

SUSTAINABLE MANAGEMENT PLAN

ADVERTISED PLAN



PROPOSED MIXED USE
DEVELOPMENT

290 PARK STREET, FITZROY
NORTH

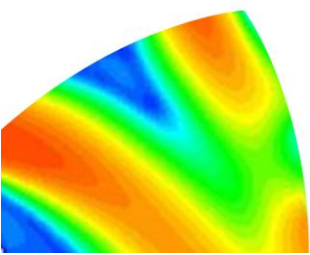
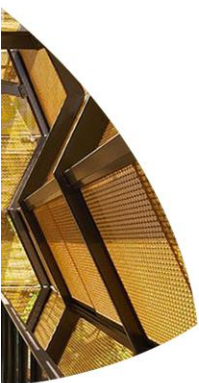
**This copied document to be made available
for the sole purpose of enabling
its consideration and review as
part of a planning process under the
Planning and Environment Act 1987.
The document must not be used for any
purpose which may breach any
copyright**

GIW25025
Revision E

Prepared for:
Antipodean Land
Developments Pty Ltd

13 April 2026

Prepared by:
GIW Environmental Solutions Pty Ltd
285 Lennox Street, Richmond
Victoria 3121, Australia
T +61 3 9044 5111
giw.com.au



ADVERTISED PLAN

Limitations

This Report has been prepared by GIW Environmental Solutions Pty Ltd for the sole use of Antipodean Land Developments Pty Ltd ("the Client"). This Report should only be presented in full and should not be used to support any objective other than those detailed within the Agreement. In particular, the Report does not contain sufficient information to enable it to be used for any use other than the project specific requirements for which the Report has been carried out.

Any reliance on this Report by a third party shall be entirely at such party's own risk. GIW Environmental Solutions Pty Ltd provides no warranty or guarantee to any third party, express or implied, as to the information and/or professional advice indicated in the Report, and accepts no liability for or in respect of any use or reliance upon the Report by a third party. Any publication of this Report must be in accordance with the Planning and Environment Act 1987 procedures under the Freedom of Information Act 1982. GIW will require formal notification by the Responsible Authority to use this Report for public access purposes. This Report is to be removed by the Responsible Authority from the public domain immediately following the public consultation period.

Copyright

The concepts and information contained in this Report are the property of GIW Environmental Solutions Pty Ltd. Use or copying of this Report in whole or in part without the written permission of GIW Environmental Solutions Pty Ltd constitutes an infringement of copyright. Information shall not be assigned to a third party without the prior consent of the author.

Revision History

Revision Number	Date Issued	Author	Approved	Comments
A	07/11/2025	CDW	IB	Draft
B	04/12/2025	CDW	IB	2 nd Draft
C	10/12/2025	CDW	IB	Final
D	10/12/2025	CDW	IB	Final
E	13/04/2025	AS	IB	Final

Prepared by:
Project consultant:



Aminath Samaha
ESD Consultant
Ba. (Interior Architecture)
M.Sc (Energy Efficient and Sustainable Building)

Approved by:
Project team leader:



Ines Buskermolen
Associate Director
B.Sc. (Science, Business and Innovation)
M.Sc. (Sustainable Development)

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright

ADVERTISED PLAN

Contents

Limitations	1
Copyright	1
Revision History	1
Contents.....	2
1. Introduction	4
Project Information	4
Statutory Requirements	5
Built Environment Sustainability Scorecard (BESS)	5
Responsibilities & Implementation.....	6
Sources of Information.....	6
2. ESD Summary	7
3. BESS Performance.....	8
4. Great Design Fast Track.....	9
Mandatory Requirements	9
Sustainable Homes Principle 01.....	10
Lifecycle Decarbonisation.....	10
Sustainable Homes Principle 02.....	11
Material Circularity.....	11
Sustainable Homes Principle 03.....	12
Net-Positive Energy	12
Sustainable Homes Principle 04.....	13
High-Performing Thermal Envelope	13
Sustainable Homes Principle 05.....	14
Water Resilience	14
Sustainable Homes Principle 06.....	15
No Waste to Landfill	15
5. ESD Assessment	16
Management	16
Water.....	17
Energy	19
Stormwater	24
Indoor Environment Quality	25

**This copied document to be made available
for the sole purpose of enabling
its consideration and review as
part of a planning process under the
Planning and Environment Act 1987.
The document must not be used for any
purpose which may breach any
copyright**

Transport.....	29
Materials.....	32
Waste Management.....	33
Urban Ecology	35
Innovation	38
Appendices.....	39
Appendix A: WSUD Response	39
Site layout Plan.....	39
BlueFactor Rating Report	40
WSUD Strategy	42
Rainwater Reuse	43
Site Management Statement.....	44
Maintenance Program	44
Appendix B: Preliminary FirstRate Certificates	46
Appendix C: Preliminary Part J4D6 BCA 2022 Façade Calculator	47
Appendix D: Renewable Energy	48
Appendix E: Daylight Modelling.....	49
Scope of Modelling.....	49
Methodology.....	49
Modelling Assumptions.....	51
Daylight Results – Numerical.....	51
Daylight Results – Visual.....	53
Overall Building Results	55
Conclusion	55
Appendix F: BESS Assessment.....	56

**ADVERTISED
PLAN**

**This copied document to be made available
for the sole purpose of enabling
its consideration and review as
part of a planning process under the
Planning and Environment Act 1987.
The document must not be used for any
purpose which may breach any
copyright**

1. Introduction

Project Information

GIW Environmental Solutions Pty Ltd ("GIW") has been engaged by Antipodean Land Developments Pty Ltd to provide Environmentally Sustainable Design (ESD) consulting services for the proposed mixed-use development at 290 Park Street, Fitzroy North.

The proposed development will include 20 apartments and 1 commercial tenancy constructed over 7 levels plus ground floor carpark and will consist of the following:

- 5 x 1 bedroom apartments
- 11 x 2 bedroom apartments
- 3 x 3 bedroom apartments
- 1 x 4 bedroom apartment
- 57m² commercial (shop/cafe)

The site located at 290 Park Street, Fitzroy North has an approximate surface area of 598m² and is currently the location of a double storey brick building. Distance from the site to Melbourne CBD is approximately 5.4km.



Figure 1 - Pre-existing sites at 290 Park Street, Fitzroy North.

**ADVERTISED
PLAN**

Statutory Requirements

This Sustainable Management Plan (SMP) has been prepared to inform City of Yarra of the proposed development's sustainability credentials and performance targets. The project team is committed to achieving a building solution which responds to City of Yarra Planning Scheme - Clause 15.01-2L-01 Environmentally Sustainable Development.

Development Type	Application Requirement	Example Tools
Development of 10 or more dwellings.	Sustainability Management Plan (SMP)	BESS Green Star MUSIC Blue Factor

Further to the above, this SMP also responds to Victoria Planning Provisions VC216 – 15.01-2S.

Built Environment Sustainability Scorecard (BESS)

The proposed mixed-use development will be assessed against the Built Environment Sustainability Scorecard (BESS) guidelines. The BESS tool addresses nine key environmental categories as follows:



Figure 2 - BESS Environmental Categories (www.bess.net.au)

All ESD measures described under the nine key environmental categories are to be suitably incorporated into relevant project documentation at the appropriate project phase.

**ADVERTISED
PLAN**

Responsibilities & Implementation

Antipodean Land Developments Pty Ltd will be responsible for the suitable implementation of the requirements of this report throughout the design and development phases. Should the development be sold the responsibility will pass to the new owner. At such time as a builder is novated or a building contract is put in place the builder will be responsible for implementation during the construction phase. At occupancy, the Owners Corporation and individual lot owners and or tenants will be responsible for the correct use of installed equipment and building systems in line with the provided Building User's Guide.

Sources of Information

The following 'Sources of Information' have been used to guide the design solutions:

- Architecture – Project No. 2502 – Drawing Set: Town Planning 31.03.26
- Municipal Association of Victoria - SDAPP Explained; Building Design for a Sustainable Future
- Built Environment Sustainability Scorecard (BESS)
- CSIRO 1999, Urban Stormwater – Best Practise Environmental Management Guidelines

ADVERTISED PLAN

**This copied document to be made available
for the sole purpose of enabling
its consideration and review as
part of a planning process under the
Planning and Environment Act 1987.
The document must not be used for any
purpose which may breach any
copyright**

2. ESD Summary

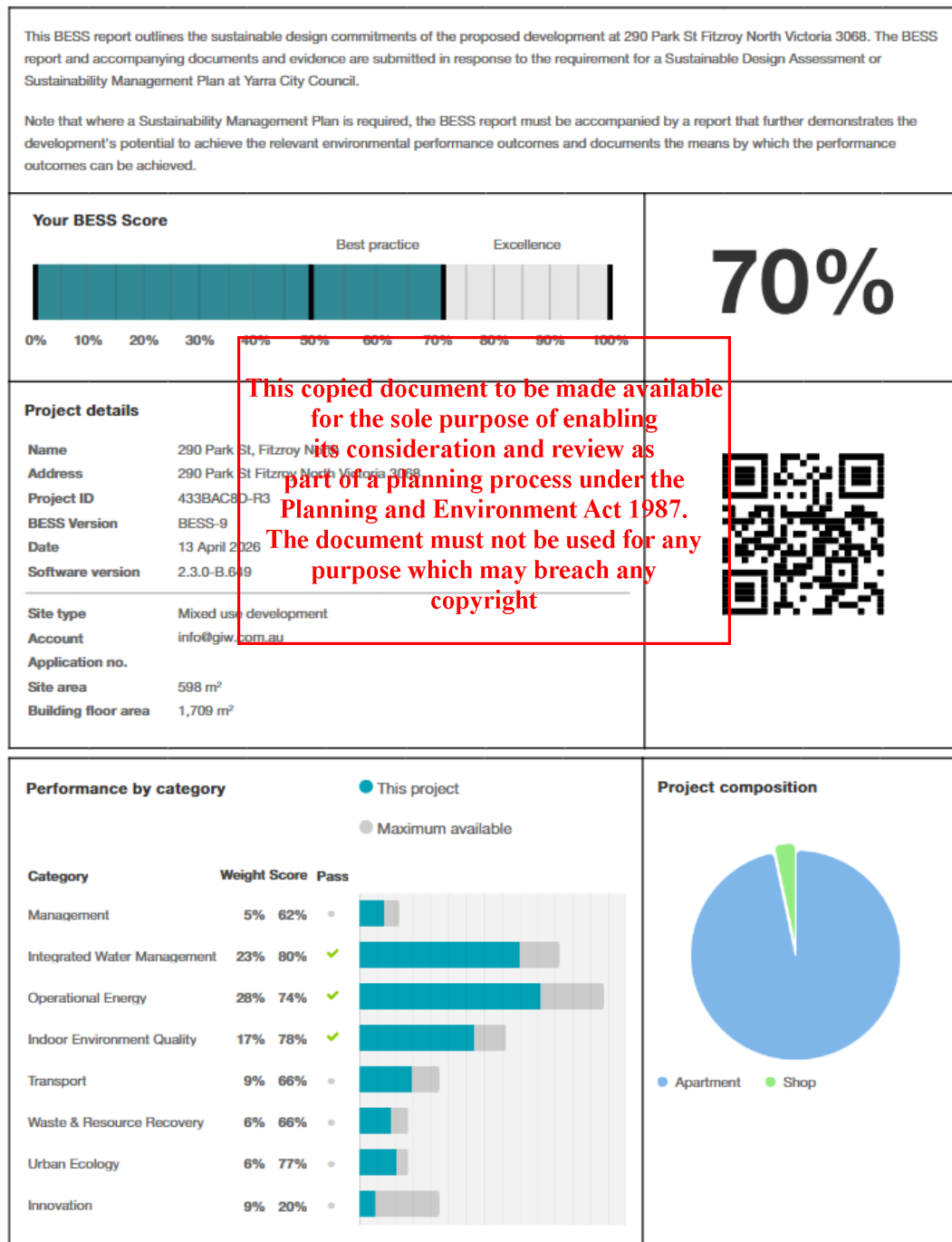
The proposed mixed-use development at 290 Park Street, Fitzroy North will implement the following ESD initiatives:

1. The project achieves a total BESS score of 70% with no mandatory category (IEQ, Energy, Water, Stormwater) below 50%.
2. 100% (20 out of 20) of the development's apartments are naturally cross-ventilated.
3. Daylight modelling has been conducted for a representative sample of apartments. The summary result is as follows:
 - 90% of living floor area achieves >90% above DF 1
 - 85% of bedroom floor area achieves >90% above DF0.5
4. The non-residential areas are targeting a 2% DF to 60% of the nominated area.
5. 70% (14 out of 20) of apartments achieve at least 3 hours of sunlight.
6. The development is provided with a comprehensive shading strategy.
7. The development is to achieve an 8.0 Star average NatHERS Energy Rating, with no unit below 6.5 Stars.
8. The non-residential areas aim to reduce heating and cooling energy consumption below the reference case (BCA Section 12.2).
9. The development is to utilise individual electric instantaneous hot water systems.
10. A min. 2kW Solar PV system is to be located on the roof.
11. Electricity and cold water is to be provided to each individual apartment, commercial tenancy and communal areas.
12. Water efficient fittings and fixtures are applied throughout.
13. A 5,000 litre rainwater tank will harvest rainwater from the level 6 roof. This tank will be connected to the ground floor commercial toilet and landscape irrigation.
14. A BlueFactor rating of 100% is achieved.
15. Landscape irrigation demand will be connected to the rainwater tank.
16. In total 30 bicycle spaces are to be provided for residents.
17. In total 5 bicycle spaces are to be provided for residential visitors.
18. In total 2 bicycle spaces are to be provided for employees & 1 bicycle space is to be provided for non-residential visitors.
19. 408m² of dedicated communal open space will be provided on Level 1 and Level 4.
20. The communal food production area will be provided on Level 4.

**ADVERTISED
PLAN**

3. BESS Performance

The project achieves a total BESS score of 70% 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.



4. Great Design Fast Track

The proposed development at 290 Park Street, Fitzroy North 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:

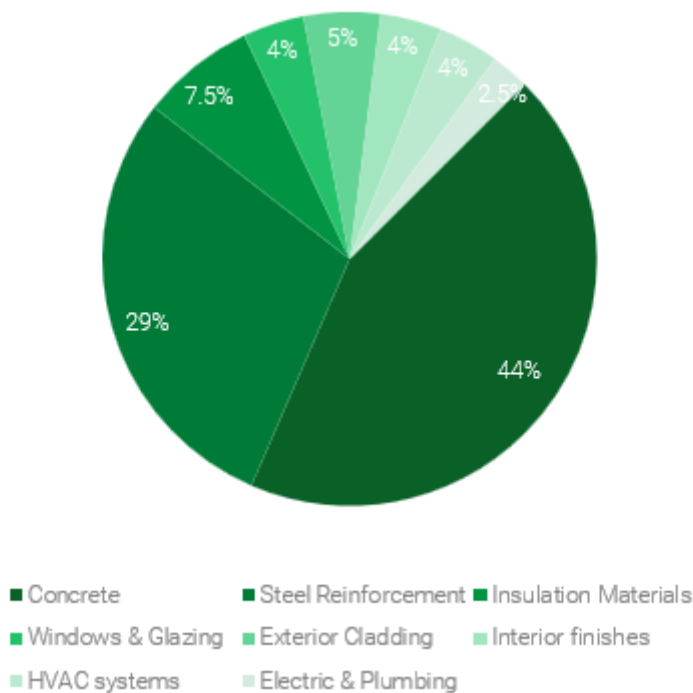
Mandatory requirement	Design Response
An average Nationwide House Energy Rating Scheme (NatHERS) rating of at least 8.0 stars, and no less than 6.5 stars for an individual apartment. Townhouses must achieve a NatHERS rating of no less than 7.5 stars.	The apartments are currently achieving an 8.0 Star average with no unit below 6.5 Stars. The representative sample ratings demonstrate the development's ability to achieve these requirements. Refer Appendix B for Preliminary FirstRate 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. 100% of the apartments are effectively cross-ventilated with windows on opposite or adjacent facades.

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright

**ADVERTISED
PLAN**

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

- Reducing the volume of high embodied carbon materials, such as steel, by limiting metal finishes.
- The development is all electric and supports the transition to zero carbon homes with no fossil fuels being burnt on site.
- Where timber is to be used, such timbers are to be FSC and / or PEFC certified.

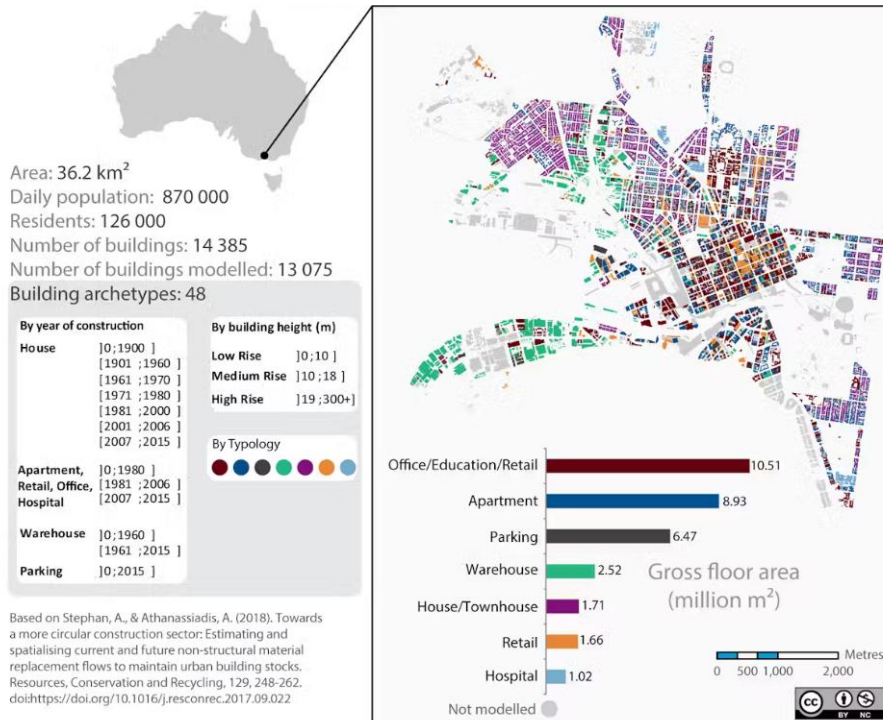
**ADVERTISED
PLAN**

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright

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

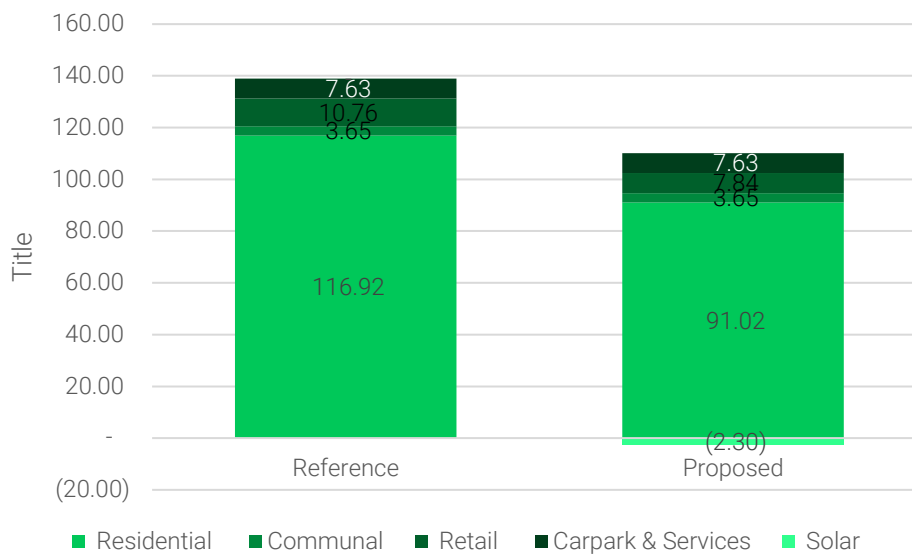
- Providing bike repair facilities to residents enables them extend the life of their bikes and delay them entering the waste stream.

**ADVERTISED
PLAN**

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright

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 31.1kgCO₂ emission reduction compared to a NCC 2022 DtS building without the application of GreenPower.

GDFT Initiatives

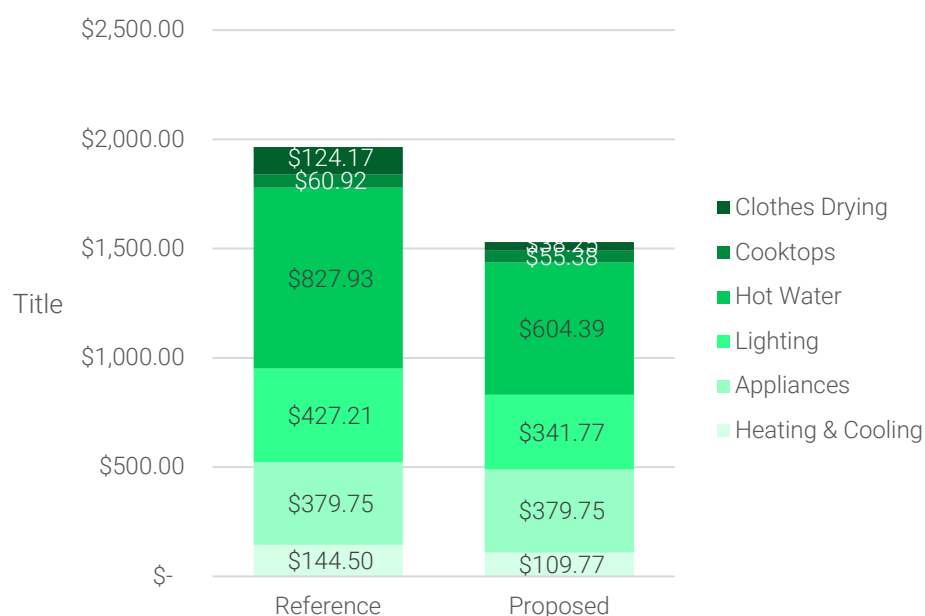
- A 2kWp PV array will reduce the developments electricity demand and reduce operational carbon emissions.
- Air conditioning systems are to be within 1 star rating of best available unit of the same capacity under MEPS 2019.
- No fossil fuels are burnt on-site avoiding additional operation carbon emissions.

**ADVERTISED
PLAN**

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright

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 \$435 on an annual basis on their energy expenses compared to a NCC 2022 DtS reference scenario.

GDFT Initiatives

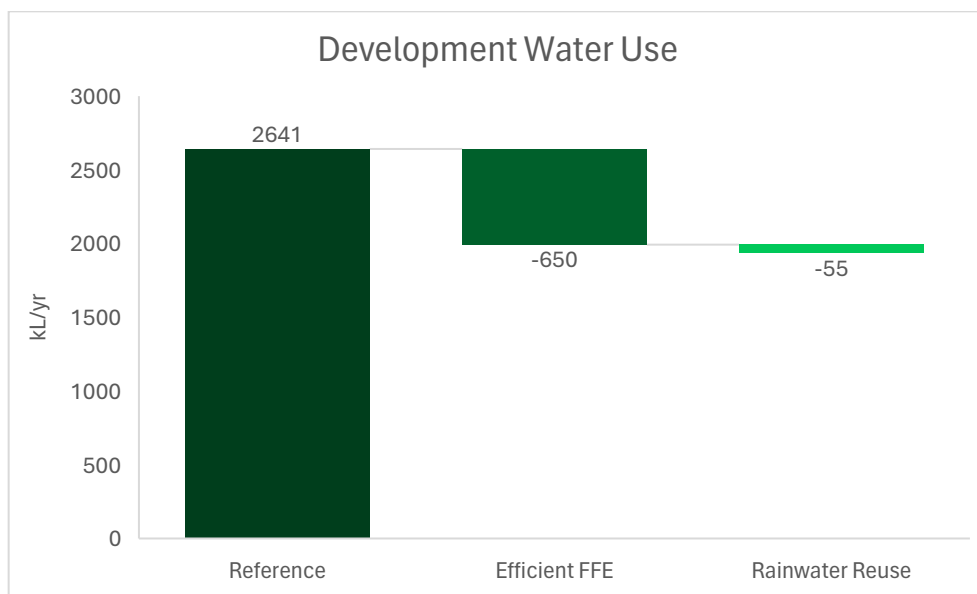
- Energy efficient design achieving an average of 8 star NatHERS rating, with no unit below 6.5 stars, reducing heating and cooling demand. The increased thermal performance makes the homes more comfortable to live and cost less to operate.
- The apartments will be built to achieve a high level of air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

**ADVERTISED
PLAN**

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright

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 24% through the introduction of water efficient fittings and fixtures. A further 2% reduction in potable water is achieved through the introduction of a 5,000 litre rainwater tank.

GDFT Initiatives

- Each home will be fitted with water efficient fixtures and fittings.
- 5,000 litre rainwater water tank will collect rainwater from the roof which is be used to provide water to the commercial WC and irrigate the landscaping.
- >80% of fire test water (e.g. hydrant pump test water or SCV annubar test) is to be reused on site.

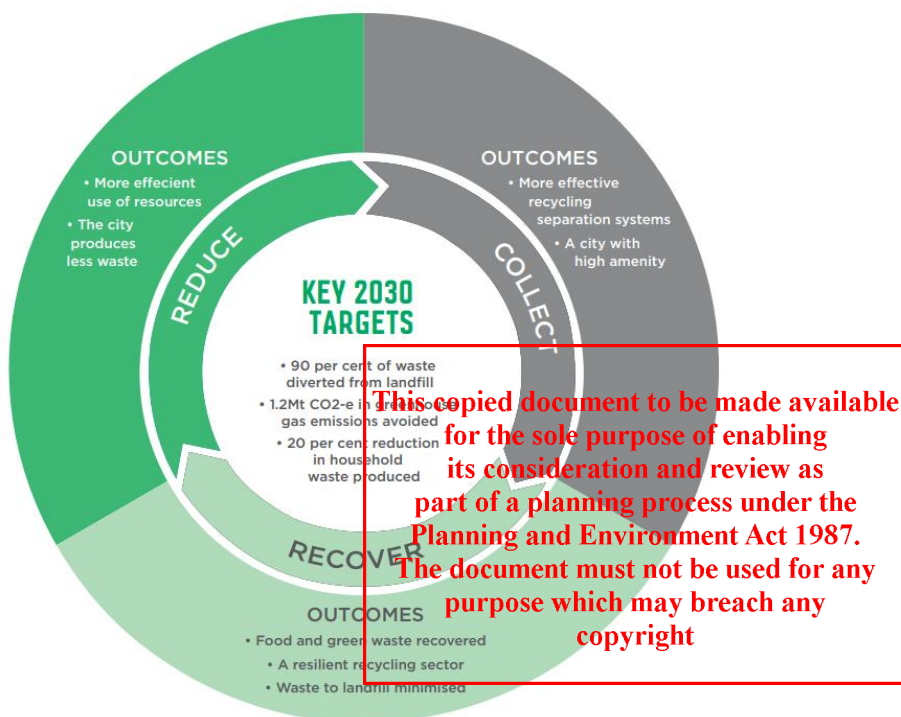
**ADVERTISED
PLAN**

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright

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 80% 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.
- Kitchen joinery is to provide appropriate spatial allowance for food and organics, general and recycling waste collection.

**ADVERTISED
PLAN**

5. ESD Assessment

**ADVERTISED
PLAN**

Management

Council ESD objectives:

- To encourage a holistic and integrated design and construction process and ongoing high performance.

Council Best Practice Standard

Criteria	Construction and Building Management Actions
Pre-Application Meeting	To ensure appropriate sustainable design principles and strategies are considered from the preliminary design stage of each development. GIW has been actively involved in the preliminary design stage, but has not been involved in a pre-application meeting with the Department of Transport or Council. This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987.
Metering	To provide building users with information that allows monitoring of energy and water consumption Electricity and cold water is to be provided to each individual apartment, commercial tenancy and communal areas. The document must not be used for any purpose which may breach any copyright Lighting and general power to common areas is to be separately metered to quantify energy used for common areas spaces. Additionally, the main electrical switchboard to contain at least two empty three-phase circuit breaker slots and four DIN rail spaces labelled to indicate the use of each space for a battery system.
Building User's Guide	To encourage and recognise initiatives that will help building users to use the building more efficiently. A Building User's Guide will be provided to all occupants explaining the correct use of installed equipment and building systems. This shall cover at a minimum: • Energy and Environmental Strategy • Monitoring and Targeting • Building Services • Transport Facilities • Materials and Waste Policy • Expansion/Re-fit Considerations • References and Further Information

Water

Council ESD objectives:

- To ensure the efficient use of water
- To reduce total operating potable water use
- To encourage the collection and reuse of stormwater
- To encourage the appropriate use of alternative water sources (e.g. grey water)
- To minimize associated water costs

Council Best Practice Standard

Criteria	Development Provision		
	WELS 4 Star - Toilets	WELS 6 Star - Bathroom Taps	WELS 4 Star – Kitchen Taps
ADVERTISED PLAN Potable Water Reduction To reduce total potable water use due through the use of efficient fixtures, appliances, and the use of rainwater.			
	WELS 3 Star -Showerhead	WELS 6 Star - Dishwasher	WELS 5 Star - Washing Machine
			
Rainwater Collection & Reuse	A 5,000 litre rainwater tank will harvest rainwater from the level 6 roof. This tank will be connected to the ground floor commercial toilet and landscape irrigation. It is estimated that this will save more than 57.6kL of potable water every year and meet 38% of the demand in these areas. Stormwater drainage mechanism is to be determined by the hydraulics services engineer at the design development phase. Refer Appendix A – WSUD Response		

Council Best Practice Standard

Criteria	Development Provision	
Landscape Irrigation	To ensure the efficient use of water and to reduce total operating potable water use through encouraging water efficient landscape design.	Landscape irrigation demand will be connected to the rainwater tank.
Building System Water Use Reduction	Ensure the efficient use of water, to reduce total operating potable water use and to encourage the appropriate use of alternative water sources for cooling and fire testing systems.	>80% of fire test water (e.g. hydrant pump test water or SCV annubar test) is to be reused on site. The proposed development is to incorporate air-cooled HVAC systems for both the residential and non-residential areas within the development.

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright

**ADVERTISED
PLAN**

Energy

Council ESD objectives:

- To ensure the efficient use of energy
- To reduce total operating greenhouse emissions
- To reduce energy peak demand
- To reduce associated energy costs

**ADVERTISED
PLAN**

Council Best Practice Standard

Criteria

Development Provision

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright

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)

Thermal Performance Rating - Residential

To reduce energy needed to achieve thermal comfort in summer and winter - improving comfort, reducing greenhouse gas emissions, energy consumption, and maintenance costs.

The apartments are currently achieving an 8.3 Star average. The below sample ratings demonstrate the developments ability to achieve these requirements. Refer Appendix B for Preliminary FirstRate Certificates.

Apt No.	ACE Total MJ/M2	ACE Heating MJ/M2	ACE Cooling MJ/M2	ACE NCFA MJ/M2	Star Rating	Similar units
101	68.9	42.8	26.1	63.5	6.6	2
103	24.8	17.5	7.3	63.2	9.0	5
202	19.8	7.4	12.4	56.2	9.4	5
205	50.9	33.0	18.0	45.0	7.6	4
303	44.1	33.5	10.6	95.2	7.9	3
601	70.8	47.2	23.6	123.4	6.5	1
Avg	46.6	30.2	16.3	74.4	7.8	
Star weighted average						8.3

*Apartments are assessed using FirstRate5 v5.5.5a

Council Best Practice Standard

Criteria	Development Provision	
	Construction assumptions for preliminary FirstRate 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 Thermal Performance Value
	Floor	Concrete R2.3
	External Walls	Concrete/Brick R2.7
	Internal Walls	Concrete R1.8
		Plasterboard R2.5
	Roof	Concrete R4.6
	Fixed Windows – Ground to Level 5	Aluminium Framed, Double Glazed, Argon Filled, Low-E, Clear Total System – U-Value: 2.71 – SHGC: 0.58
	Fixed Windows – Level 6	Aluminium Framed, Double Glazed, Argon Filled, Low-E, Clear Total System – U-Value: 2.51 – SHGC: 0.51
	Sliding Doors	Aluminium Framed, Double Glazed, Argon Filled, Low-E, Clear Total System – U-Value: 3.19 – SHGC: 0.48
	Louvres	Aluminium Framed, Double Glazed, Argon Filled, Low-E, Clear Total System – U-Value: 3.71 – SHGC: 0.54
	Awning Windows	Aluminium Framed, Double Glazed, Argon Filled, Low-E, Clear Total System – U-Value: 4.42 – SHGC: 0.40
	Awning Windows – Level 6	Aluminium Framed, Double Glazed, Argon Filled, Low-E, Clear Total System – U-Value: 3.24 – SHGC: 0.47
	Skylight	Aluminium Framed, Double Glazed, Total System

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright

**ADVERTISED
PLAN**

Council Best Practice Standard

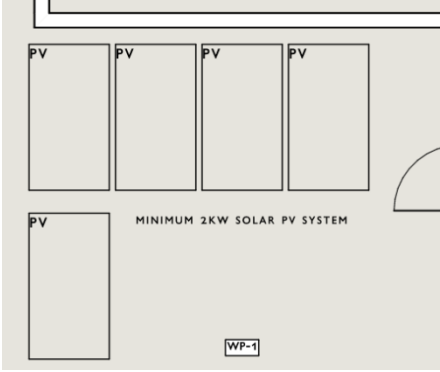
Criteria	Development Provision
Thermal Performance Rating – Non-Residential	Argon Filled, Low-E, Clear – U-Value: 2.66 – SHGC: 0.24 To reduce energy needed to achieve thermal comfort in summer and winter - improving comfort, reducing greenhouse gas emissions, energy consumption, and maintenance costs. The non-residential areas aim to reduce heating and cooling energy consumption below the reference case (BCA Section J 2022). Refer Appendix C – Preliminary Part J4D6 BCA 2022 Façade Calculator
Electrification	To support the transition to renewable energy sources. The development will be all electric with no gas connection.
HVAC System	To ensure the efficient use of energy and to reduce consumption of electricity. Inverter split systems are to be installed and sized to maintain conditions of the living rooms of each apartment. The efficiency of the air conditioning system is to be 2.5 stars for heating and 4 stars for cooling available under MEPS Post-October 2019 measurement standard. VRV / VRF systems with a COP of 3.4 are to be installed to the non-residential areas.
Hot Water System	To ensure the efficient use of energy and to reduce consumption and greenhouse emissions from water heating. The development is to utilise individual electric instantaneous hot water systems
Car Park Ventilation	To ensure the efficient use of energy, reduce total operating greenhouse gas Carpark ventilation fans are driven by a VSD motor connected to CO sensors within the carpark. The inclusion of CO sensor control will allow the ventilation fans to ramp down when the car park is unoccupied. The system is to be designed in accordance

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright

Council Best Practice Standard

Criteria	Development Provision	
	emissions and to reduce energy peak demand.	with AS1668.2. Alternatively, the carpark is to be naturally ventilated. The mechanical services engineer is responsible for the design and specification of the system. The contractor is to procure and install the specified system. Maintenance requirements of the CO sensor system are to be included in the O&M manual.
Clothes Drying	Ensure the efficient use of energy and to reduce energy consumption and greenhouse emissions associated with clothes drying	Communal clothes drying lines will be provided at Level 4 communal terrace. This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright
Internal Lighting - Residential	To ensure the efficient use of energy, to reduce energy consumption, greenhouse emissions associated with artificial lighting, and to reduce energy peak demand.	The maximum illumination power density (W/sqm) is at least 30% lower than NCC 2022 requirements. Lighting power density shall be as follows: • Dwellings: No greater than average 4W/m² • POS: No greater than average 3.2W/m² • Back of house and indoor car parks: No greater than average 1.6W/m² All common area, external and carpark lighting is to be controlled with daylight, motion sensors or timers (whichever is deemed appropriate).
Internal Lighting – Non-Residential	To ensure the efficient use of energy, to reduce energy consumption, greenhouse emissions associated with artificial lighting, and to reduce energy peak demand.	The maximum illumination power density (W/m²) in the non-residential areas meets the requirements of Table J7D3a of the NCC 2022 Section J. Lighting power density shall be as follows: • Retail: No greater than average 14W/m²

Council Best Practice Standard

Criteria	Development Provision
Renewable Energy Systems - Solar To encourage on-site renewable energy generation and reduce greenhouse emissions.	A min. 2kW Solar PV system is to be located on the roof. The system is expected to generate approximately 2,680kWh.  Location Solar PV System Refer Appendix C – Renewable Energy

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright

**ADVERTISED
PLAN**

Stormwater

Council ESD objectives:

- To reduce the impact of stormwater run-off
- To improve the water quality of stormwater run-off
- To achieve best practice stormwater quality outcomes
- To incorporate water sensitive urban design principles

Council Best Practice Standard

Criteria	Development Provision
Stormwater Treatment To minimise negative environmental impacts of stormwater runoff and maximise onsite re-use of stormwater.	The Melbourne Water – Blue Factor tool has been applied to determine performance relative to Best Practice Environmental Management Guidelines (Victoria Stormwater Committee, 1999). As per City of Yarra Planning Scheme - Clause 53.18 Stormwater Management in Urban Areas, the development is required to achieve a Blue Factor rating of 100% or greater. A BlueFactor rating of 100% is achieved via the following: • Rainwater is to be collected from the Level 6 roof and directed into the 5,000 litre rainwater tank. The commercial WCs and landscape irrigation are to be connected to the rainwater tank. • Rainwater is to be collected from the Level 4 laundry roof and terrace and directed into a $\geq 3\text{m}^2$, minimum 950mm deep raingarden with 100mm of extended detention. • Level 4 roof gardens have been modelled as raingardens as per Blue Factor guidance. Refer Appendix A – WSUD Response.

**ADVERTISED
PLAN**

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright

Indoor Environment Quality

Council ESD objectives:

- to achieve a healthy indoor environment quality for the wellbeing of building occupants.
- to provide a naturally comfortable indoor environment will lower the need for building services, such as artificial lighting, mechanical ventilation and cooling and heating devices.

Council Best Practice Standard

Criteria		Development Provision	
Daylight Access - Residential	To provide a high level of amenity and energy efficiency through design for natural light.	Daylight modelling has been conducted for a representative sample of apartments. The summary result is as follows:	
		% of living floor area above DF 1.0	% of bedroom floor area above DF 0.5
		90%	85%
		Refer Appendix D - Daylight Modelling.	
Winter Sunlight	To provide a high level of amenity and reduce need for artificial heating in winter.	70% (14 out of 20) of apartments achieve at least 3 hours of sunlight.	
Daylight Access – Non-Residential	To provide a high level of amenity and energy efficiency through design for natural light.	The non-residential areas are targeting a 2% DF to 60% of the nominated area.	
Minimal Internal Bedrooms	90% of bedrooms have an external window.	NIL internal bedrooms.	
Effective Natural Ventilation	To provide fresh air and passive cooling opportunities.	100% (20 out of 20) of the development’s apartments are naturally cross-ventilated. Apartments are provided with windows on opposite or adjacent facades or are effective single sided ventilated.	

**ADVERTISED
PLAN**

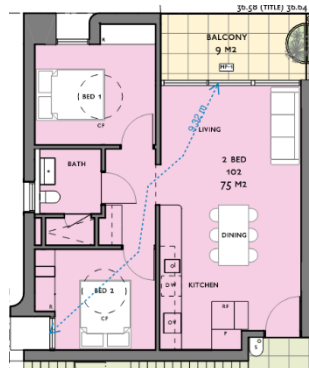
This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright

Council Best Practice Standard

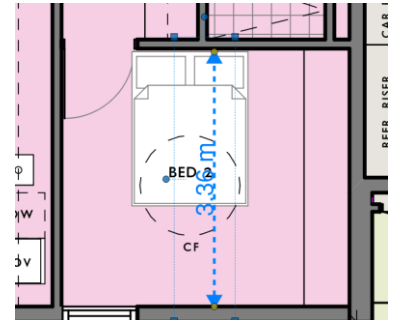
Criteria

Development Provision

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright



Typical natural cross-ventilated apartment



Typical single sided ventilated bedroom

Ventilation –
Non-
Residential

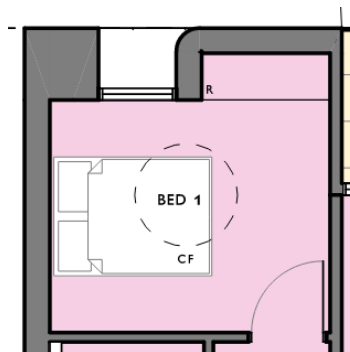
To provide fresh air and passive cooling opportunities.

60% of the commercial area is effectively naturally ventilated. This is to be included in the mechanical design and specifications.

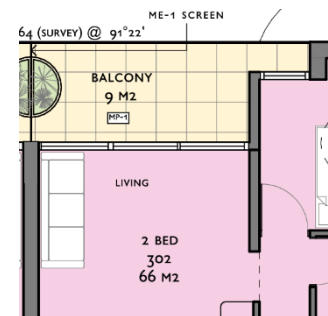
The development is provided with a comprehensive shading strategy:

Thermal
Comfort

To provide comfortable indoor spaces and reduce energy needed for heating and cooling.



Inset bedroom windows with steel plate canopies above on the north and west façade limit solar gains



Inset balconies shade living room windows

**ADVERTISED
PLAN**

Council Best Practice Standard

Criteria	Development Provision
ADVERTISED PLAN	Extension of roof parapet shades apartment below. Internal facing windows are shaded by the built form.
Thermal Comfort – Non-Residential To provide comfortable indoor spaces and reduce energy needed for heating and cooling.	The development is provided with a comprehensive shading strategy. This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright Veranda overhang shades the commercial tenancy on the north and west sides
Air Quality – Non-Residential	All paints and adhesives meet the maximum total indoor pollutant emission limits. All internally applied paints adhesives and sealants are to have a low or ultra-low VOC content in line with Green Star Buildings V1 Credit 13. All carpet meets the maximum total indoor pollutant emission limits. All internally applied carpets are to have a low VOC content in line with Green Star Buildings V1 Credit 13.

Council Best Practice Standard

Criteria	Development Provision
All engineered wood meets the maximum total indoor pollutant emission limits.	All internally applied engineered wood products are to have low formaldehyde levels in line with Green Star Buildings V1 Credit 13.

**ADVERTISED
PLAN**

**This copied document to be made available
for the sole purpose of enabling
its consideration and review as
part of a planning process under the
Planning and Environment Act 1987.
The document must not be used for any
purpose which may breach any
copyright**

ADVERTISED PLAN

Transport

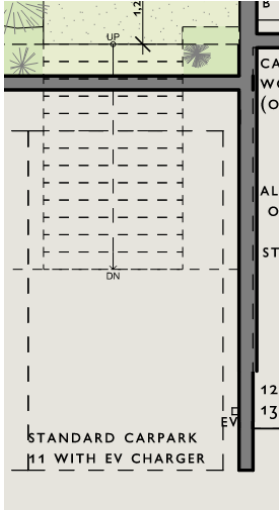
Council ESD objectives:

- To minimise car dependency.
- To ensure that the built environment is designed to promote the use of public transport, walking and cycling.

Council Best Practice Standard

Criteria	Development Provision
Bicycle Parking – Residential & Residential Visitors	To encourage and recognise initiatives that facilitate cycling. In total 30 bicycle spaces are to be provided for residents. This will provide a ratio of approximately 1.5 resident bicycle space for every apartment. In total 5 bicycle spaces are to be provided for residential visitors. This will provide a ratio of approximately 1 visitor bicycle space for every 5 apartments.
Bicycle Parking – Non-Residential & Non-Residential Visitors	To encourage and recognise initiatives that facilitate cycling. In total 2 bicycle spaces are to be provided for employees. This represents a 50% increase over the planning scheme requirements. In total 1 bicycle space is to be provided for non-residential visitors. This represents a 50% increase over the planning scheme requirements.
End of Trip Facilities –	To minimise car dependency and Nil.

Council Best Practice Standard

Criteria	Development Provision	
Non-Residential	to ensure that the built environment is designed to promote the use of public transport, walking and cycling.	ADVERTISED PLAN One charging point for electrical vehicles is integrated in the proposed development. 
Electric Vehicle Infrastructure	To minimise car dependency and to ensure that the built environment is designed to promote the use of public transport, walking and cycling.	EV charging point is to be located in the ground floor car park Future infrastructure for electrical charging points is incorporated in the services design including dedicated electrical distribution boards (DB-EV) for EV charging on every floor of the parking lot per NCC 2022 Table J9D4. Each DB-EV must be sized to support the future installation of a 7 kW (32 A) type 2 electric vehicle charger in 100% of the car parking spaces associated with a Class 2 building and 10% of car parking spaces associated with a Class 5 or 6 building.
Car Share Scheme	To minimise car dependency and to ensure that the built environment is designed to promote the use of public transport,	Nil.

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright

Council Best Practice Standard

Criteria	Development Provision	
	walking and cycling.	
Motorbikes / Mopeds	To minimise car dependency and to ensure that the built environment is designed to promote the use of public transport, walking and cycling.	Nil.

**ADVERTISED
PLAN**

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright

Materials

ESD objectives:

- Use of low embodied energy materials.
- Encourage use of recycled and reusable materials in building construction and undertake adaptive reuse of buildings, where practical.

Council Best Practice Standard

Criteria	Development Provision	
Embodied Energy	Limited use of high embodied energy metals and materials, especially in a design with intended high churn (e.g. retail)	The design will seek to limit the use of high embodied energy metal finishes.
Structural and Reinforcing Steel	Commitment to source structural and reinforcing steel from a responsible steel maker	The building's steel (by mass) is to be sourced from a Responsible Steel Maker with: • a currently valid and certified ISO 14001 Environmental Management System (EMS) in place.
Sustainable Timber	Commitment to source timber from sustainably managed source, with proof of audit trail.	Where timber is to be used, such timbers are to accord with the GBCA's 'Essential' criteria for forest certification. This may include FSC and / or PEFC Certification which are both internationally recognised schemes ensuring that timber is sourced from sustainable sources. Alternatively, recycled timber will be used.
PVC	Commitment to source best practice PVC products	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.

**ADVERTISED
PLAN**

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright

Waste Management

ADVERTISED PLAN

Council ESD objectives:

- To ensure waste avoidance, reuse and recycling during the design, construction and operation stages of development.
- To ensure long term reusability of building materials.
- To meet Councils' requirement that all multi-unit developments must provide a Waste Management Plan in accordance with the *Guide to Best Practice for Waste Management in Multi-unit Developments 2010*, published by Sustainability Victoria.

Council Best Practice Standard

Criteria	Development Provision
Building Re-use	To ensure waste avoidance, reuse and recycling during the design. None of the existing structure is re-used.
Construction and Demolition Waste	To reduce construction waste going to landfill At least 80% of the waste generated during construction and demolition has been diverted from landfill.
Food & Garden Waste	To ensure waste avoidance, reuse and recycling during the operational life of the building. Green waste storage is provided in the ground floor waste room.
Convenience of Recycling	To ensure waste avoidance, reuse and recycling during the operational life of the building. Separate general, recycling, glass and organic waste storage will be provided on the ground floor. Each tenancy is to be provided with separate general, recycling and food and organics waste bins. This requirement is to be included in the owners corporation rules or lease agreement.

Council Best Practice Standard

Criteria	Development Provision
	Kitchen joinery for the residential units is to provide appropriate spatial allowance for food and organics, general and recycling waste collection.

**ADVERTISED
PLAN**

**This copied document to be made available
for the sole purpose of enabling
its consideration and review as
part of a planning process under the
Planning and Environment Act 1987.
The document must not be used for any
purpose which may breach any
copyright**

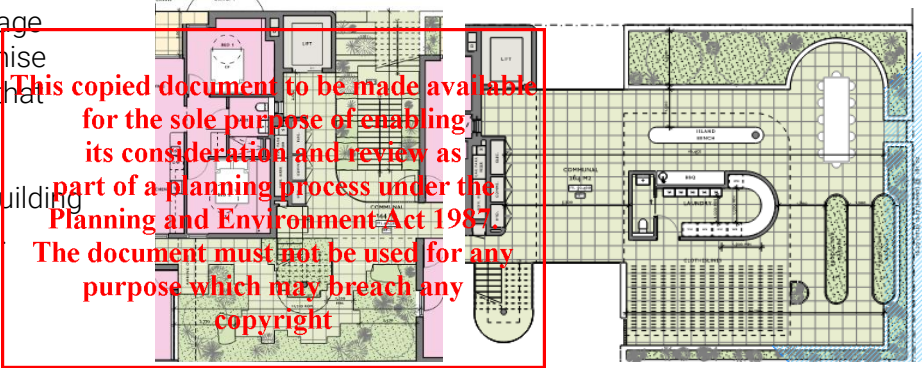
Urban Ecology

ADVERTISED PLAN

Council ESD objectives:

- To protect and enhance biodiversity.
- To provide sustainable landscaping.
- To protect and manage all remnant indigenous plant communities.
- To encourage the planting of indigenous vegetation.

Council Best Practice Standard

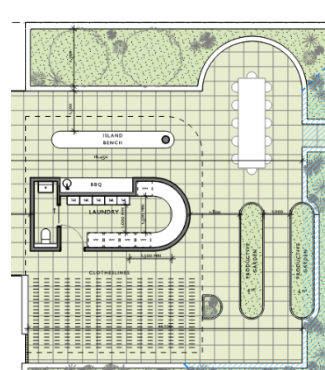
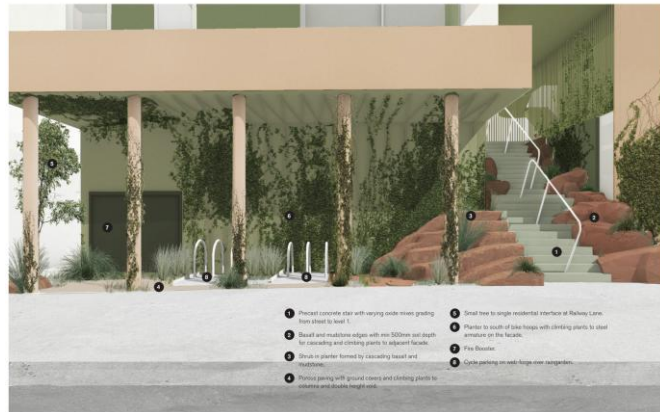
Criteria	Development Provision
Communal Space	408m² of dedicated communal open space will be provided on Level 1 and Level 4. Communal space will include the following amenities: covered clothesline, BBQ, laundry, seating, planter boxes and productive gardens. To encourage and recognise initiatives that facilitate interaction between building occupants.  Communal space will be provided on Level 1 and Level 4.
Vegetation	To encourage and recognise the use of vegetation and landscaping within and around developments. Planter boxes are to be located in communal areas and the majority of the balconies. The total area of vegetation is 32% of the site area.
Green Walls / Roof	To encourage the appropriate use of green roofs, walls and facades to mitigate the impact of the urban heat island effect. The proposed development will incorporate a green wall and roof.

Council Best Practice Standard

Criteria

Development Provision

ADVERTISED PLAN



Green wall and roof location.

Private Open Space - Balcony / Courtyard Ecology	To encourage plants in a healthy ecological context to be grown on balconies and in courtyards.	Nil.
Food Production - Residential	To encourage the production of fresh food on-site.	2x 4m ² planter boxes for communal food production will be provided.

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright

Council Best Practice Standard

Criteria	Development Provision
Heat Island Effect	The communal food production area will be provided on Level 4. To reduce the contribution of the project site to the 'heat island effect Roofs are to have a three year SRI of minimum 60 Unshaded hard-scaping elements are to have a three year SRI of minimum 40.

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright

**ADVERTISED
PLAN**

Innovation

Council ESD objectives:

- To encourage innovative technology, design and processes in all development, which positively influence the sustainability of buildings.

Council Best Practice Standard

Criteria	Development Provision	
Bicycle Repair Station	To provide opportunities for repair and reuse	Inclusion of bicycle repair station with secure, convenient and accessible equipment including repair stand, pumps and tools for fixing bicycles.
Ceiling fans	To provide comfortable indoor spaces and reduce energy needed for heating and cooling	All bedrooms are to be provided with ceiling fans to assist with passive cooling during peak summer periods.

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright

**ADVERTISED
PLAN**

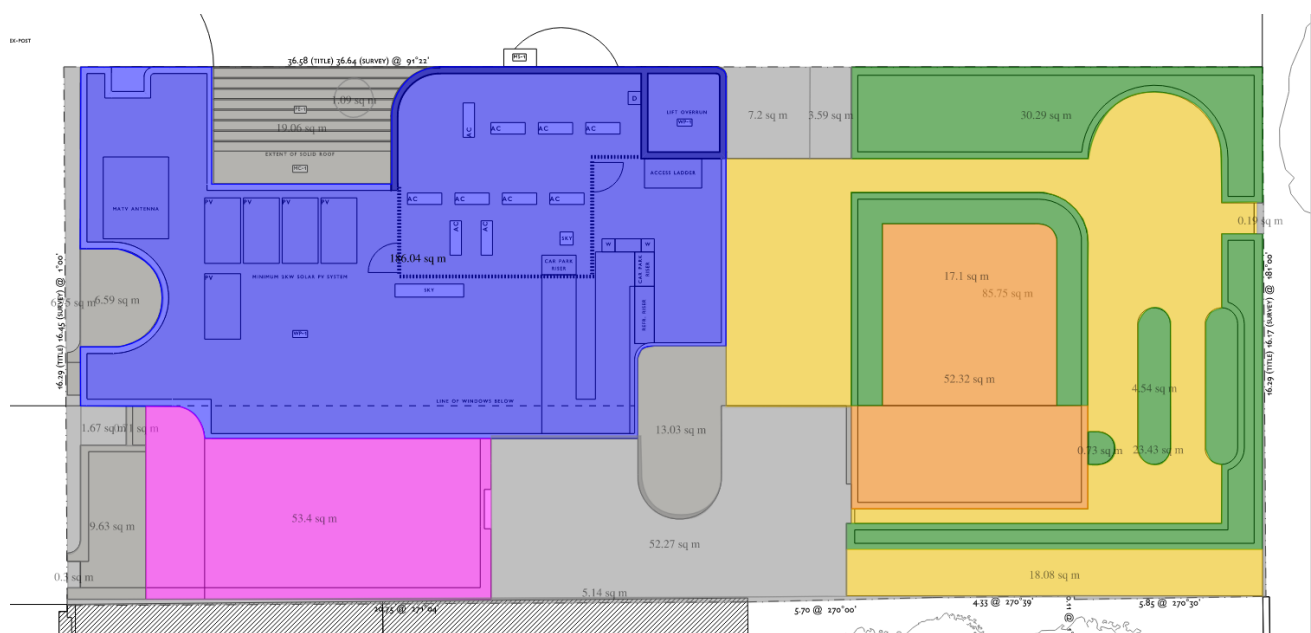
Appendices

Appendix A: WSUD Response

Site layout Plan

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

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright



Legend

	Description	Quantity	Unit
■	Impermeable	127	sq m
■	L4 Eastern Roof to RG	52	sq m
■	L4 Terrace to RG	104	sq m
■	L4 Western Roof	53	sq m
■	L6 Roof	186	sq m
■	Level 4 green roof and planter boxes	76	sq m

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

**ADVERTISED
PLAN**

BlueFactor Rating Report

A Blue Factor rating of $\geq 100\%$ can be achieved by implementing the following initiatives:

- Rainwater is to be collected from the Level 6 roof and directed into the 5,000 litre rainwater tank. The commercial WCs and landscape irrigation are to be connected to the rainwater tank.
- Rainwater is to be collected from the Level 4 laundry roof and terrace and directed into a $\geq 3\text{m}^2$, minimum 950mm deep raingarden with 100mm of extended detention.
- Level 4 roof gardens have been modelled as raingardens as per Blue Factor guidance.

Roof garden stormwater treatment

Roof gardens, or green roofs, function much like raingardens located on a roof. They filter stormwater runoff by providing biological treatment through soil, plants, roots and microbial activity. The vegetation and soil absorb rainfall, helping to reduce excess runoff and the pollutants that would otherwise enter waterways and the bay. Any treated water then drains into the building's drainage system.

In BlueFactor, the Level 4 roof garden catchment areas are connected to a 950 mm-deep raingarden with 100 mm of extended detention, sized to match the contributing catchment area. The planter boxes are considered self-treating and do not receive or treat stormwater from any other parts of the site.

**This copied document to be made available
for the sole purpose of enabling
its consideration and review as
part of a planning process under the
Planning and Environment Act 1987.
The document must not be used for any
purpose which may breach any
copyright**

**ADVERTISED
PLAN**

Blue Factor was developed by Microburst Software with support from DEECA. as a method of simplifying the analysis of stormwater treatment methods. The Blue Factor Calculator displays the amount of treatment that is required to meet best practice targets, using WSUD treatment measures.

The best practice standards have been set out 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.

The Blue Factor Result is provided below:

290 Park St, Fitzroy North - Option 5 (251212)

The proposed stormwater treatments provide 'deemed to comply' compliance with the minimum planning requirement for total nitrogen but does not comply with all the relevant objectives for management of stormwater flows on-site.



Project details

Name	V2: 290 Park St, Fitzroy North - Option 5 (251212)
Project ID	2364827A
Street address	290 Park St, Fitzroy North VIC 3068, Australia
Municipality	Yarra
Site area	598 m ²
Planning Number	

Flow and pollutant load reductions

Item	Result	Target	
Mean annual runoff volume harvested or evapotranspired (%)	19%	>27%	×
Mean annual runoff volume infiltrated or filtered (%)	0%	>9%	×
Total suspended solids (%)	60%	>80%	×
Total phosphorus (%)	49%	>45%	✓
Total nitrogen (%)	45%	>45%	✓
Total gross pollutants (%)	67%	>70%	×

**ADVERTISED
PLAN**

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright

WSUD Strategy

The development will include the provision of a 5,000 litre rainwater tank and associated pump in the basement pump room. The rainwater tank is to be connected to the ground floor commercial WC and landscape irrigation system.

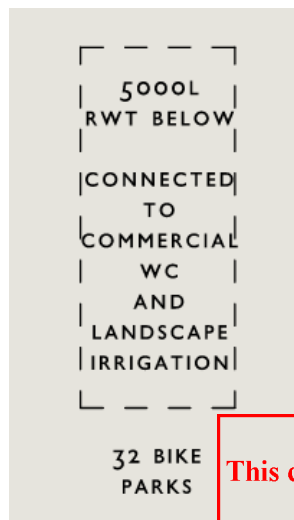


Figure 2 – Location Rainwater Tank

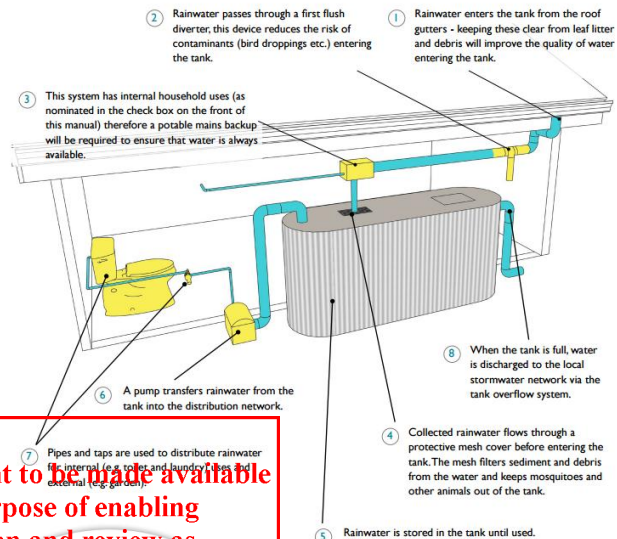


Figure 3 – Cross-section Tank
(City of Port Phillip)

Furthermore, a $\geq 3\text{m}^2$, minimum 950mm deep, raingarden with 100mm of extended detention is to be provided. Rainwater is to be collected from the Level 4 laundry roof and terrace is to be directed into the raingarden for treatment prior to discharge into the stormwater system.

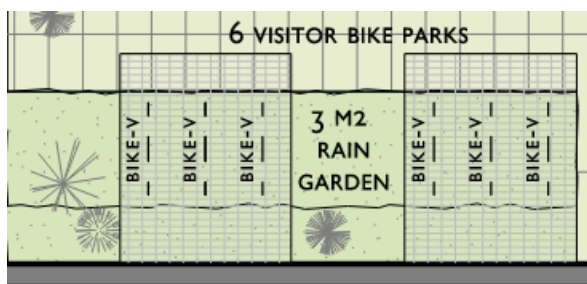


Figure 2 – Location Raingarden

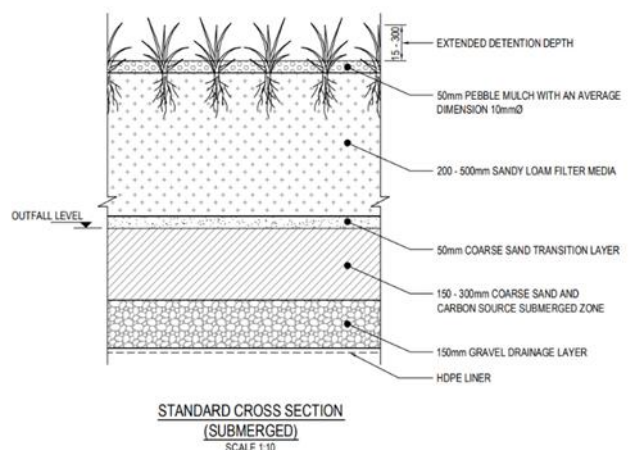


Figure 3 – Cross-section Raingarden
(City of Moreland)

**ADVERTISED
PLAN**

Rainwater Reuse

Inputs

Catchment Area	186 sqm
Number of Occupants	1
Bin Washout	No
Irrigation Area	154 sqm
Tank Capacity	5,000 Litre

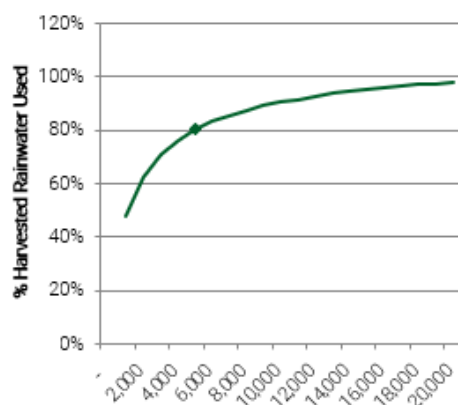
Outputs

% Served by Rainwater	38.0%
% Harvested Rainwater Used	90.0%
Total Potable Water Saved	57,575 Litre

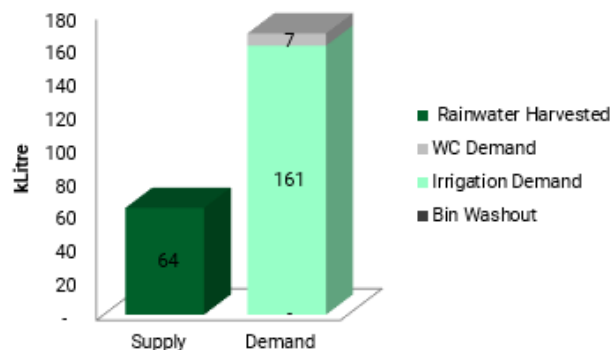
Rainwater Balance (Monthly Averages)

Month	Rainwater Harvested (L)	Irrigation Demand (L)	WC Demand (L)	Bin Washout (L)
Jan	4,268	23,858	620	0
Feb	5,375	21,612	560	0
Mar	4,831	11,086	620	0
Apr	5,449	10,613	600	0
May	5,120	10,951	620	0
Jun	5,055	4,990	600	0
Jul	3,902	5,084	620	0
Aug	4,747	5,084	620	0
Sep	5,624	14,587	600	0
Oct	5,894	14,862	620	0
Nov	7,911	14,495	600	0
Dec	5,819	24,042	620	0
Total	63,994	161,265	7,300	0
Equivalent STORM tool		22		0

Tank Sizing



Supply-Demand



F

**ADVERTISED
PLAN**

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright

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

**ADVERTISED
PLAN**

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright

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

Item	Description	Maintenance Interval
Kerbing and paved area	Remove rubbish, leaves and other debris from the surrounding drainage area.	3 monthly
Ponding area	Clear inflow points of built up sediment, rubbish and leaves. Check for erosion or gouging – repair if necessary.	3 monthly
Mulch layer (bark, pebbles, etc.)	Remove rubbish, leaves and other debris. After storm events mulch may need to be redistributed or added around inflow points.	3 monthly
Plants	Water establishing plants monthly during extended dry periods. Check plant health and replace dead plants as necessary. Use native species to suit garden conditions (e.g. full sun or shaded). Remove weeds – do not use herbicides, pesticides and fertilisers as these chemicals will pollute the stormwater runoff.	3 monthly
Rain garden soil mix	Check soil level is below surrounding hard surface level and overflow grate. Use drainage test to check soil is free draining.	Annually
Underdrain system	Use inspection well (if present) to check underdrain is working properly. Check rain garden draining freely using drainage test.	Annually

**ADVERTISED
PLAN**

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright

Appendix B: Preliminary FirstRate Certificates

**ADVERTISED
PLAN**

**This copied document to be made available
for the sole purpose of enabling
its consideration and review as
part of a planning process under the
Planning and Environment Act 1987.
The document must not be used for any
purpose which may breach any
copyright**

Nationwide House Energy Rating Scheme® NatHERS® Certificate

Generated on 10 Apr 2026 using FirstRate5: 5.5.5a (3.22)

Property

Address 101, Park Street,
Fitzroy North, VIC, 3068

Lot/DP -

NCC Class* Class 2

Floor/all Floors Type New Home

Plans

Main plan 2502PARK/29.10.2025

Prepared by Architecture architecture

Construction and environment

Assessed floor area [m²]*

Conditioned* 63.5

Unconditioned* 278.5

Total 342

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 Yes, managed

This copied document to be made available
for the sole purpose of enabling
its consideration and review as
part of a planning process under the
Planning and Environment Act 1987.
The document must not be used for any
purpose which may breach any
copyright

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	42.8	26.1
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, 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.

This copied document to be made available for the sole purpose of enabling consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright.

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?	☐	☐	☐	☐	☐

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright.

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]
Basement Carpark	basementCarPark	206.3
GF Carpark	unconditioned	272.7
GF Living/Kitchen	kitchen	18.1
GF Staircase	dayTime	7.3
Bedroom	bedroom	19.8
Bath	unconditioned	5.8
L1 Staircase	dayTime	2.4
Maisonette	living	19.4

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
CAP-057-13 A	Capral 900 Sliding Door DG 6EA/12Ar/6	3.19	0.48	0.46	0.5
CAP-055-52 A	Capral 419 Flushline Fixed Window DG 6/12Ar/6EA	2.71	0.58	0.55	0.61
CAP-061-06 A	Capral 50 Series Awning in 400 Series DG 6EA-12Ar-6	4.42	0.4	0.38	0.42
JAL-002-05 A	Aluminium Louvre Secondary Glaze SG 6mmLE	3.71	0.54	0.51	0.57

Window and glazed door schedule

Location	Window ID	Window no.	Height [mm]	Width [mm]	Window type	Opening %	Orientation	Window shading device*
GF Living/Kitchen	CAP-057-13 A	Opening 18	2400	4100	sliding	45.0	W	No
Bedroom	CAP-055-52 A	Opening 6	1800	1060	fixed	0.0	W	No
Bedroom	CAP-055-52 A	Opening 5	2700	800	fixed	0.0	W	No
Bedroom	CAP-061-06 A	Opening 7	900	1050	awning	90.0	N	No
Bedroom	CAP-055-52 A	Opening 20	900	1050	fixed	0.0	N	No
Bath	CAP-055-52 A	Opening 19	1800	900	fixed	0.0	N	No
Maisonette	CAP-055-52 A	Opening 11	2550	1950	fixed	0.0	E	No

Maisonette	JAL-002-05 A	Opening 21	2550	1200	louvre	90.0	E	No
Maisonette	CAP-055-52 A	Opening 23	600	900	fixed	0.0	E	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								

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
Maisonette	2400	900	100.0	E

External wall type

Wall ID	Wall type	Solar absorptance	Wall shade [colour]	Bulk insulation [R-value]	Reflective wall wrap*
1	GIW25025 - Internal Concrete Wall	0.5	Medium		No
2	GIW25025 - External Concrete Retaining Wall	0.5	Medium		No
3	GIW25025 - External Concrete Wall	0.5	Medium		No
4	GIW25025 - 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)
Basement Carpark	1	2850	3481	N	0	No
Basement Carpark	1	2400	598	W	0	No
Basement Carpark	1	2850	4199	N	0	No
Basement Carpark	1	2850	1831	E	0	No
Basement Carpark	1	2850	2202	N	0	No
Basement Carpark	1	2850	3804	W	0	No
Basement Carpark	1	2850	1052	N	0	No
Basement Carpark	1	2850	4144	W	0	No
Basement Carpark	1	2400	1360	S	0	No
Basement Carpark	1	2400	4589	W	0	No
Basement Carpark	2	2400	17684	S	0	No
Basement Carpark	2	2400	11265	E	0	No
Basement Carpark	2	2400	8119	N	0	No
GF Carpark	3	3840	1986	E	0	No
GF Carpark	1	3840	11941	N	0	No
GF Carpark	3	3840	602	N	0	Yes
GF Carpark	3	3840	4045	N	0	Yes
GF Carpark	1	3840	505	W	0	No
GF Carpark	1	3840	3387	N	0	No
GF Carpark	1	3840	4602	W	0	No
GF Carpark	1	3840	6201	N	0	No
GF Carpark	1	3840	587	E	0	No
GF Carpark	1	3840	2004	N	0	No
GF Carpark	1	3840	1172	W	0	No
GF Carpark	3	3840	1237	W	0	Yes
GF Carpark	3	3840	140	W	0	Yes
GF Carpark	3	3840	26417	S	0	No
GF Living/Kitchen	4	3840	4415	S	0	Yes
GF Living/Kitchen	4	3840	4400	N	1096	Yes
GF Living/Kitchen	4	410	1198	N	0	No
GF Living/Kitchen	4	3840	4101	W	2507	Yes
GF Staircase	4	3840	1757	S	0	No
GF Staircase	4	3840	818	N	1101	Yes
Bedroom	4	3000	3177	W	0	Yes
Bedroom	4	3000	935	W	0	Yes

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright.

Bedroom	4	3000	4816	S	0	Yes
Bedroom	4	3000	4816	N	1103	Yes
Bath	4	3000	1964	N	1118	Yes
L1 Staircase	4	3000	902	N	1796	Yes
Maisonette	4	3000	4056	E	770	Yes
Maisonette	4	3000	3914	N	1116	Yes
Maisonette	4	3000	7031	S	0	Yes

Internal wall type

Wall ID	Wall type	Area [m²]	Bulk insulation
1	GIW25025 - Internal Concrete Wall	19.6	Glass fibre batt (k = 0.044 density = 12 kg/m³) (R1.8)
2	FR5 - Internal Plasterboard Stud Wall	53.2	

Floor type

Location	Construction	Area [m²]	Sub-floor ventilation	Added insulation [R-value]	Covering
Basement Carpark	FR5 - 300mm concrete slab	206.3	Enclosed	R0.0	none
GF Carpark	FR5 - 300mm concrete slab	16.2	Elevated	R0.0	none
GF Carpark	FR5 - 300mm concrete slab	104	Enclosed	R0.0	none
GF Carpark	FR5 - 300mm concrete slab	200.5	Enclosed	R0.0	none
GF Carpark	FR5 - 300mm concrete slab	45.2	Elevated	R0.0	none
GF Living/Kitchen	FR5 - 300mm concrete slab	18.1	Enclosed	R2.3	Timber
GF Staircase	FR5 - 300mm concrete slab	7.2	Enclosed	R2.3	Timber
Bedroom	FR5 - 300mm concrete slab	9.3	Enclosed	R0.0	Carpet
Bedroom	FR5 - 300mm concrete slab	2.6	Elevated	R2.3	Carpet
Bedroom	FR5 - 300mm concrete slab	7.9	Elevated	R2.3	Carpet
Bath	FR5 - 300mm concrete slab	5.8	Enclosed	R0.0	Tiles
L1 Staircase	FR5 - 300mm concrete slab	2.4	Enclosed	R0.0	Timber
Maisonette	FR5 - 300mm concrete slab	6.6	Enclosed	R0.0	Timber
Maisonette	FR5 - 300mm concrete slab	12.7	Enclosed	R2.3	Timber

Ceiling type

Location	Construction material/type	Bulk insulation R-value [may include edge batt values]	Reflective wrap*
Basement Carpark	FR5 - 300mm concrete slab	R0.0	No
Basement Carpark	Plasterboard	R0.0	No
GF Carpark	Plasterboard	R0.0	No
GF Carpark	Plasterboard	R0.0	No
GF Carpark	Plasterboard	R0.0	No

NatHERS Certificate

6.6 Star Rating as of 10 Apr 2026

GF Carpark	Plasterboard	R0.0	No
GF Carpark	FR5 - 300mm concrete slab	R2.3	No
GF Carpark	Plasterboard	R0.0	No
GF Living/Kitchen	FR5 - 300mm concrete slab	R0.0	No
GF Staircase	FR5 - 300mm concrete slab	R0.0	No
Bedroom	Plasterboard	R2.3	No

Ceiling penetrations*

Location	Quantity	Type	Height [mm]	Width [mm]	Sealed/unsealed
GF Living/Kitchen	7	Downlights	80	80	Sealed
GF Living/Kitchen	1	Exhaust Fans	250	250	Sealed
GF Staircase	2	Downlights	80	80	Sealed
Bedroom	7	Downlights	80	80	Sealed
Bath	2	Downlights	80	80	Sealed
Bath	1	Exhaust Fans	250	250	Sealed
L1 Staircase	1	Downlights	80	80	Sealed
Maisonette	7	Downlights	80	80	Sealed
Maisonette	1	Exhaust Fans	250	250	Sealed

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright

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 : 300mm: 300mm 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
Internal 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.	

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Design Act 1987. The document must not be used for any purpose which may breach any copyright

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 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 copyright 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)

This copied document to be made available
for the sole purpose of enabling
its consideration and review as
part of a planning process under the
Planning and Environment Act 1987.
The document must not be used for any
purpose which may breach any
copyright

Nationwide House Energy Rating Scheme® NatHERS® Certificate

Generated on 10 Apr 2026 using FirstRate5: 5.5.5a (3.22)

Property

Address 103, Park Street,
Fitzroy North, VIC, 3068

Lot/DP -

NCC Class* Class 2

Floor/all Floors

Type New Home

Plans

Main plan 2502PARK/29.10.2025

Prepared by Architecture architecture

Construction and environment

Assessed floor area [m²]*

Conditioned*	63.2
Unconditioned*	5.2
Total	68.4
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 03904451111

Accreditation No. DMN/10/2024

Assessor Accrediting Organisation Design Matters National

Declaration of interest Yes, managed

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	17.5	7.3
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, 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.

This copied document to be made available for the sole purpose of enabling consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright.

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?	☐	☐	☐	☐	☐

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright.

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]
Living/Kitchen	kitchen	32.4
Bed 1	bedroom	12.9
Bath	unconditioned	5.2
Corridor	dayTime	4.6
Bed 2	bedroom	13.2

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
CAP-055-52 A	Capral 419 Flushline Fixed Window DG 6/12Ar/6EA	1.58	0.53	0.55	0.61
CAP-057-13 A	Capral 900 Sliding Door DG 6EA/12Ar/6	3.19	0.48	0.46	0.5
CAP-061-06 A	Capral 50 Series Awning in 400 Series DG 6EA-12Ar-6	4.42	0.4	0.38	0.42

Window and glazed door schedule

Location	Window ID	Window no.	Height [mm]	Width [mm]	Window type	Opening %	Orientation	Window shading device*
Living/Kitchen	CAP-055-52 A	Opening 5	1950	900	fixed	0.0	S	No
Living/Kitchen	CAP-055-52 A	Opening 1	2400	1450	fixed	0.0	N	No
Living/Kitchen	CAP-057-13 A	Opening 2	2400	2750	sliding	45.0	N	No
Bed 1	CAP-061-06 A	Opening 3	2600	1000	awning	90.0	N	No
Bath	CAP-055-52 A	Opening 12	850	463	fixed	0.0	E	No
Bed 2	CAP-061-06 A	Opening 4	1950	943	awning	90.0	S	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 [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]	Orient-ation	Outdoor shade	Diffuser
No Data Available							

External door schedule

Location	Height [mm]	Width [mm]	Opening %	Orientation
Living/Kitchen	2400	1081	100.0	S

External wall type

Wall ID	Wall type	Solar absorptance	Wall shade [colour]	Bulk insulation [R-value]	Reflective wall wrap*
1	GIW25025 - External Concrete Wall	0.5	Medium	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R2.7)	No
2	GIW25025 - Internal Plasterboard	0.5	Medium	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R2.5)	No
3	GIW25025 - Internal Concrete Wall	0.5	Medium	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R1.8)	No

External wall schedule

Location	Wall ID	Height [mm]	Width [mm]	Orientation	Horizontal shading feature* maximum projection [mm]	Vertical shading feature* (yes/no)
Living/Kitchen	1	3000	1986	S	1811	Yes
Living/Kitchen	1	3000	689	W	8892	Yes
Living/Kitchen	1	3000	2003	S	1126	Yes

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright

NatHERS Certificate

9 Star Rating as of 10 Apr 2026

Living/Kitchen	1	3000	246	S	0	Yes
Living/Kitchen	1	3000	4254	N	1795	Yes
Living/Kitchen	2	3000	7274	W	0	No
Bed 1	1	3000	3419	E	6186	Yes
Bed 1	1	3000	2725	N	0	No
Bed 1	1	3000	453	W	9750	Yes
Bed 1	1	3000	1218	N	448	Yes
Bed 1	1	3000	1346	W	8533	Yes
Bath	3	3000	899	E	0	No
Bath	3	3000	316	S	0	No
Bath	3	3000	846	E	0	No
Bath	1	3000	931	E	6187	Yes
Bed 2	1	3000	1351	E	6183	Yes
Bed 2	3	3000	2001	E	0	No
Bed 2	3	3000	320	N	0	No
Bed 2	1	3000	3934	S	0	Yes

Internal wall type

Wall ID	Wall type	Area [m ²]	Bulk insulation
1	FR5 - Internal Plaster board Stud Wall	52.6	

Floor type

Location	Construction	Area [m ²]	Sub-floor ventilation	Added insulation [R-value]	Covering
Living/Kitchen	FR5 - 300mm concrete slab	8.7	Enclosed	R0.0	Timber
Living/Kitchen	FR5 - 300mm concrete slab	1	Enclosed	R0.0	Timber
Living/Kitchen	FR5 - 300mm concrete slab	3.2	Elevated	R2.3	Timber
Living/Kitchen	FR5 - 300mm concrete slab	14.3	Elevated	R2.3	Timber
Living/Kitchen	FR5 - 300mm concrete slab	5.3	Enclosed	R0.0	Timber
Bed 1	FR5 - 300mm concrete slab	2.2	Elevated	R2.3	Carpet
Bed 1	FR5 - 300mm concrete slab	10.7	Enclosed	R0.0	Carpet
Bath	FR5 - 300mm concrete slab	0.6	Enclosed	R0.0	Tiles
Bath	FR5 - 300mm concrete slab	4.6	Elevated	R2.3	Tiles
Corridor	FR5 - 300mm concrete slab	4.6	Elevated	R2.3	Timber
Bed 2	FR5 - 300mm concrete slab	9.5	Elevated	R2.3	Carpet
Bed 2	FR5 - 300mm concrete slab	3.8	Elevated	R2.3	Carpet

Ceiling type

Location	Construction material/type	Bulk insulation R-value [may include edge batt values]	Reflective wrap*
Living/Kitchen	Plasterboard	R2.3	No

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright.

Living/Kitchen	Plasterboard	R2.3	No
Bed 2	Plasterboard	R2.3	No

Ceiling penetrations*

Location	Quantity	Type	Height [mm]	Width [mm]	Sealed/unsealed
Living/Kitchen	13	Downlights	80	80	Sealed
Living/Kitchen	1	Exhaust Fans	250	250	Sealed
Bed 1	5	Downlights	80	80	Sealed
Bath	2	Downlights	80	80	Sealed
Bath	1	Exhaust Fans	250	250	Sealed
Corridor	2	Downlights	80	80	Sealed
Bed 2	5	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 : 300mm: 300mm Suspended Slab	0.0	0.5	Medium

This copied document to be made available for the solar insulation enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any applicable copyright.

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.	

This copied document to be made available
for the sole purpose of enabling
its consideration and review as
part of a planning process under the
Planning and Environment Act 1987.
The document must not be used for any
purpose which may breach any
copyright

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 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)

This copied document to be made available
for the sole purpose of enabling
its consideration and review as
part of a planning process under the
Planning and Environment Act 1987.
The document must not be used for any
purpose which may breach any
copyright

Nationwide House Energy Rating Scheme® NatHERS® Certificate

Generated on 10 Apr 2026 using FirstRate5: 5.5.5a (3.22)

Property

Address 202, Park Street,
Fitzroy North, VIC, 3068

Lot/DP -

NCC Class* Class 2

Floor/all Floors Type New Home

Plans

Main plan 2502PARK/29.10.2025

Prepared by Architecture architecture

Construction and environment

Assessed floor area [m²]*

Conditioned* 56.2

Unconditioned* 5.4

Total 61.6

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 Yes, managed

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright

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	7.4	12.4
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, 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.

This copied document to be made available for the sole purpose of enabling consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright.

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?	☐	☐	☐	☐	☐

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright.

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]
Living/Kitchen	kitchen	31
Bed 2	bedroom	9.8
Bath	unconditioned	5.4
Corridor	dayTime	4.2
Bed 1	bedroom	11.4

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
CAP-055-52 A	Capral 419 Flushline Fixed Window DG 6/12Ar/6EA	0.58	0.53	0.55	0.61
CAP-057-13 A	Capral 900 Sliding Door DG 6EA/12Ar/6	3.19	0.48	0.46	0.5
CAP-061-06 A	Capral 50 Series Awning in 400 Series DG 6EA-12Ar-6	4.42	0.4	0.38	0.42

Window and glazed door schedule

Location	Window ID	Window no.	Height [mm]	Width [mm]	Window type	Opening %	Orientation	Window shading device*
Living/Kitchen	CAP-055-52 A	Opening 13	2400	1400	fixed	0.0	N	No
Living/Kitchen	CAP-057-13 A	Opening 15	2400	2750	sliding	45.0	N	No
Bed 2	CAP-061-06 A	Opening 2	1500	970	awning	90.0	W	No
Bed 2	CAP-055-52 A	Opening 7	1150	970	fixed	0.0	W	No
Bath	CAP-055-52 A	Opening 1	800	800	fixed	0.0	W	No
Bed 1	CAP-061-06 A	Opening 10	1530	1000	awning	90.0	N	No
Bed 1	CAP-055-52 A	Opening 12	1170	1000	fixed	0.0	N	No

Roof window* type and performance value

Default* roof windows

Substitution tolerance ranges	
-------------------------------	--

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
Living/Kitchen	2400	1100	100.0	E

External wall type

Wall ID	Wall type	Solar absorptance	Wall shade [colour]	Bulk insulation [R-value]	Reflective wall wrap*
1	GIW25025 - Internal Plasterboard	0.5	Medium	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R2.5)	No
2	GIW25025 - 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)
Living/Kitchen	1	3000	3428	S	0	No
Living/Kitchen	2	3000	1973	E	15632	Yes
Living/Kitchen	2	3000	698	S	2431	Yes

NatHERS Certificate

9.4 Star Rating as of 10 Apr 2026

Living/Kitchen	1	3000	5866	E	0	No
Living/Kitchen	2	3000	4154	N	1824	Yes
Bed 2	2	3000	1907	W	0	Yes
Bed 2	2	3000	592	S	722	Yes
Bed 2	2	3000	1039	W	1000	Yes
Bed 2	2	3000	448	S	0	Yes
Bed 2	2	3000	204	S	0	No
Bed 2	2	3000	368	S	1227	Yes
Bed 2	2	3000	228	S	1227	Yes
Bed 2	1	3000	1705	S	0	No
Bath	2	3000	2828	W	0	Yes
Bed 1	2	3000	1813	E	9060	Yes
Bed 1	2	3000	1632	N	0	No
Bed 1	2	3000	592	W	949	Yes
Bed 1	2	3000	1259	N	584	Yes
Bed 1	2	3000	600	N	585	Yes
Bed 1	2	3000	2930	W	0	Yes

Internal wall type

Wall ID	Wall type	Area [m ²]	Bulk insulation
1	FR5 - Internal Plaster board Stud Wall	50.8	

Floor type

Location	Construction	Area [m ²]	Sub-floor ventilation	Added insulation [R-value]	Covering
Living/Kitchen	FR5 - 300mm concrete slab	0.3	Elevated	R2.3	Timber
Living/Kitchen	FR5 - 300mm concrete slab	30.8	Enclosed	R0.0	Timber
Bed 2	FR5 - 300mm concrete slab	9.8	Enclosed	R0.0	Carpet
Bath	FR5 - 300mm concrete slab	5.4	Enclosed	R0.0	Tiles
Corridor	FR5 - 300mm concrete slab	4.2	Enclosed	R0.0	Timber
Bed 1	FR5 - 300mm concrete slab	11.4	Enclosed	R0.0	Carpet

Ceiling type

Location	Construction material/type	Bulk insulation R-value [may include edge batt values]	Reflective wrap*
No Data Available			

Ceiling penetrations*

Location	Quantity	Type	Height [mm]	Width [mm]	Sealed/unsealed
Living/Kitchen	12	Downlights	80	80	Sealed

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright

NatHERS Certificate

9.4 Star Rating as of 10 Apr 2026

Living/Kitchen	1	Exhaust Fans	250	250	Sealed
Bed 2	4	Downlights	80	80	Sealed
Bath	2	Downlights	80	80	Sealed
Bath	1	Exhaust Fans	250	250	Sealed
Corridor	2	Downlights	80	80	Sealed
Bed 1	5	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 : 300mm: 300mm 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.	
---	--

This copied document to be made available
for the sole purpose of enabling
its consideration and review as
part of a planning process under the
Planning and Environment Act 1987.
The document must not be used for any
purpose which may breach any
copyright

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 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)

This copied document to be made available
for the sole purpose of enabling
its consideration and review as
part of a planning process under the
Planning and Environment Act 1987.
The document must not be used for any
purpose which may breach any
copyright

Nationwide House Energy Rating Scheme® NatHERS® Certificate

Generated on 10 Apr 2026 using FirstRate5: 5.5.5a (3.22)

Property

Address 205, Park Street,
Fitzroy North, VIC, 3068

Lot/DP -

NCC Class* Class 2

Floor/all Floors

Type New Home

Plans

Main plan 2502PARK/29.10.2025

Prepared by Architecture architecture

Construction and environment

Assessed floor area [m²]*

Conditioned*	45
Unconditioned*	5.1
Total	50.1
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 Yes, managed

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	33	18
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, 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.

This copied document to be made available for the sole purpose of enabling consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright.

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?	☐	☐	☐	☐	☐

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright.

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]
Living/Kitchen	kitchen	33.8
Bed 1	bedroom	11.2
Bath	unconditioned	5.1

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
CAP-057-13 A	Capral 900 Sliding Door DG 6EA/12Ar/6	3.19	0.48	0.46	0.5
CAP-055-52 A	Capral 419 Flushline Fixed Window DG 6/12Ar/6EA	2.71	0.58	0.55	0.61
CAP-061-06 A	Capral 50 Series Awning in 400 Series DG 6EA-12Ar-6	2.42	0.4	0.38	0.42

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright

Window and glazed door schedule

Location	Window ID	Window no.	Height [mm]	Width [mm]	Window type	Opening %	Orientation	Window shading device*
Living/Kitchen	CAP-057-13 A	Opening 11	2700	4380	sliding	45.0	E	No
Living/Kitchen	CAP-055-52 A	Opening 13	2400	750	fixed	0.0	E	No
Bed 1	CAP-061-06 A	Opening 6	1690	1200	awning	90.0	W	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 [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
Living/Kitchen	2400	1100	100.0	N

External wall *type*

Wall ID	Wall type	Solar shading feature* maximum projection [mm]	Wall shade absorbance (colour)	Bulk insulation [R-value]	Reflective wall wrap*
1	GIW25025 - External Concrete Wall	0	Medium	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R2.7)	No
2	GIW25025 - Internal Concrete Wall	0.5	Medium	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R1.8)	No

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. This document must not be used for any purpose which may breach any copyright

External wall *schedule*

Location	Wall ID	Height [mm]	Width [mm]	Orientation	Horizontal shading feature* maximum projection [mm]	Vertical shading feature* (yes/no)
Living/Kitchen	1	3000	4407	S	0	No
Living/Kitchen	1	3000	5126	E	1861	Yes
Living/Kitchen	2	2400	8296	N	0	No
Living/Kitchen	1	2400	1882	N	1584	Yes
Living/Kitchen	1	3000	1934	W	4995	Yes
Bed 1	1	3000	3915	S	0	No
Bed 1	1	3000	3021	W	0	Yes
Bath	1	2400	1529	S	0	No

Internal wall *type*

Wall ID	Wall type	Area [m ²]	Bulk insulation
---------	-----------	------------------------	-----------------

1	FR5 - Internal Plasterboard Stud Wall	32.1
---	---------------------------------------	------

Floor type

Location	Construction	Area [m ²]	Sub-floor ventilation	Added insulation [R-value]	Covering
Living/Kitchen	FR5 - 300mm concrete slab	33.8	Enclosed	R0.0	Timber
Bed 1	FR5 - 300mm concrete slab	11.2	Enclosed	R0.0	Carpet
Bath	FR5 - 300mm concrete slab	5.1	Enclosed	R0.0	Tiles

Ceiling type

Location	Construction material/type	Bulk insulation R-value [may include edge batt values]	Reflective wrap*
No Data Available			

Ceiling penetrations*

Location	Quantity	Type	Height [mm]	Width [mm]	Sealed/unsealed
Living/Kitchen	15	Downlights	80	80	Sealed
Living/Kitchen	1	Exhaust Fans	250	250	Sealed
Bed 1	4	Downlights	80	80	Sealed
Bath	2	Downlights	80	80	Sealed
Bath	1	Exhaust Fan	250	250	Sealed

This copied document is made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright.

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 : 300mm: 300mm 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.	

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright

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 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)

This copied document to be made available
for the sole purpose of enabling
its consideration and review as
part of a planning process under the
Planning and Environment Act 1987.
The document must not be used for any
purpose which may breach any
copyright

Nationwide House Energy Rating Scheme® NatHERS® Certificate

Thermal performance
star rating

Generated on 10 Apr 2026 using FirstRate5: 5.5.5a (3.22)

Property

Address 303, Park Street,
Fitzroy North, VIC, 3068
Lot/DP -
NCC Class* Class 2
Floor/all Floors
Type New Home

Plans

Main plan 2502PARK/29.10.2025
Prepared by Architecture architecture

Construction and environment

Assessed floor area [m²]*
Conditioned* 95.2
Unconditioned* 4.3
Total 99.5
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 03904451111
Accreditation No. DMN/10/2024
Assessor Accrediting Organisation Design Matters National
Declaration of interest Yes, managed

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 [MJ/m²]

Limits taken from ABCB Standard 2022

	Heating	Cooling
Modelled	33.5	10.6
Load limits	N/A	N/A

Features determining load limits

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

Whole of Home performance rating

No Whole of Home
performance rating
generated for this
certificate

Verification

To verify this certificate, scan
the QR code or visit 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.

This copied document to be made available for the sole purpose of enabling consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright.

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 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 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]
Living/Kitchen	kitchen	46.7
Bed 3	bedroom	11.2
Bed 2	bedroom	11.7
Bath	dayTime	5.5
Ensuite	unconditioned	4.3
Corridor	dayTime	4.1
Bed 1	bedroom	15.9

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
CAP-057-13 A	Capral 900 Sliding Door DG 6EA/12Ar/6	5.19	0.48	0.46	0.5
CAP-061-06 A	Capral 50 Series Awning in 400 Series DG 6EA-12Ar-6	4.42	0.4	0.38	0.42
CAP-055-52 A	Capral 419 Flushline Fixed Window DG 6/12Ar/6EA	2.71	0.58	0.55	0.61

Window and glazed door schedule

Location	Window ID	Window no.	Height [mm]	Width [mm]	Window type	Opening %	Orientation	Window shading device*
Living/Kitchen	CAP-057-13 A	Opening 3	2700	4580	sliding	45.0	N	No
Bed 3	CAP-061-06 A	Opening 1	1900	1200	awning	90.0	N	No
Bed 3	CAP-055-52 A	Opening 4	2000	600	fixed	0.0	S	No
Bed 2	CAP-061-06 A	Opening 2	1900	1200	awning	90.0	N	No
Ensuite	CAP-055-52 A	Opening 16	2000	829	fixed	0.0	N	No
Corridor	CAP-061-06 A	Opening 6	2000	911	awning	90.0	E	No
Bed 1	CAP-061-06 A	Opening 17	1900	1500	awning	90.0	E	No

Roof window* type and performance value

Default* roof windows

		Substitution tolerance ranges		
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 [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
Living/Kitchen	2400	998	100.0	S

External wall type

Wall ID	Wall type	Solar absorptance	Wall shade [colour]	Bulk insulation [R-value]	Reflective wall wrap*
1	GIW25025 - External Concrete Wall	0.5	Medium	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R2.7)	No
2	GIW25025 - External Concrete Wall	0.5	Medium	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R2.5)	No
3	GIW25025 - Internal Plasterboard	0.5	Medium	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R2.5)	No
4	FR5 - Internal Plasterboard Stud 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)
Living/Kitchen	1	3000	1855	S	7267	Yes
Living/Kitchen	2	3000	1840	W	0	Yes
Living/Kitchen	3	3000	5951	S	0	No
Living/Kitchen	1	3000	4634	N	1825	Yes
Living/Kitchen	1	3000	686	N	1912	Yes
Living/Kitchen	1	3000	504	W	0	Yes
Living/Kitchen	1	3000	5753	W	11141	Yes
Bed 3	1	3000	3767	E	0	No
Bed 3	1	3000	1428	N	0	No
Bed 3	1	3000	138	W	10512	Yes
Bed 3	1	3000	1620	N	61	Yes
Bed 3	4	3000	2174	S	966	Yes
Bed 2	1	3000	2519	N	64	Yes
Bed 2	1	3000	275	N	2589	Yes
Bed 2	1	3000	508	NW	4286	Yes
Bed 2	1	3000	313	NW	3341	Yes
Bed 2	1	3000	229	W	5535	Yes
Bed 2	1	3000	804	W	5398	Yes
Ensuite	4	3000	140	S	0	Yes
Ensuite	1	3000	2002	E	0	No
Ensuite	4	3000	2166	N	0	Yes
Corridor	1	3000	929	E	1904	Yes
Bed 1	4	3000	2358	S	0	No
Bed 1	1	3000	1633	S	5404	Yes
Bed 1	1	3000	3001	E	0	No

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright

Internal wall type

Wall ID	Wall type	Area [m²]	Bulk insulation
1	FR5 - Internal Plasterboard Stud Wall	85.1	

Floor type

Location	Construction	Area [m²]	Sub-floor ventilation	Added insulation [R-value]	Covering
Living/Kitchen	FR5 - 300mm concrete slab	3.3	Enclosed	R0.0	Timber
Living/Kitchen	FR5 - 300mm concrete slab	43.5	Enclosed	R0.0	Timber
Bed 3	FR5 - 300mm concrete slab	5.9	Enclosed	R0.0	Carpet
Bed 3	FR5 - 300mm concrete slab	5.3	Enclosed	R0.0	Carpet
Bed 2	FR5 - 300mm concrete slab	4.9	Enclosed	R0.0	Carpet

Bed 2	FR5 - 300mm concrete slab	6.8	Enclosed	R0.0	Carpet
Bath	FR5 - 300mm concrete slab	5.5	Enclosed	R0.0	Tiles
Ensuite	FR5 - 300mm concrete slab	4.3	Enclosed	R0.0	Tiles
Corridor	FR5 - 300mm concrete slab	4.1	Enclosed	R0.0	Timber
Bed 1	FR5 - 300mm concrete slab	2.9	Enclosed	R0.0	Carpet
Bed 1	FR5 - 300mm concrete slab	4.2	Enclosed	R0.0	Carpet
Bed 1	FR5 - 300mm concrete slab	8.7	Enclosed	R0.0	Carpet

Ceiling type

Location	Construction material/type	Bulk insulation R-value [may include edge batt values]	Reflective wrap*
Living/Kitchen	Plasterboard	R2.3	No
Living/Kitchen	Plasterboard	R2.3	No
Bed 3	Plasterboard	R2.3	No
Bed 3	Plasterboard	R2.3	No
Bed 2	Plasterboard	R2.3	No
Bed 2	Plasterboard	R2.3	No
Bath	Plasterboard	R2.3	No
Ensuite	Plasterboard	R2.3	No
Corridor	Plasterboard	R2.3	No
Bed 1	Plasterboard	R2.3	No
Bed 1	Plasterboard	R2.3	No
Bed 1	Plasterboard	R2.3	No

This copied document to be made available for the sole purpose of enabling its consideration review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright

Ceiling penetrations*

Location	Quantity	Type	Height [mm]	Width [mm]	Sealed/unsealed
Living/Kitchen	14	Downlights	80	80	Sealed
Living/Kitchen	1	Exhaust Fans	250	250	Sealed
Bed 3	4	Downlights	80	80	Sealed
Bed 2	4	Downlights	80	80	Sealed
Bath	2	Downlights	80	80	Sealed
Bath	1	Exhaust Fans	250	250	Sealed
Ensuite	1	Downlights	80	80	Sealed
Ensuite	1	Exhaust Fans	250	250	Sealed
Corridor	2	Downlights	80	80	Sealed
Bed 1	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]
GreenRoofIntensive:Slab - 500mm Substrate : 300mm:300mm Slab - 500mm Substrate	0.0	0.5	Medium
Slab:Slab - Suspended Slab : 300mm: 300mm 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*

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright.

(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.

This copied document to be made available
for the sole purpose of enabling
its consideration and review as
part of a planning process under the
Planning and Environment Act 1987.
The document must not be used for any
purpose which may breach any
copyright

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 being 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)

This copied document to be made available
for the sole purpose of enabling
its consideration and review as
part of a planning process under the
Planning and Environment Act 1987.
The document must not be used for any
purpose which may breach any
copyright

Nationwide House Energy Rating Scheme® NatHERS® Certificate

Generated on 10 Apr 2026 using FirstRate5: 5.5.5a (3.22)

Property

Address 601, Park Street,
Fitzroy North, VIC, 3068
Lot/DP -
NCC Class* Class 2
Floor/all Floors
Type New Home

Plans

Main plan 2502PARK/29.10.2025
Prepared by Architecture architecture

Construction and environment

Assessed floor area [m²]*		Exposure type
Conditioned*	123.4	open
Unconditioned*	2.9	NatHERS climate zone
Total	126.3	21 Melbourne RO
Garage	-	



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 Yes, managed

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	47.2	23.6
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, 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.

This copied document to be made available for the sole purpose of enabling consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright.

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]
Bed 4	bedroom	9.8
Bed 1	bedroom	13.8
Ensuite	nightTime	4.8
Bath	dayTime	5.8
Bed 3	bedroom	9.3
Bed 2	bedroom	12.4
Entry/Corridor	dayTime	8.4
Pantry	unconditioned	2.9
Living/Kitchen	kitchen	59.5

Window and glazed door type and performance

Default* windows

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

Custom* windows

Window ID	Window description	Substitution tolerance ranges	
		SHGC lower limit	SHGC upper limit
CAP-041-95 A	Capral 425 Fixed Window DG 013_AGG PLUS Clr 6_12_6	0.48	0.54
CAP-034-27 A	Urban 582 Awning Window DG 008_AGG PLUS Clr 4_10_4	0.45	0.49
CAP-057-13 A	Capral 900 Sliding Door DG 6EA/12Ar/6	0.46	0.5

Window and glazed door schedule

Location	Window ID	Window no.	Height [mm]	Width [mm]	Window type	Opening %	Orientation	Window shading device*
Bed 4	CAP-041-95 A	Opening 10	1000	900	fixed	0.0	S	No
Bed 4	CAP-034-27 A	Opening 11	1400	900	awning	90.0	S	No
Bed 4	CAP-041-95 A	Opening 16	2400	2200	fixed	0.0	S	No
Bed 1	CAP-034-27 A	Opening 12	1400	715	awning	90.0	S	No
Bed 1	CAP-041-95 A	Opening 13	1000	800	fixed	0.0	S	No
Bed 1	CAP-041-95 A	Opening 15	2400	1282	fixed	0.0	S	No
Bed 3	CAP-041-95 A	Opening 59	1130	975	fixed	0.0	W	No
Bed 3	CAP-034-27 A	Opening 61	1270	960	awning	90.0	W	No

Bed 2	CAP-034-27 A	Opening 4	3000	957	awning	90.0	N	No
Living/Kitchen	CAP-034-27 A	Opening 8	1400	900	awning	90.0	S	No
Living/Kitchen	CAP-041-95 A	Opening 9	1000	900	fixed	0.0	S	No
Living/Kitchen	CAP-041-95 A	Opening 17	2400	2600	fixed	0.0	S	No
Living/Kitchen	CAP-041-95 A	Opening 18	2400	2539	fixed	0.0	S	No
Living/Kitchen	CAP-041-95 A	Opening 5	2400	700	fixed	0.0	N	No
Living/Kitchen	CAP-057-13 A	Opening 6	2400	4700	sliding	45.0	N	No
Living/Kitchen	CAP-041-95 A	Opening 2	1130	900	fixed	0.0	N	No
Living/Kitchen	CAP-034-27 A	Opening 3	1270	960	awning	90.0	N	No
Living/Kitchen	CAP-041-95 A	Opening 1	1700	684	fixed	0.0	S	No
Living/Kitchen	CAP-041-95 A	Opening 44	1700	377	fixed	0.0	S	No
Living/Kitchen	CAP-041-95 A	Opening 53	1700	333	fixed	0.0	SW	No
Living/Kitchen	CAP-041-95 A	Opening 54	1700	358	fixed	0.0	SW	No
Living/Kitchen	CAP-041-95 A	Opening 55	1700	270	fixed	0.0	SW	No
Living/Kitchen	CAP-041-95 A	Opening 56	1700	321	fixed	0.0	SW	No
Living/Kitchen	CAP-041-95 A	Opening 57	1700	308	fixed	0.0	W	No
Living/Kitchen	CAP-041-95 A	Opening 52	1700	275	fixed	0.0	W	No
Living/Kitchen	CAP-041-95 A	Opening 51	1700	314	fixed	0.0	W	No
Living/Kitchen	CAP-041-95 A	Opening 50	1700	414	fixed	0.0	W	No
Living/Kitchen	CAP-041-95 A	Opening 48	1700	1042	fixed	0.0	NW	No
Living/Kitchen	CAP-041-95 A	Opening 49	1700	449	fixed	0.0	NW	No
Living/Kitchen	CAP-041-95 A	Opening 47	1700	406	fixed	0.0	NW	No
Living/Kitchen	CAP-041-95 A	Opening 45	1700	405	fixed	0.0	N	No
Living/Kitchen	CAP-041-95 A	Opening 46	1700	298	fixed	0.0	N	No
Living/Kitchen	CAP-041-95 A	Opening 19	1700	669	fixed	0.0	N	No

This is a restricted document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright.

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
Velux:VEL-011-02 W	VELUX FS - Fixed Skylight DG 3mm LoE 366 / 10.5mm Argon Gap / 3mm Clear	2.66	0.24	0.23	0.25

Roof window* schedule

Location	Window ID	Window no.	Opening %	Area [m²]	Width [mm]	Orientation	Outdoor shade	Indoor shade
Ensuite	Velux:VEL-011-02 W	Element 1	0.0	0.1	0	N	None	None
Bath	Velux:VEL-011-02 W	Element 2	0.0	0.5	0	N	None	None

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
Entry/Corridor	2100	996	100.0	E

External wall type

Wall ID	Wall type	Solar absorptance	Wall shade absorptance [colour]	Bulk insulation [R-value]	Reflective wall wrap*
1	GIW25025 - External Concrete Wall	0.5	Medium	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R2.7)	No
2	GIW25025 - Internal 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)
Bed 4	1	3000	2956	S	772	Yes
Bed 1	1	3000	1004	E	2693	Yes
Bed 1	2	3000	1957	E	0	No
Bed 1	1	3000	3562	S	777	Yes
Ensuite	2	3000	1959	E	0	No
Bed 3	1	3000	429	E	870	Yes
Bed 3	1	3000	1802	N	0	No
Bed 3	1	3000	342	N	0	Yes
Bed 3	1	3000	315	N	0	Yes
Bed 3	1	3000	346	NW	0	Yes

Bed 3	1	3000	322	NW	0	Yes
Bed 3	1	3000	315	W	0	Yes
Bed 3	1	3000	2221	W	5447	Yes
Bed 2	1	3000	770	E	2683	Yes
Bed 2	2	3000	2468	E	0	No
Bed 2	1	3000	2920	N	0	No
Bed 2	1	3000	415	W	871	Yes
Bed 2	1	3000	1047	N	418	Yes
Entry/Corridor	1	3000	1157	E	2683	Yes
Entry/Corridor	1	3000	209	N	0	Yes
Pantry	1	3000	2229	E	5643	Yes
Pantry	1	3000	1638	N	0	No
Pantry	1	3000	427	W	0	Yes
Living/Kitchen	1	3000	3361	S	0	Yes
Living/Kitchen	1	3000	317	S	0	No
Living/Kitchen	1	3000	122	W	0	Yes
Living/Kitchen	1	3000	6060	S	776	Yes
Living/Kitchen	1	3000	5631	N	808	Yes
Living/Kitchen	1	3000	1029	E	5634	Yes
Living/Kitchen	1	3000	1212	E	0	Yes
Living/Kitchen	1	3000	632	N	0	Yes
Living/Kitchen	1	3000	1153	W	0	No
Living/Kitchen	1	3000	686	S	0	Yes
Living/Kitchen	1	3000	395	S	0	Yes
Living/Kitchen	1	3000	357	SW	0	Yes
Living/Kitchen	1	3000	384	SW	0	Yes
Living/Kitchen	1	3000	291	SW	0	Yes
Living/Kitchen	1	3000	334	SW	0	Yes
Living/Kitchen	1	3000	325	W	0	Yes
Living/Kitchen	1	3000	277	W	0	Yes
Living/Kitchen	1	3000	356	W	0	Yes
Living/Kitchen	1	3000	438	W	0	Yes
Living/Kitchen	1	3000	344	NW	0	Yes
Living/Kitchen	1	3000	464	NW	0	Yes
Living/Kitchen	1	3000	423	NW	0	Yes
Living/Kitchen	1	3000	428	N	0	Yes
Living/Kitchen	1	3000	307	N	0	Yes
Living/Kitchen	1	3000	666	N	0	Yes
Living/Kitchen	1	3000	1279	W	0	No

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright.

Internal wall type

Wall ID	Wall type	Area [m ²]	Bulk insulation
1	FR5 - Internal Plasterboard Stud Wall	116.7	

Floor type

Location	Construction	Area [m ²]	Sub-floor ventilation	Added insulation [R-value]	Covering
Bed 4	FR5 - 300mm concrete slab	6.5	Enclosed	R0.0	Timber
Bed 4	FR5 - 300mm concrete slab	3.3	Elevated	R2.3	Timber
Bed 1	FR5 - 300mm concrete slab	10.3	Enclosed	R0.0	Timber
Bed 1	FR5 - 300mm concrete slab	3.5	Elevated	R2.3	Timber
Ensuite	FR5 - 300mm concrete slab	4.8	Enclosed	R0.0	Timber
Bath	FR5 - 300mm concrete slab	5.8	Enclosed	R0.0	Timber
Bed 3	FR5 - 300mm concrete slab	4.5	Elevated	R2.3	Timber
Bed 3	FR5 - 300mm concrete slab	4.7	Enclosed	R0.0	Timber
Bed 2	FR5 - 300mm concrete slab	12.4	Enclosed	R0.0	Timber
Entry/Corridor	FR5 - 300mm concrete slab	8.4	Enclosed	R0.0	Timber
Pantry	FR5 - 300mm concrete slab	2.9	Enclosed	R0.0	Timber
Living/Kitchen	FR5 - 300mm concrete slab	3.9	Elevated	R2.3	Timber
Living/Kitchen	FR5 - 300mm concrete slab	0.4	Elevated	R2.3	Timber
Living/Kitchen	FR5 - 300mm concrete slab	55.2	Enclosed	R0.0	Timber

This copied document is to be made available for the sole purpose of enabling its consideration and review as part of the planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright

Ceiling type

Location	Construction material/type	Bulk insulation R-value [may include edge batt values]	Reflective wrap*
Bed 4	Plasterboard	R4.6	No
Bed 4	Plasterboard	R4.6	No
Bed 1	Plasterboard	R4.6	No
Bed 1	Plasterboard	R4.6	No
Ensuite	Plasterboard	R4.6	No
Bath	Plasterboard	R4.6	No
Bed 3	Plasterboard	R4.6	No
Bed 3	Plasterboard	R4.6	No
Bed 2	Plasterboard	R4.6	No
Entry/Corridor	Plasterboard	R4.6	No
Pantry	Plasterboard	R4.6	No
Living/Kitchen	Plasterboard	R4.6	No
Living/Kitchen	Plasterboard	R4.6	No

Ceiling penetrations*

Location	Quantity	Type	Height [mm]	Width [mm]	Sealed/unsealed
Bed 4	4	Downlights	80	80	Sealed
Bed 1	5	Downlights	80	80	Sealed
Ensuite	2	Downlights	80	80	Sealed
Ensuite	1	Exhaust Fans	250	250	Sealed
Bath	2	Downlights	80	80	Sealed
Bath	1	Exhaust Fans	250	250	Sealed
Bed 3	4	Downlights	80	80	Sealed
Bed 2	5	Downlights	80	80	Sealed
Entry/Corridor	3	Downlights	80	80	Sealed
Pantry	1	Downlights	80	80	Sealed
Living/Kitchen	23	Downlights	80	80	Sealed
Living/Kitchen	1	Exhaust Fans	250	250	Sealed

Ceiling fans

Location	Quantity	Diameter [mm]
No Data Available		

Roof type

Construction

Slab: Slab - Suspended Slab : 400mm: 400mm	Added insulation (R-value)	Solar absorptance	Roof shade [colour]
Suspended Slab	0.0	0.5	Medium

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright

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.	

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright

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 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 copyright 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)

This copied document to be made available
for the sole purpose of enabling
its consideration and review as
part of a planning process under the
Planning and Environment Act 1987.
The document must not be used for any
purpose which may breach any
copyright

Appendix C: Preliminary Part J4D6 BCA 2022 Façade Calculator

J4D6 Façade Calculator

Address	290 Park Street, Fitzroy North
Climate Zone	6
Building Classification	Class 6
Level	Ground - Commercial tenancy

	North	East	South	West	Internal
Façade area (m2)	32.2	0.0	23.5	35.1	45.5

Number of Rows	6
----------------	---

Window No.	Orientation	Dimensions		Area (m2)	Shading (m)	
		Height (m)	Width (m)		P	H
W1	North	2.61	4.23	11.0	3	2.61
W2	West	2.61	2.13	5.6	2.5	2.61
W3	South	2.61	1.21	3.2	2.5	2.61
W4	West	3.23	1.6	5.2	4.22	3.23
W5	West	2.61	4.48	11.7	2.5	2.61
W6	South	2.61	1.18	3.1	0.3	2.61

RESULTS			
Method 1	U-Value	SHGC	Min. Wall R-values
North	3.92	0.87	1
East	7.50	0.87	1.4
South	4.76	0.65	1
West	2.57	0.58	1
Internal	7.50		1.4

	U-Value	SHGC
Method 2	4.76	0.74

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright

**ADVERTISED
PLAN**

Appendix D: Renewable Energy

Inputs Solar PV

Peak Wattage of System	2.0 kWp
Azimuth	0 degrees
Inclination	10 degrees

Outputs Solar PV

Electricity Produced per Year	2680 kWh
No. Panels Required	5
Total Roof Area Required	10 sqm
Annual Carbon Savings	3002 kg CO ₂

Economic Output

Cost of System	3000.0 \$
Annual Savings	536 \$
Simple Payback	5.6 Years

**ADVERTISED
PLAN**

**This copied document to be made available
for the sole purpose of enabling
its consideration and review as
part of a planning process under the
Planning and Environment Act 1987.
The document must not be used for any
purpose which may breach any
copyright**

Appendix E: Daylight Modelling

Scope of Modelling

We have undertaken daylight modelling for 290 Park Street, Fitzroy North assessing both living and bedroom areas. 6 apartments have been selected with consideration of internal layout, inherent and adjacent building shading features. These apartments reflect a worst-case scenario with all other units anticipated to achieve the BESS performance requirements.

The development has been modelled under the following massing scenario:

- Building to the South modelled as existing heritage railway hotel.
- Buildings to the East are modelled as the existing residential.

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.

**ADVERTISED
PLAN**

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright

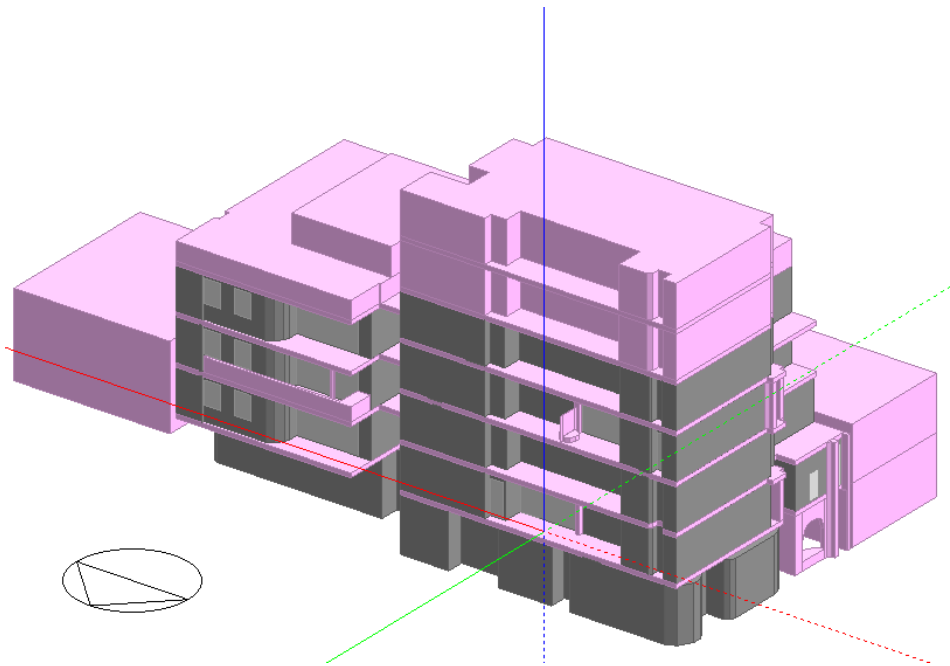
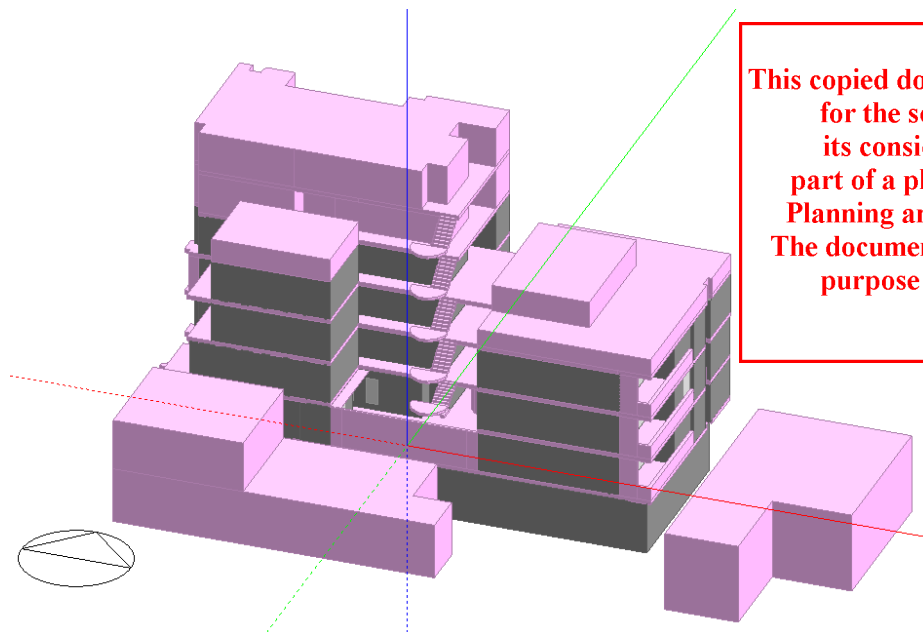


Figure 3 – DesignBuilder model of proposed and adjacent equitable development right buildings



**This copied document to be made available
for the sole purpose of enabling
its consideration and review as
part of a planning process under the
Planning and Environment Act 1987.
The document must not be used for any
purpose which may breach any
copyright**

Figure 4 – DesignBuilder model of proposed and adjacent equitable development right buildings

**ADVERTISED
PLAN**

ADVERTISED PLAN

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:
 - Fixed windows: double glazed, low-e, clear window with a total system VLT of 0.61.
- The reflectance of all materials is in accordance with the below:
 - Internal floors: 0.3
 - Internal Walls: 0.7
 - Ceilings: 0.8
 - External walls: 0.4
 - Soffits and balconies: 0.4
- 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.

Daylight Results – Numerical

The daylight results for living areas of 290 Park Street, Fitzroy North can be summarised as follows:

Area	Floor Area (m ²)	Floor Area above DF1 (m ²)	% of floor area above DF1	Status
101 Living 2	19.2	13.4	69.9	Non-compliant
101 Living	17.8	14.5	81.6	Non-compliant
103 Living	26.1	26.1	100.0	Compliant
105 Living	27.6	26.9	91.7	Compliant
204 Living	40.3	40.3	100.0	Compliant
301 Living	25.2	25.2	100.0	Compliant

The daylight results for bedrooms of 290 Park Street, Fitzroy North can be summarised as follows:

Area	Floor Area (m ²)	Floor Area above DF0.5 (m ²)	% of floor area above DF0.5	Status
101 Bed 1	17.6	17.6	100.0	Compliant
103 Bed 1	11.3	11.3	100.0	Compliant
103 Bed 2	10.1	5.0	50.4	Non-compliant
105 Bed 1	11.0	6.3	57.3	Non-compliant

Area	Floor Area (m2)	Floor Area above DF0.5 (m2)	% of floor area above DF0.5	Status
204 Bed 1	9.8	9.8	100.0	Compliant
204 Bed 2	9.8	9.8	100.0	Compliant
204 Bed 3	9.5	9.5	100.0	Compliant
302 Bed 1	11.2	11.2	100.0	Compliant
302 Bed 2	9.3	9.3	100.0	Compliant
305 Bed 1	9.7	9.7	100.0	Compliant
305 Bed 2	11.0	11.0	100.0	Compliant

ADVERTISED PLAN

**This copied document to be made available
for the sole purpose of enabling
its consideration and review as
part of a planning process under the
Planning and Environment Act 1987.
The document must not be used for any
purpose which may breach any
copyright**

Daylight Results – Visual

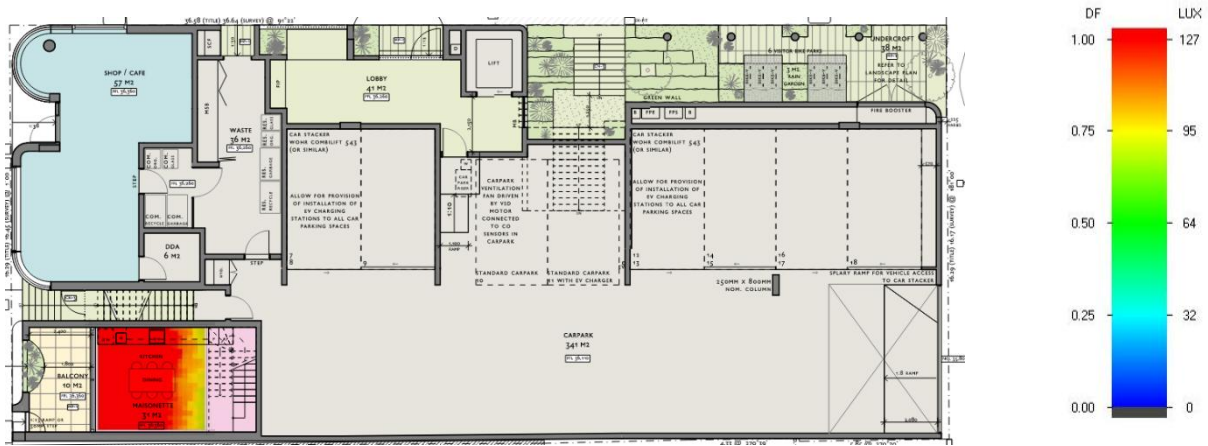


Figure 5 - Daylight Map – Ground Floor

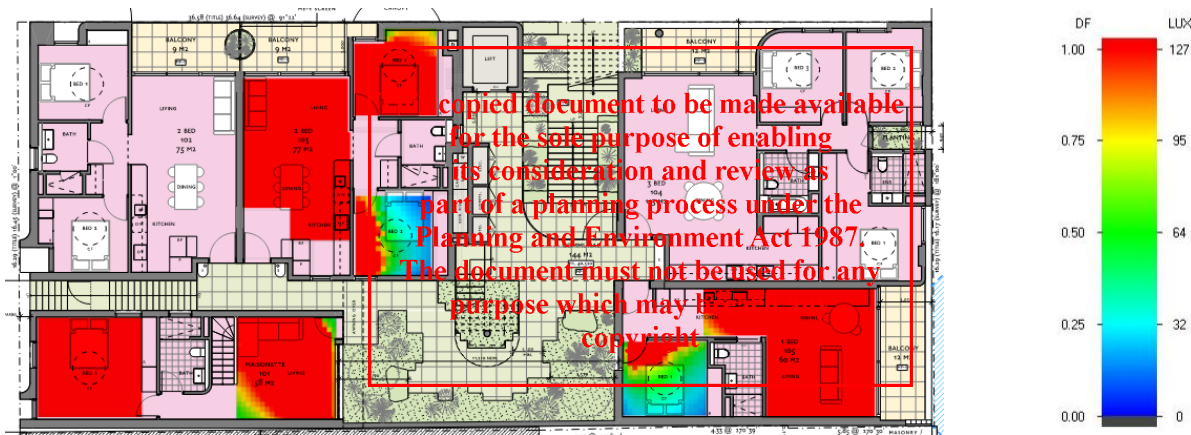


Figure 6 - Daylight Map – Level 1

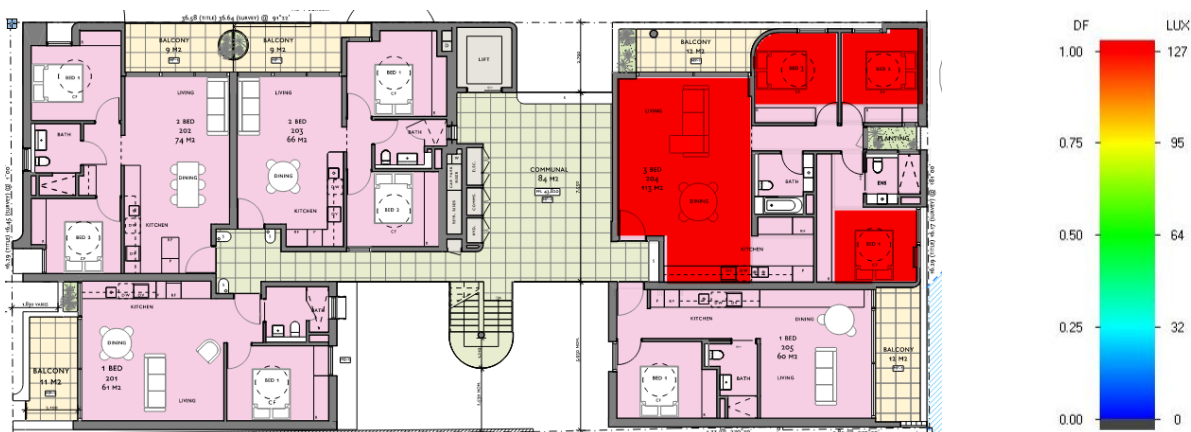


Figure 7 - Daylight Map – Level 2

**ADVERTISED
PLAN**

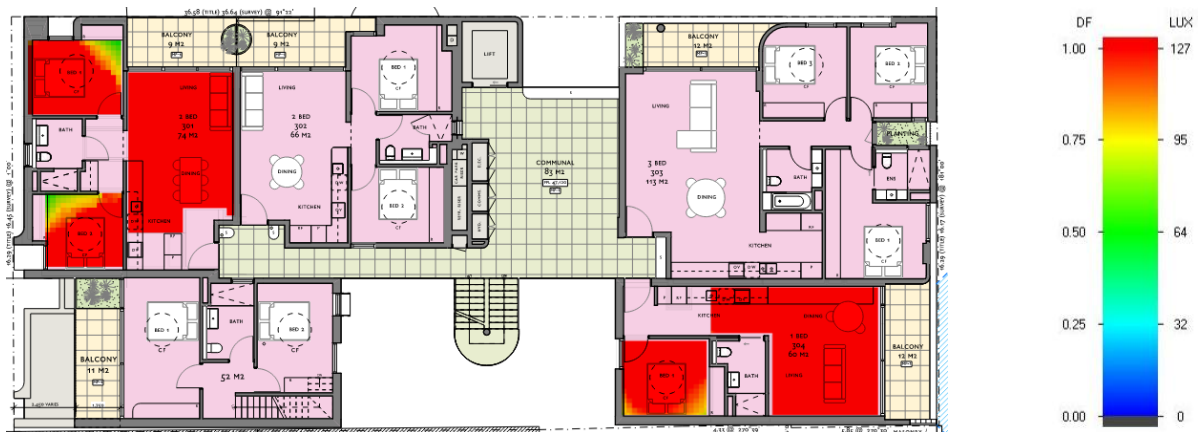


Figure 8 - Daylight Map – Level 3

ADVERTISED PLAN

**This copied document to be made available
for the sole purpose of enabling
its consideration and review as
part of a planning process under the
Planning and Environment Act 1987.
The document must not be used for any
purpose which may breach any
copyright**

Overall Building Results

Apartment No.	Total Living Areas	Living Areas Compliant	Total Bedrooms	Bedrooms Compliant
101	2	0	1	1
102	1	1	2	2
103	1	1	2	1
104	1	1	3	3
105	1	1	1	0
201	1	1	1	1
202	1	1	2	2
203	1	1	2	1
204	1	1	3	3
205	1	1	1	1
301	1	1	2	2
302	1	1	2	1
303	1	1	3	3
304	1	1	1	1
401	1	1	2	2
402	1	1	2	2
403	1	1	2	1
501	1	1	2	2
502	1	1	2	1
601	1	1	4	4
TOTAL	21	19	40	34
Percentage	90%		85%	

Conclusion

The development has been assessed and it has been determined that 90% of the living areas and 85% of bedrooms will achieve the daylight factors as prescribed under BESS and therefore the development will meet the BESS IEQ guidelines for daylight.

**ADVERTISED
PLAN**

Appendix F: BESS Assessment

**ADVERTISED
PLAN**

**This copied document to be made available
for the sole purpose of enabling
its consideration and review as
part of a planning process under the
Planning and Environment Act 1987.
The document must not be used for any
purpose which may breach any
copyright**

BESS Report

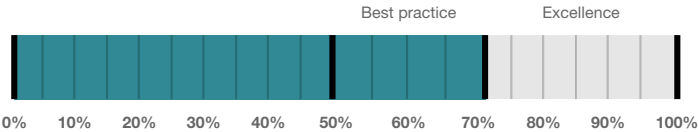
Built Environment Sustainability Scorecard



This BESS report outlines the sustainable design commitments of the proposed development at 290 Park St Fitzroy North Victoria 3068. 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 Yarra 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



70%

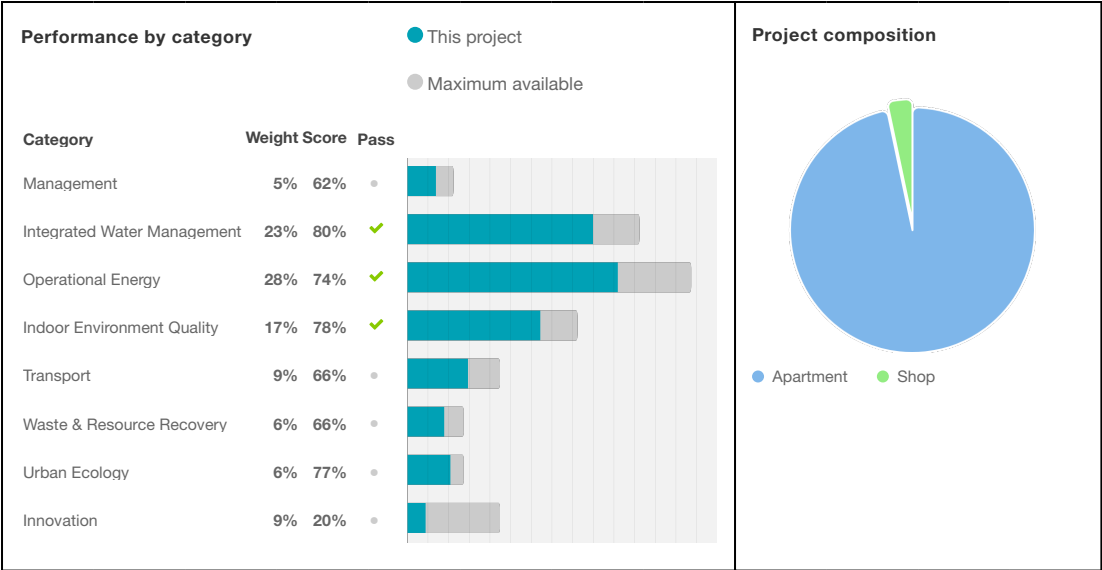
Project details

Name	290 Park St, Fitzroy North
Address	290 Park St Fitzroy North Victoria 3068
Project ID	433BAC8D-R3
BESS Version	BESS-9
Date	13 April 2026
Software version	2.3.0-B.649
Site type	Mixed use development
Account	info@giw.com.au
Application no.	
Site area	598 m ²
Building floor area	1,709 m ²

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright



ADVERTISED
PLAN



Buildings

Name	Height	Footprint	% of total footprint
290 Park St, Fitzroy North	7	388 m ²	100%

Dwellings & Non Res Spaces

Dwellings

Name	Quantity	Area	Building	% of total area
Apartment				
102, 202, 301, 401, 501	5	75.0 m ²	290 Park St, Fitzroy North	21%
103, 203, 302, 402, 502	4	71.0 m ²	290 Park St, Fitzroy North	16%
104, 204, 303	2	113 m ²	290 Park St, Fitzroy North	13%
601	1	147 m ²	290 Park St, Fitzroy North	8%
205, 304	2	60.0 m ²	290 Park St, Fitzroy North	7%
104	1	113 m ²	290 Park St, Fitzroy North	6%
401	1	103 m ²	290 Park St, Fitzroy North	6%
101	1	92.0 m ²	290 Park St, Fitzroy North	5%

103	1	71.0 m ²	290 Park St, Fitzroy North	4%
105	1	60.0 m ²	290 Park St, Fitzroy North	3%
201	1	61.0 m ²	290 Park St, Fitzroy North	3%
Total	20	1,652 m²	96%	

Non-Res Spaces

Name	Quantity	Area	Building	% of total area
Shop				
Commercial Tenancy 1	1	57.0 m ²	290 Park St, Fitzroy North	3%
Total	1	57 m²	3%	

ADVERTISED PLAN

Supporting Evidence

Shown on Floor Plans

Credit	Requirement	Response	Status
Management 3.1	Annotation: Individual utility meters to be provided to all individual dwellings	This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright	-
Management 3.2	Annotation: Individual utility meters to be provided to all individual commercial tenancies		-
Management 3.3	Annotation: Sub-meters to be provided to all commercial premises (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 and shading systems		-
Operational Energy 3.4	Location of clothes line (if proposed)		-
Operational Energy 4.2	Location and size of solar photovoltaic system		-
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 1.4	Location of non-residential bicycle parking spaces		-
Transport 1.5	Location of non-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		-
Urban Ecology 2.2	Location and size of green roof		-
Urban Ecology 2.3	Location and size of green facade		-

Supporting Documentation

Credit	Requirement	Response	Status
Management 2.2	Preliminary NatHERS assessments		-
Management 2.3a	Section J glazing assessment		-
Integrated Water Management 2.1	STORM report or MUSIC model		-
Operational Energy 1.1	Energy Report showing calculations of reference case and proposed buildings		-
Operational Energy 3.1	Details of either the fully natural carpark ventilation or CO monitoring system proposed		-
Operational Energy 3.6	Average lighting power density and lighting type(s) to be used		-
Operational Energy 3.7	Average lighting power density and lighting type(s) to be used		-
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 1.4	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 4.4			62%
1.1 Pre-Application Meeting			0%
2.2 Thermal Performance Modelling - Multi-Dwelling Residential			100%
2.3 Thermal Performance Modelling - Non-Residential			50%
3.1 Metering - Residential			100%
3.2 Metering - Non-Residential			100%
3.3 Metering - Common Areas			100%
4.1 Building Users Guide			100%

IWM Overall contribution 22.5%

80% ✓ Pass		
1.1 Potable Water Use		42% ✓ Achieved
2.1 Stormwater Treatment		100% ✓ Achieved
3.1 Water Efficient Landscaping		N/A ✦ Scoped Out
Landscape irrigation demand is connected to the rainwater tank		
4.1 Building Systems Water Use		100%

Operational Energy Overall contribution 27.5%

		Minimum required 50%	74%	✔ Pass
1.1 Thermal Performance Rating - Non-Residential			12%	
1.2 Thermal Performance Rating - Residential			75%	✔ Achieved
2.1 Greenhouse Gas Emissions			2%	
2.2 Peak Demand			0%	
2.6 Electrification			100%	
2.7 Energy consumption			100%	
3.1 Carpark Ventilation			100%	
3.2 Hot Water - Non-Residential			100%	
3.4 Clothes Drying			60%	
3.6 Internal Lighting - Apartments			100%	
3.7 Internal Lighting - Non-Residential			100%	
4.1 Combined Heat and Power (cogeneration / trigeneration)			N/A	✦ Scoped Out
No cogeneration or trigeneration system in use.				
4.2 Renewable Energy Systems - Solar			96%	
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%	78%	✔ Pass
1.1 Daylight Access - Living Areas			66%	
1.2 Daylight Access - Bedrooms			66%	
1.3 Winter Sunlight			100%	
1.4 Daylight Access - Non-Residential			60%	✔ Achieved
2.1 Ventilation - Natural - Apartments			100%	
2.3 Ventilation - Non-Residential			33%	✔ Achieved
3.4 Thermal comfort - Shading - Non-Residential			100%	
3.5 Thermal Comfort - Ceiling Fans - Non-Residential			0%	
4.1 Air Quality - Non-Residential			100%	

ADVERTISED
PLAN

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%
1.4 Bicycle Parking - Non-Residential		100%
1.5 Bicycle Parking - Non-Residential Visitor		100%
1.6 End of Trip Facilities - Non-Residential		0%
2.1 Electric Vehicle Infrastructure		100%
2.2 Car Share Scheme		0%
2.3 Motorbikes / Mopeds		0%

Waste & Resource Recovery Overall contribution 5.5%

		66%
1.1 Construction Waste - Building Re-Use		0%
2.1 Operational Waste - Food & Garden Waste		100%
2.2 Operational Waste - Convenience		100%

Urban Ecology Overall contribution 5.5%

		77%
1.1 Communal Spaces		96%
2.1 Vegetation		100%
2.2 Green Roofs		100%
2.3 Green Walls and Facades		100%
2.4 Balconies, Courtyards & Roof terraces		0%
3.1 Food Production - Residential		0%
3.2 Food Production - Non-Residential		0%

Innovation Overall contribution 9.0%

		20%
1.1 Innovation		20%

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright

ADVERTISED
PLAN

Credit breakdown

Management Overall contribution 4.5%

		62%
--	--	-----

1.1 Pre-Application Meeting		0%
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	No	
2.2 Thermal Performance Modelling - Multi-Dwelling Residential		100%
Score Contribution	This credit contributes 24.2% towards the category score.	
Criteria	Have preliminary NatHERS ratings been undertaken for all thermally unique dwellings?	
Question	Criteria Achieved ?	
Apartment	Yes	
2.3 Thermal Performance Modelling - Non-Residential		50%
Score Contribution	This credit contributes 0.6% towards the category score.	
Criteria	Has a preliminary facade assessment been undertaken in accordance with NCC2022 Section J4D6?	
Question	Criteria Achieved ?	
Shop	Yes	
Criteria	Has preliminary modelling been undertaken in accordance with either NCC2022 Section J (Energy Efficiency), NABERS or Green Star?	
Question	Criteria Achieved ?	
Shop	No	
3.1 Metering - Residential		100%
Score Contribution	This credit contributes 12.1% towards the category score.	
Criteria	Have utility meters been provided for all individual dwellings?	
Question	Criteria Achieved ?	
Apartment	Yes	
3.2 Metering - Non-Residential		100%
Score Contribution	This credit contributes 0.4% towards the category score.	
Criteria	Have utility meters been provided for all individual commercial tenants?	
Question	Criteria Achieved ?	
Shop	Yes	
3.3 Metering - Common Areas		100%

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright

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		
Shop	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		

ADVERTISED PLAN

**This copied document to be made available
for the sole purpose of enabling
its consideration and review as
part of a planning process under the
Planning and Environment Act 1987.
The document must not be used for any
purpose which may breach any
copyright**

IWM Overall contribution 22.5%**80% ✓ Pass**

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?: Melbourne Water STORM tool

STORM score achieved: 100

Flow: -

Total Suspended Solids: -

Total Phosphorus: -

Total Nitrogen: -

Rainwater tank profile

What is the total roof area connected to the rainwater tank?:

Rainwater Tank 1 186 m²

-

Tank Size:

Rainwater Tank 1 5,000 Litres

Irrigation area connected to tank:

Rainwater Tank 1 154 m²

Is connected irrigation area a water efficient garden?

Rainwater Tank 1 Yes

Other external water demand connected to tank?:

Rainwater Tank 1 0.0 Litres/Day

-

Fixtures, fittings & connections profile

Building: All 290 Park St, Fitzroy North

Showerhead:

101 3 Star WELS (≥ 7.5 but ≤ 9.0) (minimum requirement)

102, 202, 301, 401, 501

103, 203, 302, 402, 502

104, 204, 303

205, 304

401

601

201

103

104

105

Commercial Tenancy 1 Scope out

Bath: All Scope out

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright

Kitchen Taps: All	>= 4 Star WELS rating
Bathroom Taps: All	>= 6 Star WELS rating
Dishwashers: All	>= 6 Star WELS rating
WC: All	>= 4 Star WELS rating
Urinals: All	Scope out
Washing Machine Water Efficiency:	
101	>= 5 Star WELS rating
102, 202, 301, 401, 501	
103, 203, 302, 402, 502	
104, 204, 303	
205, 304	
401	
601	
201	
103	
104	
105	
Commercial Tenancy 1	Scope out
Which non-potable water source is the dwelling/space connected to?:	
101	-
102, 202, 301, 401, 501	This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright ADVERTISED PLAN
103, 203, 302, 402, 502	
104, 204, 303	
205, 304	
401	
601	
201	
103	
104	
105	
Commercial Tenancy 1	237515
Non-potable water source connected to Toilets:	
101	No
102, 202, 301, 401, 501	
103, 203, 302, 402, 502	
104, 204, 303	
205, 304	
401	
601	
201	
103	
104	
105	
Commercial Tenancy 1	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	
42%  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	2641 kL		
Output	Proposed (excluding rainwater and recycled water use)		
Project	1991 kL		
Output	Proposed (including rainwater and recycled water use)		
Project	1936 kL		
Output	% Reduction in Potable Water Consumption		
Project	26 %		
Output	% of connected demand met by rainwater		
Project	80 %		
Output	How often does the tank overflow?		
Project	Often		
Output	Opportunity for additional rainwater connection		
Project	961 kL		
2.1 Stormwater Treatment	This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright	100%	✓ Achieved
Score Contribution	This credit contributes 60% towards the category score.		
Criteria	Has a rainwater tank been demonstrated?		
Output	Yes		
Project	Yes		
Output	Yes		
Project	Yes		
3.1 Water Efficient Landscaping	This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright	N/A	✦ Scoped Out
Landscape irrigation demand is connected to the rainwater tank			
This credit was scoped out	Landscape irrigation demand is connected to the rainwater tank		
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		

ADVERTISED PLAN

Operational Energy Overall contribution 27.5%

		Minimum required 50%	74%	✔ Pass
--	--	----------------------	-----	--------

Project profile	
Use the BESS Deem to Satisfy (DtS) method for Non-residential No spaces?:	
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 Photovoltaic system 1	2.0 kW peak
Orientation (which way is the system facing)?: Solar Photovoltaic system 1	North
Inclination (angle from horizontal): Solar Photovoltaic system 1	5.0 Angle (degrees)
Which Building Class does this apply to?: Solar Photovoltaic system 1	Apartment
Dwellings profile	
Building: All	290 Park St, Fitzroy North
Below the floor is:	
101	Ground Floorpark
103	
104	
105	
102, 202, 301, 401, 501	Another Occupancy
103, 203, 302, 402, 502	
104, 204, 303	
205, 304	
401	
601	
201	
Above the ceiling is:	
101	Another Occupancy
102, 202, 301, 401, 501	
103, 203, 302, 402, 502	
104, 204, 303	
205, 304	
401	
201	
103	
104	
105	
601	Outside

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright

ADVERTISED
PLAN

Exposed sides:	
101	2
102, 202, 301, 401, 501	
103, 203, 302, 402, 502	
104, 204, 303	
205, 304	
401	
103	
104	
105	
601	4
201	
NatHERS Annual Energy Loads - Heat: All	30.2 MJ/sqm
NatHERS Annual Energy Loads - Cool: All	16.3 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)
Type of Hot Water System: All	Electric Instantaneous
Is the hot water system shared by multiple dwellings?: All	No
% Contribution from solar hot water system: All	0 %
Clothes Line: All	Shared clothesline
Clothes Dryer: All	No clothes dryer
Non-residential buildings profile	
Heating, Cooling & Comfort Ventilation	1,000 kWh
Electricity	
Reference fabric and Reference services:	
Heating, Cooling & Comfort Ventilation	1,000 kWh
Electricity	
Proposed fabric and Reference services:	
Heating, Cooling & Comfort Ventilation	1,000 kWh
Electricity	
Proposed fabric and Proposed services:	
Heating	0.0 MJ
Wood	
Reference fabric and Reference services:	
Heating	0.0 MJ
Wood	
Proposed fabric and Reference services:	
Heating	0.0 MJ
Wood	
Proposed fabric and Proposed services:	
Hot Water	1,000 kWh
Electricity - Reference:	
Hot Water	1,000 kWh
Electricity - Proposed:	

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright

Lighting	1,000 kWh
Electricity - Reference:	
Lighting	1,000 kWh
Electricity - Proposed:	
Peak Thermal Cooling Load	0.0 kW
Reference:	
Peak Thermal Cooling Load	0.0 kW
Proposed:	
1.1 Thermal Performance Rating - Non-Residential	12%
Score Contribution	This credit contributes 1.6% towards the category score.
Criteria	What is the % reduction in heating and cooling energy consumption against the reference case (NCC2022 Section J)?
Output	Total Improvement
Shop	0 %
1.2 Thermal Performance Rating - Residential	75% ✓ Achieved
Score Contribution	This credit contributes 16.9% 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	2%
Score Contribution	This credit contributes 0.2% 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	34,137 kg CO ₂
Shop	52.7 kg CO ₂
Output	Proposed Building with Proposed Services (Actual Building)
Apartment	36,722 kg CO ₂
Shop	52.7 kg CO ₂
Output	% Reduction in GHG Emissions
Apartment	-8 %
Shop	0 %
2.2 Peak Demand	0%
Score Contribution	This credit contributes 0.2% towards the category score.
Criteria	What is the % reduction in the instantaneous (peak-hour) demand against the benchmark?
2.6 Electrification	100%
Score Contribution	This credit contributes 17.4% towards the category score.
Criteria	Is the development all-electric?
Question	Criteria Achieved?
Project	Yes
2.7 Energy consumption	100%

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright

Score Contribution	This credit contributes 23.3% 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	324,098 MJ	
Shop	240 MJ	
Output	Proposed Building with Proposed Services (Actual Building)	
Apartment	167,341 MJ	
Shop	240 MJ	
Output	% Reduction in total energy	
Apartment	48 %	
Shop	0 %	
3.1 Carpark Ventilation		100%
Score Contribution	This credit contributes 5.8% 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	
3.2 Hot Water - Non-Residential		100%
Score Contribution	This credit contributes 0.2% towards the category score.	
Criteria	What is the % reduction in annual energy consumption (gas and electricity) of the hot water system against the benchmark?	
Output	Reference	
Shop	120 MJ	
Output	Proposed	
Shop	120 MJ	
Output	Improvement	
Shop	0 %	
3.4 Clothes Drying		60%
Score Contribution	This credit contributes 5.6% 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	8,301 kWh	
Output	Proposed	
Apartment	5,811 kWh	
Output	Improvement	
Apartment	30 %	
3.6 Internal Lighting - Apartments		100%

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright

Score Contribution	This credit contributes 5.6% 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	Yes	
3.7 Internal Lighting - Non-Residential		100%
Score Contribution	This credit contributes 0.4% towards the category score.	
Criteria	Does the maximum illumination power density (W/m2) in at least 90% of the area of the relevant building class meet the requirements in Table J7D3a of the NCC 2022 Vol 1?	
Question	Criteria Achieved ?	
Shop	Yes	
4.1 Combined Heat and Power (cogeneration / trigeneration)		N/A ✦ Scoped Out
No cogeneration or trigeneration system in use.		
This credit was scoped out No cogeneration or trigeneration system in use.		
4.2 Renewable Energy Systems - Solar		96%
Score Contribution	This credit contributes 5.8% 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	2,332 kWh	
Output	% of Building's Energy	
Apartment	5 %	
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.		

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright

**ADVERTISED
PLAN**

IEQ Overall contribution 16.5%

		Minimum required 50%	78%	✓ 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 28.3% towards the category score.
Criteria	What % of living areas achieve the daylight criteria?
Question	Percentage Achieved ?
Apartment	90 %
1.2 Daylight Access - Bedrooms	66%
Score Contribution	This credit contributes 28.3% towards the category score.
Criteria	What % of bedrooms achieve the daylight criteria?
Question	Percentage Achieved ?
Apartment	85 %
1.3 Winter Sunlight	100%
Score Contribution	This credit contributes 4.2% towards the category score.
Criteria	Do 10% of dwellings receive at least 3 hours of direct sunlight in all Living areas
Question	Percentage Achieved ?
Apartment	Yes
1.4 Daylight Access - Non-Residential	60% ✓ Achieved
Score Contribution	This credit contributes 1% towards the category score.
Criteria	What % of the nominated floor area has at least 2% daylight factor?
Question	Percentage Achieved?
Shop	60 %
2.1 Ventilation - Natural - Apartments	100%
Score Contribution	This credit contributes 28.3% towards the category score.
Criteria	What % of dwellings are effectively naturally ventilated?
Question	Percentage Achieved?
Apartment	100 %
2.3 Ventilation - Non-Residential	33% ✓ Achieved
Score Contribution	This credit contributes 1% towards the category score.
Criteria	What % of the regular use areas are effectively naturally ventilated?
Question	Percentage Achieved?
Shop	60 %

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright

Criteria	What increase in outdoor air is available to regular use areas compared to the minimum required by AS 1668.2:2012?
Question	Percentage Achieved?
Shop	0 %
Criteria	What CO2 concentrations are the ventilation systems designed to achieve, to monitor and to maintain?
Question	Value
Shop	-
3.4 Thermal comfort - Shading - Non-Residential	100%
Score Contribution	This credit contributes 0% towards the category score.
Criteria	What percentage of east, north and west glazing to regular use areas is effectively shaded?
Question	Percentage Achieved?
Shop	100 %
3.5 Thermal Comfort - Ceiling Fans - Non-Residential	0%
Score Contribution	This credit contributes 0.3% towards the category score.
Criteria	What percentage of regular use areas if tenancies have ceiling fans?
Question	Percentage Achieved?
Shop	0 %
4.1 Air Quality - Non-Residential	100%
Score Contribution	This credit contributes 0.3% towards the category score.
Criteria	Do all paints, sealants and adhesives meet the maximum total indoor pollutant emission limits?
Question	Criteria Achieved ?
Shop	Yes
Criteria	Does all carpet meet the maximum total indoor pollutant emission limits?
Question	Criteria Achieved ?
Shop	Yes
Criteria	Does all engineered wood meet the maximum total indoor pollutant emission limits?
Question	Criteria Achieved ?
Shop	Yes

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright

**ADVERTISED
PLAN**

Transport Overall contribution 9.0%

		66%
1.1 Bicycle Parking - Residential		100%
Score Contribution	This credit contributes 21.6% towards the category score.	
Criteria	How many secure and undercover bicycle spaces are there for residents?	
Question	Bicycle Spaces Provided ?	
Apartment	30	
Output	Min Bicycle Spaces Required	
Apartment	20	
1.2 Bicycle Parking - Residential Visitor		100%
Score Contribution	This credit contributes 21.6% towards the category score.	
Criteria	How many secure bicycle spaces are there for visitors?	
Question	Visitor Bicycle Spaces Provided ?	
Apartment	5	
Output	Min Visitor Bicycle Spaces Required	
Apartment	4	
1.3 Bicycle Parking - Convenience Residential		0%
Score Contribution	This credit contributes 0.30% towards the category score.	
Criteria	Are bicycle parking facilities for residents located at ground or entry level?	
Question	Criteria Achieved ?	
Apartment	No	
1.4 Bicycle Parking - Non-Residential		100%
Score Contribution	This credit contributes 0.7% towards the category score.	
Criteria	Have the planning scheme requirements for employee bicycle parking been exceeded by at least 50% (or a minimum of 2 where there is no planning scheme requirement)?	
Question	Criteria Achieved ?	
Shop	Yes	
Question	Bicycle Spaces Provided ?	
Shop	2	
1.5 Bicycle Parking - Non-Residential Visitor		100%
Score Contribution	This credit contributes 0.4% towards the category score.	
Criteria	Have the planning scheme requirements for visitor bicycle parking been exceeded by at least 50% (or a minimum of 1 where there is no planning scheme requirement)?	
Question	Criteria Achieved ?	
Shop	Yes	
Question	Bicycle Spaces Provided ?	
Shop	1	
1.6 End of Trip Facilities - Non-Residential		0%

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright

Score Contribution	This credit contributes 0.4% towards the category score.	
Criteria	Where adequate bicycle parking has been provided. Is there also: * 1 shower for the first 5 employee bicycle spaces plus 1 to each 10 employee bicycles spaces thereafter, * changing facilities adjacent to showers, and * one secure locker per employee bicycle space in the vicinity of the changing / shower facilities?	
Question	Number of showers provided ?	
Shop	-	
Question	Number of lockers provided ?	
Shop	-	
Output	Min Showers Required	
Shop	1	
Output	Min Lockers Required	
Shop	2	
2.1 Electric Vehicle Infrastructure		100%
Score Contribution	This credit contributes 22.3% 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 11.2% 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%
Score Contribution	This credit contributes 5.1% 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	

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright.

**ADVERTISED
PLAN**

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	

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright

ADVERTISED
PLAN

Urban Ecology Overall contribution 5.5%

		77%
--	--	-----

1.1 Communal Spaces		96%
Score Contribution	This credit contributes 11.2% towards the category score.	
Criteria	Is there at least the following amount of common space measured in square meters : * 1m ² for each of the first 50 occupants * Additional 0.5m ² for each occupant between 51 and 250 * Additional 0.25m ² for each occupant above 251?	
Question	Common space provided	
Apartment	408 m ²	
Shop	-	
Output	Minimum Common Space Required	
Apartment	41 m ²	
Shop	5 m ²	
2.1 Vegetation		100%
Score Contribution	This credit contributes 44.6% 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	32 %	
2.2 Green Roofs		100%
Score Contribution	This credit contributes 11.2% towards the category score.	
Criteria	Does the development incorporate a green roof?	
Question	Criteria Achieved ?	
Project	Yes	
2.3 Green Walls and Facades		100%
Score Contribution	This credit contributes 11.2% towards the category score.	
Criteria	Does the development incorporate a green wall or green façade?	
Question	Criteria Achieved ?	
Project	Yes	
2.4 Balconies, Courtyards & Roof terraces		0%
Score Contribution	This credit contributes 10.8% 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%

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright

**ADVERTISED
PLAN**

Score Contribution	This credit contributes 10.8% towards the category score.
Criteria	What area of space per resident is dedicated to food production?
Question	Food Production Area
Apartment	8.0 m²
Output	Min Food Production Area
Apartment	11 m²

3.2 Food Production - Non-Residential	0%
---------------------------------------	----

Score Contribution	This credit contributes 0.4% towards the category score.
Criteria	What area of space per occupant is dedicated to food production?
Question	Food Production Area
Shop	0.0 m²
Output	Min Food Production Area
Shop	2 m²

Innovation Overall contribution 9.0%

	20%
--	-----

Project Initiatives	
Initiative:	
Bicycle Repair Station	
Bedroom ceiling fans	
Description:	
Bicycle Repair Station	Inclusion of secure, convenient and accessible equipment including repair stands, pumps and tools for fixing bicycles.
Bedroom ceiling fans	All bedrooms are to be provided with ceiling fans to assist with passive cooling during peak summer periods.
Points Targeted:	
Bicycle Repair Station	-
Bedroom ceiling fans	1
Points:	
Bicycle Repair Station	1
Bedroom ceiling fans	-

1.1 Innovation	20%
----------------	-----

Score Contribution	This credit contributes 100% towards the category score.
Criteria	What percentage of the Innovation points have been claimed (10 points maximum)?

Disclaimer

The Built Environment Sustainability Scorecard (BESS) has been provided for the purpose of information and communication. While we make every effort to ensure that material is accurate and up to date (except where denoted as 'archival'), this material does in no way constitute the provision of professional or specific advice. You should seek appropriate, independent, professional advice before acting on any of the areas covered by BESS.

The Municipal Association of Victoria (MAV) and CASBE (Council Alliance for a Sustainable Built Environment) member councils do not guarantee, and accept no legal liability whatsoever arising from or connected to, the accuracy, reliability, currency or completeness of BESS, any material contained on this website or any linked sites

The Built Environment Sustainability Scorecard is an initiative of the Council Alliance for a Sustainable Built Environment (CASBE). For more details see www.bess.net.au