

BASIX™ Certificate

Building Sustainability Index

www.planningportal.nsw.gov.au/development-and-assessment/basix

Multi Dwelling

Certificate number: 1778805M_03

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.planningportal.nsw.gov.au/definitions

This certificate is a revision of certificate number 1778805M_02 submitted to the consent authority or certifier on 21 March 2025 with application SSD-78156221.

It is the responsibility of the applicant to verify with the consent authority that the original, or any revised certificate, complies with the requirements of Schedule 1 Clause 2A, 4A or 6A of the Environment Planning and Assessment Regulation 2000

Secretary

Date of issue: Monday, 02 February 2026

To be valid, this certificate must be submitted with a development application or lodged with a complying development certificate application within 3 months of the date of issue.



When submitting this BASIX certificate with a development application or complying development certificate application, it must be accompanied by NatHERS certificate 0011621670.

Project summary

Project name	93 to 107 Cecil Avenue Castle Hill NSW 2154(A&B)_03
Street address	93 TO 107 CECIL AVENUE 9 TO 10 ROGER AVENUE CASTLE HILL 2154
Local Government Area	THE HILLS SHIRE
Plan type and plan number	Deposited Plan 15399
Lot no.	27
Section no.	-
No. of residential flat buildings	2
Residential flat buildings: no. of dwellings	261
Multi-dwelling housing: no. of dwellings	0
No. of single dwelling houses	0

Project score

Water	✔ 45	Target 40
Thermal Performance	✔ Pass	Target Pass
Energy	✔ 67	Target 63
Materials	✔ -100	Target n/a





Certificate Prepared by

Name / Company Name: Certified Energy

ABN (if applicable): 95 164 564 210

Description of project

Project address	
Project name	93 to 107 Cecil Avenue Castle Hill NSW 2154(A&B)_03
Street address	93 TO 107 CECIL AVENUE 9 TO 10 ROGER AVENUE CASTLE HILL 2154
Local Government Area	THE HILLS SHIRE
Plan type and plan number	Deposited Plan 15399
Lot no.	27
Section no.	-
Project type	
No. of residential flat buildings	2
Residential flat buildings: no. of dwellings	261
Multi-dwelling housing: no. of dwellings	0
No. of single dwelling houses	0
Site details	
Site area (m ²)	9080
Roof area (m ²)	2980
Non-residential floor area (m ²)	4271
Residential car spaces	261
Non-residential car spaces	53

Common area landscape		
Common area lawn (m ²)	445	
Common area garden (m ²)	1310	
Area of indigenous or low water use species (m ²)	1176	
Assessor details and thermal loads		
Assessor number	10056	
Certificate number	0011621670	
Climate zone	56	
Project score		
Water	 45	Target 40
Thermal Performance	 Pass	Target Pass
Energy	 67	Target 63
Materials	 -100	Target n/a

Description of project

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

Residential flat buildings - East, 116 dwellings, 29 storeys above ground

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
E1001	2	98.2	0	0	0
E1101	2	98.2	0	0	0
E1201	2	98.2	0	0	0
E1301	2	98.2	0	0	0
E1401	2	98.2	0	0	0
E1501	2	98.2	0	0	0
E1601	2	98.2	0	0	0
E1701	2	98.2	0	0	0
E1801	2	98.2	0	0	0
E1901	2	98.2	0	0	0
E2001	2	98.2	0	0	0
E201	3	134.5	0	0	0
E2103	3	116.7	0	0	0
E2203	3	116.7	0	0	0
E2303	3	116.7	0	0	0
E2403	3	116.7	0	0	0
E2503	3	116.7	0	0	0
E2603	3	116.7	0	0	0
E2703	3	116.7	0	0	0
E2803	3	116.7	0	0	0
E2903	3	116.7	0	0	0
Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
E1002	2	85.9	0	0	0
E1102	2	85.9	0	0	0
E1202	2	85.9	0	0	0
E1302	2	85.9	0	0	0
E1402	2	85.9	0	0	0
E1502	2	85.9	0	0	0
E1602	2	85.9	0	0	0
E1702	2	85.9	0	0	0
E1802	2	85.9	0	0	0
E1902	2	85.9	0	0	0
E2002	2	85.9	0	0	0
E202	2	76.5	0	0	0
E2104	2	83.6	0	0	0
E2204	2	83.6	0	0	0
E2304	2	83.6	0	0	0
E2404	2	83.6	0	0	0
E2504	2	83.6	0	0	0
E2604	2	83.6	0	0	0
E2704	2	83.6	0	0	0
E2804	2	83.6	0	0	0
E2904	2	83.6	0	0	0
Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
E1003	3	116.7	0	0	0
E1103	3	116.7	0	0	0
E1203	3	116.7	0	0	0
E1303	3	116.7	0	0	0
E1403	3	116.7	0	0	0
E1503	3	116.7	0	0	0
E1603	3	116.7	0	0	0
E1703	3	116.7	0	0	0
E1803	3	116.7	0	0	0
E1903	3	116.7	0	0	0
E2003	3	116.7	0	0	0
E2101	2	98.2	0	0	0
E2201	2	98.2	0	0	0
E2301	2	98.2	0	0	0
E2401	2	98.2	0	0	0
E2501	2	98.2	0	0	0
E2601	2	98.2	0	0	0
E2701	2	98.2	0	0	0
E2801	2	98.2	0	0	0
E2901	2	98.2	0	0	0
E3001	2	98.2	0	0	0
Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
E1004	2	83.6	0	0	0
E1104	2	83.6	0	0	0
E1204	2	83.6	0	0	0
E1304	2	83.6	0	0	0
E1404	2	83.6	0	0	0
E1504	2	83.6	0	0	0
E1604	2	83.6	0	0	0
E1704	2	83.6	0	0	0
E1804	2	83.6	0	0	0
E1904	2	83.6	0	0	0
E2004	2	83.6	0	0	0
E2102	2	85.9	0	0	0
E2202	2	85.9	0	0	0
E2302	2	85.9	0	0	0
E2402	2	85.9	0	0	0
E2502	2	85.9	0	0	0
E2602	2	85.9	0	0	0
E2702	2	85.9	0	0	0
E2802	2	85.9	0	0	0
E2902	2	85.9	0	0	0
E3002	2	85.9	0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
E3003	3	116.7	0	0	0
E303	3	132.9	0	0	0
E404	3	139.7	0	0	0
E503	2	109.3	0	0	0
E602	2	84.8	0	0	0
E701	1	61.5	0	0	0
E801	2	98.2	0	0	0
E901	2	98.2	0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
E3004	2	83.6	0	0	0
E401	2	76.5	0	0	0
E405	3	133.3	0	0	0
E504	3	139.7	0	0	0
E603	2	109.3	0	0	0
E702	1	62.1	0	0	0
E802	2	85.9	0	0	0
E902	2	85.9	0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
E301	2	76.5	0	0	0
E402	2	84.8	0	0	0
E501	2	76.5	0	0	0
E505	3	134.5	0	0	0
E604	3	139.7	0	0	0
E703	3	116.7	0	0	0
E803	3	116.7	0	0	0
E903	3	116.7	0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
E302	2	84.8	0	0	0
E403	2	109.3	0	0	0
E502	2	84.8	0	0	0
E601	2	76.5	0	0	0
E605	3	133.3	0	0	0
E704	2	84.1	0	0	0
E804	2	83.6	0	0	0
E904	2	83.6	0	0	0

Residential flat buildings - South, 145 dwellings, 25 storeys above ground

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
S1001	3	116.4	0	0	0
S1005	2	115.6	0	0	0
S104	2	81.0	0	0	0
S108	2	110.7	0	0	0
S1103	3	97.6	0	0	0
S1202	2	115.1	0	0	0
S1301	3	116.4	0	0	0
S1305	2	115.6	0	0	0
S1404	2	87.6	0	0	0
S1503	3	97.6	0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
S1002	2	115.1	0	0	0
S101	2	91.6	0	0	0
S105	2	78.3	0	0	0
S109	2	91.6	0	0	0
S1104	2	87.6	0	0	0
S1203	3	97.6	0	0	0
S1302	2	115.1	0	0	0
S1401	3	116.4	0	0	0
S1405	2	115.6	0	0	0
S1504	2	87.6	0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
S1003	3	97.6	0	0	0
S102	2	112.4	0	0	0
S106	2	110.3	0	0	0
S1101	3	116.4	0	0	0
S1105	2	115.6	0	0	0
S1204	2	87.6	0	0	0
S1303	3	97.6	0	0	0
S1402	2	115.1	0	0	0
S1501	3	116.4	0	0	0
S1505	2	115.6	0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
S1004	2	87.6	0	0	0
S103	2	110.7	0	0	0
S107	2	73.1	0	0	0
S1102	2	115.1	0	0	0
S1201	3	116.4	0	0	0
S1205	2	115.6	0	0	0
S1304	2	87.6	0	0	0
S1403	3	97.6	0	0	0
S1502	2	115.1	0	0	0
S1601	3	116.4	0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
S1602	2	115.1	0	0	0
S1701	3	116.4	0	0	0
S1705	2	115.6	0	0	0
S1804	2	87.6	0	0	0
S1903	3	97.6	0	0	0
S2002	2	115.1	0	0	0
S201	2	91.6	0	0	0
S205	2	81.0	0	0	0
S209	2	110.7	0	0	0
S2103	3	97.6	0	0	0
S2202	2	115.1	0	0	0
S301	2	91.6	0	0	0
S305	2	81.0	0	0	0
S309	2	110.7	0	0	0
S403	2	91.6	0	0	0
S407	2	110.3	0	0	0
S501	3	104.9	0	0	0
S601	3	116.4	0	0	0
S605	2	115.6	0	0	0
S704	2	87.6	0	0	0
S803	3	97.6	0	0	0
S902	2	115.1	0	0	0
SGF01	2	110.7	0	0	0
SGF05	2	73.1	0	0	0
SLG04	2	110.3	0	0	0
SUG03	2	78.3	0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
S1603	3	97.6	0	0	0
S1702	2	115.1	0	0	0
S1801	3	116.4	0	0	0
S1805	2	115.6	0	0	0
S1904	2	87.6	0	0	0
S2003	3	97.6	0	0	0
S202	2	88.2	0	0	0
S206	2	78.3	0	0	0
S210	2	88.2	0	0	0
S2104	2	87.6	0	0	0
S2203	3	97.6	0	0	0
S302	2	88.2	0	0	0
S306	2	78.3	0	0	0
S310	2	88.2	0	0	0
S404	2	110.7	0	0	0
S408	2	73.1	0	0	0
S502	3	102.4	0	0	0
S602	2	115.1	0	0	0
S701	3	116.4	0	0	0
S705	2	115.6	0	0	0
S804	2	87.6	0	0	0
S903	3	97.6	0	0	0
SGF02	2	81.0	0	0	0
SLG01	2	110.7	0	0	0
SLG05	2	73.1	0	0	0
SUG04	2	110.3	0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
S1604	2	87.6	0	0	0
S1703	3	97.6	0	0	0
S1802	2	115.1	0	0	0
S1901	3	116.4	0	0	0
S1905	2	115.6	0	0	0
S2004	2	87.6	0	0	0
S203	2	91.6	0	0	0
S207	2	110.3	0	0	0
S2101	3	116.4	0	0	0
S2105	2	115.6	0	0	0
S2204	2	87.6	0	0	0
S303	2	91.6	0	0	0
S307	2	110.3	0	0	0
S401	2	91.6	0	0	0
S405	2	81	0	0	0
S409	2	110.7	0	0	0
S503	2	117.5	0	0	0
S603	3	97.6	0	0	0
S702	2	115.1	0	0	0
S801	3	116.4	0	0	0
S805	2	115.6	0	0	0
S904	2	87.6	0	0	0
SGF03	2	78.3	0	0	0
SLG02	2	81	0	0	0
SUG01	2	110.7	0	0	0
SUG05	1	58.6	0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
S1605	2	115.6	0	0	0
S1704	2	87.6	0	0	0
S1803	3	97.6	0	0	0
S1902	2	115.1	0	0	0
S2001	3	116.4	0	0	0
S2005	2	115.6	0	0	0
S204	2	110.7	0	0	0
S208	2	73.1	0	0	0
S2102	2	115.1	0	0	0
S2201	3	116.4	0	0	0
S2205	2	115.6	0	0	0
S304	2	110.7	0	0	0
S308	2	73.1	0	0	0
S402	2	88.2	0	0	0
S406	2	78.3	0	0	0
S410	2	88.2	0	0	0
S504	2	138.0	0	0	0
S604	2	87.6	0	0	0
S703	3	97.6	0	0	0
S802	2	115.1	0	0	0
S901	3	116.4	0	0	0
S905	2	115.6	0	0	0
SGF04	2	110.3	0	0	0
SLG03	2	78.3	0	0	0
SUG02	2	81	0	0	0
SUG06	2	89.8	0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
SUG072	2	91.6	0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)

Description of project

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

Common areas of unit building - East

Common area	Floor area (m ²)
Basement 2 Car Park	1920
Switch Room LG	65
Fire Pump	45
Car Park Fan Room LG	117
Hallway/lobby Building E	1250

Common area	Floor area (m ²)
Ground Car Park	2570
Plant LG	40
Plant Room Basement 2	72
Store Basement 2	215

Common area	Floor area (m ²)
Lower Ground Car Park	4140
Cold Water Plant LG	40
Service Room LG	85
Store Ground	490

Common areas of unit building - South

Common area	Floor area (m ²)
Upper Ground Car Park	1050
Plant Room Basement 1	86
OSD Basement 1	215
Lift bank (No. 1)	-

Common area	Floor area (m ²)
Basement 1 Car Park	5350
Service Basement	115
Store Basement 1	540
Lift bank (No. 2)	-

Common area	Floor area (m ²)
Bin Room	324
Car Park Fan Room Basement 1	116
Hallway/lobby Building S	1670
Lift bank (No. 3)	-

Schedule of BASIX commitments

1. Commitments for Residential flat buildings - East

(a) Buildings

(i) Materials

(b) Dwellings

(i) Water

(ii) Energy

(iii) Thermal Performance

(c) Common areas and central systems/facilities

(i) Water

(ii) Energy

2. Commitments for Residential flat buildings - South

(a) Buildings

(i) Materials

(b) Dwellings

(i) Water

(ii) Energy

(iii) Thermal Performance

(c) Common areas and central systems/facilities

(i) Water

(ii) Energy

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

(a) Buildings 'Other'

(i) Materials

(b) Common areas and central systems/facilities

(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 - East

(a) Buildings

(i) Materials	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX Certificate, including the details shown in the "Floor types", "External wall types", "Internal wall types", "Ceiling and roof types", "Frames" and "Glazing" tables below.			✓
(b) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all specifications included in the tables below.		✓	
(c) The applicant must construct the floors, walls, roof, ceiling and roof, windows, glazed doors and skylights of the development in accordance with the specifications listed in the tables below. In the case of glazing, a 5% variance from the area values listed in the "Frames" and "Glazing" tables is permitted.	✓	✓	✓
(d) The applicant must show through receipts that the materials purchased for construction are consistent with the specifications listed in the below tables.			✓

Floor types

Floor type	Area (m2)	Insulation	Low emissions option
floors above habitable rooms, frame: suspended concrete slab	11276	fibreglass batts or roll	-
floors above habitable rooms, frame: suspended concrete slab	8131.3	-	-
suspended floor above open subfloor, frame: suspended concrete slab	891.5	fibreglass batts or roll	-
concrete slab on ground, frame:	2836.94	-	none

External wall types

External wall type	Construction type	Area (m2)	Low emissions option	Insulation
External wall type 1	AAC veneer, frame: light steel frame	5105	-	fibreglass batts or roll

Internal wall types

Internal wall type	Construction type	Area (m2)	Insulation
Internal wall type 1	plasterboard, frame:light steel frame	9384	-
Internal wall type 2	plasterboard, frame:light steel frame	77	fibreglass batts or roll

Reinforcement concrete frames/columns

Building has reinforced concrete frame/columns?	Volume (m³)	Low emissions option
-	-	-

Ceiling and roof types

Ceiling and roof type	Area (m²)	Roof Insulation	Ceiling Insulation
concrete - plasterboard internal, frame: light steel frame	1120	-	fibreglass batts or roll

Glazing types

Frame types

Single glazing (m²)	Double glazing (m²)	Triple glazing (m²)	Aluminium frames (m²)	Timber frames (m²)	uPVC frames (m²)	Steel frames (m²)	Composite frames (m²)
3675.3	946.3	-	4621.6	-	-	-	-

(b) 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	4 star (> 6 but ≤ 7.5 L/min)	3 star	3 star	3 star	-	3 star	3 star	-	-	-	-	-	-	-

Alternative water source								
Dwelling no.	Alternative water supply systems	Size	Configuration	Landscape connection	Toilet connection (s)	Laundry connection	Pool top-up	Spa top-up
All dwellings	No alternative water supply	-	-	-	-	-	-	-

(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.		✓	✓
(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;		✓	

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(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 (No. 1)	individual fan, ducted to façade or roof	manual switch on/off	individual fan, ducted to façade or roof	manual switch on/off	individual fan, ducted to façade or roof	manual switch on/off

Dwelling no.	Cooling		Heating		Natural lighting	
	living areas	bedroom areas	living areas	bedroom areas	No. of bathrooms or toilets	Main kitchen
E1001, E1003, E1101, E1103, E1201, E1203, E1301, E1303, E1401, E1403, E1501, E1503, E1601, E1603, E1701, E1703, E1801, E1803, E1901, E1903, E2001, E2003, E202, E2101, E2103, E2201, E2203, E2301, E2303, E2401, E2403, E2501, E2503, E2601, E2603, E2701, E2703, E2801, E2803, E2901,	1-phase airconditioning - ducted / EER 3.0 - 3.5	1-phase airconditioning - ducted / EER 3.0 - 3.5	1-phase airconditioning - ducted / EER 3.0 - 3.5	1-phase airconditioning - ducted / EER 3.0 - 3.5	1	no

Dwelling no.	Cooling		Heating		Natural lighting	
	living areas	bedroom areas	living areas	bedroom areas	No. of bathrooms or toilets	Main kitchen
E2903, E3001, E3003, E703						
All other dwellings	1-phase airconditioning - ducted / EER 3.0 - 3.5	1-phase airconditioning - ducted / EER 3.0 - 3.5	1-phase airconditioning - ducted / EER 3.0 - 3.5	1-phase airconditioning - ducted / EER 3.0 - 3.5	0	no

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

(iii) Thermal Performance	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must attach the certificate referred to under "Assessor details" on the front page of this BASIX certificate (the "Assessor Certificate") to the development application and construction certificate application for the proposed development (or, if the applicant is applying for a complying development certificate for the proposed development, to that application). The applicant must also attach the Assessor Certificate to the application for a final occupation certificate for the proposed development.			
(b) The Assessor Certificate must have been issued by an Accredited Assessor in accordance with the Thermal Comfort Protocol.			
(c) The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX Certificate, including the details shown in the "Thermal Loads" table below.			
(d) The applicant must show on the plans accompanying the development application for the proposed development, all matters which the Thermal Comfort Protocol requires to be shown on those plans. Those plans must bear a stamp of endorsement from the Accredited Assessor, to certify that this is the case.	✓		
(e) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all thermal performance specifications set out in the Assessor Certificate, and all aspects of the proposed development which were used to calculate those specifications.		✓	
(f) The applicant must construct the development in accordance with all thermal performance specifications set out in the Assessor Certificate, and in accordance with those aspects of the development application or application for a complying development certificate which were used to calculate those specifications.		✓	✓
(g) Where there is an in-slab heating or cooling system, the applicant must:	✓	✓	✓

(iii) Thermal Performance	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(aa) Install insulation with an R-value of not less than 1.0 around the vertical edges of the perimeter of the slab; or (bb) On a suspended floor, install insulation with an R-value of not less than 1.0 underneath the slab and around the vertical edges of the perimeter of the slab.			
(h) The applicant must construct the floors and walls of the development in accordance with the specifications listed in the table below.	✔	✔	✔
(i) The applicant must show on The plans accompanying The development application for The proposed development, The locations of ceiling fans set out in The Assessor Certificate.	✔		
(j) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), the locations of ceiling fans set out in the Assessor Certificate.		✔	

Thermal loads			
Dwelling no.	Area adjusted heating load (in MJ/m²/yr)	Area adjusted cooling load (in MJ/m²/yr)	Area adjusted total load (in MJ/m²/yr)
E1001	18.5	5.6	24.100
E1002	22.9	2.5	25.400
E1003	19.0	9.1	28.100
E1004	8.5	13	21.500
E1101	18.6	5.6	24.200
E1102	23.1	2.6	25.700
E1103	19.2	9	28.200
E1104	8.6	12.9	21.500
E1201	18.9	5.7	24.600
E1202	23.4	2.3	25.700
E1203	19.4	9.0	28.400
E1204	8.8	13	21.800
E1301	19.1	5.9	25.000
E1302	23.5	2.3	25.800
E1303	19.5	9.0	28.500
E1304	8.8	12.9	21.700
E1401	19.4	5.7	25.100
E1402	23.8	2.3	26.100
E1403	19.8	9.1	28.900
E1404	9.0	12.5	21.500

Dwelling no.	Thermal loads		
	Area adjusted heating load (in MJ/m ² /yr)	Area adjusted cooling load (in MJ/m ² /yr)	Area adjusted total load (in MJ/m ² /yr)
E1501	19.5	5.7	25.200
E1502	24	2.3	26.300
E1503	19.9	9.1	29.000
E1504	9.1	12.5	21.600
E1601	19.9	5.9	25.800
E1602	24.30	2.3	26.600
E1603	20.2	9.2	29.400
E1604	9.30	12.9	22.200
E1701	20.0	5.9	25.900
E1702	24.4	2.3	26.700
E1703	20.3	9.4	29.700
E1704	9.4	12.6	22.000
E1801	20.2	5.9	26.100
E1802	24.5	2.3	26.800
E1803	20.4	9.3	29.700
E1804	9.5	12.7	22.200
E1901	20.3	5.8	26.100
E1902	24.6	2.3	26.900
E1903	20.4	9.4	29.800
E1904	9.6	13	22.600
E2001	20.5	5.9	26.400
E2003	20.5	9.5	30.000
E2004	9.7	13.2	22.900
E201	16.2	9.5	25.700
E202	18.00	10.7	28.700
E2101	20.8	5.9	26.700
E2103	20.7	9.6	30.300
E2104	9.9	13.1	23.000
E2201	20.9	6	26.900
E2202	25.1	2.5	27.600
E2203	20.8	9.6	30.400

Dwelling no.	Thermal loads		
	Area adjusted heating load (in MJ/m ² /yr)	Area adjusted cooling load (in MJ/m ² /yr)	Area adjusted total load (in MJ/m ² /yr)
E2204	10.00	12.9	22.900
E2301	21.1	5.9	27.000
E2302	25.4	2.5	27.900
E2303	20.8	9.5	30.300
E2304	10.1	13.1	23.200
E2401	21.2	6.0	27.200
E2402	25	2.7	27.700
E2403	20.6	9.5	30.100
E2404	10.2	13	23.200
E2501	21.4	6	27.400
E2502	25.1	2.7	27.800
E2503	20.4	10.2	30.600
E2504	10.3	12.9	23.200
E2601	21.4	6.0	27.400
E2602	24.9	2.8	27.700
E2603	20.2	10.6	30.800
E2604	10.3	13	23.300
E2701	21.5	6.1	27.600
E2702	25	2.8	27.800
E2703	19.9	10.7	30.600
E2704	10.4	13	23.400
E2801	21.7	6.0	27.700
E2802	24.9	2.9	27.800
E2803	19.9	10.9	30.800
E2804	10.5	12.8	23.300
E2901	21.9	6.0	27.900
E2902	24.1	3.3	27.400
E2903	19.7	11.9	31.600
E2904	10.6	13	23.600
E3001	27.7	6.0	33.700
E3002	29.30	3.3	32.600

Dwelling no.	Thermal loads		
	Area adjusted heating load (in MJ/m ² /yr)	Area adjusted cooling load (in MJ/m ² /yr)	Area adjusted total load (in MJ/m ² /yr)
E3003	21.8	10.7	32.500
E3004	10.9	9.6	20.500
E301	18.5	10.1	28.600
E302	29.4	3.2	32.600
E303	16.5	8.9	25.400
E401	19.2	10.3	29.500
E402	25.1	3.5	28.600
E403	28.3	3.8	32.100
E404	26.1	5.8	31.900
E405	16.20	10.2	26.400
E501	19.5	10.3	29.800
E502	25.7	3.8	29.500
E503	27.7	3.7	31.400
E504	26.6	5.7	32.300
E505	16.8	9.1	25.900
E601	19.9	10.5	30.400
E602	26	3.8	29.800
E603	28	3.8	31.800
E604	27	5.7	32.700
E605	17.2	9.0	26.200
E701	21.1	9.5	30.600
E702	23.4	13.9	37.300
E703	25	8.9	33.900
E704	12.8	14.8	27.600
E801	21.3	6.0	27.300
E802	26.3	2.5	28.800
E803	18.7	8.9	27.600
E804	8.2	13	21.200
E901	18.1	5.7	23.800
E902	22.6	2.5	25.100
E903	19	8.8	27.800

	Thermal loads		
Dwelling no.	Area adjusted heating load (in MJ/m ² /yr)	Area adjusted cooling load (in MJ/m ² /yr)	Area adjusted total load (in MJ/m ² /yr)
E904	8.3	12.9	21.200
All other dwellings	24.7	2.5	27.200

(c) 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	4 star (> 6 but <= 7.5 L/min)	3 star	3 star	no common laundry facility

(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.	✓	✓	✓

	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
Basement 2 Car Park	ventilation (supply + exhaust)	carbon monoxide monitor + VSD fan	no artificial lighting	-	no
Ground Car Park	ventilation (supply + exhaust)	carbon monoxide monitor + VSD fan	no artificial lighting	-	no
Lower Ground Car Park	ventilation (supply + exhaust)	carbon monoxide monitor + VSD fan	no artificial lighting	-	no
Switch Room LG	ventilation (supply + exhaust)	thermostatically controlled	light-emitting diode	manual on / manual off	no
Plant LG	ventilation (supply + exhaust)	thermostatically controlled	light-emitting diode	manual on / manual off	no
Cold Water Plant LG	ventilation (supply + exhaust)	thermostatically controlled	light-emitting diode	manual on / manual off	no
Fire Pump	ventilation (supply + exhaust)	thermostatically controlled	light-emitting diode	manual on / manual off	no
Plant Room Basement 2	ventilation (supply + exhaust)	thermostatically controlled	light-emitting diode	manual on / manual off	no
Service Room LG	ventilation (supply + exhaust)	thermostatically controlled	light-emitting diode	manual on / manual off	no
Car Park Fan Room LG	ventilation (supply + exhaust)	thermostatically controlled	light-emitting diode	manual on / manual off	no
Store Basement 2	ventilation (supply + exhaust)	none i.e., continuous	light-emitting diode	manual on / manual off	no
Store Ground	ventilation (supply + exhaust)	none i.e., continuous	light-emitting diode	manual on / manual off	no
Hallway/lobby Building E	no mechanical ventilation	-	light-emitting diode	manual on / manual off	no

Central energy systems	Type	Specification
Lift bank (No. 1)	gearless traction with V V V F motor	Number of levels with apartments served by a lift: 29 number of levels from the bottom of the lift shaft to the top of the lift shaft: 34 number of lifts: 3 lift load capacity: <1001 kg

2. Commitments for Residential flat buildings - South

(a) Buildings

(i) Materials	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX Certificate, including the details shown in the "Floor types", "External wall types", "Internal wall types", "Ceiling and roof types", "Frames" and "Glazing" tables below.			✓
(b) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all specifications included in the tables below.		✓	
(c) The applicant must construct the floors, walls, roof, ceiling and roof, windows, glazed doors and skylights of the development in accordance with the specifications listed in the tables below. In the case of glazing, a 5% variance from the area values listed in the "Frames" and "Glazing" tables is permitted.	✓	✓	✓
(d) The applicant must show through receipts that the materials purchased for construction are consistent with the specifications listed in the below tables.			✓

Floor types

Floor type	Area (m2)	Insulation	Low emissions option
floors above habitable rooms, frame: suspended concrete slab	6392	fibreglass batts or roll	-
floors above habitable rooms, frame: suspended concrete slab	11491	-	-
suspended floor above open subfloor, frame: suspended concrete slab	299	fibreglass batts or roll	-
suspended floor above garage, frame: suspended concrete slab	487	fibreglass batts or roll	-
concrete slab on ground, frame:	2048.96	-	none

External wall types

External wall type	Construction type	Area (m2)	Low emissions option	Insulation
External wall type 1	AAC veneer,frame:light steel frame	6738	-	fibreglass batts or roll

Internal wall types

Internal wall type	Construction type	Area (m2)	Insulation
Internal wall type 1	plasterboard, frame:light steel frame	10762	-
Internal wall type 2	plasterboard, frame:light steel frame	516	fibreglass batts or roll

Reinforcement concrete frames/columns

Building has reinforced concrete frame/columns?	Volume (m³)	Low emissions option
-	-	-

Ceiling and roof types

Ceiling and roof type	Area (m²)	Roof Insulation	Ceiling Insulation
concrete - plasterboard internal, frame: light steel frame	1860	-	fibreglass batts or roll

Glazing types

Frame types

Single glazing (m²)	Double glazing (m²)	Triple glazing (m²)	Aluminium frames (m²)	Timber frames (m²)	uPVC frames (m²)	Steel frames (m²)	Composite frames (m²)
4746.7	326	-	5072.7	-	-	-	-

(b) 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: <ul style="list-style-type: none"> (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	4 star (> 6 but ≤ 7.5 L/min)	3 star	3 star	3 star	-	3 star	3 star	-	-	-	-	-	-	-

Alternative water source								
Dwelling no.	Alternative water supply systems	Size	Configuration	Landscape connection	Toilet connection (s)	Laundry connection	Pool top-up	Spa top-up
All dwellings	No alternative water supply	-	-	-	-	-	-	-

(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.		✓	✓
(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;		✓	

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(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 (No. 1)	individual fan, ducted to façade or roof	manual switch on/off	individual fan, ducted to façade or roof	manual switch on/off	individual fan, ducted to façade or roof	manual switch on/off

	Cooling		Heating		Natural lighting	
Dwelling no.	living areas	bedroom areas	living areas	bedroom areas	No. of bathrooms or toilets	Main kitchen
SLG03	1-phase airconditioning - ducted / EER 3.0 - 3.5	1-phase airconditioning - ducted / EER 3.0 - 3.5	1-phase airconditioning - ducted / EER 3.0 - 3.5	1-phase airconditioning - ducted / EER 3.0 - 3.5	1	yes
S106, S207, S307, S407, SGF04, SUG04	1-phase airconditioning - ducted / EER 3.0 - 3.5	1-phase airconditioning - ducted / EER 3.0 - 3.5	1-phase airconditioning - ducted / EER 3.0 - 3.5	1-phase airconditioning - ducted / EER 3.0 - 3.5	1	no
All other dwellings	1-phase airconditioning - ducted / EER 3.0 - 3.5	1-phase airconditioning - ducted / EER 3.0 - 3.5	1-phase airconditioning - ducted / EER 3.0 - 3.5	1-phase airconditioning - ducted / EER 3.0 - 3.5	0	no

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

(iii) Thermal Performance	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must attach the certificate referred to under "Assessor details" on the front page of this BASIX certificate (the "Assessor Certificate") to the development application and construction certificate application for the proposed development (or, if the applicant is applying for a complying development certificate for the proposed development, to that application). The applicant must also attach the Assessor Certificate to the application for a final occupation certificate for the proposed development.			
(b) The Assessor Certificate must have been issued by an Accredited Assessor in accordance with the Thermal Comfort Protocol.			
(c) The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX Certificate, including the details shown in the "Thermal Loads" table below.			
(d) The applicant must show on the plans accompanying the development application for the proposed development, all matters which the Thermal Comfort Protocol requires to be shown on those plans. Those plans must bear a stamp of endorsement from the Accredited Assessor, to certify that this is the case.	✔		
(e) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all thermal performance specifications set out in the Assessor Certificate, and all aspects of the proposed development which were used to calculate those specifications.		✔	
(f) The applicant must construct the development in accordance with all thermal performance specifications set out in the Assessor Certificate, and in accordance with those aspects of the development application or application for a complying development certificate which were used to calculate those specifications.		✔	✔
(g) Where there is an in-slab heating or cooling system, the applicant must: (aa) Install insulation with an R-value of not less than 1.0 around the vertical edges of the perimeter of the slab; or (bb) On a suspended floor, install insulation with an R-value of not less than 1.0 underneath the slab and around the vertical edges of the perimeter of the slab.	✔	✔	✔
(h) The applicant must construct the floors and walls of the development in accordance with the specifications listed in the table below.	✔	✔	✔
(i) The applicant must show on The plans accompanying The development application for The proposed development, The locations of ceiling fans set out in The Assessor Certificate.	✔		
(j) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), the locations of ceiling fans set out in the Assessor Certificate.		✔	

Thermal loads			
Dwelling no.	Area adjusted heating load (in MJ/m ² /yr)	Area adjusted cooling load (in MJ/m ² /yr)	Area adjusted total load (in MJ/m ² /yr)
S1001	7.6	13.2	20.800
S1002	20.7	6.0	26.700
S1003	21.8	5.4	27.200

Dwelling no.	Thermal loads		
	Area adjusted heating load (in MJ/m ² /yr)	Area adjusted cooling load (in MJ/m ² /yr)	Area adjusted total load (in MJ/m ² /yr)
S1004	16.8	11.7	28.500
S1005	11.8	13.1	24.900
S101	16.9	9.2	26.100
S102	6.4	18.5	24.900
S103	8.2	13.7	21.900
S104	14.7	10.2	24.900
S105	14.9	18	32.900
S106	21.8	11.3	33.100
S107	9.3	8.1	17.400
S108	10.8	19.4	30.200
S109	20.6	10.2	30.800
S1101	7.5	13.3	20.800
S1102	20.5	6.1	26.600
S1103	21.7	5.3	27.000
S1104	16.7	11.4	28.100
S1105	11.9	13.4	25.300
S1201	7.7	13.4	21.100
S1202	20.9	6.1	27.000
S1203	22.1	5.3	27.400
S1204	17	11.8	28.800
S1205	12	13.4	25.400
S1302	21.1	6.1	27.200
S1303	22.2	5.3	27.500
S1304	17.2	11.8	29.000
S1305	12.1	13.4	25.500
S1402	21.4	6.1	27.500
S1403	22.5	5.3	27.800
S1404	17.5	11.7	29.200
S1405	12.4	13.4	25.800
S1502	21.6	6.1	27.700
S1503	22.7	5.2	27.900

Dwelling no.	Thermal loads		
	Area adjusted heating load (in MJ/m ² /yr)	Area adjusted cooling load (in MJ/m ² /yr)	Area adjusted total load (in MJ/m ² /yr)
S1504	17.6	11.9	29.500
S1505	12.30	13.4	25.700
S1601	8.1	13.4	21.500
S1602	21.9	5.8	27.700
S1603	23	5.0	28.000
S1604	17.9	12	29.900
S1605	12.6	13.4	26.000
S1702	22.1	6.1	28.200
S1703	23.2	5.2	28.400
S1704	18.1	11.8	29.900
S1705	12.8	13.1	25.900
S1801	8.5	12.6	21.100
S1802	22.2	6.1	28.300
S1803	23.3	5.1	28.400
S1804	18.3	11.8	30.100
S1805	12.8	13.2	26.000
S1901	8.8	12.7	21.500
S1902	22.5	6.1	28.600
S1903	23.5	5.1	28.600
S1904	18.4	11.8	30.200
S1905	12.9	13.2	26.100
S2001	8.9	12.6	21.500
S2002	22.6	6.1	28.700
S2003	23.6	5.1	28.700
S2004	18.6	11.7	30.300
S2005	13.1	13.1	26.200
S201	13.1	9.2	22.300
S202	24.3	10.7	35.000
S203	15.1	10.3	25.400
S204	10.9	11.5	22.400
S205	19.3	9.4	28.700

Dwelling no.	Thermal loads		
	Area adjusted heating load (in MJ/m ² /yr)	Area adjusted cooling load (in MJ/m ² /yr)	Area adjusted total load (in MJ/m ² /yr)
S206	18.7	14.4	33.100
S207	27.3	9.3	36.600
S208	12.6	8.1	20.700
S209	14.1	14.6	28.700
S210	13.3	13.5	26.800
S2101	9.2	12.6	21.800
S2102	23	6.1	29.100
S2103	23.9	5.1	29.000
S2104	18.9	11.7	30.600
S2105	13.4	13.1	26.500
S2201	10.5	13.3	23.800
S2202	30.6	5.9	36.500
S2203	29	4.5	33.500
S2204	23.1	8.7	31.800
S2205	13.8	11.9	25.700
S301	13.6	9.0	22.600
S302	25.1	10.7	35.800
S303	15.7	10.3	26.000
S304	11.4	11.6	23.000
S305	20.1	9.3	29.400
S306	19.8	14.2	34.000
S307	28.30	9.1	37.400
S308	13.2	8.1	21.300
S309	14.7	14.2	28.900
S310	13.8	13.2	27.000
S401	14.1	8.9	23.000
S402	25.7	10.6	36.300
S403	16.20	9.6	25.800
S404	11.7	11.6	23.300
S405	20.7	9.3	30.000
S406	20.2	14.2	34.400

Dwelling no.	Thermal loads		
	Area adjusted heating load (in MJ/m ² /yr)	Area adjusted cooling load (in MJ/m ² /yr)	Area adjusted total load (in MJ/m ² /yr)
S407	28.8	8.9	37.700
S408	13.6	8.1	21.700
S409	15.1	13.9	29.000
S410	14.3	13.1	27.400
S501	12.4	8.6	21.000
S502	26.6	5.9	32.500
S503	22.5	5.1	27.600
S504	9.8	7.2	17.000
S601	8.3	14	22.300
S602	20.9	6.0	26.900
S603	21.4	5.5	26.900
S604	18	11.6	29.600
S605	11.4	13.1	24.500
S701	6.7	13.7	20.400
S702	19.3	6.0	25.300
S703	20.6	5.5	26.100
S704	15.6	11.5	27.100
S705	11	13.1	24.100
S801	6.7	13.6	20.300
S802	19.6	6.0	25.600
S803	20.9	5.3	26.200
S804	15.9	11.4	27.300
S805	11.3	13	24.300
S901	7.0	13.5	20.500
S902	20.00	6.1	26.100
S903	21.3	5.4	26.700
S904	16.2	11.2	27.400
S905	11.50	13.2	24.700
SGF01	11.9	8.8	20.700
SGF02	12.7	10.7	23.400
SGF03	13.1	19.4	32.500

	Thermal loads		
Dwelling no.	Area adjusted heating load (in MJ/m ² /yr)	Area adjusted cooling load (in MJ/m ² /yr)	Area adjusted total load (in MJ/m ² /yr)
SGF04	19.3	11.8	31.100
SGF05	8.9	9.7	18.600
SLG01	15.1	8.5	23.600
SLG02	8.1	8.7	16.800
SLG03	13	17.4	30.400
SLG04	15.4	12.4	27.800
SLG05	7.4	17.9	25.300
SUG01	7.7	14.1	21.800
SUG02	13.5	10.4	23.900
SUG03	13.9	18.4	32.300
SUG04	20.3	11.6	31.900
SUG05	8.3	17.7	26.000
SUG06	23.0	7.2	30.200
SUG07	19.4	8.6	28.000
All other dwellings	8.2	13.1	21.300

(c) 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	4 star (> 6 but <= 7.5 L/min)	3 star	3 star	no common laundry facility

(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.	✓	✓	✓

Common area	Common area ventilation system		Common area lighting		
	Ventilation system type	Ventilation efficiency measure	Primary type of artificial lighting	Lighting efficiency measure	Lighting control system/ BMS
Upper Ground Car Park	ventilation (supply + exhaust)	carbon monoxide monitor + VSD fan	no artificial lighting	-	no
Basement 1 Car Park	ventilation (supply + exhaust)	carbon monoxide monitor + VSD fan	no artificial lighting	-	no
Bin Room	no mechanical ventilation	-	light-emitting diode	manual on / manual off	no
Plant Room Basement 1	ventilation (supply + exhaust)	thermostatically controlled	light-emitting diode	manual on / manual off	no
Service Basement	ventilation (supply + exhaust)	thermostatically controlled	light-emitting diode	manual on / manual off	no
Car Park Fan Room Basement 1	ventilation (supply + exhaust)	thermostatically controlled	light-emitting diode	manual on / manual off	no
OSD Basement 1	ventilation (supply + exhaust)	thermostatically controlled	light-emitting diode	manual on / manual off	no
Store Basement 1	ventilation (supply + exhaust)	none i.e., continuous	light-emitting diode	manual on / manual off	no
Hallway/lobby Building S	no mechanical ventilation	-	light-emitting diode	manual on / manual off	no
Lift bank (No. 1)	-	-	light-emitting diode	connected to lift call button	no
Lift bank (No. 2)	-	-	light-emitting diode	connected to lift call button	no
Lift bank (No. 3)	-	-	light-emitting diode	connected to lift call button	no

Central energy systems	Type	Specification
Lift bank (No. 2)	gearless traction with V V V F motor	Number of levels with apartments served by a lift: 8 number of levels from the bottom of the lift shaft to the top of the lift shaft: 10 number of lifts: 2 lift load capacity: <1001 kg
Lift bank (No. 3)	gearless traction with V V V F motor	Number of levels with apartments served by a lift: 25 number of levels from the bottom of the lift shaft to the top of the lift shaft: 27 number of lifts: 3 lift load capacity: <1001 kg

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

(a) Buildings 'Other'

(i) Materials	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX Certificate, including the details shown in the "Floor types", "External wall types", "Internal wall types", "Ceiling and roof types", "Frames" and "Glazing" tables below.			✓
(b) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all specifications included in the tables below.		✓	
(c) The applicant must construct the floors, walls, roof, ceiling and roof, windows, glazed doors and skylights of the development in accordance with the specifications listed in the tables below. In the case of glazing, a 5% variance from the area values listed in the "Frames" and "Glazing" tables is permitted.	✓	✓	✓
(d) The applicant must show through receipts that the materials purchased for construction are consistent with the specifications listed in the below tables.			✓

Floor types

Floor type	Area (m2)	Insulation	Low emissions option
-	-	-	-

External wall types

External wall type	Construction type	Area (m2)	Low emissions option	Insulation
-	-	-	-	-

Internal wall types

Internal wall type	Construction type	Area (m2)	Insulation
-	-	-	-

Reinforcement concrete frames/columns

Building has reinforced concrete frame/columns?	Volume (m³)	Low emissions option
-	-	-

Ceiling and roof types

Ceiling and roof type	Area (m ²)	Roof Insulation	Ceiling Insulation
-	-	-	

Glazing types**Frame types**

Single glazing (m ²)	Double glazing (m ²)	Triple glazing (m ²)	Aluminium frames (m ²)	Timber frames (m ²)	uPVC frames (m ²)	Steel frames (m ²)	Composite frames (m ²)
-	-	-	-	-	-	-	-

(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	4 star (> 6 but <= 7.5 L/min)	3 star	3 star	no common laundry facility

(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
Central hot water system (No. 1)	gas instantaneous	Piping insulation (ringmain & supply risers): (a) Piping external to building: R1.0 (~38 mm); (b) Piping internal to building: R1.0 (~38 mm)

Central energy systems	Type	Specification
Alternative energy supply	Photovoltaic system	Rated electrical output (min): 110 peak kW
Other	-	-

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).

BASIX™ Certificate

Building Sustainability Index

www.planningportal.nsw.gov.au/development-and-assessment/basix

Multi Dwelling

Certificate number: 1778802M_03

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.planningportal.nsw.gov.au/definitions

This certificate is a revision of certificate number 1778802M_02 submitted to the consent authority or certifier on 21 March 2025 with application SSD-78156221.

It is the responsibility of the applicant to verify with the consent authority that the original, or any revised certificate, complies with the requirements of Schedule 1 Clause 2A, 4A or 6A of the Environment Planning and Assessment Regulation 2000

Secretary

Date of issue: Friday, 30 January 2026

To be valid, this certificate must be submitted with a development application or lodged with a complying development certificate application within 3 months of the date of issue.



When submitting this BASIX certificate with a development application or complying development certificate application, it must be accompanied by NatHERS certificate 0012741780.

Project summary

Project name	93 to 107 Cecil Avenue Castle Hill NSW 2154 (C&D)_03
Street address	93 TO 107 CECIL AVENUE 9 TO 10 ROGER AVENUE CASTLE HILL 2154
Local Government Area	THE HILLS SHIRE
Plan type and plan number	Deposited Plan 15399
Lot no.	27
Section no.	-
No. of residential flat buildings	2
Residential flat buildings: no. of dwellings	349
Multi-dwelling housing: no. of dwellings	0
No. of single dwelling houses	0

Project score

Water	✔ 45	Target 40
Thermal Performance	✔ Pass	Target Pass
Energy	✔ 69	Target 63
Materials	✔ -100	Target n/a

Certificate Prepared by

Name / Company Name: Certified Energy

ABN (if applicable): 95 164 564 210

Description of project

Project address

Project name	93 to 107 Cecil Avenue Castle Hill NSW 2154 (C&D)_03
Street address	93 TO 107 CECIL AVENUE 9 TO 10 ROGER AVENUE CASTLE HILL 2154
Local Government Area	THE HILLS SHIRE
Plan type and plan number	Deposited Plan 15399
Lot no.	27
Section no.	-

Project type

No. of residential flat buildings	2
Residential flat buildings: no. of dwellings	349
Multi-dwelling housing: no. of dwellings	0
No. of single dwelling houses	0

Site details

Site area (m ²)	8542.69
Roof area (m ²)	3210
Non-residential floor area (m ²)	2650
Residential car spaces	349
Non-residential car spaces	71

Common area landscape

Common area lawn (m ²)	207.66
Common area garden (m ²)	5067.15
Area of indigenous or low water use species (m ²)	3534.12

Assessor details and thermal loads

Assessor number	10056
Certificate number	0012741780
Climate zone	56

Project score

Water	✔ 45	Target 40
Thermal Performance	✔ Pass	Target Pass
Energy	✔ 69	Target 63
Materials	✔ -100	Target n/a

Description of project

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

Residential flat buildings - North, 241 dwellings, 35 storeys above ground

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
N1001	1	69.1	0	0	0
N1005	2	116.4	0	0	0
N1103	2	108.6	0	0	0
N1201	1	69.1	0	0	0
N1205	2	116.4	0	0	0
N1303	2	108.6	0	0	0
N1401	1	69.1	0	0	0
N1405	2	116.4	0	0	0
N1503	2	108.6	0	0	0
N1601	1	69.1	0	0	0
N1605	2	116.4	0	0	0
N1703	2	108.6	0	0	0
N1801	1	69.1	0	0	0
N1805	2	116.4	0	0	0
N1903	2	108.6	0	0	0
N2001	1	69.1	0	0	0
N2005	2	116.4	0	0	0
N205	2	113.3	0	0	0
N2102	3	133.3	0	0	0
N2106	2	69.7	0	0	0
N2204	2	85.9	0	0	0
N1002	3	133.3	0	0	0
N1006	2	69.7	0	0	0
N1104	2	85.9	0	0	0
N1202	3	133.3	0	0	0
N1206	2	69.7	0	0	0
N1304	2	85.9	0	0	0
N1402	3	133.3	0	0	0
N1406	2	69.7	0	0	0
N1504	2	85.9	0	0	0
N1602	3	133.3	0	0	0
N1606	2	69.7	0	0	0
N1704	2	85.9	0	0	0
N1802	3	133.3	0	0	0
N1806	2	69.7	0	0	0
N1904	2	85.9	0	0	0
N2002	3	133.3	0	0	0
N2006	2	69.7	0	0	0
N206	2	113.3	0	0	0
N2103	2	108.6	0	0	0
N2201	1	69.1	0	0	0
N2205	2	116.4	0	0	0
N1003	2	108.6	0	0	0
N1101	1	69.1	0	0	0
N1105	2	116.4	0	0	0
N1203	2	108.6	0	0	0
N1301	1	69.1	0	0	0
N1305	2	116.4	0	0	0
N1403	2	108.6	0	0	0
N1501	1	69.1	0	0	0
N1505	2	116.4	0	0	0
N1603	2	108.6	0	0	0
N1701	1	69.1	0	0	0
N1705	2	116.4	0	0	0
N1803	2	108.6	0	0	0
N1901	1	69.1	0	0	0
N1905	2	116.4	0	0	0
N2003	2	108.6	0	0	0
N203	2	108.7	0	0	0
N207	1	64.8	0	0	0
N2104	2	85.9	0	0	0
N2202	3	133.3	0	0	0
N2206	2	69.7	0	0	0
N1004	2	85.9	0	0	0
N1102	3	133.3	0	0	0
N1106	2	69.7	0	0	0
N1204	2	85.9	0	0	0
N1302	3	133.3	0	0	0
N1306	2	69.7	0	0	0
N1404	2	85.9	0	0	0
N1502	3	133.3	0	0	0
N1506	2	69.7	0	0	0
N1604	2	85.9	0	0	0
N1702	3	133.3	0	0	0
N1706	2	69.7	0	0	0
N1804	2	85.6	0	0	0
N1902	3	133.3	0	0	0
N1906	2	69.7	0	0	0
N2004	2	85.9	0	0	0
N204	2	104.0	0	0	0
N2101	1	69.1	0	0	0
N2105	2	116.4	0	0	0
N2203	2	108.6	0	0	0
N2301	1	69.1	0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
N2302	3	133.3	0	0	0
N2306	2	69.7	0	0	0
N2404	2	85.9	0	0	0
N2502	3	133.3	0	0	0
N2506	2	69.7	0	0	0
N2604	2	85.9	0	0	0
N2702	3	133.3	0	0	0
N2706	2	69.7	0	0	0
N2804	2	85.9	0	0	0
N2902	3	133.3	0	0	0
N2906	2	69.7	0	0	0
N3004	2	85.9	0	0	0
N302	1	61.1	0	0	0
N306	2	113.3	0	0	0
N3103	2	108.6	0	0	0
N3201	1	69.1	0	0	0
N3205	2	116.4	0	0	0
N3303	2	108.6	0	0	0
N3401	1	69.1	0	0	0
N3405	2	116.4	0	0	0
N3503	2	108.6	0	0	0
N3601	1	69.1	0	0	0
N3605	2	116.4	0	0	0
N403	2	83.8	0	0	0
N407	2	108.7	0	0	0
N411	2	113.3	0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
N2303	2	108.6	0	0	0
N2401	1	69.1	0	0	0
N2405	2	116.4	0	0	0
N2503	2	108.6	0	0	0
N2601	1	69.1	0	0	0
N2605	2	116.4	0	0	0
N2703	2	108.6	0	0	0
N2801	1	69.1	0	0	0
N2805	2	116.4	0	0	0
N2903	2	108.6	0	0	0
N3001	1	69.1	0	0	0
N3005	2	116.4	0	0	0
N303	2	108.7	0	0	0
N307	2	75.3	0	0	0
N3104	2	85.6	0	0	0
N3202	3	133.3	0	0	0
N3206	2	69.7	0	0	0
N3304	2	85.9	0	0	0
N3402	3	133.3	0	0	0
N3406	2	69.7	0	0	0
N3504	2	85.9	0	0	0
N3602	3	133.3	0	0	0
N3606	2	69.7	0	0	0
N404	2	74.0	0	0	0
N408	2	108.7	0	0	0
N412	2	113.3	0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
N2304	2	85.9	0	0	0
N2402	3	133.3	0	0	0
N2406	2	69.7	0	0	0
N2504	2	85.9	0	0	0
N2602	3	133.3	0	0	0
N2606	2	69.7	0	0	0
N2704	2	85.9	0	0	0
N2802	3	133.3	0	0	0
N2806	2	69.7	0	0	0
N2904	2	85.9	0	0	0
N3002	3	133.3	0	0	0
N3006	2	69.7	0	0	0
N304	2	104	0	0	0
N3101	1	69.1	0	0	0
N3105	2	116.4	0	0	0
N3203	2	108.6	0	0	0
N3301	1	69.1	0	0	0
N3305	2	116.4	0	0	0
N3403	2	108.6	0	0	0
N3501	1	69.1	0	0	0
N3505	2	116.4	0	0	0
N3603	2	108.6	0	0	0
N401	2	84.9	0	0	0
N405	1	61.1	0	0	0
N409	2	112	0	0	0
N413	2	75.3	0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
N2305	2	116.4	0	0	0
N2403	2	108.6	0	0	0
N2501	1	69.1	0	0	0
N2505	2	116.4	0	0	0
N2603	2	108.6	0	0	0
N2701	1	69.1	0	0	0
N2705	2	116.4	0	0	0
N2803	2	108.6	0	0	0
N2901	1	69.1	0	0	0
N2905	2	116.4	0	0	0
N3003	2	108.6	0	0	0
N301	2	74.0	0	0	0
N305	2	113.3	0	0	0
N3102	3	133.3	0	0	0
N3106	2	69.7	0	0	0
N3204	2	85.6	0	0	0
N3302	3	133.3	0	0	0
N3306	2	69.7	0	0	0
N3404	2	85.9	0	0	0
N3502	3	133.3	0	0	0
N3506	2	69.7	0	0	0
N3604	2	85.9	0	0	0
N402	1	57.1	0	0	0
N406	2	108.7	0	0	0
N410	2	104	0	0	0
N414	2	85.9	0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
N501	2	84.9	0	0	0
N505	1	61.1	0	0	0
N509	2	112.0	0	0	0
N513	2	75.3	0	0	0
N603	2	83.8	0	0	0
N607	2	108.7	0	0	0
N611	2	113.3	0	0	0
N701	2	84.9	0	0	0
N705	1	61.1	0	0	0
N709	2	112.0	0	0	0
N713	2	75.3	0	0	0
N803	2	98	0	0	0
N902	3	133.3	0	0	0
N906	2	69.7	0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
N502	1	57.1	0	0	0
N506	2	108.7	0	0	0
N510	2	104.0	0	0	0
N514	2	85.9	0	0	0
N604	2	74.0	0	0	0
N608	2	108.7	0	0	0
N612	2	113.3	0	0	0
N702	1	57.1	0	0	0
N706	2	108.7	0	0	0
N710	2	104.0	0	0	0
N714	2	85.9	0	0	0
N804	1	62.2	0	0	0
N903	2	108.6	0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
N503	2	83.8	0	0	0
N507	2	108.7	0	0	0
N511	2	113.3	0	0	0
N601	2	84.9	0	0	0
N605	1	61.1	0	0	0
N609	2	112.0	0	0	0
N613	2	75.3	0	0	0
N703	2	83.8	0	0	0
N707	2	108.7	0	0	0
N711	2	113.3	0	0	0
N801	3	110.8	0	0	0
N805	2	116.4	0	0	0
N904	2	85.9	0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
N504	2	74	0	0	0
N508	2	108.7	0	0	0
N512	2	113.3	0	0	0
N602	1	57.1	0	0	0
N606	2	108.7	0	0	0
N610	2	104.0	0	0	0
N614	2	85.9	0	0	0
N704	2	74.0	0	0	0
N708	2	108.7	0	0	0
N712	2	113.3	0	0	0
N802	2	116.0	0	0	0
N901	1	69.1	0	0	0
N905	2	116.4	0	0	0

Residential flat buildings - West, 108 dwellings, 28 storeys above ground

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
W1001	1	69.1	0	0	0
W101	2	83.8	0	0	0
W1101	1	69.1	0	0	0
W1201	1	69.1	0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
W1002	3	133.3	0	0	0
W102	2	110.6	0.0	0	0
W1102	3	133.3	0	0	0
W1202	3	133.3	0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
W1003	2	108.1	0	0	0
W103	3	137.2	0	0	0
W1103	2	110.6	0.0	0	0
W1203	2	108.1	0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
W1004	2	84.6	0	0	0
W104	2	83.8	0	0	0
W1104	2	84.6	0	0	0
W1204	2	84.6	0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
W1301	1	69.1	0	0	0
W1401	1	69.1	0	0	0
W1501	1	69.1	0	0	0
W1601	1	69.1	0	0	0
W1701	1	69.1	0	0	0
W1801	1	69.1	0	0	0
W1901	1	69.1	0.00	0	0
W2001	1	69.1	0	0	0
W201	2	83.8	0	0	0
W205	2	83.8	0	0	0
W2104	2	84.6	0	0	0
W2204	2	84.6	0	0	0
W2304	2	84.6	0	0	0
W2404	2	84.6	0	0	0
W2504	2	84.6	0	0	0
W304	3	137.2	0	0	0
W403	2	110.6	0	0	0
W502	2	110.5	0	0	0
W602	2	110.5	0	0	0
W702	2	116.4	0	0	0
W803	2	108.1	0	0	0
W903	2	108.1	0	0	0
WUG01	2	83.8	0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
W1302	3	133.3	0	0	0
W1402	3	133.3	0	0	0
W1502	3	133.3	0	0	0
W1602	3	133.3	0	0	0
W1702	3	133.3	0	0	0
W1802	3	133.3	0	0	0
W1902	3	133.3	0	0	0
W2002	3	133.3	0	0	0
W202	2	110.5	0	0	0
W2101	1	69.1	0	0	0
W2201	1	69.1	0	0	0
W2301	1	69.1	0	0	0
W2401	1	69.1	0	0	0
W2501	1	69.1	0	0	0
W301	2	83.8	0	0	0
W305	2	83.8	0	0	0
W404	3	137.2	0	0	0
W503	2	110.5	0	0	0
W603	2	110.5	0	0	0
W703	1	57.8	0	0	0
W804	2	84.6	0	0	0
W904	2	84.6	0	0	0
WUG02	2	110.6	0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
W1303	2	108.1	0	0	0
W1403	2	108.1	0	0	0
W1503	2	108.1	0	0	0
W1603	2	108.1	0	0	0
W1703	2	108.1	0	0	0
W1803	2	108.1	0	0	0
W1903	2	108.1	0	0	0
W2003	2	108.1	0	0	0
W203	2	110.6	0	0	0
W2102	3	133.3	0	0	0
W2202	3	133.3	0	0	0
W2302	3	133.3	0	0	0
W2402	3	133.3	0	0	0
W2502	3	133.3	0	0	0
W302	2	110.5	0	0	0
W401	2	83.8	0	0	0
W405	2	83.8	0	0	0
W504	2	83.8	0	0	0
W604	2	83.8	0	0	0
W801	1	69.1	0	0	0
W901	1	69.1	0	0	0
WGF01	3	137.2	0	0	0
WUG03	3	137.2	0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
W1304	2	84.6	0	0	0
W1404	2	84.6	0	0	0
W1504	2	84.6	0	0	0
W1604	2	84.6	0	0	0
W1704	2	84.6	0	0	0
W1804	2	84.6	0	0	0
W1904	2	84.6	0	0	0
W2004	2	84.6	0	0	0
W204	3	137.2	0	0	0
W2103	2	108.1	0	0	0
W2203	2	108.1	0	0	0
W2303	2	108.1	0	0	0
W2403	2	108.1	0	0	0
W2503	2	108.1	0	0	0
W303	2	110.6	0	0	0
W402	2	110.5	0	0	0
W501	2	83.8	0	0	0
W601	2	83.8	0	0	0
W701	2	116.5	0	0	0
W802	3	133.3	0	0	0
W902	3	133.3	0	0	0
WLG01	3	137.2	0	0	0
WUG04	4	66.6	0	0	0

Description of project

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

Common areas of unit building - North

Common area	Floor area (m ²)
Basement 1 Carpark	4770
General/Bulky Waste LG	740
OSD	140
Hallway/lobby Building N	2600

Common area	Floor area (m ²)
Lower Ground Carpark	3600
Service room LG	32
BOH North	16

Common area	Floor area (m ²)
Level 1 Carpark	2200
Car Park Fan room	79
Storage Basement 1	360

Common areas of unit building - West

Common area	Floor area (m ²)
Lift bank (No. 1)	-
Ground Carpark	4100
Storage Ground	375

Common area	Floor area (m ²)
Lift bank (No. 2)	-
Upper Ground Carpark	2450
BOH West	16

Common area	Floor area (m ²)
Lift bank (No. 3)	-
Car Park Fan room Ground	77
Hallway/lobby Building W	1765

Schedule of BASIX commitments

1. Commitments for Residential flat buildings - North

(a) Buildings

(i) Materials

(b) Dwellings

(i) Water

(ii) Energy

(iii) Thermal Performance

(c) Common areas and central systems/facilities

(i) Water

(ii) Energy

2. Commitments for Residential flat buildings - West

(a) Buildings

(i) Materials

(b) Dwellings

(i) Water

(ii) Energy

(iii) Thermal Performance

(c) Common areas and central systems/facilities

(i) Water

(ii) Energy

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

(a) Buildings 'Other'

(i) Materials

(b) Common areas and central systems/facilities

(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 - North

(a) Buildings

(i) Materials	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX Certificate, including the details shown in the "Floor types", "External wall types", "Internal wall types", "Ceiling and roof types", "Frames" and "Glazing" tables below.			✓
(b) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all specifications included in the tables below.		✓	
(c) The applicant must construct the floors, walls, roof, ceiling and roof, windows, glazed doors and skylights of the development in accordance with the specifications listed in the tables below. In the case of glazing, a 5% variance from the area values listed in the "Frames" and "Glazing" tables is permitted.	✓	✓	✓
(d) The applicant must show through receipts that the materials purchased for construction are consistent with the specifications listed in the below tables.			✓

Floor types

Floor type	Area (m2)	Insulation	Low emissions option
floors above habitable rooms, frame: suspended concrete slab	23867	fibreglass batts or roll	-
suspended floor above garage, frame: suspended concrete slab	180	fibreglass batts or roll	-
suspended floor above open subfloor, frame: suspended concrete slab	175	fibreglass batts or roll	-
floors above habitable rooms, frame: suspended concrete slab	11755.91	-	-

External wall types

External wall type	Construction type	Area (m2)	Low emissions option	Insulation
External wall type 1	AAC veneer, frame: light steel frame	8648.9	-	fibreglass batts or roll

Internal wall types

Internal wall type	Construction type	Area (m2)	Insulation
Internal wall type 1	plasterboard, frame:light steel frame	17942.6	-
Internal wall type 2	plasterboard, frame:light steel frame	1258.1	fibreglass batts or roll

Reinforcement concrete frames/columns

Building has reinforced concrete frame/columns?	Volume (m³)	Low emissions option
-	-	-

Ceiling and roof types

Ceiling and roof type	Area (m²)	Roof Insulation	Ceiling Insulation
concrete - plasterboard internal, frame: light steel frame	2190	-	fibreglass batts or roll

Glazing types

Frame types

Single glazing (m²)	Double glazing (m²)	Triple glazing (m²)	Aluminium frames (m²)	Timber frames (m²)	uPVC frames (m²)	Steel frames (m²)	Composite frames (m²)
7325	465	-	7790	-	-	-	-

(b) 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	4 star (> 6 but ≤ 7.5 L/min)	3 star	3 star	3 star	-	3 star	3 star	-	-	-	-	-	-	-

Alternative water source								
Dwelling no.	Alternative water supply systems	Size	Configuration	Landscape connection	Toilet connection (s)	Laundry connection	Pool top-up	Spa top-up
All dwellings	No alternative water supply	-	-	-	-	-	-	-

(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.		✓	✓
(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;		✓	

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(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 (No. 1)	individual fan, ducted to façade or roof	manual switch on/off	individual fan, ducted to façade or roof	manual switch on/off	individual fan, ducted to façade or roof	manual switch on/off

	Cooling		Heating		Natural lighting	
Dwelling no.	living areas	bedroom areas	living areas	bedroom areas	No. of bathrooms or toilets	Main kitchen
N1003, N1005, N1103, N1105, N1203, N1205, N1303, N1305, N1403, N1405, N1503, N1505, N1603, N1605, N1703, N1705, N1803, N1805, N1903, N1905, N2003, N2005, N205, N206, N2103, N2105, N2203, N2205, N2303, N2305, N2403, N2405, N2503, N2505, N2603, N2605, N2703, N2705, N2803, N2805,	1-phase airconditioning - ducted / EER 3.0 - 3.5	1-phase airconditioning - ducted / EER 3.0 - 3.5	1-phase airconditioning - ducted / EER 3.0 - 3.5	1-phase airconditioning - ducted / EER 3.0 - 3.5	1	no

Dwelling no.	Cooling		Heating		Natural lighting	
	living areas	bedroom areas	living areas	bedroom areas	No. of bathrooms or toilets	Main kitchen
N2903, N2905, N3003, N3005, N305, N306, N3103, N3105, N3203, N3205, N3303, N3305, N3403, N3405, N3503, N3505, N3603, N3605, N411, N412, N511, N512, N611, N612, N711, N712, N805, N903, N905						
All other dwellings	1-phase airconditioning - ducted / EER 3.0 - 3.5	1-phase airconditioning - ducted / EER 3.0 - 3.5	1-phase airconditioning - ducted / EER 3.0 - 3.5	1-phase airconditioning - ducted / EER 3.0 - 3.5	0	no

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

(iii) Thermal Performance	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must attach the certificate referred to under "Assessor details" on the front page of this BASIX certificate (the "Assessor Certificate") to the development application and construction certificate application for the proposed development (or, if the applicant is applying for a complying development certificate for the proposed development, to that application). The applicant must also attach the Assessor Certificate to the application for a final occupation certificate for the proposed development.			
(b) The Assessor Certificate must have been issued by an Accredited Assessor in accordance with the Thermal Comfort Protocol.			
(c) The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX Certificate, including the details shown in the "Thermal Loads" table below.			

(iii) Thermal Performance	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(d) The applicant must show on the plans accompanying the development application for the proposed development, all matters which the Thermal Comfort Protocol requires to be shown on those plans. Those plans must bear a stamp of endorsement from the Accredited Assessor, to certify that this is the case.	✔		
(e) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all thermal performance specifications set out in the Assessor Certificate, and all aspects of the proposed development which were used to calculate those specifications.		✔	
(f) The applicant must construct the development in accordance with all thermal performance specifications set out in the Assessor Certificate, and in accordance with those aspects of the development application or application for a complying development certificate which were used to calculate those specifications.		✔	✔
(g) Where there is an in-slab heating or cooling system, the applicant must: (aa) Install insulation with an R-value of not less than 1.0 around the vertical edges of the perimeter of the slab; or (bb) On a suspended floor, install insulation with an R-value of not less than 1.0 underneath the slab and around the vertical edges of the perimeter of the slab.	✔	✔	✔
(h) The applicant must construct the floors and walls of the development in accordance with the specifications listed in the table below.	✔	✔	✔
(i) The applicant must show on The plans accompanying The development application for The proposed development, The locations of ceiling fans set out in The Assessor Certificate.	✔		
(j) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), the locations of ceiling fans set out in the Assessor Certificate.		✔	

Thermal loads			
Dwelling no.	Area adjusted heating load (in MJ/m ² /yr)	Area adjusted cooling load (in MJ/m ² /yr)	Area adjusted total load (in MJ/m ² /yr)
N1001	15.4	7.8	23.200
N1002	19.3	6.2	25.500
N1003	16.3	9.5	25.800
N1004	11.9	13	24.900
N1005	11.3	15.8	27.100
N1006	8.5	13.5	22.000
N1101	15.6	8	23.600
N1103	16.9	9.7	26.600
N1104	12	12.9	24.900
N1105	11.5	15.6	27.100

Dwelling no.	Thermal loads		
	Area adjusted heating load (in MJ/m ² /yr)	Area adjusted cooling load (in MJ/m ² /yr)	Area adjusted total load (in MJ/m ² /yr)
N1106	8.6	13.4	22.000
N1201	16	8	24.000
N1202	19.3	6.4	25.700
N1203	17.2	9.5	26.700
N1204	12.3	13.2	25.500
N1205	11.7	15.4	27.100
N1206	8.8	13.2	22.000
N1301	16.2	8	24.200
N1303	17.4	9.6	27.000
N1304	12.5	12.8	25.300
N1305	11.8	15.2	27.000
N1306	8.9	13.2	22.100
N1401	16.5	8	24.500
N1402	19.8	6.3	26.100
N1403	17.7	9.4	27.100
N1404	12.7	12.7	25.400
N1405	12.1	15	27.100
N1406	9.1	13.3	22.400
N1501	16.6	8	24.600
N1502	19.9	6.3	26.200
N1503	17.8	9.6	27.400
N1504	12.8	12.5	25.300
N1505	12.2	15.2	27.400
N1506	9.2	13.3	22.500
N1601	16.9	8	24.900
N1602	20.2	6.3	26.500
N1603	18.1	9.4	27.500
N1604	13.1	12.5	25.600
N1605	12.3	14.9	27.200
N1606	9.4	13.2	22.600
N1701	17.1	8	25.100

Dwelling no.	Thermal loads		
	Area adjusted heating load (in MJ/m ² /yr)	Area adjusted cooling load (in MJ/m ² /yr)	Area adjusted total load (in MJ/m ² /yr)
N1702	20.4	6.2	26.600
N1703	18.2	9.3	27.500
N1704	13.2	12.5	25.700
N1705	12.4	15	27.400
N1706	9.5	13.3	22.800
N1802	20.5	6.2	26.700
N1804	13.3	12.6	25.900
N1805	12.6	14.8	27.400
N1806	9.7	13.3	23.000
N1901	17.5	8	25.500
N1902	20.7	6.2	26.900
N1903	18.6	9.4	28.000
N1904	13.4	12.5	25.900
N1905	12.7	15.1	27.800
N1906	9.8	13.3	23.100
N2001	17.7	8	25.700
N2002	20.8	6.2	27.000
N2003	18.7	9.3	28.000
N2004	13.6	12.9	26.500
N2005	12.9	15.1	28.000
N2006	10	13.2	23.200
N203	25.5	6.2	31.700
N204	23.5	5.4	28.900
N205	24.2	4.4	28.600
N206	12.4	8.5	20.900
N207	22.6	9.4	32.000
N2101	18.1	8	26.100
N2102	21.1	6.1	27.200
N2103	19	9.1	28.100
N2104	13.9	12.7	26.600
N2105	13.1	15	28.100

Dwelling no.	Thermal loads		
	Area adjusted heating load (in MJ/m ² /yr)	Area adjusted cooling load (in MJ/m ² /yr)	Area adjusted total load (in MJ/m ² /yr)
N2106	10.1	13.1	23.200
N2201	18.3	8	26.300
N2202	21.2	6.2	27.400
N2203	19.2	9.2	28.400
N2204	14	12.7	26.700
N2205	13.2	14.9	28.100
N2206	10.2	13.1	23.300
N2301	18.4	8.1	26.500
N2302	21.3	6.2	27.500
N2303	19.3	8.9	28.200
N2304	14.1	12.6	26.700
N2305	13.4	15	28.400
N2306	10.2	13	23.200
N2401	18.6	8.1	26.700
N2402	21.5	6.2	27.700
N2403	19.5	9	28.500
N2404	14.3	12.3	26.600
N2405	13.5	15.1	28.600
N2406	10.4	13	23.400
N2503	19.6	9.3	28.900
N2504	14.4	12.3	26.700
N2506	10.5	13	23.500
N2603	19.6	9	28.600
N2604	14.4	12.4	26.800
N2605	13.6	15.1	28.700
N2606	10.6	13	23.600
N2701	19	8.1	27.100
N2702	21.8	6.1	27.900
N2703	19.8	9	28.800
N2704	14.6	12.5	27.100
N2801	19.2	8.1	27.300

Dwelling no.	Thermal loads		
	Area adjusted heating load (in MJ/m ² /yr)	Area adjusted cooling load (in MJ/m ² /yr)	Area adjusted total load (in MJ/m ² /yr)
N2802	21.9	6.1	28.000
N2803	19.9	9.1	29.000
N2804	14.6	12.4	27.000
N2805	13.7	15	28.700
N2806	10.7	12.8	23.500
N2901	19.4	8.1	27.500
N2902	22.1	6.2	28.300
N2903	20.1	9.1	29.200
N2904	14.7	12.4	27.100
N2905	13.9	14.9	28.800
N2906	10.8	12.8	23.600
N3001	19.5	8.3	27.800
N3002	22.2	5.9	28.100
N3003	20.3	9.2	29.500
N3004	14.9	12.3	27.200
N3005	14	14.8	28.800
N301	19.9	8.9	28.800
N302	18.5	9	27.500
N303	17.4	6.5	23.900
N304	24.4	5.5	29.900
N305	22.9	4.5	27.400
N307	15.3	11.7	27.000
N3101	19.7	8.3	28.000
N3102	22.3	6	28.300
N3103	20.4	9.1	29.500
N3104	15	12.3	27.300
N3105	14.1	14.8	28.900
N3106	10.9	12.7	23.600
N3203	20.6	9.1	29.700
N3204	15.2	12.3	27.500
N3206	11.1	12.7	23.800

Dwelling no.	Thermal loads		
	Area adjusted heating load (in MJ/m ² /yr)	Area adjusted cooling load (in MJ/m ² /yr)	Area adjusted total load (in MJ/m ² /yr)
N3303	20.6	9	29.600
N3304	15.2	12.4	27.600
N3306	11	12.6	23.600
N3401	20.1	8.1	28.200
N3402	22.7	6	28.700
N3403	20.7	8.9	29.600
N3404	15.3	12.3	27.600
N3405	14.4	14.7	29.100
N3501	20.3	8.3	28.600
N3503	20.8	9	29.800
N3504	15.4	12.1	27.500
N3505	14.6	14.7	29.300
N3601	20.7	6.6	27.300
N3602	26.9	6.6	33.500
N3603	27.9	8.8	36.700
N3604	14.6	14.1	28.700
N3605	20	14.2	34.200
N3606	12.4	10	22.400
N401	13.3	11.5	24.800
N402	27	5.4	32.400
N403	17.6	13.1	30.700
N404	20.3	9.7	30.000
N405	17.9	9.4	27.300
N406	22.9	5.9	28.800
N407	4.8	4.8	9.600
N408	4.7	3.3	8.000
N409	8.9	9.2	18.100
N410	18	5.9	23.900
N411	23.5	4.7	28.200
N413	17.3	9.3	26.600
N414	11.2	15	26.200

Dwelling no.	Thermal loads		
	Area adjusted heating load (in MJ/m ² /yr)	Area adjusted cooling load (in MJ/m ² /yr)	Area adjusted total load (in MJ/m ² /yr)
N501	13.8	11.3	25.100
N502	27.7	5.4	33.100
N503	17.6	12.2	29.800
N504	20.8	9.4	30.200
N505	18.5	9.4	27.900
N506	23.5	5.9	29.400
N507	4.9	4.8	9.700
N508	5	3.3	8.300
N509	9.2	9.2	18.400
N510	18.5	5.8	24.300
N511	24.1	4.7	28.800
N512	23.4	5.9	29.300
N513	18.4	9.2	27.600
N514	11.2	14.7	25.900
N601	14.1	11.3	25.400
N602	28.1	5.4	33.500
N603	17.9	12.2	30.100
N604	21.2	9.4	30.600
N605	18.8	9.4	28.200
N606	23.8	5.8	29.600
N607	5	4.8	9.800
N608	5.1	3.3	8.400
N609	9.4	9.2	18.600
N610	18.9	5.8	24.700
N611	24.5	4.7	29.200
N612	23.7	5.8	29.500
N614	11.5	14.6	26.100
N701	14.6	11.1	25.700
N702	28.7	5.4	34.100
N703	18.4	11.7	30.100
N704	21.3	8.7	30.000

Dwelling no.	Thermal loads		
	Area adjusted heating load (in MJ/m ² /yr)	Area adjusted cooling load (in MJ/m ² /yr)	Area adjusted total load (in MJ/m ² /yr)
N705	19.4	8.9	28.300
N706	24.3	5.7	30.000
N707	5.1	4.6	9.700
N708	5.4	3.4	8.800
N709	9.8	9.3	19.100
N710	19.5	6	25.500
N711	25.1	4.7	29.800
N712	24.3	5.8	30.100
N713	19.4	9.3	28.700
N714	11.9	14.1	26.000
N801	10.6	20.1	30.700
N802	27.5	5.7	33.200
N803	20.4	6.9	27.300
N804	18.3	11.8	30.100
N805	14.9	12.2	27.100
N901	16.7	8.1	24.800
N902	23.4	6.4	29.800
N903	21.8	10	31.800
N904	14.4	12.5	26.900
N905	11.2	15.8	27.000
N906	8.3	13.6	21.900
N1102, N1302	19.5	6.3	25.800
N1801, N306	17.3	8	25.300
N1803, N613	18.4	9.4	27.800
N2501, N2601	18.8	8.1	26.900
N2502, N2602	21.6	6.1	27.700
N2505, N2705	13.6	15	28.600
N2706, N3006	10.6	12.8	23.400
N3201, N3301	19.9	8.1	28.000
N3202, N3302	22.5	6.1	28.600
N3205, N3305	14.3	14.7	29.000

	Thermal loads		
Dwelling no.	Area adjusted heating load (in MJ/m ² /yr)	Area adjusted cooling load (in MJ/m ² /yr)	Area adjusted total load (in MJ/m ² /yr)
N3406, N3506	11.2	12.7	23.900
All other dwellings	22.8	6	28.800

(c) 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	4 star (> 6 but <= 7.5 L/min)	3 star	3 star	3 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.	✓	✓	✓

Common area	Common area ventilation system		Common area lighting		
	Ventilation system type	Ventilation efficiency measure	Primary type of artificial lighting	Lighting efficiency measure	Lighting control system/ BMS
Basement 1 Carpark	ventilation (supply + exhaust)	carbon monoxide monitor + VSD fan	no artificial lighting	-	yes
Lower Ground Carpark	ventilation (supply + exhaust)	carbon monoxide monitor + VSD fan	no artificial lighting	-	yes
Level 1 Carpark	ventilation supply only	carbon monoxide monitor + VSD fan	no artificial lighting	-	yes
General/Bulky Waste LG	no mechanical ventilation	-	light-emitting diode	manual on / manual off	yes
Service room LG	ventilation (supply + exhaust)	thermostatically controlled	light-emitting diode	manual on / manual off	yes
Car Park Fan room	ventilation (supply + exhaust)	thermostatically controlled	light-emitting diode	manual on / manual off	yes
OSD	ventilation (supply + exhaust)	thermostatically controlled	light-emitting diode	manual on / manual off	yes
BOH North	ventilation (supply + exhaust)	none i.e., continuous	light-emitting diode	manual on / manual off	yes
Storage Basement 1	no mechanical ventilation	-	light-emitting diode	manual on / manual off	yes
Storage Lower Ground	no mechanical ventilation	-	light-emitting diode	manual on / manual off	yes
Hallway/lobby Building N	no mechanical ventilation	-	light-emitting diode	manual on / manual off	yes

Central energy systems	Type	Specification
Lift bank (No. 1)	gearless traction with V V V F motor	Number of levels with apartments served by a lift: 35 number of levels from the bottom of the lift shaft to the top of the lift shaft: 40 number of lifts: 3 lift load capacity: <1001 kg
Lift bank (No. 2)	gearless traction with V V V F motor	Number of levels with apartments served by a lift: 35 number of levels from the bottom of the lift shaft to the top of the lift shaft: 40 number of lifts: 2 lift load capacity: <1001 kg

2. Commitments for Residential flat buildings - West

(a) Buildings

(i) Materials	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX Certificate, including the details shown in the "Floor types", "External wall types", "Internal wall types", "Ceiling and roof types", "Frames" and "Glazing" tables below.			✓
(b) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all specifications included in the tables below.		✓	
(c) The applicant must construct the floors, walls, roof, ceiling and roof, windows, glazed doors and skylights of the development in accordance with the specifications listed in the tables below. In the case of glazing, a 5% variance from the area values listed in the "Frames" and "Glazing" tables is permitted.	✓	✓	✓
(d) The applicant must show through receipts that the materials purchased for construction are consistent with the specifications listed in the below tables.			✓

Floor types

Floor type	Area (m2)	Insulation	Low emissions option
floors above habitable rooms, frame: suspended concrete slab	10940	fibreglass batts or roll	-
suspended floor above garage, frame: suspended concrete slab	330	fibreglass batts or roll	-
suspended floor above open subfloor, frame: suspended concrete slab	85	fibreglass batts or roll	-
floors above habitable rooms, frame: suspended concrete slab	6994.59	-	-

External wall types

External wall type	Construction type	Area (m2)	Low emissions option	Insulation
External wall type 1	AAC veneer,frame:light steel frame	5292.8	-	fibreglass batts or roll

Internal wall types

Internal wall type	Construction type	Area (m2)	Insulation
Internal wall type 1	plasterboard, frame:light steel frame	8954.3	-

Internal wall types

Internal wall type	Construction type	Area (m2)	Insulation
Internal wall type 2	plasterboard, frame:light steel frame	411.5	fibreglass batts or roll

Reinforcement concrete frames/columns

Building has reinforced concrete frame/columns?	Volume (m³)	Low emissions option
-	-	-

Ceiling and roof types

Ceiling and roof type	Area (m²)	Roof Insulation	Ceiling Insulation
concrete - plasterboard internal, frame: light steel frame	1020	-	fibreglass batts or roll

Glazing types

Frame types

Single glazing (m²)	Double glazing (m²)	Triple glazing (m²)	Aluminium frames (m²)	Timber frames (m²)	uPVC frames (m²)	Steel frames (m²)	Composite frames (m²)
3335	1080	-	4415	-	-	-	-

(b) 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	4 star (> 6 but ≤ 7.5 L/min)	3 star	3 star	3 star	-	3 star	3 star	-	-	-	-	-	-	-

Alternative water source								
Dwelling no.	Alternative water supply systems	Size	Configuration	Landscape connection	Toilet connection (s)	Laundry connection	Pool top-up	Spa top-up
All dwellings	No alternative water supply	-	-	-	-	-	-	-

(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.		✓	✓
(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;		✓	


(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(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 (No. 1)	individual fan, ducted to façade or roof	manual switch on/off	individual fan, ducted to façade or roof	manual switch on/off	individual fan, ducted to façade or roof	manual switch on/off

Dwelling no.	Cooling		Heating		Natural lighting	
	living areas	bedroom areas	living areas	bedroom areas	No. of bathrooms or toilets	Main kitchen
W1103, W1704, W1901, W2502, WUG04	1-phase airconditioning - ducted / EER 3.0 - 3.5	1-phase airconditioning - ducted / EER 3.0 - 3.5	1-phase airconditioning - ducted / EER 3.0 - 3.5	1-phase airconditioning - ducted / EER 3.0 - 3.5	2	no
W1003, W1204, W1304, W1404, W1504, W1604, W2001, W2002, W201, W205, W2101, W2102, W2301, W2401, W304, W403, W502, W602, W702, W803, W903, WUG01	1-phase airconditioning - ducted / EER 3.0 - 3.5	1-phase airconditioning - ducted / EER 3.0 - 3.5	1-phase airconditioning - ducted / EER 3.0 - 3.5	1-phase airconditioning - ducted / EER 3.0 - 3.5	1	no
All other dwellings	1-phase airconditioning - ducted / EER 3.0 - 3.5	1-phase airconditioning - ducted / EER 3.0 - 3.5	1-phase airconditioning - ducted / EER 3.0 - 3.5	1-phase airconditioning - ducted / EER 3.0 - 3.5	0	no

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

(iii) Thermal Performance	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must attach the certificate referred to under "Assessor details" on the front page of this BASIX certificate (the "Assessor Certificate") to the development application and construction certificate application for the proposed development (or, if the applicant is applying for a complying development certificate for the proposed development, to that application). The applicant must also attach the Assessor Certificate to the application for a final occupation certificate for the proposed development.			
(b) The Assessor Certificate must have been issued by an Accredited Assessor in accordance with the Thermal Comfort Protocol.			
(c) The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX Certificate, including the details shown in the "Thermal Loads" table below.			
(d) The applicant must show on the plans accompanying the development application for the proposed development, all matters which the Thermal Comfort Protocol requires to be shown on those plans. Those plans must bear a stamp of endorsement from the Accredited Assessor, to certify that this is the case.	✓		
(e) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all thermal performance specifications set out in the Assessor Certificate, and all aspects of the proposed development which were used to calculate those specifications.		✓	
(f) The applicant must construct the development in accordance with all thermal performance specifications set out in the Assessor Certificate, and in accordance with those aspects of the development application or application for a complying development certificate which were used to calculate those specifications.		✓	✓
(g) Where there is an in-slab heating or cooling system, the applicant must: (aa) Install insulation with an R-value of not less than 1.0 around the vertical edges of the perimeter of the slab; or (bb) On a suspended floor, install insulation with an R-value of not less than 1.0 underneath the slab and around the vertical edges of the perimeter of the slab.	✓	✓	✓
(h) The applicant must construct the floors and walls of the development in accordance with the specifications listed in the table below.	✓	✓	✓
(i) The applicant must show on The plans accompanying The development application for The proposed development, The locations of ceiling fans set out in The Assessor Certificate.	✓		

(iii) Thermal Performance	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(j) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), the locations of ceiling fans set out in the Assessor Certificate.			

Thermal loads			
Dwelling no.	Area adjusted heating load (in MJ/m ² /yr)	Area adjusted cooling load (in MJ/m ² /yr)	Area adjusted total load (in MJ/m ² /yr)
W1001	10.1	12	22.100
W1002	14.7	11.2	25.900
W1003	15	7.8	22.800
W1004	7.7	12	19.700
W101	15.7	7.2	22.900
W102	12.9	14.7	27.600
W103	15.9	11.5	27.400
W1101	10.2	12.2	22.400
W1102	14.8	11	25.800
W1103	15.2	7.8	23.000
W1104	7.8	11.7	19.500
W1201	10.4	12.2	22.600
W1202	15.1	10.9	26.000
W1203	15.5	7.7	23.200
W1204	8	11.7	19.700
W1301	10.5	12.2	22.700
W1302	15.2	10.9	26.100
W1303	15.6	7.7	23.300
W1304	8.1	11.7	19.800
W1401	10.8	11.7	22.500
W1402	15.5	10.9	26.400
W1403	15.9	7.7	23.600
W1404	8.4	11.6	20.000
W1501	11	11.7	22.700
W1502	15.6	10.7	26.300
W1503	16	7.8	23.800

Dwelling no.	Thermal loads		
	Area adjusted heating load (in MJ/m ² /yr)	Area adjusted cooling load (in MJ/m ² /yr)	Area adjusted total load (in MJ/m ² /yr)
W1504	8.5	11.7	20.200
W1601	11.2	12.2	23.400
W1602	15.9	10.5	26.400
W1603	16.3	7.7	24.000
W1604	8.6	12.1	20.700
W1701	11.3	12.2	23.500
W1702	16	10.7	26.700
W1703	16.5	7.8	24.300
W1704	8.7	12	20.700
W1801	11.5	12.3	23.800
W1802	16.1	10.5	26.600
W1804	8.9	11.7	20.600
W1902	16.3	10.4	26.700
W2002	16.4	10.5	26.900
W2003	17.3	7.6	24.900
W2004	8.9	11.6	20.500
W201	19.8	7.2	27.000
W202	18.4	7.8	26.200
W203	12.7	13.2	25.900
W204	19.4	9.7	29.100
W205	12.1	14.8	26.900
W2101	11.9	12.4	24.300
W2102	16.7	10.6	27.300
W2103	17.2	7.9	25.100
W2201	12	12.4	24.400
W2202	16.8	10.4	27.200
W2203	17.4	7.6	25.000
W2204	9	11.6	20.600
W2301	12.1	12.4	24.500
W2302	17	10.4	27.400
W2303	17.5	7.5	25.000

Dwelling no.	Thermal loads		
	Area adjusted heating load (in MJ/m ² /yr)	Area adjusted cooling load (in MJ/m ² /yr)	Area adjusted total load (in MJ/m ² /yr)
W2304	9.1	11.2	20.300
W2401	12.2	12.4	24.600
W2402	17.1	10.5	27.600
W2403	17.7	7.5	25.200
W2404	9.2	11.1	20.300
W2501	12.2	10.3	22.500
W2502	22.4	8.8	31.200
W2503	24.9	8.3	33.200
W2504	13.2	11.4	24.600
W301	20.6	7.2	27.800
W302	19.1	7.7	26.800
W303	13.3	13.2	26.500
W304	20	9.5	29.500
W305	12.6	14.6	27.200
W401	21.1	7.5	28.600
W402	19.6	7.6	27.200
W403	13.8	12.8	26.600
W404	20.5	9.5	30.000
W405	13	14.2	27.200
W501	21.9	6	27.900
W502	17	6.5	23.500
W503	24.9	7.3	32.200
W504	16.4	12.3	28.700
W601	22.1	6	28.100
W602	7.3	6.5	13.800
W603	29.6	7.7	37.300
W604	16.6	12.1	28.700
W701	23.9	5.1	29.000
W702	32.1	2.6	34.700
W703	23.2	12.1	35.300
W801	10.2	12.5	22.700

	Thermal loads		
Dwelling no.	Area adjusted heating load (in MJ/m ² /yr)	Area adjusted cooling load (in MJ/m ² /yr)	Area adjusted total load (in MJ/m ² /yr)
W802	25.7	11.1	36.800
W803	16.5	8.2	24.700
W804	17.4	14.1	31.500
W901	9.8	12.7	22.500
W902	14.4	11.3	25.700
W903	14.7	8	22.700
W904	7.5	12	19.500
WGF01	17.8	11.7	29.500
WUG01	19.8	12.6	32.400
WUG02	7.3	16.3	23.600
WUG03	14.9	13.6	28.500
WUG04	19.8	8.8	28.600
W104, WLG01	8.9	18.4	27.300
W1803, W1903	16.8	7.6	24.400
W1901, W2001	11.6	12.3	23.900
All other dwellings	9	11.8	20.800

(c) 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	4 star (> 6 but <= 7.5 L/min)	3 star	3 star	3 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.	✓	✓	✓

Common area	Common area ventilation system		Common area lighting		
	Ventilation system type	Ventilation efficiency measure	Primary type of artificial lighting	Lighting efficiency measure	Lighting control system/ BMS
Lift bank (No. 1)	-	-	light-emitting diode	connected to lift call button	yes
Lift bank (No. 2)	-	-	light-emitting diode	connected to lift call button	yes
Lift bank (No. 3)	-	-	light-emitting diode	connected to lift call button	yes
Ground Carpark	ventilation (supply + exhaust)	carbon monoxide monitor + VSD fan	no artificial lighting	-	yes
Upper Ground Carpark	ventilation (supply + exhaust)	carbon monoxide monitor + VSD fan	no artificial lighting	-	yes
Car Park Fan room Ground	ventilation (supply + exhaust)	thermostatically controlled	light-emitting diode	manual on / manual off	yes
Storage Ground	ventilation (supply + exhaust)	none i.e., continuous	light-emitting diode	manual on / manual off	yes
BOH West	ventilation (supply + exhaust)	none i.e., continuous	light-emitting diode	manual on / manual off	yes
Hallway/lobby Building W	no mechanical ventilation	-	light-emitting diode	manual on / manual off	yes

Central energy systems	Type	Specification
Lift bank (No. 3)	gearless traction with V V V F motor	Number of levels with apartments served by a lift: 28 number of levels from the bottom of the lift shaft to the top of the lift shaft: 29 number of lifts: 3 lift load capacity: <1001 kg

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

(a) Buildings 'Other'

(i) Materials	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX Certificate, including the details shown in the "Floor types", "External wall types", "Internal wall types", "Ceiling and roof types", "Frames" and "Glazing" tables below.			✓
(b) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all specifications included in the tables below.		✓	
(c) The applicant must construct the floors, walls, roof, ceiling and roof, windows, glazed doors and skylights of the development in accordance with the specifications listed in the tables below. In the case of glazing, a 5% variance from the area values listed in the "Frames" and "Glazing" tables is permitted.	✓	✓	✓
(d) The applicant must show through receipts that the materials purchased for construction are consistent with the specifications listed in the below tables.			✓

Floor types

Floor type	Area (m2)	Insulation	Low emissions option
-	-	-	-

External wall types

External wall type	Construction type	Area (m2)	Low emissions option	Insulation
-	-	-	-	-

Internal wall types

Internal wall type	Construction type	Area (m2)	Insulation
-	-	-	-

Reinforcement concrete frames/columns

Building has reinforced concrete frame/columns?	Volume (m³)	Low emissions option
-	-	-

Ceiling and roof types

Ceiling and roof type	Area (m ²)	Roof Insulation	Ceiling Insulation
-	-	-	

Glazing types**Frame types**

Single glazing (m ²)	Double glazing (m ²)	Triple glazing (m ²)	Aluminium frames (m ²)	Timber frames (m ²)	uPVC frames (m ²)	Steel frames (m ²)	Composite frames (m ²)
-	-	-	-	-	-	-	-

(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	4 star (> 6 but <= 7.5 L/min)	3 star	3 star	3 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
Central hot water system (No. 1)	gas instantaneous	Piping insulation (ringmain & supply risers): (a) Piping external to building: R1.0 (~38 mm); (b) Piping internal to building: R1.0 (~38 mm)

Central energy systems	Type	Specification
Alternative energy supply	Photovoltaic system	Rated electrical output (min): 110 peak kW
Other	-	-

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).