The Trust Company (Australia) Ltd AFT WH Redfern Trust

104-116 Regent St, Redfern NSW

BASIX Assessment Report

20E-21-0052-TRP-24106-0

9 December 2021

Job Title:	104-116 Regent St, Redfern NSW	
Report Title:	BASIX Assessment Report	
Document Reference:	20E-21-0052-TRP-24106-0	

Prepared For:	Prepared By:
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	9 December 2021	
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	9 December 2021	
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	9 December 2021	

Revision History:

Rev. #	Comments / Details of change(s) made	Date	Revised by:
Rev. 00	Original issue	9 Dec 21	

Executive Summary

Vipac has been commissioned to assess the interaction of the residential area of the proposed development at 104-116 Regent St, Redfern NSW with the local environment in terms of BASIX compliance.

A BASIX Certificate is a regulatory requirement and demonstrates compliance with the NSW Government's sustainability targets. BASIX assessment and certification has been completed for this project (Certificate No. 1259187M).

Dwellings within the development have been assessed in terms of their passive energy design using the BASIX Thermal Comfort protocol. They have also been assessed in terms of their ability to conserve water and also to minimise energy consumption via appliances and hot water etc.

With the recommendations provided in the BASIX certificate the development meets and exceeds the minimum requirements for all following areas.
   •   Energy Efficiency
   •   Water Efficiency
   •   Thermal Comfort

This development achieves the following targets:
   •   Energy Efficiency: 28% reduction (minimum requirements under BASIX: 25%)
   •   Water Efficiency: 41% reduction (minimum requirements under BASIX: 40%)
   •   Thermal Comfort: Will pass the thermal performance requirements under BASIX.

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1 Introduction

BASIX is a NSW State Planning Policy Tool which assesses the environmental performance of new residential premises against a range water, energy and greenhouse gas emissions targets. The assessment has three core components, BASIX Thermal Comfort, BASIX Water and BASIX Energy.

The thermal comfort assessment requires that the thermal performance of dwellings is evaluated, and measures put in place to ensure annual heating and cooling loads do not exceed pre-defined limits without compromising the occupants thermal comfort. This assessment uses computer simulation to evaluate the estimated building fabric thermal performance and passive solar design features such as orientation and solar shading.

The energy section evaluates gas and electrical energy used for heating, cooling lighting, ventilation and appliances. The BASIX Energy target requires the development to uses 25% less energy than the NSW average.

The water assessment takes account of landscaping, stormwater management as well as water efficiency performance of fixtures and fitting such as taps and showers. The BASIX target for water requires that potable water consumption is at least 40% lower than the NSW average.

Note: this report is only a guide to the BASIX certificate, for full details of BASIX requirements please refer to the BASIX certificate.

2 Building Description

The proposed development will be located at 104-116 Regent St, Redfern NSW.

2.1 Information Used in Review

Our review is based on the following architectural drawings provided by Antoniades Architects in November 2021.

Table 1 – Architectural drawings reference

Drawing Title	Drawing Number
Cover Page	DA1.00
Site Analysis	DA1.01
Setbacks - Site Plan	DA1.03
Setbacks - Levels	DA1.04
Demolition Plan - Ground Floor	DA2.01
Site Plan	DA3.01
Entry Level	DA3.02
Level 02	DA3.03
Level 03	DA3.04
Level 04	DA3.05
Level 05 -08	DA3.06
Level 09 - 15	DA3.07
Level 16	DA3.08
Level 17 / 18	DA3.09
Roof Plan	DA3.10
Long Section + Short Section	DA4.01
Regent St - Elevation	DA5.01
Northern Elevation + Southern Elevation	DA5.02
William Ln - Elevation	DA5.03
Project Data Schedule	DA6.01
Shadow Diagrams - 21 JUNE 2021	DA6.02
Material Board	DA7.02
Signage Details	DA7.03
Notification Plan	DA8.01

3 BASIX Water Section

The water efficiency performance of the development has been assessed using the online BASIX Tool. The assessment has considered the common area and central system features including the landscape design, plant species, water catchment areas, rain water tank size and efficiency of preferred fixtures and fittings in the dwellings.

The proposed development will meet the mandatory BASIX water target of 40% as long as the water commitments detailed in Table 1 are installed. For details of the requirements necessary to achieve this target, please refer to the BASIX Certificate No. 1259187M.

Table 2: Water Commitments

Common Areas and Central Systems	
Common areas	• 3-star (Water Rating) showerheads with a flow rate > 4.5 but <= 6 L/min • 5-star (Water Rating) taps • 4-star (Water Rating) toilets • 2-star (Water Rating) clothes washers
Central systems	• Fire sprinkler system
Private Dwellings	
Fixtures for apartments	• 3-star (Water Rating) showerheads with a flow rate > 4.5 but <= 6 L/min • 4-star (Water Rating) toilets • 5-star (Water Rating) kitchen taps • 5-star (Water Rating) bathroom taps

4 BASIX Energy Section

The Energy performance of the development has been assessed using the online BASIX Tool. The assessment has considered Common Area and Central System features including the lifts, ventilation and lighting for common areas (corridors, lobbies, car park etc.), centralised domestic hot water and the efficiency of preferred lighting and appliances in the dwellings.

The proposed development will meet the mandatory BASIX Energy target of 25% as long as the energy commitments detailed in

Table are installed.

Table 4: Energy Commitments

	Component	Commitment
Common Areas of residential areas	Lifts	Quantity: 2, gearless traction with V V V F motor
	Swimming pool / Sauna	• N/A
	Ventilation	• Gym: air conditioning system. time clock or BMS controlled. • Switch Room: air conditioning system. Thermostatically controlled. • Garbage: ventilation exhaust only. • Plant or service rooms: ventilation (supply & exhaust). Thermostatically controlled. • Ground floor lobby type: ventilation (supply + exhaust). Time clock or BMS controlled. • Hallway areas: ventilation (supply + exhaust). Time clock or BMS controlled. • Lift motor room: ventilation (supply + exhaust). thermostatically controlled. • Other internal common area: ventilation (supply + exhaust). thermostatically controlled.
	Lighting	• Gym: LED lighting with manual on / manual off. • Lifts: LED lighting, connected to lift call button • Switch Room: LED lighting with manual on / manual off. • Garbage: LED lighting with motion sensors. • Plant or service rooms: LED lighting with manual on / manual off. • Ground floor lobby type: LED lighting with time clock and motion sensors. • Hallway areas: LED lighting with time clock and motion sensors • Lift motor room: LED lighting with manual on / manual off. • Other internal common area: LED lighting with motion sensors.
	Hot Water	• Central hot water system 1: Gas-fired boiler with R0.6 (~25 mm) insulation to the pipes
	Central cooling system	Variable refrigerant volume units • Energy source: electric driven compressor • Heat rejection method: air cooled condenser • Unit efficiency (min): medium - COP 3.5 - 5.5
	Central heating system	Variable refrigerant volume units • Energy source: electric driven compressor + air sourced evaporator • Unit efficiency: medium - COP 3.5 - 5.5
	Alternative Energy Supply	• 40 kW Solar PV system

Component		Commitment
Private Dwellings	Ventilation	• Kitchen Exhaust: Individual fan, ducted to façade or roof, manual on/off switch. • Bathroom Exhaust: Individual fan, ducted to façade or roof, interlocked to light. • Laundry Exhaust: Individual fan, ducted to façade or roof, continuous
	Heating & Cooling to living & bedroom areas	• Central cooling & heating system
	Lighting	• Fluorescent or LED lights with dedicated fittings
	Other	• Electric cooktop and electric oven • 2.5 star rated refrigerator

5 Disclaimer

This report is prepared using the information described above and inputs from other consultants. Whilst Vipac has endeavoured to ensure the information used is accurate, no responsibility or liability to any third party is accepted for any loss or damage arising out of the use of this report by any third party. Any third party wishing to act upon any material contained in this report should first contact Vipac for detailed advice which will take into account that party's particular requirements.

Computer performance assessment provides an estimate of building performance. This estimate is based on a necessarily simplified and idealised version of the building that does not and cannot fully represent all the intricacies of the building once built. As a result, simulation results only represent an interpretation of the potential performance of the building. Although great care has been taken to prepare this report, Vipac does not make any representations or give any warranties or assurances as to the accuracy or completeness of the information contained in the report or that the report is free from errors or omission. Vipac and its employees and agents shall not be liable for any loss arising because of, any person using or relying on the report and whether caused by reason or error, negligent act or omission in the report. The BASIX assessment and certification has been prepared based on the preliminary architectural and building services design with the view to conduct a detailed assessment once the design is further developed.

Performance of the completed building may be significantly affected by the quality of construction; commissioning, ongoing management of the building, and the way the building is operated, monitored and maintained. Building fabric inputs require verifiable manufacturer data to confirm thermal properties.

This report is intended as a guide to assist with the application of BASIX. It should be read in conjunction with the BASIX and the NCC 2019; specific applications may vary during the design development of the project.

6 Summary & Conclusion

The proposed development has been assessed in terms of its ability to conserve water and minimise energy consumption.

Subject to the provisions of this report the proposed development will be able to achieve the BASIX requirements. For further details, please refer to the BASIX Certificate 1259187M provided.

Appendix A – BASIX Certificate

BASIX®Certificate

Building Sustainability Index www.basix.nsw.gov.au

Multi Dwelling

Certificate number: 1259187M

This certificate confirms that the proposed development will meet the NSW government's requirements for sustainability, if it is built in accordance with the commitments set out below. Terms used in this certificate, or in the commitments, have the meaning given by the document entitled "BASIX Definitions" dated 10/09/2020 published by the Department. This document is available at www.basix.nsw.gov.au

Secretary
Date of issue: Monday, 06 December 2021
To be valid, this certificate must be lodged within 3 months of the date of issue.

NSW GOVERNMENT | Planning, Industry & Environment

Project summary	
Project name	104-116 Regent St, Redfern NSW 2016
Street address	104-116 Regent Street Redfern NSW 2016
Local Government Area	Sydney City Council
Plan type and plan number	deposited 1026349
Lot no.	10
Section no.	-
No. of residential flat buildings	1
No. of units in residential flat buildings	387
No. of multi-dwelling houses	0
No. of single dwelling houses	0

Project score			
Water	✔	41	Target 40
Thermal Comfort	✔	concession	Target Pass
Energy	✔	28	Target 25

If any changes to this BASIX certificate are required, please contact Vipac with following details:
- Project reference: 104-116 Regent Street, Redfern NSW 2016
- Contact number: 0430 108 801

Certificate Prepared by
Name / Company Name: Vipac
ABN (if applicable): 33005453627

Description of project

Project address

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No. of multi-dwelling houses	0
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Site details

Site area (m²)	1366
Roof area (m²)	396
Non-residential floor area (m²)	-
Residential car spaces	0
Non-residential car spaces	-

Common area landscape

Common area lawn (m²)	0.0
Common area garden (m²)	422.0
Area of indigenous or low water use species (m²)	337.0

Assessor details

Assessor number	N/A
Certificate number	N/A
Climate zone	N/A
Ceiling fan in at least one bedroom	N/A
Ceiling fan in at least one living room or other conditioned area	N/A

Project score

Water	✔ 41	Target 40
Thermal Comfort	✔	concessionTarget Pass
Energy	✔ 28	Target 25

Description of project

The tables below describe the dwellings and common areas within the project

Residential flat buildings - Building1, 387 dwellings, 18 storeys above ground

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)	Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)	Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)	Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)	Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
02.01	2	27.0	0.0	0.0	0.0	02.02	1	15.0	0.0	0.0	0.0	02.03	1	15.0	0.0	0.0	0.0	02.04	1	15.0	0.0	0.0	0.0	02.05	1	15.0	0.0	0.0	0.0
02.06	1	15.0	0.0	0.0	0.0	02.07	1	15.0	0.0	0.0	0.0	02.08	1	15.0	0.0	0.0	0.0	02.09	1	15.0	0.0	0.0	0.0	02.10	1	15.0	0.0	0.0	0.0
02.11	1	15.0	0.0	0.0	0.0	02.12	1	15.0	0.0	0.0	0.0	02.13	1	15.0	0.0	0.0	0.0	03.01	2	27.0	0.0	0.0	0.0	03.02	1	15.0	0.0	0.0	0.0
03.03	1	15.0	0.0	0.0	0.0	03.04	1	15.0	0.0	0.0	0.0	03.05	1	15.0	0.0	0.0	0.0	03.06	1	15.0	0.0	0.0	0.0	03.07	1	15.0	0.0	0.0	0.0
03.08	1	15.0	0.0	0.0	0.0	03.09	1	15.0	0.0	0.0	0.0	03.10	1	15.0	0.0	0.0	0.0	03.11	1	15.0	0.0	0.0	0.0	03.12	1	15.0	0.0	0.0	0.0
03.13	1	15.0	0.0	0.0	0.0	03.14	2	27.0	0.0	0.0	0.0	03.15	1	15.0	0.0	0.0	0.0	03.16	1	15.0	0.0	0.0	0.0	03.17	1	15.0	0.0	0.0	0.0
03.18	1	15.0	0.0	0.0	0.0	03.19	1	15.0	0.0	0.0	0.0	03.20	1	15.0	0.0	0.0	0.0	03.21	1	15.0	0.0	0.0	0.0	03.22	1	15.0	0.0	0.0	0.0
03.23	1	15.0	0.0	0.0	0.0	03.24	1	15.0	0.0	0.0	0.0	03.25	1	15.0	0.0	0.0	0.0	03.26	1	15.0	0.0	0.0	0.0	04.01	2	27.0	0.0	0.0	0.0
04.02	1	12.0	0.0	0.0	0.0	04.03	1	12.0	0.0	0.0	0.0	04.04	1	12.0	0.0	0.0	0.0	04.05	1	12.0	0.0	0.0	0.0	04.06	1	12.0	0.0	0.0	0.0
04.07	1	12.0	0.0	0.0	0.0	04.08	1	12.0	0.0	0.0	0.0	04.09	1	12.0	0.0	0.0	0.0	04.10	1	12.0	0.0	0.0	0.0	04.11	1	12.0	0.0	0.0	0.0
04.12	1	12.0	0.0	0.0	0.0	04.13	1	12.0	0.0	0.0	0.0	04.14	2	27.0	0.0	0.0	0.0	04.15	1	12.0	0.0	0.0	0.0	04.16	1	12.0	0.0	0.0	0.0
04.17	1	12.0	0.0	0.0	0.0	04.18	1	12.0	0.0	0.0	0.0	04.19	1	12.0	0.0	0.0	0.0	04.20	1	12.0	0.0	0.0	0.0	04.21	1	12.0	0.0	0.0	0.0
04.22	1	12.0	0.0	0.0	0.0	05.01	2	27.0	0.0	0.0	0.0	05.02	1	15.0	0.0	0.0	0.0	05.03	1	15.0	0.0	0.0	0.0	05.04	1	15.0	0.0	0.0	0.0
05.05	1	15.0	0.0	0.0	0.0	05.06	1	15.0	0.0	0.0	0.0	05.07	1	15.0	0.0	0.0	0.0	05.08	1	15.0	0.0	0.0	0.0	05.09	1	15.0	0.0	0.0	0.0
05.10	1	15.0	0.0	0.0	0.0	05.11	1	15.0	0.0	0.0	0.0	05.12	1	15.0	0.0	0.0	0.0	05.13	1	15.0	0.0	0.0	0.0	05.14	2	27.0	0.0	0.0	0.0
05.15	1	15.0	0.0	0.0	0.0	05.16	1	15.0	0.0	0.0	0.0	05.17	1	15.0	0.0	0.0	0.0	05.18	1	15.0	0.0	0.0	0.0	05.19	1	15.0	0.0	0.0	0.0
05.20	1	15.0	0.0	0.0	0.0	05.21	1	15.0	0.0	0.0	0.0	05.22	1	15.0	0.0	0.0	0.0	05.23	1	15.0	0.0	0.0	0.0	05.24	1	15.0	0.0	0.0	0.0
05.25	1	15.0	0.0	0.0	0.0	05.26	1	15.0	0.0	0.0	0.0	06.01	2	27.0	0.0	0.0	0.0	06.02	1	15.0	0.0	0.0	0.0	06.03	1	15.0	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)	Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)	Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)	Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)	Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
06.04	1	15.0	0.0	0.0	0.0	06.05	1	15.0	0.0	0.0	0.0	06.06	1	15.0	0.0	0.0	0.0	06.07	1	15.0	0.0	0.0	0.0	06.08	1	15.0	0.0	0.0	0.0
06.09	1	15.0	0.0	0.0	0.0	06.10	1	15.0	0.0	0.0	0.0	06.11	1	15.0	0.0	0.0	0.0	06.12	1	15.0	0.0	0.0	0.0	06.13	1	15.0	0.0	0.0	0.0
06.14	2	27.0	0.0	0.0	0.0	06.15	1	15.0	0.0	0.0	0.0	06.16	1	15.0	0.0	0.0	0.0	06.17	1	15.0	0.0	0.0	0.0	06.18	1	15.0	0.0	0.0	0.0
06.19	1	15.0	0.0	0.0	0.0	06.20	1	15.0	0.0	0.0	0.0	06.21	1	15.0	0.0	0.0	0.0	06.22	1	15.0	0.0	0.0	0.0	06.23	1	15.0	0.0	0.0	0.0
06.24	1	15.0	0.0	0.0	0.0	06.25	1	15.0	0.0	0.0	0.0	06.26	1	15.0	0.0	0.0	0.0	07.01	2	27.0	0.0	0.0	0.0	07.02	1	15.0	0.0	0.0	0.0
07.03	1	15.0	0.0	0.0	0.0	07.04	1	15.0	0.0	0.0	0.0	07.05	1	15.0	0.0	0.0	0.0	07.06	1	15.0	0.0	0.0	0.0	07.07	1	15.0	0.0	0.0	0.0
07.08	1	15.0	0.0	0.0	0.0	07.09	1	15.0	0.0	0.0	0.0	07.10	1	15.0	0.0	0.0	0.0	07.11	1	15.0	0.0	0.0	0.0	07.12	1	15.0	0.0	0.0	0.0
07.13	1	15.0	0.0	0.0	0.0	07.14	2	27.0	0.0	0.0	0.0	07.15	1	15.0	0.0	0.0	0.0	07.16	1	15.0	0.0	0.0	0.0	07.17	1	15.0	0.0	0.0	0.0
07.18	1	15.0	0.0	0.0	0.0	07.19	1	15.0	0.0	0.0	0.0	07.20	1	15.0	0.0	0.0	0.0	07.21	1	15.0	0.0	0.0	0.0	07.22	1	15.0	0.0	0.0	0.0
07.23	1	15.0	0.0	0.0	0.0	07.24	1	15.0	0.0	0.0	0.0	07.25	1	15.0	0.0	0.0	0.0	07.26	1	15.0	0.0	0.0	0.0	08.01	2	27.0	0.0	0.0	0.0
08.02	1	15.0	0.0	0.0	0.0	08.03	1	15.0	0.0	0.0	0.0	08.04	1	15.0	0.0	0.0	0.0	08.05	1	15.0	0.0	0.0	0.0	08.06	1	15.0	0.0	0.0	0.0
08.07	1	15.0	0.0	0.0	0.0	08.08	1	15.0	0.0	0.0	0.0	08.09	1	15.0	0.0	0.0	0.0	08.10	1	15.0	0.0	0.0	0.0	08.11	1	15.0	0.0	0.0	0.0
08.12	1	15.0	0.0	0.0	0.0	08.13	1	15.0	0.0	0.0	0.0	08.14	2	27.0	0.0	0.0	0.0	08.15	1	15.0	0.0	0.0	0.0	08.16	1	15.0	0.0	0.0	0.0
08.17	1	15.0	0.0	0.0	0.0	08.18	1	15.0	0.0	0.0	0.0	08.19	1	15.0	0.0	0.0	0.0	08.20	1	15.0	0.0	0.0	0.0	08.21	1	15.0	0.0	0.0	0.0
08.22	1	15.0	0.0	0.0	0.0	08.23	1	15.0	0.0	0.0	0.0	08.24	1	15.0	0.0	0.0	0.0	08.25	1	15.0	0.0	0.0	0.0	08.26	1	15.0	0.0	0.0	0.0
09.01	1	28.0	0.0	0.0	0.0	09.02	1	15.0	0.0	0.0	0.0	09.03	1	15.0	0.0	0.0	0.0	09.04	1	15.0	0.0	0.0	0.0	09.05	1	15.0	0.0	0.0	0.0
09.06	1	15.0	0.0	0.0	0.0	09.07	1	15.0	0.0	0.0	0.0	09.08	1	15.0	0.0	0.0	0.0	09.09	1	15.0	0.0	0.0	0.0	09.10	1	15.0	0.0	0.0	0.0
09.11	1	15.0	0.0	0.0	0.0	09.12	1	15.0	0.0	0.0	0.0	09.13	1	15.0	0.0	0.0	0.0	09.14	2	27.0	0.0	0.0	0.0	09.15	1	15.0	0.0	0.0	0.0
09.16	1	15.0	0.0	0.0	0.0	09.17	1	15.0	0.0	0.0	0.0	09.18	1	15.0	0.0	0.0	0.0	09.19	1	15.0	0.0	0.0	0.0	09.20	1	15.0	0.0	0.0	0.0
09.21	1	15.0	0.0	0.0	0.0	09.22	1	15.0	0.0	0.0	0.0	09.23	1	15.0	0.0	0.0	0.0	09.24	1	15.0	0.0	0.0	0.0	09.25	1	15.0	0.0	0.0	0.0
09.26	1	15.0	0.0	0.0	0.0	10.01	1	28.0	0.0	0.0	0.0	10.02	1	15.0	0.0	0.0	0.0	10.03	1	15.0	0.0	0.0	0.0	10.04	1	15.0	0.0	0.0	0.0
10.05	1	15.0	0.0	0.0	0.0	10.06	1	15.0	0.0	0.0	0.0	10.07	1	15.0	0.0	0.0	0.0	10.08	1	15.0	0.0	0.0	0.0	10.09	1	15.0	0.0	0.0	0.0
10.10	1	15.0	0.0	0.0	0.0	10.11	1	15.0	0.0	0.0	0.0	10.12	1	15.0	0.0	0.0	0.0	10.13	1	15.0	0.0	0.0	0.0	10.14	2	27.0	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
10.15	1	15.0	0.0	0.0	0.0
10.20	1	15.0	0.0	0.0	0.0
10.25	1	15.0	0.0	0.0	0.0
11.04	1	15.0	0.0	0.0	0.0
11.09	1	15.0	0.0	0.0	0.0
11.14	2	27.0	0.0	0.0	0.0
11.19	1	15.0	0.0	0.0	0.0
11.24	1	15.0	0.0	0.0	0.0
12.03	1	15.0	0.0	0.0	0.0
12.08	1	15.0	0.0	0.0	0.0
12.13	1	15.0	0.0	0.0	0.0
12.18	1	15.0	0.0	0.0	0.0
12.23	1	15.0	0.0	0.0	0.0
13.02	1	15.0	0.0	0.0	0.0
13.07	1	15.0	0.0	0.0	0.0
13.12	1	15.0	0.0	0.0	0.0
13.17	1	15.0	0.0	0.0	0.0
13.22	1	15.0	0.0	0.0	0.0
14.01	1	28.0	0.0	0.0	0.0
14.06	1	15.0	0.0	0.0	0.0
14.11	1	15.0	0.0	0.0	0.0
14.16	1	15.0	0.0	0.0	0.0
14.21	1	15.0	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
10.16	1	15.0	0.0	0.0	0.0
10.21	1	15.0	0.0	0.0	0.0
10.26	1	15.0	0.0	0.0	0.0
11.05	1	15.0	0.0	0.0	0.0
11.10	1	15.0	0.0	0.0	0.0
11.15	1	15.0	0.0	0.0	0.0
11.20	1	15.0	0.0	0.0	0.0
11.25	1	15.0	0.0	0.0	0.0
12.04	1	15.0	0.0	0.0	0.0
12.09	1	15.0	0.0	0.0	0.0
12.14	2	27.0	0.0	0.0	0.0
12.19	1	15.0	0.0	0.0	0.0
12.24	1	15.0	0.0	0.0	0.0
13.03	1	15.0	0.0	0.0	0.0
13.08	1	15.0	0.0	0.0	0.0
13.13	1	15.0	0.0	0.0	0.0
13.18	1	15.0	0.0	0.0	0.0
13.23	1	15.0	0.0	0.0	0.0
14.02	1	15.0	0.0	0.0	0.0
14.07	1	15.0	0.0	0.0	0.0
14.12	1	15.0	0.0	0.0	0.0
14.17	1	15.0	0.0	0.0	0.0
14.22	1	15.0	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
10.17	1	15.0	0.0	0.0	0.0
10.22	1	15.0	0.0	0.0	0.0
11.01	1	28.0	0.0	0.0	0.0
11.06	1	15.0	0.0	0.0	0.0
11.11	1	15.0	0.0	0.0	0.0
11.16	1	15.0	0.0	0.0	0.0
11.21	1	15.0	0.0	0.0	0.0
11.26	1	15.0	0.0	0.0	0.0
12.05	1	15.0	0.0	0.0	0.0
12.10	1	15.0	0.0	0.0	0.0
12.15	1	15.0	0.0	0.0	0.0
12.20	1	15.0	0.0	0.0	0.0
12.25	1	15.0	0.0	0.0	0.0
13.04	1	15.0	0.0	0.0	0.0
13.09	1	15.0	0.0	0.0	0.0
13.14	2	27.0	0.0	0.0	0.0
13.19	1	15.0	0.0	0.0	0.0
13.24	1	15.0	0.0	0.0	0.0
14.03	1	15.0	0.0	0.0	0.0
14.08	1	15.0	0.0	0.0	0.0
14.13	1	15.0	0.0	0.0	0.0
14.18	1	15.0	0.0	0.0	0.0
14.23	1	15.0	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
10.18	1	15.0	0.0	0.0	0.0
10.23	1	15.0	0.0	0.0	0.0
11.02	1	15.0	0.0	0.0	0.0
11.07	1	15.0	0.0	0.0	0.0
11.12	1	15.0	0.0	0.0	0.0
11.17	1	15.0	0.0	0.0	0.0
11.22	1	15.0	0.0	0.0	0.0
12.01	1	28.0	0.0	0.0	0.0
12.05	1	15.0	0.0	0.0	0.0
12.11	1	15.0	0.0	0.0	0.0
12.16	1	15.0	0.0	0.0	0.0
12.21	1	15.0	0.0	0.0	0.0
12.26	1	15.0	0.0	0.0	0.0
13.05	1	15.0	0.0	0.0	0.0
13.10	1	15.0	0.0	0.0	0.0
13.15	1	15.0	0.0	0.0	0.0
13.20	1	15.0	0.0	0.0	0.0
13.25	1	15.0	0.0	0.0	0.0
14.04	1	15.0	0.0	0.0	0.0
14.09	1	15.0	0.0	0.0	0.0
14.14	2	27.0	0.0	0.0	0.0
14.19	1	15.0	0.0	0.0	0.0
14.24	1	15.0	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
10.19	1	15.0	0.0	0.0	0.0
10.24	1	15.0	0.0	0.0	0.0
11.03	1	15.0	0.0	0.0	0.0
11.08	1	15.0	0.0	0.0	0.0
11.13	1	15.0	0.0	0.0	0.0
11.18	1	15.0	0.0	0.0	0.0
11.23	1	15.0	0.0	0.0	0.0
12.02	1	15.0	0.0	0.0	0.0
12.06	1	15.0	0.0	0.0	0.0
12.12	1	15.0	0.0	0.0	0.0
12.17	1	15.0	0.0	0.0	0.0
12.22	1	15.0	0.0	0.0	0.0
13.01	1	28.0	0.0	0.0	0.0
13.06	1	15.0	0.0	0.0	0.0
13.11	1	15.0	0.0	0.0	0.0
13.16	1	15.0	0.0	0.0	0.0
13.21	1	15.0	0.0	0.0	0.0
13.26	1	15.0	0.0	0.0	0.0
14.05	1	15.0	0.0	0.0	0.0
14.10	1	15.0	0.0	0.0	0.0
14.15	1	15.0	0.0	0.0	0.0
14.20	1	15.0	0.0	0.0	0.0
14.25	1	15.0	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
14.26	1	15.0	0.0	0.0	0.0
15.05	1	15.0	0.0	0.0	0.0
15.10	1	15.0	0.0	0.0	0.0
15.15	1	15.0	0.0	0.0	0.0
15.20	1	15.0	0.0	0.0	0.0
15.25	1	15.0	0.0	0.0	0.0
16.04	1	15.0	0.0	0.0	0.0
16.09	1	15.0	0.0	0.0	0.0
16.14	2	27.0	0.0	0.0	0.0
17.05	1	15.0	0.0	0.0	0.0
17.10	1	15.0	0.0	0.0	0.0
18.02	1	15.0	0.0	0.0	0.0
18.07	1	15.0	0.0	0.0	0.0
18.12	1	15.0	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
15.01	1	28.0	0.0	0.0	0.0
15.06	1	15.0	0.0	0.0	0.0
15.11	1	15.0	0.0	0.0	0.0
15.16	1	15.0	0.0	0.0	0.0
15.21	1	15.0	0.0	0.0	0.0
15.26	1	15.0	0.0	0.0	0.0
16.05	1	15.0	0.0	0.0	0.0
16.10	1	15.0	0.0	0.0	0.0
17.01	2	27.0	0.0	0.0	0.0
17.06	1	15.0	0.0	0.0	0.0
17.11	1	15.0	0.0	0.0	0.0
18.03	1	15.0	0.0	0.0	0.0
18.08	1	15.0	0.0	0.0	0.0
18.13	1	15.0	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
15.02	1	15.0	0.0	0.0	0.0
15.07	1	15.0	0.0	0.0	0.0
15.12	1	15.0	0.0	0.0	0.0
15.17	1	15.0	0.0	0.0	0.0
15.22	1	15.0	0.0	0.0	0.0
16.01	2	27.0	0.0	0.0	0.0
16.06	1	15.0	0.0	0.0	0.0
16.11	1	15.0	0.0	0.0	0.0
17.02	1	15.0	0.0	0.0	0.0
17.06	1	15.0	0.0	0.0	0.0
17.12	1	15.0	0.0	0.0	0.0
18.04	1	15.0	0.0	0.0	0.0
18.09	1	15.0	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
15.03	1	15.0	0.0	0.0	0.0
15.08	1	15.0	0.0	0.0	0.0
15.13	1	15.0	0.0	0.0	0.0
15.18	1	15.0	0.0	0.0	0.0
15.23	1	15.0	0.0	0.0	0.0
16.02	1	15.0	0.0	0.0	0.0
16.07	1	15.0	0.0	0.0	0.0
16.12	1	15.0	0.0	0.0	0.0
17.03	1	15.0	0.0	0.0	0.0
17.08	1	15.0	0.0	0.0	0.0
17.13	1	15.0	0.0	0.0	0.0
18.05	1	15.0	0.0	0.0	0.0
18.10	1	15.0	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
15.04	1	15.0	0.0	0.0	0.0
15.09	1	15.0	0.0	0.0	0.0
15.14	2	27.0	0.0	0.0	0.0
15.19	1	15.0	0.0	0.0	0.0
15.24	1	15.0	0.0	0.0	0.0
16.03	1	15.0	0.0	0.0	0.0
16.08	1	15.0	0.0	0.0	0.0
16.13	1	15.0	0.0	0.0	0.0
17.04	1	15.0	0.0	0.0	0.0
17.09	1	15.0	0.0	0.0	0.0
18.01	2	27.0	0.0	0.0	0.0
18.06	1	15.0	0.0	0.0	0.0
18.11	1	15.0	0.0	0.0	0.0

Description of project

The tables below describe the dwellings and common areas within the project

Common areas of unit building - Building1

Common area	Floor area (m²)	Common area	Floor area (m²)	Common area	Floor area (m²)
Gym	81.0	Lift car (No.1)	-	Lift car (No.2)	-
Lift motor room	11.0	Switch room	20.0	Garbage room	72.0
Plant or service room	312.0	Other internal common area	610.0	Ground floor lobby type	40.0
Hallway/lobby type	1164.0				

Schedule of BASIX commitments

1. Commitments for Residential flat buildings - Building1

    (a) Dwellings

        (i) Water

        (ii) Energy

        (iii) Thermal Comfort

    (b) Common areas and central systems/facilities

        (i) Water

        (ii) Energy

2. Commitments for multi-dwelling houses

3. Commitments for single dwelling houses

4. Commitments for common areas and central systems/facilities for the development (non-building specific)

        (i) Water

        (ii) Energy

Schedule of BASIX commitments

The commitments set out below regulate how the proposed development is to be carried out. It is a condition of any development consent granted, or complying development certificate issued, for the proposed development, that BASIX commitments be complied with.

1. Commitments for Residential flat buildings - Building1

(a) Dwellings

(i) Water	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must comply with the commitments listed below in carrying out the development of a dwelling listed in a table below.			
(b) The applicant must plant indigenous or low water use species of vegetation throughout the area of land specified for the dwelling in the "Indigenous species" column of the table below, as private landscaping for that dwelling. (This area of indigenous vegetation is to be contained within the "Area of garden and lawn" for the dwelling specified in the "Description of Project" table).	✔	✔	
(c) If a rating is specified in the table below for a fixture or appliance to be installed in the dwelling, the applicant must ensure that each such fixture and appliance meets the rating specified for it.		✔	✔
(d) The applicant must install an on demand hot water recirculation system which regulates all hot water use throughout the dwelling, where indicated for a dwelling in the "HW recirculation or diversion" column of the table below.		✔	✔
(e) The applicant must install:			
(aa) a hot water diversion system to all showers, kitchen sinks and all basins in the dwelling, where indicated for a dwelling in the "HW recirculation or diversion" column of the table below; and		✔	✔
(bb) a separate diversion tank (or tanks) connected to the hot water diversion systems of at least 100 litres. The applicant must connect the hot water diversion tank to all toilets in the dwelling.		✔	✔
(e) The applicant must not install a private swimming pool or spa for the dwelling, with a volume exceeding that specified for it in the table below.	✔	✔	
(f) If specified in the table, that pool or spa (or both) must have a pool cover or shading (or both).		✔	
(g) The pool or spa must be located as specified in the table.	✔	✔	
(h) The applicant must install, for the dwelling, each alternative water supply system, with the specified size, listed for that dwelling in the table below. Each system must be configured to collect run-off from the areas specified (excluding any area which supplies any other alternative water supply system), and to divert overflow as specified. Each system must be connected as specified.	✔	✔	✔

	Fixtures					Appliances		Individual pool				Individual spa		
Dwelling no.	All shower-heads	All toilet flushing systems	All kitchen taps	All bathroom taps	HW recirculation or diversion	All clothes washers	All dish-washers	Volume (max volume)	Pool cover	Pool location	Pool shaded	Volume (max volume)	Spa cover	Spa shaded
All dwellings	3 star (> 4.5 but <= 6 L/min)	4 star	5 star	5 star	no	-	-	-	-	-	-	-	-	-

	Alternative water source								
Dwelling no.	Alternative water supply systems	Size	Configuration		Landscape connection	Toilet connection (s)	Laundry connection	Pool top-up	Spa top-up
None	-	-	-		-	-	-	-	-

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must comply with the commitments listed below in carrying out the development of a dwelling listed in a table below.			
(b) The applicant must install each hot water system specified for the dwelling in the table below, so that the dwelling's hot water is supplied by that system. If the table specifies a central hot water system for the dwelling, then the applicant must connect that central system to the dwelling, so that the dwelling's hot water is supplied by that central system.	✔	✔	✔
(c) The applicant must install, in each bathroom, kitchen and laundry of the dwelling, the ventilation system specified for that room in the table below. Each such ventilation system must have the operation control specified for it in the table.		✔	✔
(d) The applicant must install the cooling and heating system/s specified for the dwelling under the "Living areas" and "Bedroom areas" headings of the "Cooling" and "Heating" columns in the table below, in/for at least 1 living/bedroom area of the dwelling. If no cooling or heating system is specified in the table for "Living areas" or "Bedroom areas", then no systems may be installed in any such areas. If the term "zoned" is specified beside an air conditioning system, then the system must provide for day/night zoning between living areas and bedrooms.		✔	✔
(e) This commitment applies to each room or area of the dwelling which is referred to in a heading to the "Artificial lighting" column of the table below (but only to the extent specified for that room or area). The applicant must ensure that the "primary type of artificial lighting" for each such room in the dwelling is fluorescent lighting or light emitting diode (LED) lighting. If the term "dedicated" is specified for a particular room or area, then the light fittings in that room or area must only be capable of being used for fluorescent lighting or light emitting diode (LED) lighting.		✔	✔

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(f) This commitment applies to each room or area of the dwelling which is referred to in a heading to the "Natural lighting" column of the table below (but only to the extent specified for that room or area). The applicant must ensure that each such room or area is fitted with a window and/or skylight.	✔	✔	✔
(g) This commitment applies if the applicant installs a water heating system for the dwelling's pool or spa. The applicant must:			
(aa) install the system specified for the pool in the "Individual Pool" column of the table below (or alternatively must not install any system for the pool). If specified, the applicant must install a timer, to control the pool's pump; and		✔	
(bb) install the system specified for the spa in the "Individual Spa" column of the table below (or alternatively must not install any system for the spa). If specified, the applicant must install a timer to control the spa's pump.		✔	
(h) The applicant must install in the dwelling:			
(aa) the kitchen cook-top and oven specified for that dwelling in the "Appliances & other efficiency measures" column of the table below;		✔	
(bb) each appliance for which a rating is specified for that dwelling in the "Appliances & other efficiency measures" column of the table, and ensure that the appliance has that minimum rating; and		✔	✔
(cc) any clothes drying line specified for the dwelling in the "Appliances & other efficiency measures" column of the table.		✔	
(i) If specified in the table, the applicant must carry out the development so that each refrigerator space in the dwelling is "well ventilated".		✔	

	Hot water	Bathroom ventilation system		Kitchen ventilation system		Laundry ventilation system	
Dwelling no.	Hot water system	Each bathroom	Operation control	Each kitchen	Operation control	Each laundry	Operation control
All dwellings	central hot water system 1	individual fan, ducted to façade or roof	interlocked to light	individual fan, ducted to façade or roof	manual switch on/off	individual fan, ducted to façade or roof	none (ie. continuous)

	Cooling		Heating		Artificial lighting						Natural lighting	
Dwelling no.	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or dining rooms	Each kitchen	All bathrooms/ toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
02.01, 03.01, 03.14, 04.01, 04.14, 05.01, 05.14, 06.01, 06.14, 07.01, 07.14, 08.01, 08.14, 09.14, 10.14, 11.14, 12.14, 13.14, 14.14, 15.14, 16.01, 16.14, 17.01, 18.01	central cooling system 1	central cooling system 1	central heating system 1	central heating system 1	2 (dedicated)	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	0	-
All other dwellings	central cooling system 1	central cooling system 1	central heating system 1	central heating system 1	1 (dedicated)	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	0	-

	Individual pool		Individual spa		Appliances & other efficiency measures								
Dwelling no.	Pool heating system	Timer	Spa heating system	Timer	Kitchen cooktop/oven	Refrigerator	Well ventilated fridge space	Dishwasher	Clothes washer	Clothes dryer	Indoor or sheltered clothes drying line	Private outdoor or unsheltered clothes drying line
All dwellings	-	-	-	-	electric cooktop & electric oven	2.5 star	-	-	-	-	-	-

(iii) Thermal Comfort	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The development will be a Class 3 building. The applicant must include in the documentation accompanying the application for a construction certificate (or complying development certificate, if applicable), a report demonstrating that the development will meet Section J of the National Construction Code - Volume 1.	✔	✔	✔

(b) Common areas and central systems/facilities

(i) Water	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) If, in carrying out the development, the applicant installs a showerhead, toilet, tap or clothes washer into a common area, then that item must meet the specifications listed for it in the table.		✔	✔
(b) The applicant must install (or ensure that the development is serviced by) the alternative water supply system(s) specified in the "Central systems" column of the table below. In each case, the system must be sized, be configured, and be connected, as specified in the table.	✔	✔	✔
(c) A swimming pool or spa listed in the table must not have a volume (in kLs) greater than that specified for the pool or spa in the table.	✔	✔	
(d) A pool or spa listed in the table must have a cover or shading if specified for the pool or spa in the table.		✔	
(e) The applicant must install each fire sprinkler system listed in the table so that the system is configured as specified in the table.		✔	✔
(f) The applicant must ensure that the central cooling system for a cooling tower is configured as specified in the table.		✔	✔

Common area	Showerheads rating	Toilets rating	Taps rating	Clothes washers rating
All common areas	3 star (> 4.5 but <= 6 L/min)	4 star	5 star	2 star

Central systems	Size	Configuration	Connection (to allow for...)
Fire sprinkler system (No. 1)	-	-	-

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) If, in carrying out the development, the applicant installs a ventilation system to service a common area specified in the table below, then that ventilation system must be of the type specified for that common area, and must meet the efficiency measure specified.		✔	✔

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(b) In carrying out the development, the applicant must install, as the "primary type of artificial lighting" for each common area specified in the table below, the lighting specified for that common area. This lighting must meet the efficiency measure specified. The applicant must also install a centralised lighting control system or Building Management System (BMS) for the common area, where specified.		✔	✔
(c) The applicant must install the systems and fixtures specified in the "Central energy systems" column of the table below. In each case, the system or fixture must be of the type, and meet the specifications, listed for it in the table.	✔	✔	✔

	Common area ventilation system		Common area lighting		
Common area	Ventilation system type	Ventilation efficiency measure	Primary type of artificial lighting	Lighting efficiency measure	Lighting control system/BMS
Gym	air conditioning system	time clock or BMS controlled	light-emitting diode	manual on / manual off	No
Lift car (No.1)	-	-	light-emitting diode	connected to lift call button	No
Lift car (No.2)	-	-	light-emitting diode	connected to lift call button	No
Lift motor room	ventilation (supply + exhaust)	thermostatically controlled	light-emitting diode	manual on / manual off	No
Switch room	air conditioning system	thermostatically controlled	light-emitting diode	manual on / manual off	No
Garbage room	ventilation exhaust only	-	light-emitting diode	motion sensors	No
Plant or service room	ventilation (supply + exhaust)	thermostatically controlled	light-emitting diode	manual on / manual off	No
Other internal common area	ventilation (supply + exhaust)	thermostatically controlled	light-emitting diode	motion sensors	No
Ground floor lobby type	ventilation (supply + exhaust)	time clock or BMS controlled	light-emitting diode	time clock and motion sensors	No
Hallway/lobby type	ventilation (supply + exhaust)	time clock or BMS controlled	light-emitting diode	time clock and motion sensors	No

Central energy systems	Type	Specification
Central hot water system (No. 1)	gas-fired boiler	Piping insulation (ringmain & supply risers): (a) Piping external to building: R0.6 (~25 mm); (b) Piping internal to building: R0.6 (~25 mm)

Central energy systems	Type	Specification
Central cooling system (No. 1)	variable refrigerant volume units	Energy source: electric driven compressor Heat rejection method: air cooled condenser Unit efficiency (min): medium - COP 3.5 - 5.5
Central heating system (No. 1)	variable refrigerant volume units	Energy source: electric driven compressor + air sourced evaporator Unit efficiency: medium - COP 3.5 - 5.5
Lift (No. 1)	gearless traction with V V V F motor	Number of levels (including basement): 18
Lift (No. 2)	gearless traction with V V V F motor	Number of levels (including basement): 18

4. Commitments for common areas and central systems/facilities for the development (non-building specific)

(b) Common areas and central systems/facilities

(i) Water	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) If, in carrying out the development, the applicant installs a showerhead, toilet, tap or clothes washer into a common area, then that item must meet the specifications listed for it in the table.		✔	✔
(b) The applicant must install (or ensure that the development is serviced by) the alternative water supply system(s) specified in the "Central systems" column of the table below. In each case, the system must be sized, be configured, and be connected, as specified in the table.	✔	✔	✔
(c) A swimming pool or spa listed in the table must not have a volume (in kLs) greater than that specified for the pool or spa in the table.	✔	✔	
(d) A pool or spa listed in the table must have a cover or shading if specified for the pool or spa in the table.		✔	
(e) The applicant must install each fire sprinkler system listed in the table so that the system is configured as specified in the table.		✔	✔
(f) The applicant must ensure that the central cooling system for a cooling tower is configured as specified in the table.		✔	✔

Common area	Showerheads rating	Toilets rating	Taps rating	Clothes washers rating
All common areas	3 star (> 4.5 but <= 6 L/min)	4 star	5 star	2 star

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) If, in carrying out the development, the applicant installs a ventilation system to service a common area specified in the table below, then that ventilation system must be of the type specified for that common area, and must meet the efficiency measure specified.		✔	✔
(b) In carrying out the development, the applicant must install, as the "primary type of artificial lighting" for each common area specified in the table below, the lighting specified for that common area. This lighting must meet the efficiency measure specified. The applicant must also install a centralised lighting control system or Building Management System (BMS) for the common area, where specified.		✔	✔
(c) The applicant must install the systems and fixtures specified in the "Central energy systems" column of the table below. In each case, the system or fixture must be of the type, and meet the specifications, listed for it in the table.	✔	✔	✔

Central energy systems	Type	Specification
Alternative energy supply	Photovoltaic system	Rated electrical output (min): 40.0 peak kW

Notes

1. In these commitments, "applicant" means the person carrying out the development.
2. The applicant must identify each dwelling, building and common area listed in this certificate, on the plans accompanying any development application, and on the plans and specifications accompanying the application for a construction certificate / complying development certificate, for the proposed development, using the same identifying letter or reference as is given to that dwelling, building or common area in this certificate.
3. This note applies if the proposed development involves the erection of a building for both residential and non-residential purposes (or the change of use of a building for both residential and non-residential purposes). Commitments in this certificate which are specified to apply to a "common area" of a building or the development, apply only to that part of the building or development to be used for residential purposes.
4. If this certificate lists a central system as a commitment for a dwelling or building, and that system will also service any other dwelling or building within the development, then that system need only be installed once (even if it is separately listed as a commitment for that other dwelling or building).
5. If a star or other rating is specified in a commitment, this is a minimum rating.
6. All alternative water systems to be installed under these commitments (if any), must be installed in accordance with the requirements of all applicable regulatory authorities. NOTE: NSW Health does not recommend that stormwater, recycled water or private dam water be used to irrigate edible plants which are consumed raw, or that rainwater be used for human consumption in areas with potable water supply.

Legend

1. Commitments identified with a "✔" in the "Show on DA plans" column must be shown on the plans accompanying the development application for the proposed development (if a development application is to be lodged for the proposed development).
2. Commitments identified with a "✔" in the "Show on CC/CDC plans and specs" column must be shown in the plans and specifications accompanying the application for a construction certificate / complying development certificate for the proposed development.
3. Commitments identified with a "✔" in the "Certifier check" column must be certified by a certifying authority as having been fulfilled. (Note: a certifying authority must not issue an occupation certificate (either interim or final) for a building listed in this certificate, or for any part of such a building, unless it is satisfied that each of the commitments whose fulfilment it is required to monitor in relation to the building or part, has been fulfilled).