can be applied to walls, roofs and ceilings. When combined with an appropriate air gap and emissivity value, it provides insulative 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.

*Refer to glossary.

STCs	Small-scale Technology Certificates, certificates created by the REC registry for renewable energy technologies that may be bought and sold as part of the Small-scale Renewable Energy Scheme operated by the Clean Energy Regulatory
Thermal breaks	are materials with an R-value greater than or equal to 0.2 that must separate the metal frame from the cladding. This includes, but is not limited to, materials such as timber battens greater than or equal to 20mm thick, continuous thermal breaks such as polystyrene insulation sheeting, plastic strips or furring channels.
U-value	the rate of heat transfer through a window. The lower the U-value, the better the insulating ability.
Unconditioned	a zone within a dwelling that is assumed 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 subject wall/window. Includes privacy screens, other walls in the building (wing walls), fences, other buildings, vegetation (protected or listed heritage trees).
Window shading device	a device fixed to windows that provides shading e.g. window awnings or screens but excludes horizontal* or vertical shading features* (eg eaves and balconies)

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Nationwide House Energy Rating Scheme® NatHERS® Certificate

Thermal performance
star rating

Generated on 27 Mar 2026 using FirstRate5: 5.5.5a (3.22)

Property

Address 102, 123-129 Erskine St,
Middle Park, VIC, 3206

Lot/DP N/A

NCC Class* Class 2

Floor/all Floors

Type New Home

Plans

Main plan N/A

Prepared by Cera Stribley Pty. Ltd.

Construction and environment

Assessed floor area [m²]*

Conditioned* 235.5

Unconditioned* 3.8

Total 239.3

Garage -

Exposure type

suburban

NatHERS climate zone

21 Melbourne RO



42.9 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

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Business name GIW Environmental Solutions

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Phone 03904451111

Accreditation No. DMN/10/2024

Assessor Accrediting Organisation Design Matters National

Declaration of interest No

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Thermal performance [MJ/m²]

Limits taken from ABCB Standard 2022

	Heating	Cooling
Modelled	28.6	14.2
Load limits	55	38

Features determining load limits

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

NCC Requirements

NCC provisions Volume 1

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.

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 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. If contact the relevant local building regulating authority, noting that State and Territory variations may also apply.

Setting options:

Floor type:

CSOG – Concrete Slab on Ground

SF – Suspended Floor (or a mixture of CSOG and SF)

NA – Not Applicable

NCC climate Zone 1 or 2:

Yes

No

NA – not applicable

Outdoor living area:

Yes

No

NA – not applicable

Outdoor living area ceiling fan:

Yes

No

NA – not applicable

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:

No Whole of Home performance assessment conducted for this certificate.

Greenhouse gas emissions:

No Whole of Home performance assessment conducted for this certificate.

No Whole of Home performance assessment conducted for this certificate.

Graph key:



Predicted onsite renewable energy impact

No Whole of Home performance assessment conducted for this certificate.

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Certificate check

The checklist covers important items impacting the dwelling's ratings. It is recommended that the accuracy of the whole certificate is checked.

Note: The boxes indicate when and who should check each item. It is not mandatory to complete this checklist.

	Approval stage		Construction stage		
	Assessor checked	Consent authority/surveyor checked	Builder checked	Consent authority/surveyor checked	Occupancy/other
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					
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 'Window and glazed door schedule' and 'Roof window schedule' tables on this Certificate?	☐	☐	☐	☐	☐
Does the installed windows meet the substitution tolerances (AFRC* based SHGC* and U-values*) as shown in the 'Window and glazed door type and performance' and 'Roof window type and performance' 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 'Floor type' table on this certificate?	☐	☐	☐	☐	☐
Ceiling penetrations*					
Does the 'quantity' and 'type' of ceiling penetrations* (e.g. downlights, exhaust fans, etc) shown on the NatHERS-stamped plans or as installed match what is shown in the 'Ceiling penetrations' table on this Certificate?	☐	☐	☐	☐	☐
Ceiling					
Does the ceiling insulation (R-value) shown on the NatHERS-stamped plans or as installed match what is shown in the 'Ceiling type' 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 'Roof type' 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?	☐	☐	☐	☐	☐

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Certificate check

Continued

Approval stage		Construction stage		
Assessor checked	Consent authority/surveyor checked	Builder checked	Consent authority/surveyor checked	Occupancy/other

Additional NCC requirements for thermal performance (not included in the NatHERS assessment)

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

Does the dwelling meet the NCC requirements for Building Sealing?

☐ ☐ ☐ ☐

Whole of Home performance check (not applicable if a Whole of Home performance assessment is not conducted)

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 as installed match the location and minimum efficiency/performance requirements shown in the 'Appliance schedule' on this Certificate?

☐ ☐ ☐ ☐

Does the hot water system type and efficiency/performance shown on the NatHERS-stamped plans or as installed match the minimum efficiency/performance requirements shown in the 'Appliance schedule' 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 'Appliance schedule' 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 NatHERS assessment)

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

Room schedule

Room	Zone Type	Area [m²]
Dirrect Access	dayTime	15.8
Powder Room	dayTime	4.3
Kitchen/Living	kitchen	60.6
Bedroom 1	bedroom	21.8
WIR/Study	dayTime	18.8
Bathroom	nightTime	12.1
Living	living	17.1
Ensuite 2	nightTime	6.5
Laundry	unconditioned	3.8
Study	dayTime	7.2
Ensuite 3	nightTime	4.4
Hall 1	dayTime	24
Hall 2	dayTime	2.9
Bedroom 3	bedroom	13.4
Bedroom 2	bedroom	13.6
Butlers Kitchen	dayTime	13.1

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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
No Data Available					

Custom* windows

Window ID	Window description	Maximum	SHGC*	Substitution tolerance ranges	
		U-value*		SHGC lower limit	SHGC upper limit
THC-010-21 A	Series EC95 TB Sliding Door DG 4mmEnTech-12Ar-4mmClr	2.93	0.49	0.47	0.51
THC-033-07 B	EC45TB Fixed Window TPS Spacer DG 6ET/12Ar/6	2.09	0.51	0.48	0.54
THC-024-04 B	Series EC65TB Casement Window DG 6ET/12Ar/6	2.46	0.36	0.34	0.38
THC-023-03 B	Series EC35TB Awning Window DG 4ET-12Ar-4	2.51	0.47	0.45	0.49

Window and glazed door schedule

Location	Window ID	Window no.	Height [mm]	Width [mm]	Window type	Opening %	Orientation	Window shading device*
Kitchen/Living	THC-010-21 A	Opening 91	2800	6500	sliding	45.0	NE	No
Bedroom 1	THC-033-07 B	Opening 93	2500	1820	fixed	0.0	NE	No
WIR/Study	THC-033-07 B	Opening 96	2096	1600	fixed	0.0	NE	No
Bathroom	THC-010-21 A	Opening 139	1900	2759	sliding	45.0	SW	No
Living	THC-033-07 B	Opening 102	1400	1050	fixed	0.0	SW	No
Living	THC-024-04 B	Opening 100	2700	900	casement	90.0	SE	No
Living	THC-033-07 B	Opening 138	2700	1792	fixed	0.0	SE	No
Study	THC-023-03 B	Opening 107	2300	1200	awning	60.0	NW	No
Hall 1	THC-023-03 B	Opening 108	2300	2900	awning	60.0	SW	No
Bedroom 3	THC-033-07 B	Opening 104	1400	1050	fixed	0.0	SW	No
Bedroom 2	THC-033-07 B	Opening 103	2600	1500	fixed	0.0	SW	No
Butlers Kitchen	THC-010-21 A	Opening 95	2800	3000	sliding	45.0	NE	No

Roof window* type and performance value

Default* roof windows

Window ID

No Data Available

Window description

No Data Available

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Maximum

U-value*

SHGC*

Substitution tolerance ranges

SHGC lower limit SHGC upper limit

Custom* roof windows

Window ID

No Data Available

Window description

No Data Available

Maximum

U-value*

SHGC*

Substitution tolerance ranges

SHGC lower limit SHGC upper limit

Roof window* schedule

Location	Window ID	Window no.	Opening %	Area [m²]	Width [mm]	Orientation	Outdoor shade	Indoor shade
No Data Available								

Skylight* type and performance

Skylight ID

No Data Available

Skylight description

No Data Available

Skylight shaft reflectance

No Data Available

Skylight* schedule

Location	Skylight ID	Skylight No.	Skylight shaft length [mm]	Area [m²]	Orientation	Outdoor shade	Diffuser
No Data Available							

External door *schedule*

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

External wall *type*

Wall ID	Wall type	Solar absorptance	Wall shade [colour]	Bulk insulation [R-value]	Reflective wall wrap*
1	123-129 - R2.7 Semi-exposed Concrete Wall	0.5	Medium	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R2.7)	No
2	123-129 - R2.7 External Concrete Wall	0.5	Medium	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R2.7)	No

External wall *schedule*

Location	Wall ID	Height [mm]	Width [mm]	Orientation	Horizontal shading feature* maximum projection [mm]	Vertical shading feature* (yes/no)
Dirrect Access	1	3200	5478	NW	0	No
Dirrect Access	2	3200	1913	SE	11337	Yes
Dirrect Access	2	3200	2380	NE	0	Yes
Kitchen/Living	2	3200	7483	NE	4437	Yes
Bedroom 1	2	3200	1808	NE	0	Yes
Bedroom 1	2	3200	898	NW	11354	Yes
WIR/Study	2	3200	7311	SE	0	Yes
WIR/Study	2	3200	598	NE	0	Yes
WIR/Study	2	3200	1975	NE	0	Yes
Bathroom	2	2900	2992	SW	0	Yes
Bathroom	2	3200	2248	SE	0	Yes
Living	2	3200	1629	SW	0	No
Living	2	3550	1104	SW	0	No
Living	2	3200	1379	SW	0	No
Living	2	3200	3200	SE	0	Yes
Study	2	2900	2244	NW	0	Yes
Ensuite 3	2	3200	2256	SW	0	No
Hall 1	1	3200	4545	NW	0	No
Hall 1	2	3200	2921	SW	0	Yes
Bedroom 3	2	3200	3088	NW	0	Yes
Bedroom 3	2	3200	961	SW	0	No
Bedroom 3	2	3550	1076	SW	0	No
Bedroom 3	2	3200	1520	SW	0	No

Bedroom 2	2	3550	1609	SW	0	No
Bedroom 2	2	3200	2070	SW	0	No
Butlers Kitchen	2	3200	4036	NE	4437	Yes

Internal wall type

Wall ID	Wall type	Area [m ²]	Bulk insulation
1	FR5 - Internal Plasterboard Stud Wall	331.7	

Floor type

Location	Construction	Area [m ²]	Sub-floor ventilation	Added insulation [R-value]	Covering
Direct Access	FR5 - 250mm concrete slab	14.5	Enclosed	R0.0	Timber
Direct Access	FR5 - 250mm concrete slab	1.3	Elevated	R3.6	Timber
Powder Room	FR5 - 250mm concrete slab	4.3	Enclosed	R0.0	Tiles
Kitchen/Living	FR5 - 250mm concrete slab	60.6	Enclosed	R0.0	Timber
Bedroom 1	FR5 - 250mm concrete slab	15.7	Enclosed	R0.0	Carpet
Bedroom 1	FR5 - 250mm concrete slab	6.2	Enclosed	R0.0	Carpet
WIR/Study	FR5 - 250mm concrete slab	3.5	Enclosed	R0.0	Carpet
WIR/Study	FR5 - 250mm concrete slab	11.2	Enclosed	R0.0	Carpet
Bathroom	FR5 - 250mm concrete slab	12.1	Enclosed	R0.0	Tiles
Living	FR5 - 250mm concrete slab	3.3	Enclosed	R0.0	Timber
Living	FR5 - 250mm concrete slab	13.5	Enclosed	R0.0	Timber
Ensuite 2	FR5 - 250mm concrete slab	0.3	Enclosed	R0.0	Tiles
Ensuite 2	FR5 - 250mm concrete slab	6.1	Enclosed	R0.0	Tiles
Laundry	FR5 - 250mm concrete slab	0.3	Enclosed	R0.0	Tiles
Laundry	FR5 - 250mm concrete slab	3.5	Enclosed	R0.0	Tiles
Study	FR5 - 250mm concrete slab	0.5	Enclosed	R0.0	Timber
Study	FR5 - 250mm concrete slab	6.6	Enclosed	R0.0	Timber
Ensuite 3	FR5 - 250mm concrete slab	4.4	Enclosed	R0.0	Tiles
Hall 1	FR5 - 250mm concrete slab	24	Enclosed	R0.0	Timber
Hall 2	FR5 - 250mm concrete slab	0.2	Enclosed	R0.0	Timber
Hall 2	FR5 - 250mm concrete slab	2.7	Enclosed	R0.0	Timber
Bedroom 3	FR5 - 250mm concrete slab	13.4	Enclosed	R0.0	Carpet
Bedroom 2	FR5 - 250mm concrete slab	4.9	Elevated	R3.6	Carpet
Bedroom 2	FR5 - 250mm concrete slab	6.9	Enclosed	R0.0	Carpet
Bedroom 2	FR5 - 250mm concrete slab	1.8	Enclosed	R0.0	Carpet
Butlers Kitchen	FR5 - 250mm concrete slab	13.1	Enclosed	R0.0	Timber

Ceiling type

Location	Construction material/type	Bulk insulation R-value [may include edge batt values]	Reflective wrap*
----------	----------------------------	--	------------------

Living	Plasterboard	R3.0	No
Study	Plasterboard	R3.0	No
Ensuite 3	Plasterboard	R3.0	No
Bedroom 3	Plasterboard	R3.0	No
Bedroom 2	Plasterboard	R3.0	No
Bedroom 2	Plasterboard	R3.0	No

Ceiling penetrations*

Location	Quantity	Type	Height [mm]	Width [mm]	Sealed/unsealed
Dirrect Access	6	Downlights	80	80	Sealed
Powder Room	1	Downlights	80	80	Sealed
Powder Room	1	Exhaust Fans	250	250	Sealed
Kitchen/Living	24	Downlights	80	80	Sealed
Kitchen/Living	1	Exhaust Fans	250	250	Sealed
Bedroom 1	8	Downlights	80	80	Sealed
WIR/Study	6	Downlights	80	80	Sealed
Bathroom	5	Downlights	80	80	Sealed
Bathroom	1	Exhaust Fans	250	250	Sealed
Living	6	Downlights	80	80	Sealed
Ensuite 2	2	Downlights	80	80	Sealed
Ensuite 2	2	Exhaust Fans	250	250	Sealed
Laundry	1	Downlights	80	80	Sealed
Laundry	1	Exhaust Fans	250	250	Sealed
Study	2	Downlights	80	80	Sealed
Ensuite 3	1	Downlights	80	80	Sealed
Ensuite 3	1	Exhaust Fans	250	250	Sealed
Hall 1	9	Downlights	80	80	Sealed
Hall 2	1	Downlights	80	80	Sealed
Bedroom 3	5	Downlights	80	80	Sealed
Bedroom 2	5	Downlights	80	80	Sealed
Butlers Kitchen	5	Downlights	80	80	Sealed
Butlers Kitchen	1	Exhaust Fans	250	250	Sealed

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Ceiling fans

Location	Quantity	Diameter [mm]
No Data Available		

Roof type

Construction	Added insulation [R-value]	Solar absorptance	Roof shade [colour]
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Slab:Slab - Suspended Slab : 250mm: 250mm Suspended Slab	0.0	0.5	Medium
Cont:Attic-Continuous	0.0	0.5	Medium

Thermal bridging *schedule for steel frame elements*

Building element	Steel section dimensions [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.

Cooling system

Appliance/ system type	Location	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Whole of Home performance assessment conducted for this certificate.				

Heating system

Appliance/ system type	Location	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Whole of Home performance assessment conducted for this certificate.				

Hot water system

Appliance/ system type	Fuel type	Minimum efficiency/ performance	Hot Water CER Zone	Zone 3 STC	Assessed daily load
No Whole of Home performance assessment conducted for this certificate.					

Pool/spa equipment

Appliance/ system type	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Whole of Home performance assessment conducted for this certificate.			

Onsite renewable energy *schedule*

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

System type	Orientation	System size or generation capacity
No Whole of Home performance assessment conducted for this certificate.		

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.	

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

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 be occupied and cooled or heated on standard occupancy assumptions. In some circumstances it will include garages.
COP	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 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 ventilated corridor in a Class 2 building.
Exposure category – exposed	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 – suburban	terrain with numerous, closely spaced obstructions below 10m e.g. suburban housing, heavily vegetated bushland areas.
Exposure category – protected	terrain with numerous, closely spaced obstructions over 10 m e.g. city and industrial areas.
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 (NCC) Class	the NCC groups buildings by their function and use, and assigns a classification code. NatHERS software models NCC Class 1, 2 or 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)	can be applied to walls, roofs and ceilings. When combined with an appropriate air gap and emissivity value, it provides insulative 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.

*Refer to glossary.

STCs	Small-scale Technology Certificates, certificates created by the REC registry for renewable energy technologies that may be bought and sold as part of the Small-scale Renewable Energy Scheme operated by the Clean Energy Regulatory
Thermal breaks	are materials with an R-value greater than or equal to 0.2 that must separate the metal frame from the cladding. This includes, but is not limited to, materials such as timber battens greater than or equal to 20mm thick, continuous thermal breaks such as polystyrene insulation sheeting, plastic strips or furring channels.
U-value	the rate of heat transfer through a window. The lower the U-value, the better the insulating ability.
Unconditioned	a zone within a dwelling that is assumed 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 subject wall/window. Includes privacy screens, other walls in the building (wing walls), fences, other buildings, vegetation (protected or listed heritage trees).
Window shading device	a device fixed to windows that provides shading e.g. window awnings or screens but excludes horizontal* or vertical shading features* (eg eaves and balconies)

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Nationwide House Energy Rating Scheme® NatHERS® Certificate

Generated on 27 Mar 2026 using FirstRate5: 5.5.5a (3.22)

Property

Address 201, 123-129 Erskine St,
Middle Park, VIC, 3206

Lot/DP N/A

NCC Class* Class 2

Floor/all Floors

Type New Home

Plans

Main plan N/A

Prepared by Cera Stribley Pty. Ltd.

Construction and environment

Assessed floor area [m²]*

Conditioned* 238.2

Unconditioned* 3.8

Total 242

Garage -

Exposure type

suburban

NatHERS climate zone

21 Melbourne RO



Accredited assessor

Name Gary Wertheimer

Business name GIW Environmental Solutions

Email gary@giv.com.au

Phone 03904451111

Accreditation No. DMN/10/2024

Assessor Accrediting Organisation Design Matters National

Declaration of interest No

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NCC Requirements

NCC provisions Volume 1

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



38.9 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	24.6	14.3
Load limits	55	38

Features determining load limits

Floor type	N/A
(lowest conditioned area)	
NCC climate zone 1 or 2	N
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 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. If contact the relevant local building regulating authority, noting that State and Territory variations may also apply.

Setting options:

Floor type:

CSOG – Concrete Slab on Ground

SF – Suspended Floor (or a mixture of CSOG and SF)

NA – Not Applicable

NCC climate Zone 1 or 2:

Yes

No

NA – not applicable

Outdoor living area:

Yes

No

NA – not applicable

Outdoor living area ceiling fan:

Yes

No

NA – not applicable

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:

No Whole of Home performance assessment conducted for this certificate.

Greenhouse gas emissions:

No Whole of Home performance assessment conducted for this certificate.

No Whole of Home performance assessment conducted for this certificate.

Graph key:



Predicted onsite renewable energy impact

No Whole of Home performance assessment conducted for this certificate.

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The checklist covers important items impacting the dwelling's ratings. It is recommended that the accuracy of the whole certificate is checked.

Note: The boxes indicate when and who should check each item. It is not mandatory to complete this checklist.

Approval stage		Construction stage		
Assessor checked	Consent authority/ surveyor checked	Builder checked	Consent authority/ surveyor checked	Occupancy/other

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?

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 'Window and glazed door schedule' and 'Roof window schedule' tables on this Certificate?

Does the installed windows meet the substitution tolerances (AFRC* based SHGC* and U-values*) as shown in the 'Window and glazed door type and performance' and 'Roof window type and performance' tables on this Certificate?

Does the external wall bulk insulation (R-value) shown on the External Wall type 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?

Does the floor insulation (R-value) shown on the NatHERS-stamped plans or as installed match what is shown in the 'Floor type' table on this certificate?

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

Does the ceiling insulation (R-value) shown on the NatHERS-stamped plans or as installed match what is shown in the 'Ceiling type' table on this Certificate?

Does the external roof shade (colour) on the NatHERS stamped plans or as installed match what is shown in the 'Roof type' table on this Certificate?

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.

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".

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?

Page 3 of 13

Certificate check

Continued

Approval stage		Construction stage		
Assessor checked	Consent authority/surveyor checked	Builder checked	Consent authority/surveyor checked	Occupancy/other

Additional NCC requirements for thermal performance (not included in the NatHERS assessment)

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

Does the dwelling meet the NCC requirements for Building Sealing?

☐ ☐ ☐ ☐

Whole of Home performance check (not applicable if a Whole of Home performance assessment is not conducted)

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 'Appliance schedule' on this Certificate?

☐ ☐ ☐ ☐ ☐

Does the hot water system type and efficiency/performance shown on the NatHERS-stamped plans or as installed match the minimum efficiency/performance requirements shown in the 'Appliance schedule' 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 'Appliance schedule' 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 NatHERS assessment)

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

Room schedule

Room	Zone Type	Area [m²]
Pantry	dayTime	11.5
Kitchen/Living	kitchen	74.8
Living	living	10.4
Laundry	dayTime	3.3
Powder room	unconditioned	3.8
Dirrect Access	dayTime	13.5
Hall 1	dayTime	7.7
Ensuite 1	nightTime	11.3
WIR	nightTime	17.2
Bedroom 1	bedroom	24.6
Hall 2	dayTime	5.1
Bathroom	dayTime	7.3
Study	dayTime	16.3
Bedroom 2	bedroom	13.3
Bedroom 3	bedroom	16.4
WIR	dayTime	5.4

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Window and glazed door type and performance

Default* windows

Window ID	Window description	Maximum U-value*	SHGC*	SHGC lower limit	SHGC upper limit
No Data Available					

Custom* windows

Window ID	Window description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
ALU-018-03 W	IDEAL 4000 Fixed Window DG LightBridge_ClrSO_6-12-6	1.48	0.39	0.37	0.41
ALU-004-09 W	60mm Sliding Window DG LightBridge_ClrSO_6-12-6	2.07	0.35	0.33	0.37
THC-023-03 B	Series EC35TB Awning Window DG 4ET-12Ar-4	2.51	0.47	0.45	0.49
THC-024-04 B	Series EC65TB Casement Window DG 6ET/12Ar/6	2.46	0.36	0.34	0.38

Window and glazed door schedule

Location	Window ID	Window no.	Height [mm]	Width [mm]	Window type	Opening %	Orientation	Window shading device*
Kitchen/Living	ALU-018-03 W	Opening 97	1500	2600	fixed	0.0	NW	No
Kitchen/Living	ALU-004-09 W	Opening 62	2900	6800	sliding	45.0	NE	No
Kitchen/Living	ALU-018-03 W	Opening 65	2300	1865	fixed	0.0	SW	No
Kitchen/Living	ALU-018-03 W	Opening 98	2370	2000	fixed	0.0	NE	No
Kitchen/Living	THC-023-03 B	Opening 102	2370	1000	awning	90.0	NE	No
Living	ALU-004-09 W	Opening 66	1700	2400	sliding	45.0	NW	No
WIR	ALU-018-03 W	Opening 75	1650	1400	fixed	0.0	SW	No
Bedroom 1	ALU-004-09 W	Opening 74	3160	2120	sliding	45.0	SW	No
Study	THC-024-04 B	Opening 71	3150	1100	casement	45.0	NW	No
Study	ALU-018-03 W	Opening 72	2150	1700	fixed	0.0	SW	No
Study	ALU-018-03 W	Opening 73	2150	1500	fixed	0.0	SW	No
Bedroom 2	ALU-004-09 W	Opening 70	3150	1500	sliding	45.0	SW	No
Bedroom 3	ALU-018-03 W	Opening 99	2300	1700	fixed	0.0	NE	No
Bedroom 3	ALU-004-09 W	Opening 69	3150	2710	sliding	45.0	SW	No

Roof window* type and performance value

Default* roof windows

Window ID	Window description	Maximum U-value	SHGC*
No Data Available			

Substitution tolerance ranges

SHGC lower limit	SHGC upper limit
------------------	------------------

Custom* roof windows

Window ID	Window description	Maximum U-value*	SHGC*
No Data Available			

Substitution tolerance ranges

SHGC lower limit	SHGC upper limit
------------------	------------------

Roof window* schedule

Location	Window ID	Window no.	Opening %	Area [m²]	Width [mm]	Orientation	Outdoor shade	Indoor shade
No Data Available								

Skylight* type and performance

Skylight ID	Skylight description	Skylight shaft reflectance
No Data Available		

Skylight* schedule

Location	Skylight ID	Skylight No.	Skylight shaft length [mm]	Area [m²]	Orientation	Outdoor shade	Diffuser
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No Data
AvailableExternal door *schedule*

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

External wall *type*

Wall ID	Wall type	Solar absorptance	Wall shade [colour]	Bulk insulation [R-value]	Reflective wall wrap*
1	123-129 - R2.7 Semi-exposed Concrete Wall	0.5	Medium	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R2.7)	No
2	123-129 - R2.7 External Concrete Wall	0.5	Medium	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R2.7)	No
3	123-129 - R2.7 Double Brick Finished	0.5	Medium	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R2.7)	No
4	123-129 - R2.7 External Concrete Wall	0.5	Medium		No

External wall *schedule*

Location	Wall ID	Height [mm]	Width [mm]	Orientation	Horizontal shading feature* maximum projection [mm]	Vertical shading feature* (yes/no)
Pantry	1	3200	1185	SE	0	No
Pantry	2	3200	1588	NE	0	No
Pantry	1	3200	3368	SE	0	No
Kitchen/Living	2	3200	3291	NW	8261	Yes
Kitchen/Living	2	3200	8330	NE	4711	Yes
Kitchen/Living	2	3200	5612	NW	0	No
Kitchen/Living	2	3200	2527	SW	0	Yes
Kitchen/Living	2	3200	317	NW	0	Yes
Kitchen/Living	2	3200	4118	NE	0	No
Living	2	3200	2456	NW	0	Yes
Laundry	1	3200	1253	SE	0	No
Dirrect Access	1	3200	5138	SE	0	No
Ensuite 1	1	3200	703	NE	0	No
WIR	3	3200	2409	SW	0	No
WIR	2	3200	4635	SE	0	Yes
WIR	1	3200	3394	SE	0	No
WIR	1	3200	1804	NE	0	No
Bedroom 1	3	3200	4232	SW	0	Yes

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Study	2	3200	2264	NW	0	Yes
Study	3	3200	4529	SW	0	No
Bedroom 2	2	3200	1753	SW	0	Yes
Bedroom 3	2	3200	2481	NE	0	Yes
Bedroom 3	2	3200	5095	NW	0	No
Bedroom 3	2	3200	323	W	0	Yes
Bedroom 3	2	3200	3077	SW	0	Yes
WIR	4	3200	605	NW	0	Yes

Internal wall type

Wall ID	Wall type	Area [m ²]	Bulk insulation
1	FR5 - Internal Plasterboard Stud Wall	290.4	

Floor type

Location	Construction	Area [m ²]	Sub-floor ventilation	Added insulation [R-value]	Covering
Pantry	FR5 - 250mm concrete slab	8.9	Enclosed	R0.0	Timber
Pantry	FR5 - 250mm concrete slab	2.6	Enclosed	R0.0	Timber
Kitchen/Living	FR5 - 250mm concrete slab	16.7	Enclosed	R0.0	Timber
Kitchen/Living	FR5 - 250mm concrete slab	48.5	Enclosed	R0.0	Timber
Kitchen/Living	FR5 - 250mm concrete slab	19.7	Enclosed	R0.0	Timber
Living	FR5 - 250mm concrete slab	10.4	Enclosed	R0.0	Timber
Laundry	FR5 - 250mm concrete slab	2.3	Enclosed	R0.0	Tiles
Powder room	FR5 - 250mm concrete slab	3.8	Enclosed	R0.0	Tiles
Dirrect Access	FR5 - 250mm concrete slab	13.5	Enclosed	R0.0	Timber
Hall 1	FR5 - 250mm concrete slab	7.7	Enclosed	R0.0	Timber
Ensuite 1	FR5 - 250mm concrete slab	11.3	Enclosed	R0.0	Tiles
WIR	FR5 - 250mm concrete slab	6.4	Enclosed	R0.0	Carpet
WIR	FR5 - 250mm concrete slab	10.9	Enclosed	R0.0	Carpet
Bedroom 1	FR5 - 250mm concrete slab	5.4	Enclosed	R0.0	Carpet
Bedroom 1	FR5 - 250mm concrete slab	19.2	Enclosed	R0.0	Carpet
Hall 2	FR5 - 250mm concrete slab	5.1	Enclosed	R0.0	Timber
Bathroom	FR5 - 250mm concrete slab	3.8	Enclosed	R0.0	Tiles
Bathroom	FR5 - 250mm concrete slab	3.5	Enclosed	R0.0	Tiles
Study	FR5 - 250mm concrete slab	3.8	Enclosed	R0.0	Timber
Study	FR5 - 250mm concrete slab	4.9	Elevated	R3.6	Timber
Study	FR5 - 250mm concrete slab	7.6	Enclosed	R0.0	Timber
Bedroom 2	FR5 - 250mm concrete slab	6.8	Enclosed	R0.0	Carpet
Bedroom 2	FR5 - 250mm concrete slab	6.4	Enclosed	R0.0	Carpet
Bedroom 3	FR5 - 250mm concrete slab	16.4	Enclosed	R0.0	Carpet

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WIR	FR5 - 250mm concrete slab	5.4	Enclosed	R0.0	Carpet
-----	---------------------------	-----	----------	------	--------

Ceiling type

Location	Construction material/type	Bulk insulation R-value [may include edge batt values]	Reflective wrap*
Pantry	Plasterboard	R3.6	No
Kitchen/Living	Plasterboard	R3.6	No
Kitchen/Living	Plasterboard	R3.6	No
WIR	Plasterboard	R3.6	No
Bedroom 1	Plasterboard	R3.6	No
Bathroom	Plasterboard	R3.6	No
Study	Plasterboard	R3.6	No
Study	Plasterboard	R3.6	No
Bedroom 2	Plasterboard	R3.6	No
Bedroom 3	Plasterboard	R3.6	No

Ceiling penetrations*

Location	Quantity	Type	Height [mm]	Width [mm]	Sealed/unsealed
Pantry	4	Downlights	80	80	Sealed
Kitchen/Living	26	Downlights	80	80	Sealed
Kitchen/Living	1	Exhaust Fans	250	250	Sealed
Living	4	Downlights	80	80	Sealed
Laundry	1	Exhaust Fans	250	250	Sealed
Laundry	1	Downlights	80	80	Sealed
Powder room	1	Exhaust Fans	250	250	Sealed
Powder room	1	Downlights	80	80	Sealed
Dirrect Access	5	Downlights	80	80	Sealed
Hall 1	3	Downlights	80	80	Sealed
Ensuite 1	1	Exhaust Fans	250	250	Sealed
Ensuite 1	4	Downlights	80	80	Sealed
WIR	6	Downlights	80	80	Sealed
Bedroom 1	9	Downlights	80	80	Sealed
Hall 2	1	Downlights	80	80	Sealed
Bathroom	1	Exhaust Fans	250	250	Sealed
Bathroom	2	Downlights	80	80	Sealed
Study	6	Downlights	80	80	Sealed
Bedroom 2	4	Downlights	80	80	Sealed
Bedroom 3	6	Downlights	80	80	Sealed

Ceiling fans

Location	Quantity	Diameter [mm]
No Data Available		

Roof type

Construction	Added insulation [R-value]	Solar absorptance	Roof shade [colour]
Slab:Slab - Suspended Slab : 250mm: 250mm Suspended Slab	0.0	0.5	Medium

Thermal bridging schedule for steel frame elements

Building element	Steel section dimensions [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.

Cooling system

Appliance/ system type	Location	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Whole of Home performance assessment conducted for this certificate.				

Heating system

Appliance/ system type	Location	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Whole of Home performance assessment conducted for this certificate.				

Hot water system

Appliance/ system type	Fuel type	Minimum efficiency/ performance	Hot Water CER Zone	Zone 3 STC	Assessed daily load
No Whole of Home performance assessment conducted for this certificate.					

Pool/spa equipment

Appliance/ system type	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Whole of Home performance assessment conducted for this certificate.			

Onsite renewable energy schedule

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

System type	Orientation	System size or generation capacity
No Whole of Home performance assessment conducted for this certificate.		

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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.

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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

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 be occupied and cooled or heated on standard occupancy assumptions. In some circumstances it will include garages.
COP	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 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 ventilated corridor in a Class 2 building.
Exposure category – exposed	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 – suburban	terrain with numerous, closely spaced obstructions below 10m e.g. suburban housing, heavily vegetated bushland areas.
Exposure category – protected	terrain with numerous, closely spaced obstructions over 10 m e.g. city and industrial areas.
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 (NCC) Class	the NCC groups buildings by their function and use, and assigns a classification code. NatHERS software models NCC Class 1, 2 or 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)	can be applied to walls, roofs and ceilings. When combined with an appropriate air gap and emissivity value, it provides insulative 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.

*Refer to glossary.

STCs	Small-scale Technology Certificates, certificates created by the REC registry for renewable energy technologies that may be bought and sold as part of the Small-scale Renewable Energy Scheme operated by the Clean Energy Regulatory
Thermal breaks	are materials with an R-value greater than or equal to 0.2 that must separate the metal frame from the cladding. This includes, but is not limited to, materials such as timber battens greater than or equal to 20mm thick, continuous thermal breaks such as polystyrene insulation sheeting, plastic strips or furring channels.
U-value	the rate of heat transfer through a window. The lower the U-value, the better the insulating ability.
Unconditioned	a zone within a dwelling that is assumed 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 subject wall/window. Includes privacy screens, other walls in the building (wing walls), fences, other buildings, vegetation (protected or listed heritage trees).
Window shading device	a device fixed to windows that provides shading e.g. window awnings or screens but excludes horizontal* or vertical shading features* (eg eaves and balconies)

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Nationwide House Energy Rating Scheme® NatHERS® Certificate

Generated on 27 Mar 2026 using FirstRate5: 5.5.5a (3.22)

Property

Address 202, 123-129 Erskine St,
Middle Park, VIC, 3206

Lot/DP N/A

NCC Class* Class 2

Floor/all Floors

Type New Home

Plans

Main plan N/A

Prepared by Cera Stribley Pty. Ltd.

Construction and environment

Assessed floor area [m²]*

Conditioned* 187.9

Unconditioned* 3.1

Total 191

Garage -

Exposure type

suburban

NatHERS climate zone

21 Melbourne RO



Accredited assessor

Name Gary Wertheimer

Business name GIW Environmental Solutions

Email gary@giv.com.au

Phone 0390445111

Accreditation No. DMN/10/2024

Assessor Accrediting Organisation Design Matters National

Declaration of interest No

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NCC Requirements

NCC provisions Volume 1

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



36 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	26.1	9.9
Load limits	55	38

Features determining load limits

Floor type	N/A
(lowest conditioned area)	
NCC climate zone 1 or 2	N
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 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. If contact the relevant local building regulating authority, noting that State and Territory variations may also apply.

Setting options:

Floor type:

CSOG – Concrete Slab on Ground

SF – Suspended Floor (or a mixture of CSOG and SF)

NA – Not Applicable

NCC climate Zone 1 or 2:

Yes

No

NA – not applicable

Outdoor living area:

Yes

No

NA – not applicable

Outdoor living area ceiling fan:

Yes

No

NA – not applicable

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:

No Whole of Home performance assessment conducted for this certificate.

Greenhouse gas emissions:

No Whole of Home performance assessment conducted for this certificate.

No Whole of Home performance assessment conducted for this certificate.

Graph key:



Predicted onsite renewable energy impact

No Whole of Home performance assessment conducted for this certificate.

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Certificate check

The checklist covers important items impacting the dwelling's ratings. It is recommended that the accuracy of the whole certificate is checked.

Note: The boxes indicate when and who should check each item. It is not mandatory to complete this checklist.

	Approval stage		Construction stage		
	Assessor checked	Consent authority/surveyor checked	Builder checked	Consent authority/surveyor checked	Occupancy/other
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					
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 'Window and glazed door schedule' and 'Roof window schedule' tables on this Certificate?	☐	☐	☐	☐	☐
Does the installed windows meet the substitution tolerances (AFRC* based SHGC* and U-values*) as shown in the 'Window and glazed door type and performance' and 'Roof window type and performance' 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 'Floor type' table on this certificate?	☐	☐	☐	☐	☐
Ceiling penetrations*					
Does the 'quantity' and 'type' of ceiling penetrations* (e.g. downlights, exhaust fans, etc) shown on the NatHERS-stamped plans or as installed match what is shown in the 'Ceiling penetrations' table on this Certificate?	☐	☐	☐	☐	☐
Ceiling					
Does the ceiling insulation (R-value) shown on the NatHERS-stamped plans or as installed match what is shown in the 'Ceiling type' 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 'Roof type' 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?	☐	☐	☐	☐	☐

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Certificate check

Continued

Approval stage		Construction stage		
Assessor checked	Consent authority/surveyor checked	Builder checked	Consent authority/surveyor checked	Occupancy/other

Additional NCC requirements for thermal performance (not included in the NatHERS assessment)

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

Does the dwelling meet the NCC requirements for Building Sealing?

☐ ☐ ☐ ☐

Whole of Home performance check (not applicable if a Whole of Home performance assessment is not conducted)

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 'Appliance schedule' on this Certificate?

☐ ☐ ☐ ☐

Does the hot water system type and efficiency/performance shown on the NatHERS-stamped plans or as installed match the minimum efficiency/performance requirements shown in the 'Appliance schedule' 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 'Appliance schedule' 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 NatHERS assessment)

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

Room schedule

Room	Zone Type	Area [m²]
Direct Access	dayTime	17.5
Kitchen/Living	kitchen	62
Bedroom 1	bedroom	19.4
WIR 1	nightTime	7.5
Ensuite 1	nightTime	13.5
Study Room	dayTime	5.1
Powder Room	dayTime	6.5
Pantry	dayTime	6.8
Laundry	dayTime	6.7
Hall	dayTime	6.7
Powder Room	unconditioned	3.1
Bathroom	dayTime	8.8
Bedroom 3	bedroom	14
Bedroom 2	bedroom	13.5

Window and glazed door type and performance

Default* windows

		Substitution tolerance ranges	
Window ID	Window description	SHGC lower limit	SHGC upper limit
No Data Available			

Custom* windows

Window ID	Window description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
ALU-018-03 W	IDEAL 4000 Fixed Window DG LightBridge_ClrSO_6-12-6	1.48	0.39	0.37	0.41
ALU-004-09 W	60mm Sliding Window DG LightBridge_ClrSO_6-12-6	2.07	0.35	0.33	0.37
ALU-002-09 W	Awning Id4000 DG LightBridge_ClrSO_5-14-5	1.67	0.3	0.28	0.32

Window and glazed door schedule

Location	Window ID	Window no.	Height [mm]	Width [mm]	Window type	Opening %	Orientation	Window shading device*
Direct Access	ALU-018-03 W	Opening 107	3100	2900	fixed	0.0	NE	No
Kitchen/Living	ALU-004-09 W	Opening 98	2800	6060	sliding	45.0	NE	No
Bedroom 1	ALU-018-03 W	Opening 97	2500	1800	fixed	0.0	NE	No

WIR 1	ALU-018-03 W	Opening 140	1930	1600	fixed	0.0	NE	No
Ensuite 1	ALU-004-09 W	Opening 104	3000	2160	sliding	45.0	SW	No
Study Room	ALU-018-03 W	Opening 109	3100	2880	fixed	0.0	SW	No
Pantry	ALU-018-03 W	Opening 137	1320	2000	fixed	0.0	SW	No
Bedroom 3	ALU-002-09 W	Opening 138	1320	2000	awning	90.0	SW	No
Bedroom 2	ALU-004-09 W	Opening 100	2800	3060	sliding	45.0	NE	No

Roof window* *type and performance value*

Default* roof windows

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

Custom* roof windows

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

Roof window* *schedule*

Location	Window ID	Window no.	Opening %	Area [m²]	Width [mm]	Orientation	Outdoor shade	Indoor shade
No Data Available								

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Skylight* *type and performance*

Skylight ID	Skylight description	Skylight shaft reflectance
No Data Available		

Skylight* *schedule*

Location	Skylight ID	Skylight No.	Skylight shaft length [mm]	Area [m²]	Orient-ation	Outdoor shade	Diffuser
No Data Available							

External door *schedule*

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

External wall *type*

Wall ID	Wall type	Solar absorptance	Wall shade [colour]	Bulk insulation [R-value]	Reflective wall wrap*
1	123-129 - R2.7 Semi-exposed Concrete Wall	0.5	Medium	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R2.7)	No

2	123-129 - R2.7 External Concrete Wall	0.5	Medium	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R2.7)	No
---	---------------------------------------	-----	--------	--	----

External wall schedule

Location	Wall ID	Height [mm]	Width [mm]	Orientation	Horizontal shading feature* maximum projection [mm]	Vertical shading feature* (yes/no)
Direct Access	1	3200	6055	NW	0	No
Direct Access	2	3200	2104	SE	0	Yes
Direct Access	2	3200	2905	NE	0	Yes
Kitchen/Living	2	3200	8046	NE	4534	Yes
Bedroom 1	2	3200	901	NW	0	Yes
Bedroom 1	2	3200	980	NE	0	No
Bedroom 1	2	3450	1849	NE	0	No
Bedroom 1	2	3200	550	NE	0	No
WIR 1	2	3200	4342	SE	0	No
WIR 1	2	3200	2038	NE	0	No
Ensuite 1	2	3200	2924	SW	0	Yes
Ensuite 1	2	3200	4593	SE	0	No
Study Room	1	3200	1759	NW	0	No
Study Room	2	3200	2936	SW	0	Yes
Powder Room	1	3200	2243	SW	0	No
Pantry	2	3200	1644	NW	0	Yes
Pantry	2	3200	3777	SW	3879	Yes
Laundry	2	3200	3728	SW	3871	Yes
Bathroom	2	3200	3072	SW	3882	Yes
Bedroom 3	2	3200	3053	SW	3876	Yes
Bedroom 2	2	3200	3534	NE	4560	Yes

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Internal wall type

Wall ID	Wall type	Area [m²]	Bulk insulation
1	FR5 - Internal Plasterboard Stud Wall	218	

Floor type

Location	Construction	Area [m²]	Sub-floor ventilation	Added insulation [R-value]	Covering
Direct Access	FR5 - 200mm concrete slab	17.5	Enclosed	R0.0	Timber
Kitchen/Living	FR5 - 200mm concrete slab	62	Enclosed	R0.0	Timber
Bedroom 1	FR5 - 200mm concrete slab	6.8	Enclosed	R0.0	Carpet
Bedroom 1	FR5 - 200mm concrete slab	12.6	Enclosed	R0.0	Carpet
WIR 1	FR5 - 200mm concrete slab	7.5	Enclosed	R0.0	Carpet

Ensuite 1	FR5 - 200mm concrete slab	13.5	Enclosed	R0.0	Tiles
Study Room	FR5 - 200mm concrete slab	5.1	Enclosed	R0.0	Timber
Powder Room	FR5 - 200mm concrete slab	6.5	Enclosed	R0.0	Timber
Pantry	FR5 - 200mm concrete slab	5.5	Enclosed	R0.0	Timber
Pantry	FR5 - 200mm concrete slab	1.3	Enclosed	R0.0	Timber
Laundry	FR5 - 200mm concrete slab	5.5	Enclosed	R0.0	Tiles
Laundry	FR5 - 200mm concrete slab	1.2	Enclosed	R0.0	Tiles
Hall	FR5 - 200mm concrete slab	6.7	Enclosed	R0.0	Timber
Powder Room	FR5 - 200mm concrete slab	3.1	Enclosed	R0.0	Tiles
Bathroom	FR5 - 200mm concrete slab	4.5	Enclosed	R0.0	Tiles
Bathroom	FR5 - 200mm concrete slab	4.2	Enclosed	R0.0	Tiles
Bedroom 3	FR5 - 200mm concrete slab	4.5	Enclosed	R0.0	Carpet
Bedroom 3	FR5 - 200mm concrete slab	9.5	Enclosed	R0.0	Carpet
Bedroom 2	FR5 - 200mm concrete slab	10.8	Enclosed	R0.0	Carpet
Bedroom 2	FR5 - 200mm concrete slab	2.7	Enclosed	R0.0	Carpet

Ceiling type

Location	Construction material/type	Bulk insulation R-value [may include edge batt values]	Reflective wrap*
Bedroom 1	Plasterboard	R3.6	No
WIR 1	Plasterboard	R3.6	No
Ensuite 1	Plasterboard	R3.6	No
Pantry	Plasterboard	R3.6	No
Laundry	Plasterboard	R3.6	No
Bathroom	Plasterboard	R3.6	No
Bedroom 3	Plasterboard	R3.6	No
Bedroom 2	Plasterboard	R3.6	No

Ceiling penetrations*

Location	Quantity	Type	Height [mm]	Width [mm]	Sealed/unsealed
Direct Access	5	Downlights	80	80	Sealed
Kitchen/Living	1	Exhaust Fans	250	250	Sealed
Kitchen/Living	24	Downlights	80	80	Sealed
Bedroom 1	7	Downlights	80	80	Sealed
WIR 1	2	Downlights	80	80	Sealed
Ensuite 1	1	Exhaust Fans	250	250	Sealed
Ensuite 1	4	Downlights	80	80	Sealed
Study Room	3	Downlights	80	80	Sealed
Powder Room	1	Exhaust Fans	250	250	Sealed

NatHERS Certificate

8.4 Star Rating as of 27 Mar 2026

Powder Room	2	Downlights	80	80	Sealed
Pantry	2	Downlights	80	80	Sealed
Laundry	1	Exhaust Fans	250	250	Sealed
Laundry	2	Downlights	80	80	Sealed
Hall	2	Downlights	80	80	Sealed
Powder Room	1	Downlights	80	80	Sealed
Powder Room	1	Exhaust Fans	250	250	Sealed
Bathroom	2	Downlights	80	80	Sealed
Bathroom	1	Exhaust Fans	250	250	Sealed
Bedroom 3	5	Downlights	80	80	Sealed
Bedroom 2	5	Downlights	80	80	Sealed

Ceiling fans

Location	Quantity	Diameter [mm]
No Data Available		

Roof type

Construction	Added insulation [R-value]	Soil absorptance	Roof shade [colour]
Slab:Slab - Suspended Slab : 200mm: 200mm Suspended Slab	0.0	0.5	Medium

Thermal bridging schedule for steel frame elements

Building element	Steel section dimensions [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.

Cooling system

Appliance/ system type	Location	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Whole of Home performance assessment conducted for this certificate.				

Heating system

Appliance/ system type	Location	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Whole of Home performance assessment conducted for this certificate.				

Hot water system

Appliance/ system type	Fuel type	Minimum efficiency/ performance	Hot Water CER Zone	Zone 3 STC	Assessed daily load
No Whole of Home performance assessment conducted for this certificate.					

Pool/spa equipment

Appliance/ system type	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Whole of Home performance assessment conducted for this certificate.			

Onsite renewable energy *schedule*

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

System type	Orientation	System size or generation capacity
No Whole of Home performance assessment conducted for this certificate.		

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.	

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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

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 be occupied and cooled or heated on standard occupancy assumptions. In some circumstances it will include garages.
COP	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 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 ventilated corridor in a Class 2 building.
Exposure category – exposed	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 – suburban	terrain with numerous, closely spaced obstructions below 10m e.g. suburban housing, heavily vegetated bushland areas.
Exposure category – protected	terrain with numerous, closely spaced obstructions over 10 m e.g. city and industrial areas.
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 (NCC) Class	the NCC groups buildings by their function and use, and assigns a classification code. NatHERS software models NCC Class 1, 2 or 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)	can be applied to walls, roofs and ceilings. When combined with an appropriate air gap and emissivity value, it provides insulative 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.

*Refer to glossary.

STCs	Small-scale Technology Certificates, certificates created by the REC registry for renewable energy technologies that may be bought and sold as part of the Small-scale Renewable Energy Scheme operated by the Clean Energy Regulatory
Thermal breaks	are materials with an R-value greater than or equal to 0.2 that must separate the metal frame from the cladding. This includes, but is not limited to, materials such as timber battens greater than or equal to 20mm thick, continuous thermal breaks such as polystyrene insulation sheeting, plastic strips or furring channels.
U-value	the rate of heat transfer through a window. The lower the U-value, the better the insulating ability.
Unconditioned	a zone within a dwelling that is assumed 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 subject wall/window. Includes privacy screens, other walls in the building (wing walls), fences, other buildings, vegetation (protected or listed heritage trees).
Window shading device	a device fixed to windows that provides shading e.g. window awnings or screens but excludes horizontal* or vertical shading features* (eg eaves and balconies)

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Nationwide House Energy Rating Scheme® NatHERS® Certificate

Thermal performance
star rating

Generated on 27 Mar 2026 using FirstRate5: 5.5.5a (3.22)

Property

Address 301, 123-129 Erskine St,
Middle Park, VIC, 3206

Lot/DP N/A

NCC Class* Class 2

Floor/all Floors

Type New Home

Plans

Main plan N/A

Prepared by Cera Stribley Pty. Ltd.

Construction and environment

Assessed floor area [m²]*

Conditioned*	293.3
Unconditioned*	3.5
Total	296.8
Garage	-

Exposure type open

NatHERS climate zone 21 Melbourne RO



Accredited assessor

Name Gary Wertheimer

Business name GIW Environmental Solutions

Email gary@giv.com.au

Phone 0390445111

Accreditation No. DMN/10/2024

Assessor Accrediting Organisation Design Matters National

Declaration of interest No

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59.8 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	38.6	21.1
Load limits	55	38

Features determining load limits

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

NCC Requirements

NCC provisions Volume 1

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.

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 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:

Floor type:

CSOG – Concrete Slab on Ground

SF – Suspended Floor (or a mixture of CSOG and SF)

NA – Not Applicable

NCC climate Zone 1 or 2:

Yes

No

NA – not applicable

Outdoor living area:

Yes

No

NA – not applicable

Outdoor living area ceiling fan:

Yes

No

NA – not applicable

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:

No Whole of Home performance assessment conducted for this certificate.

Greenhouse gas emissions:

No Whole of Home performance assessment conducted for this certificate.

No Whole of Home performance assessment conducted for this certificate.

Graph key:



Predicted onsite renewable energy impact

No Whole of Home performance assessment conducted for this certificate.

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Certificate check

The checklist covers important items impacting the dwelling's ratings. It is recommended that the accuracy of the whole certificate is checked.

Note: The boxes indicate when and who should check each item. It is not mandatory to complete this checklist.

	Approval stage		Construction stage		
	Assessor checked	Consent authority/surveyor checked	Builder checked	Consent authority/surveyor checked	Occupancy/other
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					
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 'Window and glazed door schedule' and 'Roof window schedule' tables on this Certificate?	☐	☐	☐	☐	☐
Does the installed windows meet the substitution tolerances (AFRC* based SHGC* and U-values*) as shown in the 'Window and glazed door type and performance' and 'Roof window type and performance' 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 'Floor type' table on this certificate?	☐	☐	☐	☐	☐
Ceiling penetrations*					
Does the 'quantity' and 'type' of ceiling penetrations* (e.g. downlights, exhaust fans, etc) shown on the NatHERS-stamped plans or as installed match what is shown in the 'Ceiling penetrations' table on this Certificate?	☐	☐	☐	☐	☐
Ceiling					
Does the ceiling insulation (R-value) shown on the NatHERS-stamped plans or as installed match what is shown in the 'Ceiling type' 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 'Roof type' 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?	☐	☐	☐	☐	☐

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Certificate check

Continued

Approval stage		Construction stage		
Assessor checked	Consent authority/surveyor checked	Builder checked	Consent authority/surveyor checked	Occupancy/other

Additional NCC requirements for thermal performance (not included in the NatHERS assessment)

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

Does the dwelling meet the NCC requirements for Building Sealing?

☐ ☐ ☐ ☐

Whole of Home performance check (not applicable if a Whole of Home performance assessment is not conducted)

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 'Appliance schedule' on this Certificate?

☐ ☐ ☐ ☐

Does the hot water system type and efficiency/performance shown on the NatHERS-stamped plans or as installed match the minimum efficiency/performance requirements shown in the 'Appliance schedule' 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 'Appliance schedule' 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 NatHERS assessment)

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

Room schedule

Room	Zone Type	Area [m²]
Kitchen/Living	kitchen	113.5
Bedroom 3	bedroom	16.7
Butlers Kitchen	dayTime	11
Pantry	dayTime	14.8
Bedroom 2	bedroom	17.1
Powder Room	unconditioned	3.5
Direct Access	dayTime	11.9
Laundry	dayTime	4.9
Living	living	18.4
Ensuite	nightTime	10.6
Bedroom 1	bedroom	26.1
WIR 1	nightTime	5.2
Hall	dayTime	28.8
Bedroom 3 Ensuite	nightTime	5.1
Bedroom 2 Ensuite	nightTime	5.4
Bedroom 2 WIR	nightTime	3.9

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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
No Data Available					

Custom* windows

Window ID	Window description	Maximum	SHGC*	Substitution tolerance ranges	
		U-value*		SHGC lower limit	SHGC upper limit
ALU-004-09 W	60mm Sliding Window DG LightBridge_ClrSO_6-12-6	2.07	0.35	0.33	0.37
ALU-018-03 W	IDEAL 4000 Fixed Window DG LightBridge_ClrSO_6-12-6	1.48	0.39	0.37	0.41

Window and glazed door schedule

Location	Window ID	Window no.	Height [mm]	Width [mm]	Window type	Opening %	Orientation	Window shading device*
Kitchen/Living	ALU-004-09 W	Opening 204	3250	2857	sliding	45.0	NW	Yes
Kitchen/Living	ALU-004-09 W	Opening 203	3250	3000	sliding	45.0	NW	Yes

Kitchen/Living	ALU-018-03 W	Opening 262	3250	1200	fixed	0.0	SW	No
Kitchen/Living	ALU-004-09 W	Opening 202	3250	3000	sliding	45.0	NW	No
Kitchen/Living	ALU-018-03 W	Opening 263	3250	1200	fixed	0.0	NE	No
Kitchen/Living	ALU-004-09 W	Opening 201	3250	2950	sliding	45.0	NW	Yes
Kitchen/Living	ALU-004-09 W	Opening 260	3250	3150	sliding	45.0	SW	No
Kitchen/Living	ALU-004-09 W	Opening 189	3250	3150	sliding	45.0	SW	No
Kitchen/Living	ALU-004-09 W	Opening 190	3250	2400	sliding	45.0	SW	No
Kitchen/Living	ALU-004-09 W	Opening 207	3250	2300	sliding	45.0	NE	Yes
Kitchen/Living	ALU-004-09 W	Opening 261	3250	2300	sliding	45.0	NE	Yes
Kitchen/Living	ALU-004-09 W	Opening 206	3250	2300	sliding	45.0	NE	Yes
Bedroom 3	ALU-004-09 W	Opening 251	3250	1675	sliding	45.0	NE	Yes
Bedroom 3	ALU-004-09 W	Opening 221	3250	1456	sliding	45.0	NE	Yes
Pantry	ALU-004-09 W	Opening 209	3250	2300	sliding	45.0	NE	Yes
Bedroom 2	ALU-004-09 W	Opening 249	3250	1675	sliding	45.0	NE	Yes
Bedroom 2	ALU-004-09 W	Opening 250	3250	1571	sliding	45.0	NE	Yes
Direct Access	ALU-018-03 W	Opening 210	3250	2000	fixed	0.0	NE	Yes
Living	ALU-004-09 W	Opening 222	3250	1511	sliding	45.0	NE	Yes
Living	ALU-018-03 W	Opening 223	3250	774	fixed	0.0	NE	Yes
Ensuite	ALU-004-09 W	Opening 247	3250	1675	sliding	45.0	NE	Yes
Ensuite	ALU-004-09 W	Opening 217a	3250	1675	sliding	45.0	NE	Yes
Bedroom 1	ALU-004-09 W	Opening 252	3250	3150	sliding	45.0	SW	No
Bedroom 1	ALU-004-09 W	Opening 198	3250	3150	sliding	45.0	SW	No
Bedroom 1	ALU-004-09 W	Opening 199	3250	2670	sliding	45.0	SE	Yes
Bedroom 1	ALU-004-09 W	Opening 200	3250	2670	sliding	45.0	SE	Yes
Bedroom 1	ALU-004-09 W	Opening 248	3250	1675	sliding	45.0	NE	Yes
Hall	ALU-018-03 W	Opening 243	3250	750	fixed	0.0	SW	No
Hall	ALU-004-09 W	Opening 192	3250	3150	sliding	45.0	SW	No
Hall	ALU-004-09 W	Opening 242	3250	3150	sliding	45.0	SW	No
Hall	ALU-004-09 W	Opening 194	3250	3150	sliding	45.0	SW	No
Hall	ALU-004-09 W	Opening 195	3250	3150	sliding	45.0	SW	No

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Roof window* type and performance value

Default* roof windows

Window ID	Window description	Maximum U-value*	SHGC*	SHGC lower limit	SHGC upper limit
No Data Available					

Custom* roof windows

Substitution tolerance ranges

Window ID	Window description	Maximum U-value*	SHGC*	SHGC lower limit	SHGC upper limit
No Data Available					

Roof window* schedule

Location	Window ID	Window no.	Opening %	Area [m²]	Width [mm]	Orientation	Outdoor shade	Indoor shade
No Data Available								

Skylight* type and performance

Skylight ID	Skylight description	Skylight shaft reflectance
No Data Available		

Skylight* schedule

Location	Skylight ID	Skylight No.	Skylight shaft length [mm]	Area [m²]	Orientation	Outdoor shade	Diffuser
No Data Available							

External door schedule

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

External wall type

Wall ID	Wall type	Solar absorptance	Wall shade [colour]	Bulk insulation [R-value]	Reflective wall wrap*
1	123-129 - R2.7 External Concrete Wall	0.5	Medium	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R2.7)	No
2	123-129 - R2.7 Semi-exposed Concrete Wall	0.5	Medium	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R2.7)	No
3	123-129 - R2.7 External Concrete Wall	0.5	Medium		No

External wall schedule

Location	Wall ID	Height [mm]	Width [mm]	Orientation	Horizontal shading feature* maximum projection [mm]	Vertical shading feature* (yes/no)
Kitchen/Living	1	3250	3076	NW	328	Yes
Kitchen/Living	1	3250	355	NW	301	Yes
Kitchen/Living	1	3250	3305	NW	301	Yes
Kitchen/Living	1	3250	1251	SW	0	Yes
Kitchen/Living	1	3250	3328	NW	1551	Yes
Kitchen/Living	1	3250	1227	NE	0	Yes
Kitchen/Living	1	3250	3276	NW	300	Yes

Kitchen/Living	1	3250	3161	SW	305	Yes
Kitchen/Living	1	3250	271	SW	305	Yes
Kitchen/Living	1	3250	3224	SW	305	Yes
Kitchen/Living	1	3250	275	SW	311	Yes
Kitchen/Living	1	3250	2414	SW	311	Yes
Kitchen/Living	2	3250	1156	SE	0	No
Kitchen/Living	1	3250	2302	NE	195	Yes
Kitchen/Living	1	3250	389	NE	0	Yes
Kitchen/Living	1	3250	2356	NE	129	Yes
Kitchen/Living	1	3250	307	NE	129	Yes
Kitchen/Living	1	3250	3132	NE	129	Yes
Bedroom 3	1	3250	1615	NE	369	Yes
Bedroom 3	1	3250	385	NE	0	Yes
Bedroom 3	1	3250	1607	NE	315	Yes
Butlers Kitchen	2	3250	2766	SE	0	No
Pantry	1	3250	2593	NE	281	Yes
Pantry	2	3250	5736	SE	0	No
Bedroom 2	1	3250	347	NE	0	Yes
Bedroom 2	1	3250	347	NE	0	Yes
Bedroom 2	1	3250	347	NE	0	Yes
Powder Room	2	3250	2220	NE	0	No
Direct Access	1	3250	1198	NE	0	Yes
Direct Access	2	3250	7116	NW	0	No
Living	1	3250	1652	NE	406	Yes
Living	1	3250	1481	NW	0	Yes
Living	1	3250	1031	NE	0	Yes
Ensuite	1	3250	1671	NE	371	Yes
Ensuite	1	3250	208	NE	371	Yes
Ensuite	1	3250	1677	NE	371	Yes
Bedroom 1	1	3250	3128	SW	434	Yes
Bedroom 1	3	3250	337	SW	458	No
Bedroom 1	3	3250	3175	SW	458	Yes
Bedroom 1	1	3250	2621	SE	267	Yes
Bedroom 1	1	3250	412	SE	259	Yes
Bedroom 1	1	3250	2610	SE	267	Yes
Bedroom 1	1	3250	318	SE	266	Yes
Bedroom 1	1	3250	391	NE	0	Yes
Bedroom 1	1	3250	1724	NE	433	Yes
Hall	1	3250	748	SW	312	Yes

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Hall	1	3250	323	SW	312	Yes
Hall	1	3250	3218	SW	312	Yes
Hall	1	3250	475	SE	0	Yes
Hall	1	3250	3354	SW	373	Yes
Hall	1	3250	542	NW	0	Yes
Hall	1	3250	3251	SW	463	Yes
Hall	1	3250	353	SW	463	Yes
Hall	1	3250	3355	SW	412	Yes
Hall	2	3250	400	NE	0	No

Internal wall type

Wall ID	Wall type	Area [m²]	Bulk insulation
1	FR5 - Internal Plasterboard Stud Wall	316.4	

Floor type

Location	Construction	Area [m²]	Sub-floor ventilation	Added insulation [R-value]	Covering
Kitchen/Living	FR5 - 200mm concrete slab	2.8	Elevated	R3.6	Timber
Kitchen/Living	FR5 - 200mm concrete slab	3.9	Enclosed	R0.0	Timber
Kitchen/Living	FR5 - 200mm concrete slab	72.8	Enclosed	R0.0	Timber
Kitchen/Living	FR5 - 200mm concrete slab	1.9	Elevated	R3.6	Timber
Bedroom 3	FR5 - 200mm concrete slab	10.7	Enclosed	R0.0	Carpet
Bedroom 3	FR5 - 200mm concrete slab	5.9	Elevated	R3.6	Carpet
Butlers Kitchen	FR5 - 200mm concrete slab	1.4	Enclosed	R0.0	Timber
Pantry	FR5 - 200mm concrete slab	14.8	Enclosed	R0.0	Timber
Bedroom 2	FR5 - 200mm concrete slab	15.5	Enclosed	R0.0	Carpet
Bedroom 2	FR5 - 200mm concrete slab	1.6	Elevated	R3.6	Carpet
Powder Room	FR5 - 200mm concrete slab	3.5	Enclosed	R0.0	Tiles
Direct Access	FR5 - 200mm concrete slab	11.9	Enclosed	R0.0	Timber
Laundry	FR5 - 200mm concrete slab	4.9	Enclosed	R0.0	Tiles
Living	FR5 - 200mm concrete slab	13.7	Enclosed	R0.0	Timber
Living	FR5 - 200mm concrete slab	4.6	Elevated	R3.6	Timber
Ensuite	FR5 - 200mm concrete slab	10.6	Enclosed	R0.0	Tiles
Bedroom 1	FR5 - 200mm concrete slab	26.1	Enclosed	R0.0	Carpet
WIR 1	FR5 - 200mm concrete slab	5.2	Enclosed	R0.0	Carpet
Hall	FR5 - 200mm concrete slab	28.8	Enclosed	R0.0	Timber
Bedroom 3 Ensuite	FR5 - 200mm concrete slab	5.1	Enclosed	R0.0	Tiles
Bedroom 2 Ensuite	FR5 - 200mm concrete slab	5.4	Enclosed	R0.0	Tiles
Bedroom 2 WIR	FR5 - 200mm concrete slab	3.9	Enclosed	R0.0	Carpet

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Ceiling type

Location	Construction material/type	Bulk insulation R-value [may include edge batt values]	Reflective wrap*
Kitchen/Living	Plasterboard	R3.6	No
Kitchen/Living	Plasterboard	R3.6	No

Ceiling penetrations*

Location	Quantity	Type	Height [mm]	Width [mm]	Sealed/unsealed
Kitchen/Living	24	Downlights	80	80	Sealed
Kitchen/Living	1	Exhaust Fans	250	250	Sealed
Bedroom 3	6	Downlights	90	90	Sealed
Butlers Kitchen	3	Downlights	80	80	Sealed
Butlers Kitchen	1	Exhaust Fans	250	250	Sealed
Pantry	3	Downlights	80	80	Sealed
Bedroom 2	6	Downlights	80	80	Sealed
Powder Room	1	Downlights	80	80	Sealed
Powder Room	1	Exhaust Fans	250	250	Sealed
Direct Access	5	Downlights	80	80	Sealed
Laundry	1	Downlights	80	80	Sealed
Laundry	1	Exhaust Fans	250	250	Sealed
Living	7	Downlights	80	80	Sealed
Ensuite	4	Downlights	80	80	Sealed
Ensuite	1	Exhaust Fans	250	250	Sealed
Bedroom 1	10	Downlights	80	80	Sealed
WIR 1	2	Downlights	80	80	Sealed
Hall	10	Downlights	80	80	Sealed
Bedroom 3 Ensuite	2	Downlights	80	80	Sealed
Bedroom 3 Ensuite	1	Exhaust Fans	250	250	Sealed
Bedroom 2 Ensuite	2	Downlights	80	80	Sealed
Bedroom 2 Ensuite	1	Exhaust Fans	250	250	Sealed
Bedroom 2 WIR	1	Downlights	80	80	Sealed

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Ceiling fans

Location	Quantity	Diameter [mm]
No Data Available		

Roof type

Construction	Added insulation [R-value]	Solar absorptance	Roof shade [colour]
--------------	----------------------------	-------------------	---------------------

Slab: Slab - Suspended Slab : 200mm: 200mm
Suspended Slab

0.0

0.5

Medium

Thermal bridging *schedule for steel frame elements*

Building element	Steel section dimensions [height x width, mm]	Frame spacing [mm]	Steel thickness [BMT, mm]	Thermal break [R-value]
External wall	90 x 40	600	0.75	0

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.

Cooling system

Appliance/ system type	Location	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Whole of Home performance assessment conducted for this certificate.				

Heating system

Appliance/ system type	Location	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Whole of Home performance assessment conducted for this certificate.				

Hot water system

Appliance/ system type	Fuel type	Minimum efficiency/ performance	Hot Water CER Zone	Zone 3 STC	Assessed daily load
No Whole of Home performance assessment conducted for this certificate.					

Pool/spa equipment

Appliance/ system type	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Whole of Home performance assessment conducted for this certificate.			

Onsite renewable energy *schedule*

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

System type	Orientation	System size or generation capacity
No Whole of Home performance assessment conducted for this certificate.		

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.	

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

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 be occupied and heated or cooled on standard occupancy assumptions. In some circumstances it will include garages.
COP	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 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 ventilated corridor in a Class 2 building.
Exposure category – exposed	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 – suburban	terrain with numerous, closely spaced obstructions below 10m e.g. suburban housing, heavily vegetated bushland areas.
Exposure category – protected	terrain with numerous, closely spaced obstructions over 10 m e.g. city and industrial areas.
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 (NCC) Class	the NCC groups buildings by their function and use, and assigns a classification code. NatHERS software models NCC Class 1, 2 or 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)	can be applied to walls, roofs and ceilings. When combined with an appropriate air gap and emissivity value, it provides insulative 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.

*Refer to glossary.

STCs	Small-scale Technology Certificates, certificates created by the REC registry for renewable energy technologies that may be bought and sold as part of the Small-scale Renewable Energy Scheme operated by the Clean Energy Regulatory
Thermal breaks	are materials with an R-value greater than or equal to 0.2 that must separate the metal frame from the cladding. This includes, but is not limited to, materials such as timber battens greater than or equal to 20mm thick, continuous thermal breaks such as polystyrene insulation sheeting, plastic strips or furring channels.
U-value	the rate of heat transfer through a window. The lower the U-value, the better the insulating ability.
Unconditioned	a zone within a dwelling that is assumed 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 subject wall/window. Includes privacy screens, other walls in the building (wing walls), fences, other buildings, vegetation (protected or listed heritage trees).
Window shading device	a device fixed to windows that provides shading e.g. window awnings or screens but excludes horizontal* or vertical shading features* (eg eaves and balconies)

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Nationwide House Energy Rating Scheme® NatHERS® Certificate

Generated on 27 Mar 2026 using FirstRate5: 5.5.5a (3.22)

Property

Address 401, 123-129 Erskine St,
Middle Park, VIC, 3206

Lot/DP N/A

NCC Class* Class 2

Floor/all Floors Type New Home

Plans

Main plan N/A

Prepared by Cera Stribley Pty. Ltd.

Construction and environment

Assessed floor area [m²]*		Exposure type
Conditioned*	252.7	open
Unconditioned*	3.5	NatHERS climate zone
Total	256.2	21 Melbourne RO
Garage	-	



Accredited assessor

Name Gary Wertheimer

Business name GIW Environmental Solutions

Email gary@giv.com.au

Phone 03904451111

Accreditation No. DMN/10/2024

Assessor Accrediting Organisation Design Matters National

Declaration of interest No

NCC Requirements

NCC provisions Volume 1

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



Thermal performance [MJ/m²]

Limits taken from ABCB Standard 2022

	Heating	Cooling
Modelled	45.1	22.4
Load limits	55	38

Features determining load limits

Floor type	N/A
(lowest conditioned area)	
NCC climate zone 1 or 2	Y
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 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. If contact the relevant local building regulating authority, noting that State and Territory variations may also apply.

Setting options:

Floor type:

CSOG – Concrete Slab on Ground

SF – Suspended Floor (or a mixture of CSOG and SF)

NA – Not Applicable

NCC climate Zone 1 or 2:

Yes

No

NA – not applicable

Outdoor living area:

Yes

No

NA – not applicable

Outdoor living area ceiling fan:

Yes

No

NA – not applicable

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:

No Whole of Home performance assessment conducted for this certificate.

Greenhouse gas emissions:

No Whole of Home performance assessment conducted for this certificate.

No Whole of Home performance assessment conducted for this certificate.

Graph key:



Predicted onsite renewable energy impact

No Whole of Home performance assessment conducted for this certificate.

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The checklist covers important items impacting the dwelling's ratings. It is recommended that the accuracy of the whole certificate is checked.

Note: The boxes indicate when and who should check each item. It is not mandatory to complete this checklist.

Certificate check	Approval stage		Construction stage		
	Assessor checked	Consent authority/surveyor checked	Builder checked	Consent authority/surveyor checked	Occupancy/other
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					
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 'Window and glazed door schedule' and 'Roof window schedule' tables on this Certificate?	☐	☐	☐	☐	☐
Does the installed windows meet the substitution tolerances (AFRC* based SHGC* and U-values*) as shown in the 'Window and glazed door type and performance' and 'Roof window type and performance' 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 'Floor type' table on this certificate?	☐	☐	☐	☐	☐
Ceiling penetrations*					
Does the 'quantity' and 'type' of ceiling penetrations* (e.g. downlights, exhaust fans, etc) shown on the NatHERS-stamped plans or as installed match what is shown in the 'Ceiling penetrations' table on this Certificate?	☐	☐	☐	☐	☐
Ceiling					
Does the ceiling insulation (R-value) shown on the NatHERS-stamped plans or as installed match what is shown in the 'Ceiling type' 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 'Roof type' 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?	☐	☐	☐	☐	☐

*Refer to glossary.

Certificate check

Continued

Approval stage		Construction stage		
Assessor checked	Consent authority/surveyor checked	Builder checked	Consent authority/surveyor checked	Occupancy/other

Additional NCC requirements for thermal performance (not included in the NatHERS assessment)

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

Does the dwelling meet the NCC requirements for Building Sealing?

☐
☐
☐
☐

Whole of Home performance check (not applicable if a Whole of Home performance assessment is not conducted)

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?

☐
☐
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☐

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 'Appliance schedule' on this Certificate?

☐
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☐

Does the hot water system type and efficiency/performance shown on the NatHERS-stamped plans or as installed match the minimum efficiency/performance requirements shown in the 'Appliance schedule' 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 'Appliance schedule' 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 NatHERS assessment)

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

Room schedule

Room	Zone Type	Area [m²]
Kitchen/Living	kitchen	81.7
Bedroom 3	bedroom	16.7
Butlers Kitchen	dayTime	7.1
Pantry	dayTime	9.9
Bedroom 2	bedroom	17.1
Powder Room	unconditioned	3.5
Direct Access	dayTime	11.9
Laundry	dayTime	4.9
Living	living	18.4
Ensuite	nightTime	10.6
Bedroom 1	bedroom	26.1
WIR 1	nightTime	5.2
Hall	dayTime	28.8
Bedroom 3 Ensuite	nightTime	5.1
Bedroom 2 Ensuite	nightTime	5.4
Bedroom 2 WIR	nightTime	3.9

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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
No Data Available					

Custom* windows

Window ID	Window description	Maximum	SHGC*	Substitution tolerance ranges	
		U-value*		SHGC lower limit	SHGC upper limit
ALU-004-09 W	60mm Sliding Window DG LightBridge_ClrSO_6-12-6	2.07	0.35	0.33	0.37
ALU-018-03 W	IDEAL 4000 Fixed Window DG LightBridge_ClrSO_6-12-6	1.48	0.39	0.37	0.41

Window and glazed door schedule

Location	Window ID	Window no.	Height [mm]	Width [mm]	Window type	Opening %	Orientation	Window shading device*
Kitchen/Living	ALU-004-09 W	Opening 204	3250	2997	sliding	45.0	NW	Yes
Kitchen/Living	ALU-004-09 W	Opening 203	3250	3000	sliding	45.0	NW	Yes

Kitchen/Living	ALU-004-09 W	Opening 202	3250	2850	sliding	45.0	NW	Yes
Kitchen/Living	ALU-004-09 W	Opening 201	3250	2950	sliding	45.0	NW	Yes
Kitchen/Living	ALU-004-09 W	Opening 189	3250	3150	sliding	45.0	SW	No
Kitchen/Living	ALU-004-09 W	Opening 190	3250	2400	sliding	45.0	SW	No
Kitchen/Living	ALU-004-09 W	Opening 241	3250	500	sliding	45.0	NE	No
Kitchen/Living	ALU-004-09 W	Opening 207	3250	2300	sliding	45.0	NE	No
Kitchen/Living	ALU-004-09 W	Opening 206	3250	2300	sliding	45.0	NE	No
Bedroom 3	ALU-004-09 W	Opening 251	3250	1675	sliding	45.0	NE	No
Bedroom 3	ALU-004-09 W	Opening 221	3250	1456	sliding	45.0	NE	No
Pantry	ALU-004-09 W	Opening 209	3250	1800	sliding	45.0	NE	No
Bedroom 2	ALU-004-09 W	Opening 249	3250	1675	sliding	45.0	NE	No
Bedroom 2	ALU-004-09 W	Opening 250	3250	1571	sliding	45.0	NE	No
Direct Access	ALU-018-03 W	Opening 210	3250	2000	fixed	0.0	NE	Yes
Living	ALU-004-09 W	Opening 222	3250	1511	sliding	45.0	NE	No
Living	ALU-018-03 W	Opening 211	3250	774	fixed	0.0	NE	Yes
Ensuite	ALU-004-09 W	Opening 247	3250	1675	sliding	45.0	NE	No
Ensuite	ALU-004-09 W	Opening 217	3250	1675	sliding	45.0	NE	No
Bedroom 1	ALU-004-09 W	Opening 252	3250	1067	sliding	45.0	SW	No
Bedroom 1	ALU-004-09 W	Opening 198	3250	3150	sliding	45.0	SW	No
Bedroom 1	ALU-004-09 W	Opening 199a	3250	2670	sliding	45.0	SE	No
Bedroom 1	ALU-004-09 W	Opening 200	3250	2670	sliding	45.0	SE	No
Bedroom 1	ALU-004-09 W	Opening 248	3250	1675	sliding	45.0	NE	No
Hall	ALU-018-03 W	Opening 243	3250	750	fixed	0.0	SW	No
Hall	ALU-004-09 W	Opening 192	3250	3150	sliding	45.0	SW	No
Hall	ALU-004-09 W	Opening 242	3250	2840	sliding	45.0	SW	No
Hall	ALU-004-09 W	Opening 194	3250	3150	sliding	45.0	SW	No
Hall	ALU-004-09 W	Opening 195	3250	3150	sliding	45.0	SW	No

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Roof window* type and performance value

Default* roof windows

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

Custom* roof windows

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

Roof window* schedule

Location	Window ID	Window no.	Opening %	Area [m ²]	Width [mm]	Orientation	Outdoor shade	Indoor shade
No Data Available								

Skylight* type and performance

Skylight ID	Skylight description	Skylight shaft reflectance
No Data Available		

Skylight* schedule

Location	Skylight ID	Skylight No.	Skylight shaft length [mm]	Area [m ²]	Orientation	Outdoor shade	Diffuser
No Data Available							

External door schedule

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

External wall type

Wall ID	Wall type	Solar absorptance (colour)	Wall shade	Bulk insulation [R-value]	Reflective wall wrap*
1	123-129 - R2.7 External Concrete Wall	0.5	Medium	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R2.7)	No
2	123-129 - R2.7 Semi-exposed Concrete Wall	0.5	Medium	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R2.7)	No
3	123-129 - R2.7 External Concrete Wall	0.5	Medium		No

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External wall schedule

Location	Wall ID	Height [mm]	Width [mm]	Orientation	Horizontal shading feature* maximum projection [mm]	Vertical shading feature* (yes/no)
Kitchen/Living	1	3250	2954	NW	3109	Yes
Kitchen/Living	1	3250	355	NW	3109	Yes
Kitchen/Living	1	3250	3011	NW	3109	Yes
Kitchen/Living	1	3250	379	NW	3109	Yes
Kitchen/Living	1	3250	3083	NW	3109	Yes
Kitchen/Living	1	3250	318	NW	3110	Yes
Kitchen/Living	1	3250	3104	NW	3101	Yes
Kitchen/Living	1	3250	3344	SW	234	Yes
Kitchen/Living	1	3250	275	SW	234	Yes
Kitchen/Living	1	3250	2414	SW	0	Yes

Kitchen/Living	2	3250	1195	SE	0	No
Kitchen/Living	1	3250	544	NE	497	Yes
Kitchen/Living	1	3250	338	NE	497	Yes
Kitchen/Living	1	3250	2337	NE	497	Yes
Kitchen/Living	1	3250	354	NE	0	Yes
Kitchen/Living	1	3250	2434	NE	497	Yes
Bedroom 3	1	3250	1615	NE	401	Yes
Bedroom 3	1	3250	385	NE	0	Yes
Bedroom 3	1	3250	1607	NE	347	Yes
Butlers Kitchen	2	3250	2672	SE	0	No
Pantry	1	3250	1727	NE	503	Yes
Pantry	2	3250	5716	SE	0	No
Bedroom 2	1	3250	1659	NE	538	Yes
Bedroom 2	1	3250	347	NE	0	Yes
Bedroom 2	1	3250	1573	NE	415	Yes
Powder Room	2	3250	2220	NE	0	No
Direct Access	1	3250	1983	NE	0	Yes
Direct Access	2	3250	1652	NE	0	No
Living	1	3250	1652	NE	439	Yes
Living	1	3250	1031	NE	0	Yes
Living	1	3250	1031	NE	0	Yes
Ensuite	1	3250	1571	NE	403	Yes
Ensuite	1	3250	208	NE	403	Yes
Ensuite	1	3250	1677	NE	403	Yes
Bedroom 1	1	3250	3128	SW	239	Yes
Bedroom 1	3	3250	337	SW	263	No
Bedroom 1	3	3250	3175	SW	263	Yes
Bedroom 1	1	3250	2621	SE	395	Yes
Bedroom 1	1	3250	412	SE	388	Yes
Bedroom 1	1	3250	2610	SE	396	Yes
Bedroom 1	1	3250	318	SE	396	Yes
Bedroom 1	1	3250	391	NE	0	Yes
Bedroom 1	1	3250	1724	NE	465	Yes
Hall	1	3250	748	SW	235	Yes
Hall	1	3250	323	SW	235	Yes
Hall	1	3250	3218	SW	235	Yes
Hall	1	3250	475	SE	0	Yes
Hall	1	3250	3354	SW	373	Yes
Hall	1	3250	542	NW	0	Yes

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Hall	1	3250	3251	SW	268	Yes
Hall	1	3250	353	SW	268	Yes
Hall	1	3250	3355	SW	217	Yes
Hall	2	3250	400	NE	0	No

Internal wall type

Wall ID	Wall type	Area [m²]	Bulk insulation
1	FR5 - Internal Plasterboard Stud Wall	308.3	

Floor type

Location	Construction	Area [m²]	Sub-floor ventilation	Added insulation [R-value]	Covering
Kitchen/Living	FR5 - 200mm concrete slab	81.7	Enclosed	R0.0	Timber
Bedroom 3	FR5 - 200mm concrete slab	16.7	Enclosed	R0.0	Carpet
Butlers Kitchen	FR5 - 200mm concrete slab	7.1	Enclosed	R0.0	Timber
Pantry	FR5 - 200mm concrete slab	9.9	Enclosed	R0.0	Timber
Bedroom 2	FR5 - 200mm concrete slab	17.1	Enclosed	R0.0	Carpet
Powder Room	FR5 - 200mm concrete slab	3.5	Enclosed	R0.0	Tiles
Direct Access	FR5 - 200mm concrete slab	11.9	Enclosed	R0.0	Timber
Laundry	FR5 - 200mm concrete slab	4.9	Enclosed	R0.0	Tiles
Living	FR5 - 200mm concrete slab	18.4	Enclosed	R0.0	Timber
Ensuite	FR5 - 200mm concrete slab	10.6	Enclosed	R0.0	Tiles
Bedroom 1	FR5 - 200mm concrete slab	26.1	Enclosed	R0.0	Carpet
WIR 1	FR5 - 200mm concrete slab	5.2	Enclosed	R0.0	Carpet
Hall	FR5 - 200mm concrete slab	28.8	Enclosed	R0.0	Timber
Bedroom 3 Ensuite	FR5 - 200mm concrete slab	5.1	Enclosed	R0.0	Tiles
Bedroom 2 Ensuite	FR5 - 200mm concrete slab	5.4	Enclosed	R0.0	Tiles
Bedroom 2 WIR	FR5 - 200mm concrete slab	3.9	Enclosed	R0.0	Carpet

Ceiling type

Location	Construction material/type	Bulk insulation R-value [may include edge batt values]	Reflective wrap*
Kitchen/Living	Plasterboard	R4.6	No
Bedroom 3	Plasterboard	R4.6	No
Butlers Kitchen	Plasterboard	R4.6	No
Pantry	Plasterboard	R4.6	No
Bedroom 2	Plasterboard	R4.6	No
Powder Room	Plasterboard	R4.6	No
Direct Access	Plasterboard	R4.6	No
Laundry	Plasterboard	R4.6	No
Living	Plasterboard	R4.6	No

Ensuite	Plasterboard	R4.6	No
Bedroom 1	Plasterboard	R4.6	No
WIR 1	Plasterboard	R4.6	No
Hall	Plasterboard	R4.6	No
Bedroom 3 Ensuite	Plasterboard	R4.6	No
Bedroom 2 Ensuite	Plasterboard	R4.6	No
Bedroom 2 WIR	Plasterboard	R4.6	No

Ceiling penetrations*

Location	Quantity	Type	Height [mm]	Width [mm]	Sealed/unsealed
Kitchen/Living	24	Downlights	80	80	Sealed
Kitchen/Living	1	Exhaust Fans	250	250	Sealed
Bedroom 3	6	Downlights	90	90	Sealed
Butlers Kitchen	3	Downlights	80	80	Sealed
Butlers Kitchen	1	Exhaust Fans	250	250	Sealed
Pantry	3	Downlights	80	80	Sealed
Bedroom 2	6	Downlights	80	80	Sealed
Powder Room	1	Downlights	80	80	Sealed
Powder Room	1	Exhaust Fans	250	250	Sealed
Direct Access	5	Downlights	80	80	Sealed
Laundry	5	Downlights	80	80	Sealed
Laundry	1	Exhaust Fans	250	250	Sealed
Living	7	Downlights	80	80	Sealed
Ensuite	4	Downlights	80	80	Sealed
Ensuite	1	Exhaust Fans	250	250	Sealed
Bedroom 1	10	Downlights	80	80	Sealed
WIR 1	2	Downlights	80	80	Sealed
Hall	10	Downlights	80	80	Sealed
Bedroom 3 Ensuite	2	Downlights	80	80	Sealed
Bedroom 3 Ensuite	1	Exhaust Fans	250	250	Sealed
Bedroom 2 Ensuite	2	Downlights	80	80	Sealed
Bedroom 2 Ensuite	1	Exhaust Fans	250	250	Sealed
Bedroom 2 WIR	1	Downlights	80	80	Sealed

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Ceiling fans

Location	Quantity	Diameter [mm]
No Data Available		

Roof type

Construction	Added insulation [R-value]	Solar absorptance	Roof shade [colour]
SlabExt:Slab - Suspended Slab - External Insul : 200mm: 200mm Suspended Slab - External Insul	0.0	0.5	Medium

Thermal bridging *schedule for steel frame elements*

Building element	Steel section dimensions [height x width, mm]	Frame spacing [mm]	Steel thickness [BMT,mm]	Thermal break [R-value]
External wall	90 x 40	600	0.75	0

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.

Cooling system

Appliance/ system type	Location	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Whole of Home performance assessment conducted for this certificate.				

Heating system

Appliance/ system type	Location	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Whole of Home performance assessment conducted for this certificate.				

Hot water system

Appliance/ system type	Fuel type	Minimum efficiency/ performance	Hot Water CER Zone	Zone 3 STC	Assessed daily load
No Whole of Home performance assessment conducted for this certificate.					

Pool/spa equipment

Appliance/ system type	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Whole of Home performance assessment conducted for this certificate.			

Onsite renewable energy *schedule*

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

System type	Orientation	System size or generation capacity
No Whole of Home performance assessment conducted for this certificate.		

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.	

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

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 be occupied and heated or cooled on standard occupancy assumptions. In some circumstances it will include garages.
COP	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 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 ventilated corridor in a Class 2 building.
Exposure category – exposed	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 – suburban	terrain with numerous, closely spaced obstructions below 10m e.g. suburban housing, heavily vegetated bushland areas.
Exposure category – protected	terrain with numerous, closely spaced obstructions over 10 m e.g. city and industrial areas.
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 (NCC) Class	the NCC groups buildings by their function and use, and assigns a classification code. NatHERS software models NCC Class 1, 2 or 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)	can be applied to walls, roofs and ceilings. When combined with an appropriate air gap and emissivity value, it provides insulative 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.

*Refer to glossary.

STCs	Small-scale Technology Certificates, certificates created by the REC registry for renewable energy technologies that may be bought and sold as part of the Small-scale Renewable Energy Scheme operated by the Clean Energy Regulatory
Thermal breaks	are materials with an R-value greater than or equal to 0.2 that must separate the metal frame from the cladding. This includes, but is not limited to, materials such as timber battens greater than or equal to 20mm thick, continuous thermal breaks such as polystyrene insulation sheeting, plastic strips or furring channels.
U-value	the rate of heat transfer through a window. The lower the U-value, the better the insulating ability.
Unconditioned	a zone within a dwelling that is assumed 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 subject wall/window. Includes privacy screens, other walls in the building (wing walls), fences, other buildings, vegetation (protected or listed heritage trees).
Window shading device	a device fixed to windows that provides shading e.g. window awnings or screens but excludes horizontal* or vertical shading features* (eg eaves and balconies)

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Appendix C – Renewable Energy

Inputs Solar PV

Peak Wattage of System	8.0 kWp
Azimuth	0 degrees
Inclination	10 degrees

Outputs Solar PV

Electricity Produced per Year	10721 kWh
No. Panels Required	18
Total Roof Area Required	33 sqm
Annual Carbon Savings	12008 kg CO ₂

Economic Output

Cost of System	12000.0 \$
Annual Savings	2144 \$
Simple Payback	5.6 Years

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Appendix D – Daylight Modelling

Scope of Modelling

We have undertaken daylight modelling for 4 sample units assessing both living and bedroom areas. Units G01, G02, 102 and 202 have been selected with consideration of internal layout, inherent and adjacent building shading features. These apartments selected to provide a representative sample for assessing overall compliance, to achieve the BESS performance requirements.

The development has been modelled under an equitable development rights scenario with a similar building to that of the proposed on the east and west boundaries.

Methodology

The daylight levels in apartments are benchmarked against the best practice requirements as set out under the Built Environment Sustainability Scorecard (BESS) tool: Indoor Environment Quality (IEQ) – Daylight Access Living Areas and Bedrooms. These levels are as follows:

"Dwellings should achieve the following daylight factors (DF)

- *80% of the total number of living rooms achieve a daylight factor greater than 1% to 90% of the floor area of each living area, including kitchens.*
- *80% of the total number of bedrooms achieve a daylight factor greater than 0.5% to 90% of the floor area in each room."*

The daylight modelling has been completed using the Radiance software suite, an accurate computing program used to predict light levels in a space prior to construction. Scene geometric data and material properties are interfaced into the Radiance software using DesignBuilder.

Daylight Factor has been calculated using a CIE uniform cloudy sky.

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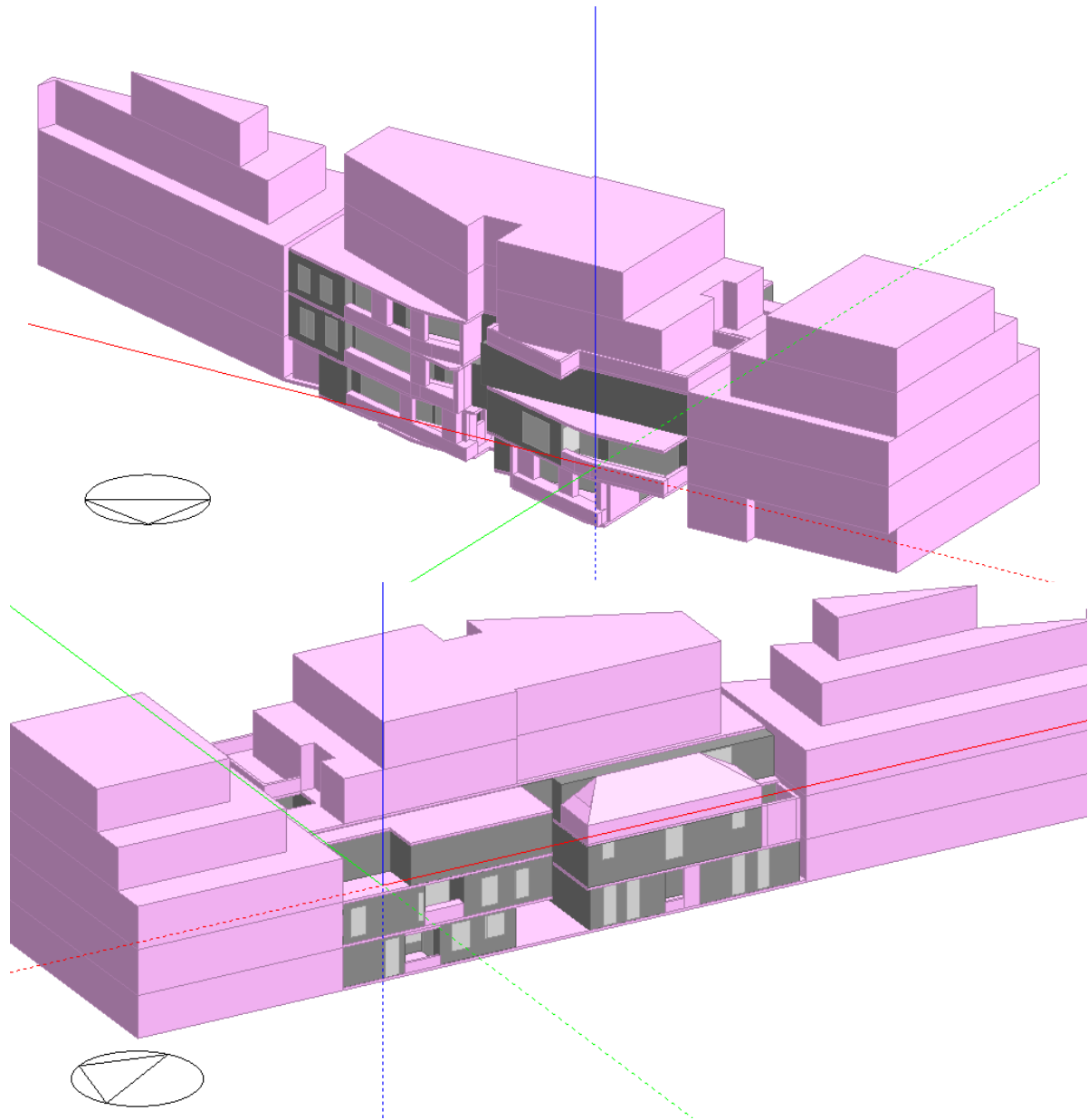


Figure 1 – DesignBuilder model of proposed and adjacent equitable development right buildings

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Modelling Assumptions

The following assumptions have been made with respect to the modelling:

- Modelled window dimensions and shading structures are as depicted on the Architectural drawings.
- The glazing performance used for external windows is as follows:
 - Double glazed, low-e, clear window with a total system VLT of 0.59.
- The internal reflectance of all materials is in accordance with the below:
 - Floors: 0.3
 - Walls: 0.7
 - Ceilings: 0.8
- Transient and unoccupied spaces such as corridors and wardrobes have been excluded from the modelled area.
- The reflectance of external buildings and structures is assumed to be 0.4.

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Daylight Results – Numerical

The daylight results for living areas of 123-129 Erskine Street, Middle Park can be summarised as follows:

Area	Floor Area (m2)	Floor Area above DF1 (m2)	% of floor area above DF1	Status
G01 Living	50.9	36.8	72.2	Non-Compliant
G02 Living	52.2	52.2	100.0	Compliant
102 Living	64.9	64.7	99.8	Compliant
102 Living 2	13.3	13.3	99.7	Compliant
202 Living	62.2	56.0	90.1	Compliant

The daylight results for bedrooms of 123-129 Erskine Street, Middle Park can be summarised as follows:

Area	Floor Area (m2)	Floor Area above DF0.5 (m2)	% of floor area above DF0.5	Status
G01 Bed 1	17.7	17.7	100.0	Compliant
G01 Bed 2	12.1	12.1	100.0	Compliant
G01 Bed 3	18.6	18.6	100.0	Compliant
G02 Bed 1	20.5	20.5	100.0	Compliant
G02 Bed 2	11.3	11.3	100.0	Compliant
G02 Bed 3	11.6	11.6	100.0	Compliant
102 Bed 1	23.8	23.8	100.0	Compliant
102 Bed 2	9.9	9.9	100.0	Compliant
102 Bed 3	10.8	10.8	100.0	Compliant
202 Bed 1	12.3	12.3	100.0	Compliant
202 Bed 2	25.7	25.7	100.0	Compliant
202 Bed 3	14.3	14.3	100.0	Compliant

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Daylight Results – Visual



Figure 2 - Daylight Map – G01

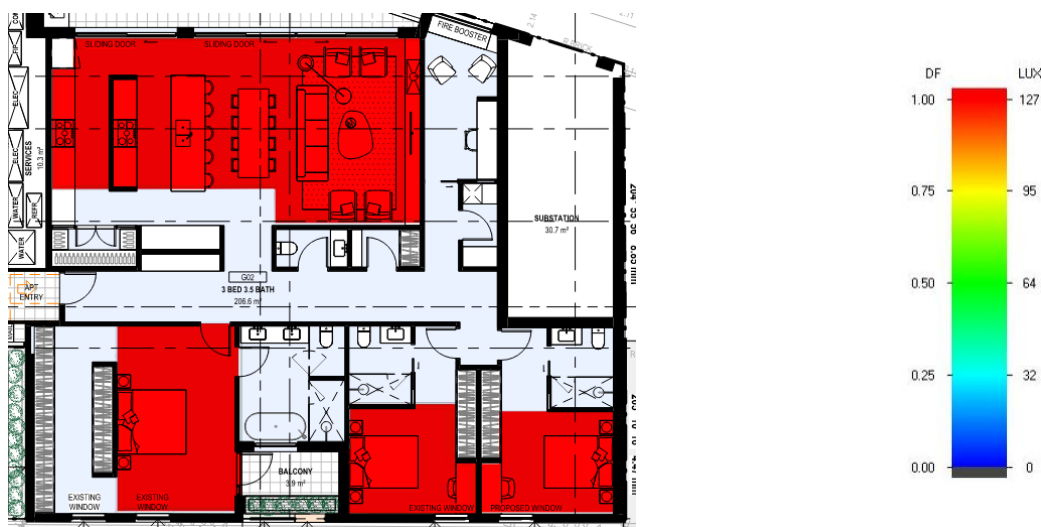


Figure 3 - Daylight Map – G02

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Figure 4 - Daylight Map - 102



Figure 5 - Daylight Map - 202

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Overall Building Results

Apartment No.	Total Living Areas	Living Areas Compliant	Total Bedrooms	Bedrooms Compliant
G01	1	0	3	3
G02	1	1	3	3
101	2	1	3	3
102	2	2	3	3
201	2	2	3	3
202	1	1	3	3
301	2	2	3	3
401	2	2	3	3
TOTAL	13	11	24	24
Percentage	85%		100%	

Conclusion

The development has been assessed and it has been determined that 85% of living areas and 100% of bedrooms will achieve the daylight factors as prescribed under BESS and therefore the development will meet the BESS IEQ guidelines for daylight.

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Appendix E – BESS Assessment

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BESS Report

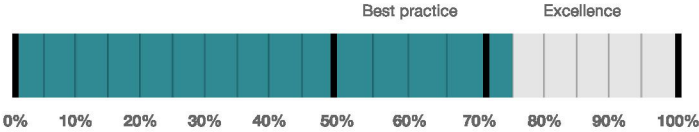
Built Environment Sustainability Scorecard

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This BESS report outlines the sustainable design commitments of the proposed development at 123 Erskine St Middle Park Victoria 3206. The BESS report and accompanying documents and evidence are submitted in response to the requirement for a Sustainable Design Assessment or Sustainability Management Plan at Port Phillip City Council.

Note that where a Sustainability Management Plan is required, the BESS report must be accompanied by a report that further demonstrates the development's potential to achieve the relevant environmental performance outcomes and documents the means by which the performance outcomes can be achieved.

Your BESS Score



75%

Project details

Name 123-129 Erskine Street, Middle Park VIC, Australia
Address 123 Erskine St Middle Park Victoria 3206
Project ID E3AAB40C-R3
BESS Version BESS-9
Date 09 April 2026
Software version 2.3.0-B.649

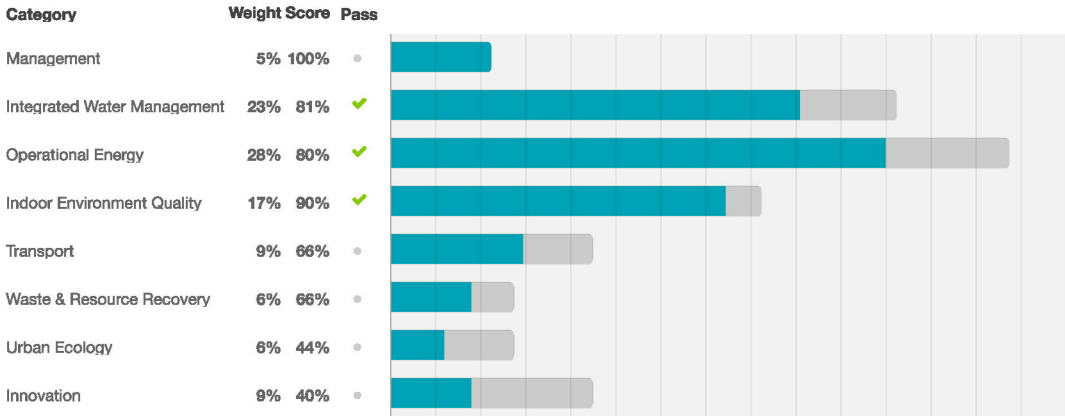
Site type Multi unit development (apartment building)
Account [REDACTED]
Application no. [REDACTED]
Site area 730 m²
Building floor area 2,056 m²



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Performance by category

● This project ● Maximum available



Buildings

Name	Height	Footprint	% of total footprint
123-129 Erskine Street, Middle Park VIC, Australia	5	500 m²	100%

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Dwellings & Non Res Spaces

Dwellings				
Name	Quantity	Area	Building	% of total area
Apartment				
301	1	320 m²	123-129 Erskine Street, Middle Park VIC, Australia	15%
401	1	278 m²	123-129 Erskine Street, Middle Park VIC, Australia	13%
201	1	273 m²	123-129 Erskine Street, Middle Park VIC, Australia	13%
102	1	268 m²	123-129 Erskine Street, Middle Park VIC, Australia	13%
101	1	282 m²	123-129 Erskine Street, Middle Park VIC, Australia	13%
202	1	215 m²	123-129 Erskine Street, Middle Park VIC, Australia	10%
G02	1	208 m²	123-129 Erskine Street, Middle Park VIC, Australia	10%
G01	1	211 m²	123-129 Erskine Street, Middle Park VIC, Australia	10%
Total	8	2,056 m²	100%	

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Supporting Evidence

Shown on Floor Plans			
Credit	Requirement	Response	Status
Management 3.1	Annotation: Individual utility meters to be provided to all individual dwellings		-
Management 3.3	Annotation: Sub-meters to be provided to all major common area services (list each)		-
Integrated Water Management 2.1	Location of any stormwater management systems (rainwater tanks, raingardens, buffer strips)		-
Operational Energy 3.1	Carpark with natural ventilation or CO monitoring system		-
Operational Energy 4.2	Location and size of solar photovoltaic system		-

Credit	Requirement	Response	Status
Indoor Environment Quality 1.1	If using BESS daylight calculator, references to floorplans and elevations showing window sizes and sky angles.		-
Indoor Environment Quality 1.2	If using BESS daylight calculator, references to floorplans and elevations showing window sizes and sky angles.		-
Indoor Environment Quality 1.3	If using BESS daylight calculator, references to floorplans and elevations showing window sizes and sky angles.		-
Indoor Environment Quality 2.1	Dwellings meeting the requirements for being 'naturally ventilated'		-
Transport 1.1	Location of residential bicycle parking spaces		-
Transport 1.2	Location of residential visitor bicycle parking spaces		-
Transport 2.1	Location of electric vehicle charging infrastructure		-
Waste & Resource Recovery 2.1	Location of food and garden waste facilities		-
Waste & Resource Recovery 2.2	Location of recycling facilities		-
Urban Ecology 1.1	Location and size of communal spaces		-
Urban Ecology 2.1	Location and size of vegetated areas		-

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Supporting Documentation

Credit	Requirement	Response	Status
Management 2.2	Preliminary NatHERS assessments		-
Integrated Water Management 2.1	STORM report or MUSIC model		-
Operational Energy 3.1	Details of either the fully natural carpark ventilation or CO monitoring system proposed		-
Operational Energy 4.2	Specifications of the solar photovoltaic system(s)		-
Indoor Environment Quality 1.1	If using an alternative daylight modelling program, a short report detailing assumptions used and results achieved.		-
Indoor Environment Quality 1.2	If using an alternative daylight modelling program, a short report detailing assumptions used and results achieved.		-
Indoor Environment Quality 1.3	If using an alternative daylight modelling program, a short report detailing assumptions used and results achieved.		-
Indoor Environment Quality 2.1	A list of naturally ventilated dwellings		-

Credit summary

Management Overall contribution 4.5%

		100%
1.1 Pre-Application Meeting		100%
2.2 Thermal Performance Modelling - Multi-Dwelling Residential		100%
3.1 Metering - Residential		100%
3.3 Metering - Common Areas		100%
4.1 Building Users Guide		100%

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IWM Overall contribution 22.5%

		81%	✔ Pass
1.1 Potable Water Use		45%	✔ Achieved
2.1 Stormwater Treatment		100%	✔ Achieved
3.1 Water Efficient Landscaping		N/A	✦ Scoped Out
Landscape irrigation connected to RWT			
4.1 Building Systems Water Use		100%	

Operational Energy Overall contribution 27.5%

		Minimum required 50%	80%	✔ Pass
	1.2 Thermal Performance Rating - Residential		75%	✔ Achieved
	2.1 Greenhouse Gas Emissions		83%	
	2.6 Electrification		100%	
	2.7 Energy consumption		100%	
	3.1 Carpark Ventilation		100%	
	3.4 Clothes Drying		0%	
	3.6 Internal Lighting - Apartments		0%	
	4.2 Renewable Energy Systems - Solar		100%	
	4.4 Renewable Energy Systems - Other		N/A	✦ Scoped Out
	No other (non-solar PV) renewable energy is in use.			

IEQ Overall contribution 16.5%

		Minimum required 50%		90%	✔ Pass
	1.1 Daylight Access - Living Areas			66%	
	1.2 Daylight Access - Bedrooms			100%	
	1.3 Winter Sunlight			100%	
	2.1 Ventilation - Natural - Apartments			100%	

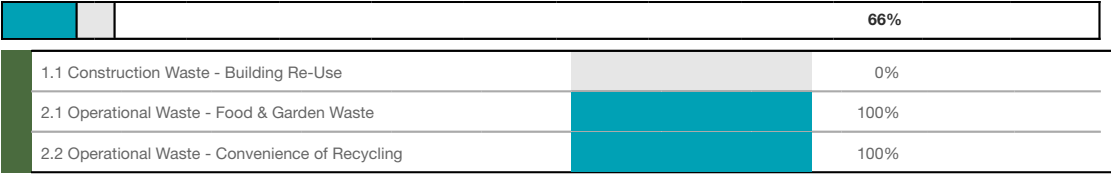
Transport Overall contribution 9.0%

		66%	
1.1 Bicycle Parking - Residential		100%	
1.2 Bicycle Parking - Residential Visitor		100%	
1.3 Bicycle Parking - Convenience Residential		0%	
2.1 Electric Vehicle Infrastructure		100%	
2.2 Car Share Scheme		0%	
2.3 Motorbikes / Motorbikes		0%	

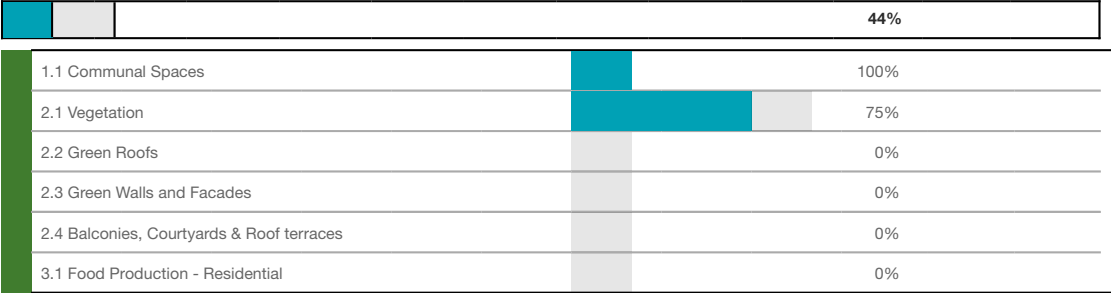
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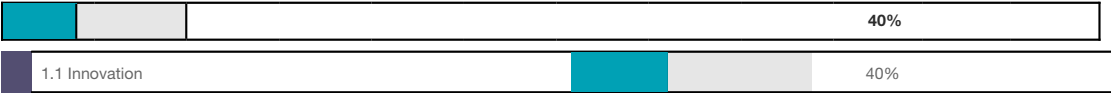
Waste & Resource Recovery Overall contribution 5.5%



Urban Ecology Overall contribution 5.5%



Innovation Overall contribution 9.0%



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Credit breakdown

Management Overall contribution 4.5%

		100%
1.1 Pre-Application Meeting		100%
Score Contribution	This credit contributes 37.5% towards the category score.	
Criteria	Has an ESD professional been engaged to provide sustainability advice from schematic design to construction? AND Has the ESD professional been involved in a pre-application meeting with Council?	
Question	Criteria Achieved ?	
Project	Yes	
2.2 Thermal Performance Modelling - Multi-Dwelling Residential		100%
Score Contribution	This credit contributes 25% towards the category score.	
Criteria	Have preliminary NatHERS ratings been undertaken for all thermally unique dwellings?	
Question	Criteria Achieved ?	
Apartment	Yes	
3.1 Metering - Residential		100%
Score Contribution	This credit contributes 12.5% towards the category score.	
Criteria	Have utility meters been provided for all individual dwellings?	
Question	Criteria Achieved ?	
Apartment	Yes	
3.3 Metering - Common Areas		100%
Score Contribution	This credit contributes 12.5% towards the category score.	
Criteria	Have all major common area services been separately submetered?	
Question	Criteria Achieved ?	
Apartment	Yes	
4.1 Building Users Guide		100%
Score Contribution	This credit contributes 12.5% towards the category score.	
Criteria	Will a building users guide be produced and issued to occupants?	
Question	Criteria Achieved ?	
Project	Yes	

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IWM Overall contribution 22.5%

		81% ✔ Pass
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Do you have a reticulated third pipe or an on-site water recycling system?:	No
Are you installing a swimming pool?:	No

Stormwater profile	
Which stormwater modelling software are you using?:	MUSIC or other modelling software
STORM score achieved:	-
Flow:	33 %
Total Suspended Solids:	83 %
Total Phosphorus:	70 %
Total Nitrogen:	59 %

Rainwater tank profile	
What is the total roof area connected to the rainwater tank?:	
Rainwater Tank 1	396 m²
	-
Tank Size:	
Rainwater Tank 1	5,000 Litres
	-
Irrigation area connected to tank:	
Rainwater Tank 1	180 m²
	-
Is connected irrigation area a water efficient garden?:	
Rainwater Tank 1	No
	-
Other external water demand connected to tank?:	
Rainwater Tank 1	0.0 Litres/Day
	-

Fixtures, fittings & connections profile	
Building: All	123-129 Erskine Street, Middle Park VIC, Australia
Showerhead: All	4 Star WELS (>= 6.0 but <= 7.5)
Bath: All	Medium Sized Contemporary Bath
Kitchen Taps: All	>= 6 Star WELS rating
Bathroom Taps: All	>= 6 Star WELS rating
Dishwashers: All	>= 5 Star WELS rating
WC: All	>= 4 Star WELS rating
Urinals: All	Scope out
Washing Machine Water Efficiency: All	Occupant to Install

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Which non-potable water source is the dwelling/space connected to?:

G01	Rainwater Tank 1
G02	
101	
102	
201	
202	
301	
401	

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Non-potable water source connected to Toilets: All Yes

Non-potable water source connected to Laundry (washing machine): All No

Non-potable water source connected to Hot Water System: All No

1.1 Potable Water Use

45%  Achieved

Score Contribution	This credit contributes 33.3% towards the category score.
Criteria	What is the reduction in total potable water use due to efficient fixtures, appliances, rainwater use and recycled water use? To achieve points in this credit there must be >25% potable water reduction.
Output	Reference
Project	2157 kL
Output	Proposed (excluding rainwater and recycled water use)
Project	1696 kL
Output	Proposed (including rainwater and recycled water use)
Project	1534 kL
Output	% Reduction in Potable Water Consumption
Project	28 %
Output	% of connected demand met by rainwater
Project	83 %
Output	How often does the tank overflow?
Project	Often
Output	Opportunity for additional rainwater connection
Project	822 kL

2.1 Stormwater Treatment

100%  Achieved

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Score Contribution	This credit contributes 60% towards the category score.	
Criteria	Has best practice stormwater management been demonstrated?	
Output	Flow	
Project	33 %	
Output	Min Suspended Solids reduction	
Project	80 %	
Output	Total Suspended Solids reduction	
Project	83 %	
Output	Min Phosphorus reduction	
Project	45 %	
Output	Total Phosphorus reduction	
Project	70 %	
Output	Min Nitrogen reduction	
Project	45 %	
Output	Total Nitrogen reduction	
Project	59 %	
3.1 Water Efficient Landscaping		N/A ✦ Scoped Out
Landscape irrigation connected to RWT		
This credit was scoped out		Landscape irrigation connected to RWT
4.1 Building Systems Water Use		100%
Score Contribution	This credit contributes 6.7% towards the category score.	
Criteria	Where applicable, have measures been taken to reduce potable water consumption by >80% in the buildings air-conditioning chillers and when testing fire safety systems?	
Question	Criteria Achieved ?	
Project	Yes	

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Operational Energy Overall contribution 27.5%

		Minimum required 50%	80%	Pass
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Are you installing any renewable energy system(s) (other than solar photovoltaic)?:	No
Energy Supply:	All-electric
Solar Photovoltaic system profile	
System Size (lesser of inverter and panel capacity): Solar PV	8.0 kW peak
Orientation (which way is the system facing)?: Solar PV	North
Inclination (angle from horizontal): Solar PV	10.0 Angle (degrees)
Dwellings profile	
Building: All	123-129 Erskine Street, Middle Park VIC, Australia
Below the floor is:	
G01	Ground or Carpark
G02	
101	Another Occupancy
102	
201	
202	
301	
401	
Above the ceiling is:	
G01	Another Occupancy
G02	
101	
102	
201	
202	
301	
401	Outside
Exposed sides:	
G01	3
G02	
101	
102	
201	
202	
301	4
401	
NatHERS Annual Energy Loads - Heat: All	30.6 MJ/sqm
NatHERS Annual Energy Loads - Cool: All	13.8 MJ/sqm
NatHERS star rating: All	8.0
Type of Heating System: All	Reverse cycle space
Heating System Efficiency: All	2.5 Stars (2019 MEPS)
Type of Cooling System: All	Refrigerative space
Cooling System Efficiency: All	4 Stars (2019 MEPS)

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Type of Hot Water System: All		Electric Heat Pump Band 1	
Is the hot water system shared by multiple dwellings?: All		Yes	
% Contribution from solar hot water system: All		0 %	
Clothes Line: All		No drying facilities	
Clothes Dryer: All		Occupant to install	
1.2 Thermal Performance Rating - Residential			75% ✓ Achieved
Score Contribution		This credit contributes 17.6% towards the category score.	
Criteria		What is the average NatHERS rating?	
Output		Average NATHERS Rating (Weighted)	
Apartment		8.0 Stars	
2.1 Greenhouse Gas Emissions			83%
Score Contribution		This credit contributes 17.6% towards the category score.	
Criteria		What is the % reduction in annual greenhouse gas emissions against the benchmark?	
Output		Reference Building with Reference Services (BCA only)	
Apartment		29,286 kg CO2	
Output		Proposed Building with Proposed Services (Actual Building)	
Apartment		24,377 kg CO2	
Output		% Reduction in GHG Emissions	
Apartment		16 %	
2.6 Electrification			100%
Score Contribution		This credit contributes 17.6% towards the category score.	
Criteria		Is the development all-electric?	
Question		Criteria Achieved?	
Project		Yes	
2.7 Energy consumption			100%
Score Contribution		This credit contributes 23.5% towards the category score.	
Criteria		What is the % reduction in annual energy consumption against the benchmark?	
Output		Reference Building with Reference Services (BCA only)	
Apartment		268,555 MJ	
Output		Proposed Building with Proposed Services (Actual Building)	
Apartment		111,086 MJ	
Output		% Reduction in total energy	
Apartment		58 %	
3.1 Carpark Ventilation			100%
Score Contribution		This credit contributes 5.9% towards the category score.	
Criteria		If you have an enclosed carpark, is it: (a) fully naturally ventilated (no mechanical ventilation system) or (b) 40 car spaces or less with Carbon Monoxide monitoring to control the operation and speed of the ventilation fans?	
Question		Criteria Achieved ?	
Project		Yes	

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3.4 Clothes Drying		0%
Score Contribution	This credit contributes 5.9% towards the category score.	
Criteria	What is the % reduction in annual energy consumption (gas and electricity) from a combination of clothes lines and efficient driers against the benchmark?	
Output	Reference	
Apartment	5,608 kWh	
Output	Proposed	
Apartment	5,608 kWh	
Output	Improvement	
Apartment	0 %	
3.6 Internal Lighting - Apartments		0%
Score Contribution	This credit contributes 5.9% towards the category score.	
Criteria	Is the maximum illumination power density (W/m2) in at least 90% of the relevant building class at least 20% lower than required by clause J7D3(1)(a) and Table J6.2a of the NCC 2022 Vol 1 (Class 2-9)?	
Question	Criteria Achieved ?	
Apartment	No	
4.2 Renewable Energy Systems - Solar		100%
Score Contribution	This credit contributes 5.9% towards the category score.	
Criteria	What % of the estimated energy consumption of the building class it supplies does the solar power system provide?	
Output	Solar Power - Energy Generation per year	
Apartment	9,695 kWh	
Output	% of Building's Energy	
Apartment	31 %	
4.4 Renewable Energy Systems - Other		N/A  Scoped Out
No other (non-solar PV) renewable energy is in use.		
This credit was scoped out	No other (non-solar PV) renewable energy is in use.	

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IEQ Overall contribution 16.5%

Minimum required 50%

90%

✓ Pass

Use the BESS Deemed to Satisfy (DtS) method for daylight to Dwellings?:	No
What approach do you want to use for daylight to Dwellings?:	Provide our own calculations
1.1 Daylight Access - Living Areas	66%
Score Contribution	This credit contributes 30% towards the category score.
Criteria	What % of living areas achieve the daylight criteria?
Question	Percentage Achieved ?
Apartment	85 %
1.2 Daylight Access - Bedrooms	100%
Score Contribution	This credit contributes 30% towards the category score.
Criteria	What % of bedrooms achieve the daylight criteria?
Question	Percentage Achieved ?
Apartment	100 %
1.3 Winter Sunlight	100%
Score Contribution	This credit contributes 10% towards the category score.
Criteria	Do 70% of dwellings receive at least 3 hours of direct sunlight in all Living areas between 9am and 3pm in mid-winter?
Question	Criteria Achieved ?
Apartment	Yes
2.1 Ventilation - Natural - Apartments	100%
Score Contribution	This credit contributes 30% towards the category score.
Criteria	What % of dwellings are effectively naturally ventilated?
Question	Percentage Achieved?
Apartment	100 %

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Transport Overall contribution 9.0%

		66%
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1.1 Bicycle Parking - Residential		100%
-----------------------------------	--	------

Score Contribution	This credit contributes 22.2% towards the category score.
Criteria	How many secure and undercover bicycle spaces are there for residents?
Question	Bicycle Spaces Provided ?
Apartment	8
Output	Min Bicycle Spaces Required
Apartment	8

1.2 Bicycle Parking - Residential Visitor		100%
---	--	------

Score Contribution	This credit contributes 22.2% towards the category score.
Criteria	How many secure bicycle spaces are there for visitors?
Question	Visitor Bicycle Spaces Provided ?
Apartment	2
Output	Min Visitor Bicycle Spaces Required
Apartment	2

1.3 Bicycle Parking - Convenience Residential		0%
---	--	----

Score Contribution	This credit contributes 11.1% towards the category score.
Criteria	Are bike parking facilities for residents located at ground or entry level?
Question	Criteria Achieved ?
Apartment	No

2.1 Electric Vehicle Infrastructure		100%
-------------------------------------	--	------

Score Contribution	This credit contributes 22.2% towards the category score.
Criteria	Are facilities provided for the charging of electric vehicles?
Question	Criteria Achieved ?
Project	Yes

2.2 Car Share Scheme		0%
----------------------	--	----

Score Contribution	This credit contributes 11.1% towards the category score.
Criteria	Has a formal car sharing scheme been integrated into the development?
Question	Criteria Achieved ?
Project	No

2.3 Motorbikes / Mopeds		0%
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Score Contribution	This credit contributes 11.1% towards the category score.
Criteria	Are a minimum of 5% of vehicle parking spaces designed and labelled for motorbikes (must be at least 5 motorbike spaces)?
Question	Criteria Achieved ?
Project	No

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Waste & Resource Recovery Overall contribution 5.5%

		66%
1.1 Construction Waste - Building Re-Use		0%
Score Contribution	This credit contributes 33.3% towards the category score.	
Criteria	If the development is on a site that has been previously developed, has at least 30% of the existing building been re-used?	
Question	Criteria Achieved ?	
Project	No	
2.1 Operational Waste - Food & Garden Waste		100%
Score Contribution	This credit contributes 33.3% towards the category score.	
Criteria	Are facilities provided for on-site management of food and garden waste?	
Question	Criteria Achieved ?	
Project	Yes	
2.2 Operational Waste - Convenience of Recycling		100%
Score Contribution	This credit contributes 33.3% towards the category score.	
Criteria	Are the recycling facilities at least as convenient for occupants as facilities for general waste?	
Question	Criteria Achieved ?	
Project	Yes	

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Urban Ecology Overall contribution 5.5%

		44%
1.1 Communal Spaces		100%
Score Contribution	This credit contributes 11.1% towards the category score.	
Criteria	Is there at least the following amount of common space measured in square meters : * 1m² for each of the first 50 occupants * Additional 0.5m² for each occupant between 51 and 250 * Additional 0.25m² for each occupant above 251?	
Question	Common space provided	
Apartment	33.5 m²	
Output	Minimum Common Space Required	
Apartment	30 m²	
2.1 Vegetation		75%
Score Contribution	This credit contributes 44.4% towards the category score.	
Criteria	How much of the site is covered with vegetation, expressed as a percentage of the total site area?	
Question	Percentage Achieved ?	
Project	25 %	
2.2 Green Roofs		0%
Score Contribution	This credit contributes 11.1% towards the category score.	
Criteria	Does the development incorporate a green roof?	
Question	Criteria Achieved ?	
Project	No	
2.3 Green Walls and Facades		0%
Score Contribution	This credit contributes 11.1% towards the category score.	
Criteria	Does the development incorporate a green wall or green façade?	
Question	Criteria Achieved ?	
Project	No	
2.4 Balconies, Courtyards & Roof terraces		0%
Score Contribution	This credit contributes 11.1% towards the category score.	
Criteria	Is there a tap and floor waste on every balcony and courtyard (including any roof terraces)?	
Question	Criteria Achieved ?	
Apartment	No	
3.1 Food Production - Residential		0%

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Score Contribution	This credit contributes 11.1% towards the category score.
Criteria	What area of space per resident is dedicated to food production?
Question	Food Production Area
Apartment	0.0 m²
Output	Min Food Production Area
Apartment	8 m²

Innovation Overall contribution 9.0%

			40%
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Project Initiatives			
Initiative:			
ESD Verification during construction		O	
Air Tightness / Air permeability testing		3	
Solshare		O	
90% recycling of construction & demolition waste		O	
Description:			
ESD Verification during construction		ESD Verification during construction	
Air Tightness / Air permeability testing		Commitment to undertake Air Tightness / Air permeability testing.	
Solshare		Solshare system	
90% recycling of construction & demolition waste		90% recycling of construction & demolition waste	
Points Targeted:			
ESD Verification during construction		1	
Air Tightness / Air permeability testing		-	
Solshare		1	
90% recycling of construction & demolition waste		1	
Points:			
ESD Verification during construction		-	
Air Tightness / Air permeability testing		1	
Solshare		-	
90% recycling of construction & demolition waste		-	
1.1 Innovation			40%
Score Contribution			
This credit contributes 100% towards the category score.			
Criteria			
What percentage of the Innovation points have been claimed (10 points maximum)?			

Disclaimer

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