

BASIX™ Certificate

Building Sustainability Index

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

Multi Dwelling

Certificate number: 1834827M_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

Secretary

Date of issue: Wednesday, 25 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 0012800200.

Project summary

Project name	88 Waterloo Rd_Cottonwood_03
Street address	21 COTTONWOOD CRESCENT MACQUARIE PARK 2113
Local Government Area	RYDE
Plan type and plan number	Strata Plan 7984
No. of residential flat buildings	1
Residential flat buildings: no. of dwellings	432
Multi-dwelling housing: no. of dwellings	0
No. of single dwelling houses	0

Project score

Water	✓ 49	Target 40
Thermal Performance	✓ Pass	Target Pass
Energy	✓ 65	Target 63
Materials	✓ -100	Target n/a

Certificate Prepared by

Name / Company Name: JHA Consulting Engineers (NSW) Pty Ltd

ABN (if applicable): 48612666172

Description of project

Project address

Project name	88 Waterloo Rd_Cottonwood_03
Street address	21 COTTONWOOD CRESCENT MACQUARIE PARK 2113
Local Government Area	RYDE
Plan type and plan number	Strata Plan 7984

Project type

No. of residential flat buildings	1
Residential flat buildings: no. of dwellings	432
Multi-dwelling housing: no. of dwellings	0
No. of single dwelling houses	0

Site details

Site area (m²)	2580
Roof area (m²)	1053.5
Non-residential floor area (m²)	0
Residential car spaces	462
Non-residential car spaces	0

Common area landscape

Common area lawn (m²)	85
Common area garden (m²)	252.4
Area of indigenous or low water use species (m²)	75.72

Assessor details and thermal loads

Assessor number	20647
Certificate number	0012800200
Climate zone	56

Project score

Water	✓ 49	Target 40
Thermal Performance	✓ Pass	Target Pass
Energy	✓ 65	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 - Building 1_Cottonwood, 432 dwellings, 54 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)
C1001	2	81.5	0	0	0
C1005	1	42.8	0	0	0
C1009	1	50.4	0	0	0
C1101	2	81.5	0	0	0
C1105	1	40.6	0	0	0
C1109	1	60.8	0	0	0
C1203	2	77.7	0	0	0
C1207	3	100.3	0	0	0
C1301	2	81.5	0	0	0
C1305	1	40.6	0	0	0
C1309	1	60.8	0	0	0
C1403	2	77.7	0	0	0
C1407	3	100.3	0	0	0
C1501	2	81.5	0	0	0
C1505	1	40.6	0	0	0
C1509	1	60.8	0	0	0
C1603	2	77.7	0	0	0
C1607	3	100.3	0	0	0
C1701	2	81.5	0	0	0
C1705	1	40.6	0	0	0
C1709	1	60.8	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)
C1002	1	50.4	0	0	0
C1006	1	42.8	0	0	0
C1010	2	69.9	0	0	0
C1102	1	50.4	0	0	0
C1106	1	52.6	0	0	0
C1110	1	53.5	0	0	0
C1204	1	49.7	0	0	0
C1208	3	100.3	0	0	0
C1302	1	50.4	0	0	0
C1306	1	52.6	0	0	0
C1310	1	53.5	0	0	0
C1404	1	49.7	0	0	0
C1408	3	100.3	0	0	0
C1502	1	50.4	0	0	0
C1506	1	52.6	0	0	0
C1510	1	53.5	0	0	0
C1604	1	49.7	0	0	0
C1608	3	100.3	0	0	0
C1702	1	50.4	0	0	0
C1706	1	52.6	0	0	0
C1710	1	53.5	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)
C1003	1	50.9	0	0	0
C1007	1	49.6	0	0	0
C1011	1	46.2	0	0	0
C1103	2	77.7	0	0	0
C1107	3	100.3	0	0	0
C1201	2	81.5	0	0	0
C1205	1	40.6	0	0	0
C1209	1	60.8	0	0	0
C1303	2	77.7	0	0	0
C1307	3	100.3	0	0	0
C1401	2	81.5	0	0	0
C1405	1	40.6	0	0	0
C1409	1	60.8	0	0	0
C1503	2	77.7	0	0	0
C1507	3	100.3	0	0	0
C1601	2	81.5	0	0	0
C1605	1	40.6	0	0	0
C1609	1	60.8	0	0	0
C1703	2	77.7	0	0	0
C1707	3	100.3	0	0	0
C1801	2	81.5	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)
C1004	1	42.7	0	0	0
C1008	1	50.9	0	0	0
C1012	1	50.3	0	0	0
C1104	1	49.7	0	0	0
C1108	3	100.3	0	0	0
C1202	1	50.4	0	0	0
C1206	1	52.6	0	0	0
C1210	1	53.5	0	0	0
C1304	1	49.7	0	0	0
C1308	3	100.3	0	0	0
C1402	1	50.4	0	0	0
C1406	1	52.6	0	0	0
C1410	1	53.5	0	0	0
C1504	1	49.7	0	0	0
C1508	3	100.3	0	0	0
C1602	1	50.4	0	0	0
C1606	1	52.6	0	0	0
C1610	1	53.5	0	0	0
C1704	1	49.7	0	0	0
C1708	3	100.3	0	0	0
C1802	1	50.4	0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
C1803	2	77.7	0	0	0
C1807	3	100.3	0	0	0
C1901	2	81.5	0	0	0
C1905	1	40.6	0	0	0
C1909	1	60.8	0	0	0
C2003	2	77.7	0	0	0
C2007	3	100.3	0	0	0
C2010	1	53.5	0	0	0
C2102	1	50.4	0	0	0
C2106	1	52.6	0	0	0
C2110	1	53.5	0	0	0
C2204	1	49.7	0	0	0
C2208	3	100.3	0	0	0
C2302	2	98.2	0	0	0
C2306	2	92.7	0	0	0
C2402	2	98.2	0	0	0
C2406	2	92.7	0	0	0
C2503	1	59.4	0	0	0
C2507	1	62	0	0	0
C2603	1	59.4	0	0	0
C2607	1	62	0	0	0
C2703	1	59.4	0	0	0
C2707	1	62	0	0	0
C2803	1	59.4	0	0	0
C2807	1	62	0	0	0
C2903	2	77.7	0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
C1804	1	49.7	0	0	0
C1808	3	100.3	0	0	0
C1902	1	50.4	0	0	0
C1906	1	52.6	0	0	0
C1910	1	53.5	0	0	0
C2004	1	49.7	0	0	0
C2008	3	100.3	0	0	0
C202	1	50.8	0	0	0
C2103	2	77.7	0	0	0
C2107	3	100.3	0	0	0
C2201	2	81.5	0	0	0
C2205	1	40.6	0	0	0
C2209	1	60.8	0	0	0
C2303	1	59.4	0	0	0
C2307	1	62	0	0	0
C2403	1	59.4	0	0	0
C2407	1	62	0	0	0
C2504	1	73.4	0	0	0
C2508	1	47.8	0	0	0
C2604	1	73.4	0	0	0
C2608	1	47.8	0	0	0
C2704	1	73.4	0	0	0
C2708	1	47.8	0	0	0
C2804	1	73.4	0	0	0
C2808	1	47.8	0	0	0
C2904	2	86.2	0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
C1805	1	40.6	0	0	0
C1809	1	60.8	0	0	0
C1903	2	77.7	0	0	0
C1907	3	100.3	0	0	0
C2001	2	81.5	0	0	0
C2005	1	40.6	0	0	0
C2009	1	60.8	0	0	0
C203	1	62.7	0	0	0
C2104	1	49.7	0	0	0
C2108	3	100.3	0	0	0
C2202	1	50.4	0	0	0
C2206	1	52.6	0	0	0
C2210	1	53.5	0	0	0
C2304	1	73.4	0	0	0
C2308	1	47.8	0	0	0
C2404	1	73.4	0	0	0
C2501	2	98.2	0	0	0
C2505	2	92.7	0	0	0
C2601	2	98.2	0	0	0
C2605	2	92.7	0	0	0
C2701	2	98.2	0	0	0
C2705	2	92.7	0	0	0
C2801	2	98.2	0	0	0
C2805	2	92.7	0	0	0
C2901	2	114.8	0	0	0
C2905	2	86.5	0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
C1806	1	52.6	0	0	0
C1810	1	53.5	0	0	0
C1904	1	49.7	0	0	0
C1908	3	100.3	0	0	0
C2002	1	50.4	0	0	0
C2006	1	52.6	0	0	0
C201	1	50.8	0	0	0
C2101	2	81.5	0	0	0
C2105	1	40.6	0	0	0
C2109	1	60.8	0	0	0
C2203	2	77.7	0	0	0
C2207	3	100.3	0	0	0
C2301	2	98.2	0	0	0
C2305	2	92.7	0	0	0
C2401	2	98.2	0	0	0
C2405	2	92.7	0	0	0
C2502	2	98.2	0	0	0
C2506	2	92.7	0	0	0
C2602	2	98.2	0	0	0
C2606	2	92.7	0	0	0
C2702	2	98.2	0	0	0
C2706	2	92.7	0	0	0
C2802	2	98.2	0	0	0
C2806	2	92.7	0	0	0
C2902	2	89.8	0	0	0
C2906	2	101.9	0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
C2907	3	100.3	0	0	0
C3003	2	77.7	0	0	0
C3007	3	100.3	0	0	0
C303	1	62.7	0	0	0
C3104	2	86.2	0	0	0
C3108	1	60.8	0	0	0
C3204	2	86.2	0	0	0
C3208	1	60.8	0	0	0
C3304	2	86.2	0	0	0
C3308	1	60.8	0	0	0
C3404	2	86.2	0	0	0
C3408	1	60.8	0	0	0
C3504	2	86.2	0	0	0
C3508	1	60.8	0	0	0
C3604	2	86.2	0	0	0
C3608	1	60.8	0	0	0
C3704	2	86.2	0	0	0
C3708	1	60.8	0	0	0
C3804	2	86.2	0	0	0
C3808	1	60.8	0	0	0
C3904	2	86.2	0	0	0
C3908	1	60.8	0	0	0
C4004	2	86.2	0	0	0
C4008	1	60.8	0	0	0
C404	1	50.9	0	0	0
C408	1	50.3	0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
C2908	1	60.8	0	0	0
C3004	2	86.2	0	0	0
C3008	1	60.8	0	0	0
C3101	2	114.8	0	0	0
C3105	2	86.5	0	0	0
C3201	2	114.8	0	0	0
C3205	2	86.5	0	0	0
C3301	2	114.8	0	0	0
C3305	2	86.5	0	0	0
C3401	2	114.8	0	0	0
C3405	2	86.5	0	0	0
C3501	2	114.8	0	0	0
C3505	2	86.5	0	0	0
C3601	2	114.8	0	0	0
C3605	2	86.5	0	0	0
C3701	2	114.8	0	0	0
C3705	2	86.5	0	0	0
C3801	2	114.8	0	0	0
C3805	2	86.5	0	0	0
C3901	2	114.8	0	0	0
C3905	2	86.5	0	0	0
C4001	2	114.8	0	0	0
C4005	2	86.5	0	0	0
C401	2	81.5	0	0	0
C405	1	50.4	0	0	0
C4101	2	114.8	0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
C3001	2	114.8	0	0	0
C3005	2	86.5	0	0	0
C301	1	50.8	0	0	0
C3102	2	89.8	0	0	0
C3106	2	101.9	0	0	0
C3202	2	89.8	0	0	0
C3206	2	101.9	0	0	0
C3302	2	89.8	0	0	0
C3306	2	101.9	0	0	0
C3402	2	89.8	0	0	0
C3406	2	101.9	0	0	0
C3502	2	89.8	0	0	0
C3506	2	101.9	0	0	0
C3602	2	89.8	0	0	0
C3606	2	101.9	0	0	0
C3702	2	89.8	0	0	0
C3706	2	101.9	0	0	0
C3802	2	89.8	0	0	0
C3806	2	101.9	0	0	0
C3902	2	89.8	0	0	0
C3906	2	101.9	0	0	0
C4002	2	89.8	0	0	0
C4006	2	101.9	0	0	0
C402	1	50.4	0	0	0
C406	2	69.9	0	0	0
C4102	2	89.8	0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
C3002	2	89.8	0	0	0
C3006	2	101.9	0	0	0
C302	1	50.8	0	0	0
C3103	2	77.7	0	0	0
C3107	3	100.3	0	0	0
C3203	2	77.7	0	0	0
C3207	3	100.3	0	0	0
C3303	2	77.7	0	0	0
C3307	3	100.3	0	0	0
C3403	2	77.7	0	0	0
C3407	3	100.3	0	0	0
C3503	2	77.7	0	0	0
C3507	3	100.3	0	0	0
C3603	2	77.7	0	0	0
C3607	3	100.3	0	0	0
C3703	2	77.7	0	0	0
C3707	3	100.3	0	0	0
C3803	2	77.7	0	0	0
C3807	3	100.3	0	0	0
C3903	2	77.7	0	0	0
C3907	3	100.3	0	0	0
C4003	2	77.7	0	0	0
C4007	3	100.3	0	0	0
C403	1	50.9	0	0	0
C407	1	46.2	0	0	0
C4103	2	77.7	0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
C4104	2	86.2	0	0	0
C4108	1	60.8	0	0	0
C4204	2	86.2	0	0	0
C4208	1	60.8	0	0	0
C4304	2	86.2	0	0	0
C4308	1	60.8	0	0	0
C4404	2	86.2	0	0	0
C4408	1	60.8	0	0	0
C4504	3	116.2	0	0	0
C4601	3	119.4	0	0	0
C4605	3	117.9	0	0	0
C4702	2	92.8	0	0	0
C4706	3	125.1	0	0	0
C4803	3	119.9	0	0	0
C4807	3	128.7	0	0	0
C4904	3	116.2	0	0	0
C5001	3	119.4	0	0	0
C5005	3	117.9	0	0	0
C502	1	50.4	0	0	0
C506	1	42.8	0	0	0
C510	2	69.9	0	0	0
C5104	4+	172.6	0	0	0
C5201	4+	188.8	0	0	0
C601	2	81.5	0	0	0
C605	1	42.8	0	0	0
C609	1	50.4	0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
C4105	2	86.5	0	0	0
C4201	2	114.8	0	0	0
C4205	2	86.5	0	0	0
C4301	2	114.8	0	0	0
C4305	2	86.5	0	0	0
C4401	2	114.8	0	0	0
C4405	2	86.5	0	0	0
C4501	3	119.4	0	0	0
C4505	3	117.9	0	0	0
C4602	2	92.8	0	0	0
C4606	3	125.1	0	0	0
C4703	3	119.9	0	0	0
C4707	3	128.7	0	0	0
C4804	3	116.2	0	0	0
C4901	3	119.4	0	0	0
C4905	3	117.9	0	0	0
C5002	2	92.8	0	0	0
C5006	3	125.1	0	0	0
C503	1	50.9	0	0	0
C507	1	49.6	0	0	0
C5101	4+	163.3	0	0	0
C5105	4+	231.2	0	0	0
C5202	4+	204.2	0	0	0
C602	1	50.4	0	0	0
C606	1	42.8	0	0	0
C610	2	69.9	0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
C4106	2	101.9	0	0	0
C4202	2	89.8	0	0	0
C4206	2	101.9	0	0	0
C4302	2	89.8	0	0	0
C4306	2	101.9	0	0	0
C4402	2	89.8	0	0	0
C4406	2	101.9	0	0	0
C4502	2	92.8	0	0	0
C4506	3	125.1	0	0	0
C4603	3	119.9	0	0	0
C4607	3	128.7	0	0	0
C4704	3	116.2	0	0	0
C4801	3	119.4	0	0	0
C4805	3	117.9	0	0	0
C4902	2	92.8	0	0	0
C4906	3	125.1	0	0	0
C5003	3	119.9	0	0	0
C5007	3	128.7	0	0	0
C504	1	42.7	0	0	0
C508	1	50.9	0	0	0
C5102	4+	146.8	0	0	0
C511	1	46.2	0	0	0
C5203	4+	208.2	0	0	0
C603	1	50.9	0	0	0
C607	1	49.6	0	0	0
C611	1	46.2	0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
C4107	3	100.3	0	0	0
C4203	2	77.7	0	0	0
C4207	3	100.3	0	0	0
C4303	2	77.7	0	0	0
C4307	3	100.3	0	0	0
C4403	2	77.7	0	0	0
C4407	3	100.3	0	0	0
C4503	3	119.9	0	0	0
C4507	3	128.7	0	0	0
C4604	3	116.2	0	0	0
C4701	3	119.4	0	0	0
C4705	3	117.9	0	0	0
C4802	2	92.8	0	0	0
C4806	3	125.1	0	0	0
C4903	3	119.9	0	0	0
C4907	3	128.7	0	0	0
C5004	3	116.2	0	0	0
C501	2	81.5	0	0	0
C505	1	42.8	0	0	0
C509	1	50.4	0	0	0
C5103	3	116.8	0	0	0
C512	1	50.3	0	0	0
C5204	4+	231.2	0	0	0
C604	1	42.7	0	0	0
C608	1	50.9	0	0	0
C612	1	50.3	0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
C701	2	81.5	0	0	0
C705	1	42.8	0	0	0
C709	1	50.4	0	0	0
C801	2	81.5	0	0	0
C805	1	42.8	0	0	0
C809	1	50.4	0	0	0
C901	2	81.5	0	0	0
C905	1	42.8	0	0	0
C909	1	50.4	0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
C702	1	50.4	0	0	0
C706	1	42.8	0	0	0
C710	2	69.9	0	0	0
C802	1	50.4	0	0	0
C806	1	42.8	0	0	0
C810	2	69.9	0	0	0
C902	1	50.4	0	0	0
C906	1	42.8	0	0	0
C910	2	69.9	0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
C703	1	50.9	0	0	0
C707	1	49.6	0	0	0
C711	1	46.2	0	0	0
C803	1	50.9	0	0	0
C807	1	49.6	0	0	0
C811	1	46.2	0	0	0
C903	1	50.9	0	0	0
C907	1	49.6	0	0	0
C911	1	46.2	0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
C704	1	42.7	0	0	0
C708	1	50.9	0	0	0
C712	1	50.3	0	0	0
C804	1	42.7	0	0	0
C808	1	50.9	0	0	0
C812	1	50.3	0	0	0
C904	1	42.7	0	0	0
C908	1	50.9	0	0	0
C912	1	50.3	0	0	0

Description of project

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

Common areas of the development (non-building specific)

Common area	Floor area (m²)	Common area	Floor area (m²)	Common area	Floor area (m²)
Lift bank (No. 1)	-	Lift bank (No. 2)	-	Underground Car Park (Combined)	13094.6
Above ground Car Park (Combined)	3725.9	Fire/switch room (Combined)	259.9	Garbage room (Combined)	1616.7
Service room (Combined)	333.1	Comms room (Combined)	10.3	UG Office	16.2
Staircase (Combined)	1541.2	Ground floor lobby (Combined)	321.6	Other lobby (Combined)	4132.8

Schedule of BASIX commitments

1. Commitments for Residential flat buildings - Building 1_Cottonwood

(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 multi-dwelling housing

(a) Dwellings

(i) Water

(ii) Energy

(iii) Thermal Performance and Materials

3. Commitments for single dwelling houses

(a) Dwellings

(i) Water

(ii) Energy

(iii) Thermal Performance and Materials

4. 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 - Building 1_Cottonwood

(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
suspended floor above open subfloor, frame: suspended concrete slab	34330	-	-

External wall types

External wall type	Construction type	Area (m2)	Low emissions option	Insulation
External wall type 1	concrete panel/ plasterboard, frame: light steel frame	4491.5	-	fibreglass batts or roll

Internal wall types

Internal wall type	Construction type	Area (m2)	Insulation
Internal wall type 1	plasterboard, frame: light steel frame	45420.3	-

Reinforcement concrete frames/columns		
Building has reinforced concrete frame/columns?	Volume (m³)	Low emissions option
no	-	-

Ceiling and roof types			
Ceiling and roof type	Area (m²)	Roof Insulation	Ceiling Insulation
concrete - plasterboard internal, frame: no frame	1053.5	-	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)
-	14703	-	14703	-	-	-	-

(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)	4 star	5 star	5 star	-	4 star	4 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
All dwellings	1-phase airconditioning - ducted / EER 3.5 - 4.0	1-phase airconditioning - non ducted / EER 3.5 - 4.0	1-phase airconditioning - ducted / EER > 4.0	1-phase airconditioning - ducted / EER > 4.0	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	-	-	-	-	-	induction cooktop & electric oven	4 star	2 star	yes	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)
C1001	18.7	10.0	28.700
C1002	15.3	13.5	28.800
C1003	16.4	17.6	34.000
C1004	1.9	12.5	14.400

	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)
C1005	17.5	8.6	26.100
C1006	17.3	10.3	27.600
C1007	27.8	7.8	35.600
C1008	24.2	13.8	38.000
C1009	23.7	14.2	37.900
C1010	28.1	9.4	37.500
C1011	14.5	9.7	24.200
C1012	28.6	9.4	38.000
C1101	16.3	9.5	25.800
C1102	15.4	13.5	28.900
C1104	15.9	9.5	25.400
C1105	15.3	15.0	30.300
C1106	29.1	8.7	37.800
C1107	23.2	11.6	34.800
C1108	23.6	12.7	36.300
C1109	27.2	6.9	34.100
C1110	17.6	9.9	27.500
C1201	17.4	10.1	27.500
C1202	15.6	13.1	28.700
C1204	15.7	9.4	25.100
C1205	10.1	15.2	25.300
C1206	28.1	8.6	36.700
C1207	22.2	13.9	36.100
C1208	22.7	14.6	37.300
C1209	19.9	8.1	28.000
C1210	8.5	14.7	23.200
C1301	17.7	9.6	27.300
C1303	9.7	13.1	22.800
C1304	15.8	9.2	25.000
C1305	10.3	15.1	25.400
C1306	27.9	8.6	36.500

	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)
C1308	22.8	13.2	36.000
C1309	20.0	8.1	28.100
C1310	8.6	14.3	22.900
C1401	17.7	9.3	27.000
C1404	16.0	9.1	25.100
C1405	10.4	15.0	25.400
C1406	28.0	8.5	36.500
C1407	22.5	12.3	34.800
C1408	22.9	13.0	35.900
C1409	20.2	7.9	28.100
C1410	8.7	14.4	23.100
C1501	17.7	9.9	27.600
C1502	15.9	13.2	29.100
C1504	16.1	9.2	25.300
C1506	28.2	8.5	36.700
C1507	22.6	12.2	34.800
C1508	23.1	13.5	36.600
C1509	20.3	8.0	28.300
C1510	8.8	14.1	22.900
C1601	17.8	9.4	27.200
C1602	16.1	13.1	29.200
C1603	10.0	12.9	22.900
C1604	16.3	9.2	25.500
C1605	10.6	14.8	25.400
C1606	28.4	8.5	36.900
C1608	23.2	12.8	36.000
C1609	20.4	7.9	28.300
C1610	8.9	14.0	22.900
C1701	18.1	9.4	27.500
C1702	16.2	13.1	29.300
C1703	10.1	12.8	22.900

	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)
C1704	16.4	9.1	25.500
C1705	10.8	14.8	25.600
C1706	28.6	8.5	37.100
C1707	22.9	12.1	35.000
C1708	23.1	12.2	35.300
C1709	20.6	7.7	28.300
C1710	9.0	13.8	22.800
C1801	18.4	10.0	28.400
C1802	16.4	13.1	29.500
C1803	10.2	12.8	23.000
C1804	16.6	9.3	25.900
C1805	10.9	14.8	25.700
C1806	28.8	8.5	37.300
C1807	23.0	12.1	35.100
C1809	20.7	7.7	28.400
C1810	9.2	13.6	22.800
C1901	18.7	9.6	28.300
C1902	16.6	12.8	29.400
C1903	10.4	12.9	23.300
C1904	16.7	9.1	25.800
C1905	11.0	14.5	25.500
C1906	28.9	9.0	37.900
C1908	22.6	13.7	36.300
C1909	20.9	7.6	28.500
C1910	9.3	13.6	22.900
C2001	18.7	9.3	28.000
C2002	16.7	12.8	29.500
C2003	10.3	12.5	22.800
C2004	16.9	9.1	26.000
C2005	11.1	14.5	25.600
C2006	28.8	8.6	37.400

	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)
C2007	23.3	12.1	35.400
C2008	22.7	13.7	36.400
C2009	21.0	7.5	28.500
C201	11.8	16.8	28.600
C2010	9.4	13.5	22.900
C202	13.1	16.5	29.600
C203	27.8	10.0	37.800
C2101	18.7	9.4	28.100
C2102	16.8	12.8	29.600
C2103	10.4	12.5	22.900
C2104	17.0	9.2	26.200
C2105	11.2	14.5	25.700
C2106	28.9	8.8	37.700
C2107	25.5	11.5	37.000
C2108	22.8	13.7	36.500
C2109	21.1	7.6	28.700
C2110	9.5	13.4	22.900
C2201	14.4	7.6	22.000
C2202	18.0	10.9	28.900
C2203	11.2	10.6	21.800
C2204	19.6	7.4	27.000
C2205	14.2	11.9	26.100
C2207	24.9	11.1	36.000
C2208	26.5	11.1	37.600
C2209	20.1	5.9	26.000
C2210	7.7	7.1	14.800
C2301	11.0	19.3	30.300
C2302	5.8	19.3	25.100
C2303	15.0	9.1	24.100
C2304	19.4	12.2	31.600
C2305	18.8	14.8	33.600

	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)
C2306	21.3	12.4	33.700
C2307	24.4	10.1	34.500
C2308	7.1	10.6	17.700
C2401	11.0	19.7	30.700
C2402	5.8	19.2	25.000
C2403	15.0	8.6	23.600
C2404	19.2	12.3	31.500
C2405	19.4	13.9	33.300
C2406	22.5	12.5	35.000
C2407	17.0	12.6	29.600
C2502	5.9	19.3	25.200
C2503	8.6	14.7	23.300
C2504	19.3	12.1	31.400
C2505	19.5	13.8	33.300
C2506	22.6	12.4	35.000
C2508	17.7	12.5	30.200
C2602	5.9	18.9	24.800
C2603	8.6	14.8	23.400
C2604	19.3	12.0	31.300
C2605	19.5	13.6	33.100
C2608	9.1	16.7	25.800
C2701	11.2	18.8	30.000
C2702	6.0	18.8	24.800
C2703	8.7	14.6	23.300
C2704	19.4	11.8	31.200
C2705	19.6	13.7	33.300
C2706	22.7	12.3	35.000
C2707	17.2	12.4	29.600
C2708	9.2	16.6	25.800
C2801	11.3	18.7	30.000
C2802	6.0	18.7	24.700

	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)
C2803	10.0	13.4	23.400
C2804	19.6	11.8	31.400
C2805	19.4	13.8	33.200
C2807	17.4	12.2	29.600
C2808	9.3	16.8	26.100
C2901	24.0	12.3	36.300
C2903	6.5	13.4	19.900
C2904	11.7	13.0	24.700
C2905	17.0	13.1	30.100
C2906	24.5	12.3	36.800
C2907	25.2	10.7	35.900
C2908	13.9	11.6	25.500
C3001	21.7	13.7	35.400
C3002	5.6	20.0	25.600
C3003	5.9	13.9	19.800
C3004	10.1	13.1	23.200
C3005	14.7	13.4	28.100
C3006	22.1	12.3	34.400
C3007	23.3	11.5	34.800
C3008	14.1	11.3	25.400
C301	14.2	15.9	30.100
C302	15.9	14.0	29.900
C3101	21.9	13.7	35.600
C3103	6.0	13.5	19.500
C3104	10.2	13.0	23.200
C3105	14.8	13.4	28.200
C3107	23.2	11.4	34.600
C3108	14.2	11.2	25.400
C3201	21.8	13.7	35.500
C3203	6.0	13.8	19.800
C3204	10.2	12.9	23.100

	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)
C3205	14.8	13.3	28.100
C3206	22.3	12.2	34.500
C3207	23.2	11.1	34.300
C3208	14.2	11.1	25.300
C3301	22.0	13.6	35.600
C3302	5.8	19.7	25.500
C3303	6.1	13.6	19.700
C3304	10.3	12.9	23.200
C3305	14.9	13.4	28.300
C3306	22.1	11.9	34.000
C3307	23.3	11.2	34.500
C3308	14.3	11.1	25.400
C3402	5.9	19.7	25.600
C3403	6.3	13.8	20.100
C3404	10.4	12.8	23.200
C3405	15.0	13.4	28.400
C3407	23.4	11.0	34.400
C3502	5.9	19.6	25.500
C3503	6.3	13.7	20.000
C3505	15.0	13.3	28.300
C3507	23.5	11.0	34.500
C3601	22.2	13.6	35.800
C3602	6.0	19.5	25.500
C3603	6.4	13.9	20.300
C3606	22.7	12.1	34.800
C3607	23.6	11.3	34.900
C3608	14.5	11.0	25.500
C3701	22.2	13.5	35.700
C3702	6.0	19.4	25.400
C3706	22.4	11.8	34.200
C3707	23.6	10.9	34.500

	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)
C3708	14.5	10.8	25.300
C3803	6.4	13.8	20.200
C3805	15.3	13.2	28.500
C3807	23.7	11.0	34.700
C3903	6.5	13.6	20.100
C3905	15.2	13.2	28.400
C3906	22.6	11.7	34.300
C3907	23.7	11.1	34.800
C4002	6.1	19.0	25.100
C4005	15.4	13.2	28.600
C4006	22.7	11.6	34.300
C401	21.3	9.0	30.300
C402	13.8	12.1	25.900
C403	14.4	18.7	33.100
C404	22.9	12.6	35.500
C405	22.8	13.9	36.700
C406	23.4	13.3	36.700
C407	15.1	12.2	27.300
C408	28.1	7.6	35.700
C4103	6.6	13.4	20.000
C4105	15.4	13.0	28.400
C4106	22.7	11.7	34.400
C4108	14.8	10.7	25.500
C4201	22.6	13.4	36.000
C4202	6.2	19.0	25.200
C4203	6.6	13.5	20.100
C4204	10.7	12.6	23.300
C4206	22.8	11.7	34.500
C4207	24.0	10.5	34.500
C4208	14.9	10.7	25.600
C4301	22.7	13.4	36.100

	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)
C4302	6.2	18.8	25.000
C4303	6.6	13.6	20.200
C4304	10.7	12.7	23.400
C4307	24.0	10.6	34.600
C4308	14.9	10.6	25.500
C4401	24.6	12.5	37.100
C4402	7.5	16.5	24.000
C4403	6.5	12.8	19.300
C4404	12.4	11.8	24.200
C4405	19.8	11.4	31.200
C4406	23.0	11.8	34.800
C4407	24.9	10.2	35.100
C4408	13.9	8.3	22.200
C4501	22.0	15.5	37.500
C4503	10.3	11.7	22.000
C4504	16.6	8.1	24.700
C4505	24.7	12.7	37.400
C4507	25.2	10.3	35.500
C4601	20.0	17.3	37.300
C4603	10.0	11.9	21.900
C4605	24.8	12.7	37.500
C4606	23.9	11.9	35.800
C4607	17.2	13.0	30.200
C4701	19.3	16.8	36.100
C4702	6.3	19.7	26.000
C4705	24.8	12.5	37.300
C4707	17.2	13.2	30.400
C4801	19.5	16.5	36.000
C4803	10.2	12.1	22.300
C4804	15.2	8.9	24.100
C4805	24.9	13.0	37.900

	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)
C4806	24.1	11.9	36.000
C4807	17.4	13.2	30.600
C4901	19.5	16.8	36.300
C4904	15.2	9.0	24.200
C4905	25.0	12.4	37.400
C4906	24.1	12.0	36.100
C4907	17.4	13.3	30.700
C5001	17.6	15.4	33.000
C5002	6.4	17.9	24.300
C5003	11.6	10.4	22.000
C5004	20.1	7.6	27.700
C5005	25.3	11.9	37.200
C5006	20.4	8.2	28.600
C5007	17.5	13.3	30.800
C501	18.0	10.6	28.600
C502	12.7	16.0	28.700
C503	12.9	21.0	33.900
C504	1.1	16.5	17.600
C505	12.4	11.2	23.600
C507	17.3	19.4	36.700
C508	20.9	16.4	37.300
C509	20.0	15.0	35.000
C510	22.1	13.9	36.000
C5101	21.5	9.7	31.200
C5102	10.1	10.9	21.000
C5103	10.2	10.1	20.300
C5104	25.5	9.0	34.500
C5105	21.5	9.6	31.100
C512	21.5	14.9	36.400
C5201	18.0	9.5	27.500
C5202	10.3	9.4	19.700

	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)
C5203	26.3	9.4	35.700
C5204	27.5	9.2	36.700
C601	18.4	10.3	28.700
C602	12.7	15.6	28.300
C603	13.1	20.8	33.900
C604	1.1	16.4	17.500
C605	12.6	11.3	23.900
C606	13.0	12.2	25.200
C607	17.6	19.2	36.800
C608	21.2	16.3	37.500
C609	20.3	14.6	34.900
C610	22.8	14.0	36.800
C611	10.8	15.0	25.800
C612	21.8	14.5	36.300
C701	18.8	10.4	29.200
C702	13.2	15.5	28.700
C703	13.4	20.2	33.600
C704	1.2	16.3	17.500
C705	12.9	11.4	24.300
C706	13.4	11.9	25.300
C707	18.1	18.9	37.000
C708	21.8	16.1	37.900
C709	20.8	14.1	34.900
C710	22.9	13.5	36.400
C711	11.1	14.6	25.700
C712	22.4	14.6	37.000
C801	20.5	9.2	29.700
C802	15.2	13.7	28.900
C803	15.3	19.1	34.400
C804	1.7	13.9	15.600
C805	14.7	10.8	25.500

	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)
C806	14.9	11.7	26.600
C807	20.1	17.4	37.500
C808	22.7	15.2	37.900
C809	23.2	14.2	37.400
C810	25.0	12.5	37.500
C812	23.5	12.8	36.300
C901	20.2	9.0	29.200
C902	15.1	13.6	28.700
C903	15.3	19.2	34.500
C904	1.7	13.7	15.400
C906	15.2	11.6	26.800
C907	20.3	17.4	37.700
C908	22.9	15.0	37.900
C909	23.4	14.2	37.600
C910	25.1	12.4	37.500
C911	12.8	12.4	25.200
C912	23.7	12.8	36.500
C1103, C1203	9.5	12.8	22.300
C1302, C1402	15.8	13.1	28.900
C1307, C2606	22.3	12.4	34.700
C1403, C1503	9.8	13.0	22.800
C1505, C511	10.5	15.0	25.500
C1607, C3106	22.7	12.2	34.900
C1907, C4306	23.1	12.3	35.400
C2206, C303	30.9	6.7	37.600
C2501, C2601	11.1	19.3	30.400
C2507, C2607	17.1	12.4	29.500
C2806, C3806	22.9	12.2	35.100
C2902, C4602	6.3	19.9	26.200
C3102, C3202	5.7	19.9	25.600
C3401, C3501	22.1	13.6	35.700

	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)
C3406, C3506	22.6	12.0	34.600
C3408, C3508	14.4	11.0	25.400
C3504, C3604	10.4	12.7	23.100
C3605, C3705	15.1	13.3	28.400
C3703, C4003	6.5	13.9	20.400
C3808, C3908	14.6	10.8	25.400
C4001, C4101	22.5	13.4	35.900
C4004, C4104	10.6	12.8	23.400
C4007, C4107	23.8	10.8	34.600
C4008, C905	14.8	10.8	25.600
C4205, C4305	15.5	13.1	28.600
C4506, C4706	23.9	12.0	35.900
C4604, C4704	15.1	8.8	23.900
C4703, C4903	10.2	12.0	22.200
C506, C811	12.7	12.3	25.000
C1808, C3801, C3901	22.4	13.3	35.700
C3704, C3804, C3904	10.5	12.7	23.200
C3802, C3902, C4102	6.1	19.1	25.200
All other dwellings	6.4	19.7	26.100

(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)	4 star	5 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.	✓	✓	✓

2. Commitments for multi-dwelling housing

(a) Dwellings

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

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(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; (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".		✓	
(iii) Thermal Performance and Materials	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.			

(iii) Thermal Performance and Materials	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(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.		✓	

3. Commitments for single dwelling houses

(a) Dwellings

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

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(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; (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".		✓	
(iii) Thermal Performance and Materials	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.			

(iii) Thermal Performance and Materials	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(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.		✓	

4. 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
suspended floor above open subfloor, frame: suspended concrete slab	25053	-	-

External wall types

External wall type	Construction type	Area (m2)	Low emissions option	Insulation
External wall type 1	concrete panel/ plasterboard,frame:light steel frame	1000	-	fibreglass batts or roll

Internal wall types

Internal wall type	Construction type	Area (m2)	Insulation
Internal wall type 1	plasterboard, frame:light steel frame	1000	-

Reinforcement concrete frames/columns

Building has reinforced concrete frame/columns?	Volume (m³)	Low emissions option
no	-	-

Ceiling and roof types

Ceiling and roof type	Area (m²)	Roof Insulation	Ceiling Insulation
concrete - plasterboard internal, frame: no frame	100	-	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)
-	1000	-	1000	-	-	-	-

(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)	4 star	5 star	no common laundry facility

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

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) If, in carrying out the development, the applicant installs a ventilation system to service a common area specified in the table below, then that ventilation system must be of the type specified for that common area, and must meet the efficiency measure specified.		✓	✓
(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
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
Underground Car Park (Combined)	ventilation (supply + exhaust)	carbon monoxide monitor + VSD fan	light-emitting diode	zoned switching with motion sensor	yes
Above ground Car Park (Combined)	ventilation (supply + exhaust)	carbon monoxide monitor + VSD fan	light-emitting diode	zoned switching with motion sensor	yes
Fire/switch room (Combined)	ventilation supply only	thermostatically controlled	light-emitting diode	manual on / manual off	yes
Garbage room (Combined)	ventilation exhaust only	-	light-emitting diode	manual on / manual off	yes
Service room (Combined)	ventilation supply only	thermostatically controlled	light-emitting diode	manual on / manual off	yes
Comms room (Combined)	air conditioning system	thermostatically controlled	light-emitting diode	manual on / manual off	yes
UG Office	air conditioning system	time clock or BMS controlled	light-emitting diode	manual on / manual off	yes
Staircase (Combined)	no mechanical ventilation	-	light-emitting diode	zoned switching with motion sensor	yes
Ground floor lobby (Combined)	ventilation supply only	time clock or BMS controlled	light-emitting diode	zoned switching with daylight sensor	yes
Other lobby (Combined)	ventilation supply only	time clock or BMS controlled	light-emitting diode	zoned switching with daylight sensor	yes

Central energy systems	Type	Specification
Lift bank (No. 1)	gearless traction with V V V F motor and regenerative drive	Number of levels with apartments served by a lift: 39 number of levels from the bottom of the lift shaft to the top of the lift shaft: 68 number of lifts: 3 lift load capacity: ≥ 1001 kg but ≤ 1500 kg
Lift bank (No. 2)	gearless traction with V V V F motor and regenerative drive	Number of levels with apartments served by a lift: 40 number of levels from the bottom of the lift shaft to the top of the lift shaft: 68 number of lifts: 3 lift load capacity: ≥ 1001 kg but ≤ 1500 kg
Central hot water system (No. 1)	electric heat pump – air sourced	Piping insulation (ringmain & supply risers): (a) Piping external to building: R1.0 (~38 mm); (b) Piping internal to building: R1.0 (~38 mm) (c) Unit Efficiency: $3.5 < \text{COP} \leq 4.0$
Alternative energy supply	Photovoltaic system	Rated electrical output (min): 80 peak kW

Central energy systems	Type	Specification
Other	Building management system installed?: yes Active power factor correction installed?: yes	-

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).