

BASIX™ Certificate

Building Sustainability Index

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

Multi Dwelling

Certificate number: 1746306M_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 June 2025

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 03P1M5RP7P.

Project summary

Project name	BARINGS COMPASS CENTRE -339 units_03
Street address	83-99 NORTH TERRACE BANKSTOWN 2200
Local Government Area	CANTERBURY-BANKSTOWN
Plan type and plan number	Deposited Plan -
Lot no.	-
Section no.	-
No. of residential flat buildings	2
Residential flat buildings: no. of dwellings	336
Multi-dwelling housing: no. of dwellings	0
No. of single dwelling houses	0

Project score

Water	✓ 51	Target 40
Thermal Performance	✓ Pass	Target Pass
Energy	✓ 65	Target 63
Materials	✓ -100	Target n/a

Certificate Prepared by

Name / Company Name: E-LAB Consulting

ABN (if applicable):

Description of project

Project address	
Project name	BARINGS COMPASS CENTRE -339 units_03
Street address	83-99 NORTH TERRACE BANKSTOWN 2200
Local Government Area	CANTERBURY-BANKSTOWN
Plan type and plan number	Deposited Plan -
Lot no.	-
Section no.	-
Project type	
No. of residential flat buildings	2
Residential flat buildings: no. of dwellings	336
Multi-dwelling housing: no. of dwellings	0
No. of single dwelling houses	0
Site details	
Site area (m²)	8175
Roof area (m²)	569
Non-residential floor area (m²)	17187.4
Residential car spaces	279
Non-residential car spaces	212

Common area landscape		
Common area lawn (m²)	0	
Common area garden (m²)	1187.18	
Area of indigenous or low water use species (m²)	0	
Assessor details and thermal loads		
Assessor number	20/1972	
Certificate number	03P1M5RP7P	
Climate zone	56	
Project score		
Water	✔ 51	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 - TOWER B, 165 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)
1001	2	86.3	0	0	0
1005	1	51.5	0	0	0
1009	1	52.2	0	0	0
1104	1	35.1	0	0	0
1108	1	52.2	0	0	0
1203	2	78	0	0	0
1207	2	79.4	0	0	0
1302	1	53.7	0	0	0
1306	2	76.7	0	0	0
1401	2	86.3	0	0	0
1405	1	51.5	0	0	0
1409	1	52.2	0	0	0
1504	1	35.1	0	0	0
1508	1	52.2	0	0	0
1603	2	78	0	0	0
1607	2	79.4	0	0	0
1702	1	53.7	0	0	0
1706	2	76.7	0	0	0
1801	2	86.30	0	0	0
1805	1	51.5	0	0	0
1809	1	52.2	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)
1002	1	53.7	0	0	0
1006	2	76.7	0	0	0
1101	2	86.3	0	0	0
1105	1	51.5	0	0	0
1109	1	52.2	0	0	0
1204	1	35.1	0	0	0
1208	1	52.2	0	0	0
1303	2	78	0	0	0
1307	2	79.4	0	0	0
1402	1	53.7	0	0	0
1406	2	76.7	0	0	0
1501	2	86.3	0	0	0
1505	1	51.5	0	0	0
1509	1	52.2	0	0	0
1604	1	35.1	0	0	0
1608	1	52.2	0	0	0
1703	2	78	0	0	0
1707	2	79.4	0	0	0
1802	1	53.7	0	0	0
1806	2	76.7	0	0	0
1901	3	86.3	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)
1003	2	78	0	0	0
1007	2	79.4	0	0	0
1102	1	53.7	0	0	0
1106	2	76.7	0	0	0
1201	2	86.3	0	0	0
1205	1	51.5	0	0	0
1209	1	52.2	0	0	0
1304	1	35.1	0	0	0
1308	1	52.2	0	0	0
1403	2	78	0	0	0
1407	2	79.4	0	0	0
1502	1	53.7	0	0	0
1506	2	76.7	0	0	0
1601	2	86.30	0	0	0
1605	1	51.5	0	0	0
1609	1	52.2	0	0	0
1704	1	35.1	0	0	0
1708	1	52.2	0	0	0
1803	2	78	0	0	0
1807	2	79.4	0	0	0
1902	1	53.7	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)
1004	1	35.1	0	0	0
1008	1	52.2	0	0	0
1103	2	78	0	0	0
1107	2	79.4	0	0	0
1202	1	53.7	0	0	0
1206	2	76.7	0	0	0
1301	2	86.3	0	0	0
1305	1	51.5	0	0	0
1309	1	52.2	0	0	0
1404	1	35.1	0	0	0
1408	1	52.2	0	0	0
1503	2	78	0	0	0
1507	2	79.4	0	0	0
1602	1	53.7	0	0	0
1606	2	76.7	0	0	0
1701	2	86.3	0	0	0
1705	1	51.5	0	0	0
1709	1	52.2	0	0	0
1804	1	35.1	0	0	0
1808	1	52.2	0	0	0
1903	2	78	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)
1904	1	35.1	0	0	0
1908	2	52.2	0	0	0
2003	2	78	0	0	0
2007	2	79.4	0	0	0
2102	1	53.7	0	0	0
2106	2	76.7	0	0	0
2201	2	86.3	0	0	0
2205	1	35.1	0	0	0
2209	1	52.2	0	0	0
2304	1	51.5	0	0	0
2308	1	52.2	0	0	0
503	2	78	0	0	0
604	2	35.1	0	0	0
608	1	52.2	0	0	0
703	2	78	0	0	0
707	2	79.4	0	0	0
802	1	53.7	0	0	0
806	2	76.7	0	0	0
901	2	86.3	0	0	0
905	1	51.5	0	0	0
909	1	52.2	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)
1905	1	51.5	0	0	0
1909	2	52.2	0	0	0
2004	1	51.5	0	0	0
2008	1	52.2	0	0	0
2103	2	78	0	0	0
2107	2	79.4	0	0	0
2202	1	53.7	0	0	0
2206	2	76.7	0	0	0
2301	2	86.3	0	0	0
2305	1	35.1	0	0	0
2309	1	52.2	0	0	0
601	2	86.3	0	0	0
605	1	51.5	0	0	0
609	1	52.2	0	0	0
704	1	35.5	0	0	0
708	2	63.1	0	0	0
803	2	78	0	0	0
807	2	79.4	0	0	0
902	1	53.7	0	0	0
906	2	76.7	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)
1906	2	76.7	0	0	0
2001	2	86.3	0	0	0
2005	1	35.1	0	0	0
2009	1	52.2	0	0	0
2104	1	51.5	0	0	0
2108	1	52.2	0	0	0
2203	2	78	0	0	0
2207	2	79.4	0	0	0
2302	1	53.7	0	0	0
2306	2	76.7	0	0	0
501	2	86.3	0	0	0
602	1	53.7	0	0	0
606	2	76.7	0	0	0
701	2	86.3	0	0	0
705	1	51.5	0	0	0
709	2	63.1	0	0	0
804	1	35.1	0	0	0
808	1	52.2	0	0	0
903	2	78	0	0	0
907	2	79.4	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)
1907	2	79.4	0	0	0
2002	1	53.7	0	0	0
2006	2	76.7	0	0	0
2101	2	86.3	0	0	0
2105	1	35.1	0	0	0
2109	1	52.2	0	0	0
2204	1	51.5	0	0	0
2208	1	52.20	0	0	0
2303	2	78	0	0	0
2307	2	79.4	0	0	0
502	1	55.2	0	0	0
603	2	78	0	0	0
607	2	79.4	0	0	0
702	1	53.7	0	0	0
706	2	76.7	0	0	0
801	2	86.3	0	0	0
805	1	51.5	0	0	0
809	1	52.2	0	0	0
904	1	35.1	0	0	0
908	1	52.2	0	0	0

Residential flat buildings - TOWER C - 2, 171 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)
1001	1	52.30	0	0	0
1005	1	52.2	0	0	0
1009	2	77	0	0	0
1104	2	76.40	0	0	0
1108	1	56.6	0	0	0
1203	2	78.6	0	0	0
1207	3	95.9	0	0	0
1302	1	34.9	0	0	0
1306	1	35.1	0	0	0
1401	1	52.3	0	0	0
1405	1	52.2	0	0	0
1409	2	77	0	0	0
1504	2	76.4	0	0	0
1508	1	56.6	0	0	0
1603	2	78.6	0	0	0
1607	3	95.9	0	0	0
1702	1	34.9	0	0	0
1706	1	35.1	0	0	0
1801	1	52.3	0	0	0
1805	1	52.2	0	0	0
1809	2	77	0	0	0
1904	2	76.4	0	0	0
1908	1	56.6	0	0	0
2003	2	78.6	0	0	0
2007	3	95.8	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)
1002	1	34.9	0	0	0
1006	1	35.1	0	0	0
1101	1	52.3	0	0	0
1105	1	52.2	0	0	0
1109	2	77	0	0	0
1204	2	76.40	0	0	0
1208	1	56.6	0	0	0
1303	2	78.6	0	0	0
1307	3	95.9	0	0	0
1402	1	34.9	0	0	0
1406	1	35.1	0	0	0
1501	1	52.3	0	0	0
1505	1	52.2	0	0	0
1509	2	77	0	0	0
1604	2	76.4	0	0	0
1608	1	56.6	0	0	0
1703	2	78.6	0	0	0
1707	3	95.9	0	0	0
1802	1	34.9	0	0	0
1806	1	35.1	0	0	0
1901	1	52.3	0	0	0
1905	1	52.2	0	0	0
1909	2	77	0	0	0
2004	2	76.4	0	0	0
2008	1	56.6	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)
1003	2	78.6	0	0	0
1007	3	95.9	0	0	0
1102	1	34.9	0	0	0
1106	1	35.1	0	0	0
1201	1	52.3	0	0	0
1205	1	52.2	0	0	0
1209	2	77	0	0	0
1304	2	76.40	0	0	0
1308	1	56.6	0	0	0
1403	2	78.6	0	0	0
1407	3	95.9	0	0	0
1502	1	34.9	0	0	0
1506	1	35.1	0	0	0
1601	1	52.3	0	0	0
1605	1	52.2	0	0	0
1609	2	77	0	0	0
1704	2	76.4	0	0	0
1708	1	56.6	0	0	0
1803	2	78.6	0	0	0
1807	3	95.9	0	0	0
1902	1	34.9	0	0	0
1906	1	35.1	0	0	0
2001	1	52.3	0	0	0
2005	1	52.2	0	0	0
2009	2	77	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)
1004	2	76.40	0	0	0
1008	1	56.6	0	0	0
1103	2	78.6	0	0	0
1107	3	95.9	0	0	0
1202	1	34.9	0	0	0
1206	1	35.1	0	0	0
1301	1	52.3	0	0	0
1305	1	52.2	0	0	0
1309	2	77	0	0	0
1404	2	76.40	0	0	0
1408	1	56.6	0	0	0
1503	2	78.6	0	0	0
1507	3	95.9	0	0	0
1602	1	34.9	0	0	0
1606	1	35.1	0	0	0
1701	1	52.3	0	0	0
1705	1	52.2	0	0	0
1709	2	77	0	0	0
1804	2	76.4	0	0	0
1808	1	56.6	0	0	0
1903	2	78.6	0	0	0
1907	3	95.8	0	0	0
2002	1	34.9	0	0	0
2006	1	35.1	0	0	0
201	3	96.7	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)
202	1	56.6	0	0	0
2103	2	78.6	0	0	0
2107	3	95.8	0	0	0
2202	1	34.9	0	0	0
2206	1	35.1	0	0	0
2301	1	52.3	0	0	0
2305	1	52.2	0	0	0
2309	2	77	0	0	0
505	3	96.7	0	0	0
602	1	34.9	0	0	0
606	1	35.1	0	0	0
701	1	52.30	0	0	0
705	1	52.2	0	0	0
709	2	77	0	0	0
804	2	76.40	0	0	0
808	1	56.6	0	0	0
903	2	78.6	0	0	0
907	3	95.9	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)
203	2	78.7	0	0	0
2104	2	76.4	0	0	0
2108	1	56.6	0	0	0
2203	2	78.6	0	0	0
2207	3	95.8	0	0	0
2302	1	34.9	0	0	0
2306	1	35.1	0	0	0
301	1	56.6	0	0	0
506	1	56.5	0	0	0
603	2	78.6	0	0	0
607	1	95.9	0	0	0
702	1	34.9	0	0	0
706	1	35.1	0	0	0
801	1	52.30	0	0	0
805	1	52.2	0	0	0
809	2	77	0	0	0
904	2	76.40	0	0	0
908	1	56.6	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)
2101	1	52.3	0	0	0
2105	1	52.2	0	0	0
2109	2	77	0	0	0
2204	2	76.4	0	0	0
2208	1	56.6	0	0	0
2303	2	78.6	0	0	0
2307	3	95.8	0	0	0
302	1	56.6	0	0	0
507	2	78.7	0	0	0
604	2	76.4	0	0	0
608	1	56.6	0	0	0
703	2	78.6	0	0	0
707	3	95.9	0	0	0
802	1	34.9	0	0	0
806	1	35.1	0	0	0
901	1	52.30	0	0	0
905	1	52.2	0	0	0
909	2	77	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)
2102	1	34.9	0	0	0
2106	1	35.1	0	0	0
2201	1	52.3	0	0	0
2205	1	52.2	0	0	0
2209	2	77	0	0	0
2304	2	76.4	0	0	0
2308	1	56.6	0	0	0
303	3	96.7	0	0	0
601	1	52.30	0	0	0
605	1	52.2	0	0	0
609	2	77	0	0	0
704	2	76.40	0	0	0
708	1	56.6	0	0	0
803	2	78.6	0	0	0
807	3	95.9	0	0	0
902	1	34.9	0	0	0
906	1	35.1	0	0	0

Description of project

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

Common areas of unit building - TOWER B

Common area	Floor area (m²)
Main Switch Room - B	29.58
SP Plant - B	20.29
Hallway - B	1086.34

Common area	Floor area (m²)
Lvl. 5 Common Area	376.83
WC	23.32

Common area	Floor area (m²)
Exhaust Plant - B	30.33
Lobby - B	53.49

Common areas of unit building - TOWER C - 2

Common area	Floor area (m²)
Lift bank (No. 1)	-
Main Switch Room - C	25.89
VC Room	39
Hallway - C	1068.41

Common area	Floor area (m²)
Lift bank (No. 2)	-
Exhaust Plant - C	30.23
Co-working Space	155.35

Common area	Floor area (m²)
Gym	161.91
SP Plant - C	12.86
Lobby - C	55.67

Common areas of the development (non-building specific)

Common area	Floor area (m²)
Car Park	11433.59
Residential Waste Store	50.48
Grease Arrestor	82.7
BB Hot Water	27.18
Main SPD and Supply SR	27.52
Exhaust Fan Room	53.06
Cooling Tower	89.24
Fire Stairs - B	476.62
FCR	28.31

Common area	Floor area (m²)
BB Chute / Storage	16.31
Residential Recycling Store	105.04
Generator Fuel Tank Room and Pump set	29.47
Combined chillers. ETS & DHW Plant	167.31
Hot Water - TA	73.77
Mech Car Park Fan Room	21.76
Heat Pump	50.44
Other internal common area (No. 3)	473.24
Office	30.7

Common area	Floor area (m²)
BC Chute / Storage	24.62
CPE & CPS Fan room	301.53
NBN Entrance	46.59
Fire Pump & water tank	182.87
OSD	149.32
Supply Fan Room	71.19
Fire Stairs - Basement	97.94
MEZ Corridor	94.81

Schedule of BASIX commitments

1. Commitments for Residential flat buildings - TOWER B

(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 - TOWER C - 2

(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 multi-dwelling housing

(a) Dwellings

(i) Water

(ii) Energy

(iii) Thermal Performance and Materials

4. Commitments for single dwelling houses

(a) Dwellings

(i) Water

(ii) Energy

(iii) Thermal Performance and Materials

5. 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 - TOWER B

(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 enclosed subfloor, frame: suspended concrete slab	2045.6	fibreglass batts or roll	-
floors above habitable rooms, frame: suspended concrete slab	10725.1	fibreglass batts or roll	-
suspended floor above garage, frame: suspended concrete slab	200.1	fibreglass batts or roll	-
concrete slab on ground, frame:	200.1	-	30% cement substitute

External wall types

External wall type	Construction type	Area (m2)	Low emissions option	Insulation
External wall type 1	concrete block/ plasterboard, frame: light steel frame	34320	-	fibreglass batts or roll

External wall types				
External wall type	Construction type	Area (m2)	Low emissions option	Insulation
External wall type 2	brick veneer,frame:timber - untreated softwood	5000	-	fibreglass batts or roll
External wall type 3	concrete panel/ plasterboard,frame:no frame	500	-	polyester minimum 85% post-consumer recycled content

Internal wall types			
Internal wall type	Construction type	Area (m2)	Insulation
Internal wall type 1	plasterboard, frame:light steel frame	12500	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
framed - metal roof, frame: light steel frame	239.4	foil/sarking	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)
-	2300	-	-	2300	-	-	-

(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	6 star	6 star	-	4 star	5 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	Central water tank (No. 1)	See central systems	See central systems	yes	yes	yes	no	no

(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	interlocked to light with timer off	individual fan, ducted to façade or roof	interlocked to light	individual fan, ducted to façade or roof	interlocked to light

	Cooling		Heating		Natural lighting	
Dwelling no.	living areas	bedroom areas	living areas	bedroom areas	No. of bathrooms or toilets	Main kitchen
All dwellings	Central cooling system (No. 1)	Central cooling system (No. 1)	Central heating system (No. 1)	Central heating system (No. 1)	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	4 star	9.5 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)
1001	23.9	10.4	34.300
1002	21.9	8.5	30.400
1003	25.1	12.3	37.400
1004	8.5	14.7	23.200

	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)
1005	16	9.2	25.200
1006	12.3	13.5	25.800
1007	11	16.5	27.500
1009	13.4	10.7	24.100
1101	24.1	10.4	34.500
1102	22.1	8.5	30.600
1103	25.3	12.2	37.500
1104	8.6	14.6	23.200
1105	16.2	9.2	25.400
1106	12.4	13.3	25.700
1107	11.1	16.4	27.500
1109	13.5	10.7	24.200
1201	24.4	10.3	34.700
1202	22.4	8.3	30.700
1203	25.6	12.2	37.800
1204	8.9	14.3	23.200
1205	16.5	9.2	25.700
1206	12.6	13.2	25.800
1207	11.3	15.9	27.200
1208	13.2	11.2	24.400
1209	13.08	10.7	23.780
1301	24.5	10.2	34.700
1302	22.5	8.3	30.800
1303	25.7	11.9	37.600
1304	9	13.9	22.900
1305	16.6	9.2	25.800
1306	12.70	13.1	25.800
1307	11.4	15.7	27.100
1308	13.3	11.2	24.500
1309	13.9	10.6	24.500
1401	24.7	10.2	34.900

	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)
1402	22.7	8.4	31.100
1403	25.9	12	37.900
1404	9.1	13.3	22.400
1405	16.8	9.2	26.000
1406	12.8	13	25.800
1407	11.5	15.8	27.300
1408	13.5	11	24.500
1409	14	10.6	24.600
1501	24.8	9.9	34.700
1502	22.8	8.2	31.000
1503	26.1	11.9	38.000
1504	9.2	13.70	22.900
1505	16.9	9.2	26.100
1506	12.9	13	25.900
1507	11.6	15.9	27.500
1508	13.6	11	24.600
1509	14.2	10.5	24.700
1601	25	10	35.000
1602	23	8.2	31.200
1603	26.2	11.8	38.000
1604	9.3	13.5	22.800
1605	17.1	9.3	26.400
1606	13.1	13.1	26.200
1607	11.7	15.7	27.400
1609	14.3	10.5	24.800
1701	25.1	9.9	35.000
1702	23.1	8.2	31.300
1703	26.1	11.6	37.700
1704	9.4	13.4	22.800
1705	17.2	9.4	26.600
1706	13.2	13	26.200

	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)
1707	11.8	15.5	27.300
1709	14.5	10.6	25.100
1801	25.3	9.8	35.100
1802	23.3	8.2	31.500
1804	9.5	13	22.500
1805	17.4	9.2	26.600
1806	13.3	13	26.300
1807	11.9	15.5	27.400
1808	13.9	11.1	25.000
1809	14.6	10.6	25.200
1901	25.4	9.8	35.200
1902	23.4	8.3	31.700
1904	9.6	12.9	22.500
1905	17.5	9.3	26.800
1906	13.4	12.9	26.300
1907	12	15.6	27.600
1908	14	11	25.000
1909	14.7	10.6	25.300
2001	25.5	9.8	35.300
2002	23.6	8.3	31.900
2004	9.7	13	22.700
2005	17.7	9.3	27.000
2006	13.6	12.8	26.400
2007	12.1	15.4	27.500
2008	14.2	11.1	25.300
2009	14.8	10.6	25.400
2101	25.7	9.8	35.500
2102	23.7	8.3	32.000
2104	9.9	13.1	23.000
2105	17.8	9.4	27.200
2106	13.7	12.9	26.600

	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)
2107	12.2	15.3	27.500
2108	14.3	11	25.300
2109	15	10.6	25.600
2201	25.8	9.7	35.500
2202	23.8	8.3	32.100
2203	26.1	11.5	37.600
2204	10	12.8	22.800
2205	17.9	9.4	27.300
2206	13.8	12.7	26.500
2207	12.4	15.1	27.500
2208	14.4	11.1	25.500
2209	15.1	10.4	25.500
2301	14.6	21.03	35.630
2302	27.7	10.1	37.800
2303	19.8	17.2	37.000
2304	17.9	16.1	34.000
2305	24.5	10.9	35.400
2306	20.6	14.7	35.300
2307	19.5	16.9	36.400
2308	22.1	13.4	35.500
2309	23.2	12.5	35.700
501	25.4	8	33.400
502	22.7	9.2	31.900
503	25.3	9.9	35.200
601	20.8	11.4	32.200
602	18.8	9.2	28.000
603	21.8	13.2	35.000
604	6.4	15.9	22.300
605	13	9.3	22.300
606	9.9	14.4	24.300
607	8.9	19	27.900

	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)
608	10.2	12.2	22.400
609	10.8	11.8	22.600
701	21.3	11.4	32.700
702	19.3	8.9	28.200
703	22.3	13.4	35.700
704	6.7	15.5	22.200
705	13.5	9.2	22.700
706	10.2	14.4	24.600
707	9.3	18.8	28.100
708	10.6	12	22.600
709	11.2	11.6	22.800
801	21.6	11.2	32.800
802	19.6	8.9	28.500
803	22.7	13.3	36.000
804	6.9	15.6	22.500
805	13.8	9.4	23.200
806	10.5	14.3	24.800
807	9.5	18.6	28.100
808	10.9	11.8	22.700
809	11.5	11.6	23.100
901	23.6	10.4	34.000
902	21.6	8.6	30.200
903	24.8	12.4	37.200
904	8.3	14.7	23.000
905	15.8	9.3	25.100
906	12	13.5	25.500
907	10.8	16.3	27.100
908	12.6	11.2	23.800
909	13.2	11	24.200
1008, 1108	12.9	11.1	24.000
1608, 1708	13.8	11	24.800

	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)
1803, 2003	25.8	11.7	37.500
All other dwellings	25.9	11.8	37.700

(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	6 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
Main Switch Room - B	ventilation supply only	thermostatically controlled	light-emitting diode	manual on / manual off	yes
Lvl. 5 Common Area	air conditioning system	time clock or BMS controlled	light-emitting diode	zoned switching with motion sensor	yes
Exhaust Plant - B	no mechanical ventilation	-	light-emitting diode	manual on / manual off	yes
SP Plant - B	no mechanical ventilation	-	light-emitting diode	manual on / manual off	yes
WC	ventilation exhaust only	none i.e., continuous	light-emitting diode	motion sensors	yes
Lobby - B	air conditioning system	time clock or BMS controlled	light-emitting diode	zoned switching with motion sensor	yes
Hallway - B	ventilation supply only	time clock or BMS controlled	light-emitting diode	motion sensors	yes

Central energy systems	Type	Specification
Lift bank (No. 1)	gearless traction with V V V F motor and regenerative drive	Number of levels (including basement): 19 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 but <= 1500kg

2. Commitments for Residential flat buildings - TOWER C - 2

(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 enclosed subfloor, frame: suspended concrete slab	1952.15	fibreglass batts or roll	-
floors above habitable rooms, frame: suspended concrete slab	10610.1	fibreglass batts or roll	-
suspended floor above garage, frame: suspended concrete slab	200.1	fibreglass batts or roll	-
concrete slab on ground, frame:	200.1	-	30% cement substitute

External wall types

External wall type	Construction type	Area (m2)	Low emissions option	Insulation
External wall type 1	concrete block/ plasterboard,frame:light steel frame	33950	-	fibreglass batts or roll
External wall type 2	brick veneer,frame:timber - untreated softwood	5000	-	fibreglass batts or roll
External wall type 3	concrete panel/ plasterboard,frame:no frame	500	-	polyester minimum 85% post- consumer recycled content

Internal wall types			
Internal wall type	Construction type	Area (m2)	Insulation
Internal wall type 1	plasterboard, frame:light steel frame	12500	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
framed - metal roof, frame: light steel frame	239.4	foil/sarking	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)
-	2300	-	-	2300	-	-	-

(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	6 star	6 star	-	4 star	5 star	-	-	-	-	-	-	-

Dwelling no.	Alternative water source							
	Alternative water supply systems	Size	Configuration	Landscape connection	Toilet connection (s)	Laundry connection	Pool top-up	Spa top-up
302, 303	No alternative water supply	-	-	-	-	-	-	-
All other dwellings	Central water tank (No. 2)	See central systems	See central systems	yes	yes	yes	no	no

(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:			

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(aa) the kitchen cook-top and oven specified for that dwelling in the "Appliances & other efficiency measures" column of the table below; (bb) each appliance for which a rating is specified for that dwelling in the "Appliances & other efficiency measures" column of the table, and ensure that the appliance has that minimum rating; and (cc) any clothes drying line specified for the dwelling in the "Appliances & other efficiency measures" column of the table.		  	
(i) If specified in the table, the applicant must carry out the development so that each refrigerator space in the dwelling is "well ventilated".			

	Hot water	Bathroom ventilation system		Kitchen ventilation system		Laundry ventilation system	
Dwelling no.	Hot water system	Each bathroom	Operation control	Each kitchen	Operation control	Each laundry	Operation control
All dwellings	Central hot water system (No. 2)	individual fan, ducted to façade or roof	interlocked to light with timer off	individual fan, ducted to façade or roof	interlocked to light	individual fan, ducted to façade or roof	interlocked to light

	Cooling		Heating		Natural lighting	
Dwelling no.	living areas	bedroom areas	living areas	bedroom areas	No. of bathrooms or toilets	Main kitchen
302, 303	-	-	-	-	0	-
All other dwellings	Central cooling system (No. 2)	Central cooling system (No. 2)	Central heating system (No. 2)	Central heating system (No. 2)	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
302, 303	-	-	-	-	-	electric cooktop & electric oven	4 star	9.5 star	-	-
All other dwellings	-	-	-	-	-	electric cooktop & electric oven	4 star	9.5 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)
1001	15.8	12.1	27.900
1002	8.9	17.4	26.300
1003	21.4	12.9	34.300

	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)
1004	18.1	8.9	27.000
1005	9.5	9.3	18.800
1006	8.6	14.7	23.300
1007	10	9.6	19.600
1008	2.1	6.1	8.200
1009	5.1	16.4	21.500
1101	15.9	11.7	27.600
1102	8.9	17.2	26.100
1103	21.5	13	34.500
1104	18.9	9.1	28.000
1105	9.6	9.4	19.000
1106	8.8	14.4	23.200
1107	10.1	9.3	19.400
1108	2.2	6.1	8.300
1109	5.9	15.4	21.300
1201	16.2	11.7	27.900
1202	9.1	17.2	26.300
1203	21.8	13.1	34.900
1204	18.5	9.1	27.600
1205	9.8	9.4	19.200
1206	9	13.8	22.800
1207	10.2	9.4	19.600
1208	2.3	6.3	8.600
1209	6	14.9	20.900
1301	16.4	11.6	28.000
1302	9.3	17.1	26.400
1303	21.9	13	34.900
1304	18.7	9	27.700
1305	9.9	9.2	19.100
1306	9.1	13.6	22.700
1307	10.3	9.3	19.600

	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)
1309	6.1	15.3	21.400
1401	16.5	11.7	28.200
1402	9.4	16.8	26.200
1403	22.1	13	35.100
1404	18.8	9.1	27.900
1405	10.1	9.2	19.300
1406	9.2	13.4	22.600
1407	10.4	9.3	19.700
1409	6.1	15	21.100
1501	16.7	11.3	28.000
1502	9.5	16.4	25.900
1503	22.2	13	35.200
1504	18.9	8.8	27.700
1505	10.2	9.1	19.300
1506	9.3	13.2	22.500
1507	10.5	9.3	19.800
1508	2.4	6.3	8.700
1509	6.1	14.7	20.800
1601	16.8	11.5	28.300
1602	9.6	16.1	25.700
1603	22.3	13	35.300
1604	19.1	8.9	28.000
1605	10.3	9	19.300
1606	9.4	13.2	22.600
1607	10.6	9.3	19.900
1608	2.4	6.2	8.600
1609	6.2	15.2	21.400
1701	17	11.4	28.400
1702	9.7	16.2	25.900
1703	22.5	12.8	35.300
1704	19.2	8.8	28.000

	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)
1705	10.4	9	19.400
1706	9.5	13.1	22.600
1707	10.7	9.4	20.100
1708	2.5	6.2	8.700
1709	6.3	15.4	21.700
1801	17.1	11.4	28.500
1802	9.8	16.1	25.900
1803	22.6	12.7	35.300
1804	19.3	9.1	28.400
1805	10.5	8.8	19.300
1806	9.6	12.6	22.200
1807	10.8	9.2	20.000
1808	2.5	6.1	8.600
1809	6.3	14.6	20.900
1901	17.3	11.4	28.700
1902	10	15.7	25.700
1903	22.7	12.7	35.400
1904	19.5	9.3	28.800
1905	10.6	8.9	19.500
1906	9.7	12.8	22.500
1907	10.9	9.2	20.100
1908	2.4	6	8.400
1909	6.4	15.1	21.500
2001	17.4	11.3	28.700
2002	10	15.8	25.800
2003	22.9	12.6	35.500
2004	19.6	9.2	28.800
2005	10.8	8.6	19.400
2006	9.7	12.6	22.300
2007	11	9	20.000
201	14	14.4	28.400

	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)
202	2.3	6.1	8.400
203	5.6	12.1	17.700
2101	17.6	11.3	28.900
2102	10.2	15.6	25.800
2103	23	12.5	35.500
2104	19.7	9.1	28.800
2105	10.9	8.5	19.400
2106	9.90	12.7	22.600
2107	11.1	9.1	20.200
2108	2.5	5.9	8.400
2201	17.7	11.3	29.000
2202	10.3	15.6	25.900
2203	23.1	12.4	35.500
2204	19.9	9	28.900
2205	11	8.4	19.400
2206	10	12.4	22.400
2207	11.2	9.2	20.400
2209	6.5	15.2	21.700
2301	24.6	13.2	37.800
2302	20.3	16.6	36.900
2303	17	20.1	37.100
2304	25.9	10.4	36.300
2305	18.7	11.8	30.500
2306	18.3	15.5	33.800
2307	17.9	13	30.900
2308	8.7	7.1	15.800
2309	13.8	17.7	31.500
301	10.5	12.5	23.000
302	1.7	7.6	9.300
303	6.7	12.3	19.000
505	15.1	11.1	26.200

	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)
506	1.9	6.3	8.200
507	5.2	16.6	21.800
601	12.8	12.5	25.300
602	7.1	21	28.100
603	18.6	13.9	32.500
604	15.3	9.6	24.900
605	7.3	11	18.300
606	6.5	15.5	22.000
607	8.2	11.4	19.600
608	1.4	6.5	7.900
609	4.5	16.7	21.200
701	13.2	12.6	25.800
702	7.5	20.8	28.300
703	19	13.7	32.700
704	15.8	9.5	25.300
705	7.6	11	18.600
706	6.8	15.4	22.200
707	8.5	11.4	19.900
708	1.6	6.1	7.700
709	4.7	16.6	21.300
801	13.6	12.4	26.000
802	7.5	20	27.500
803	19.3	14	33.300
804	16	9.4	25.400
805	7.8	10.5	18.300
806	7	15.3	22.300
807	8.7	11.3	20.000
808	1.6	6.4	8.000
809	4.9	16.6	21.500
901	15.5	11.9	27.400
902	8.8	17.5	26.300

	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)
903	21.1	13.1	34.200
904	17.8	9	26.800
905	9.3	9.3	18.600
906	8.4	14.8	23.200
907	8.9	11.4	20.300
908	2	6.1	8.100
909	5.7	15.1	20.800
1308, 1408	2.3	6.2	8.500
2008, 2208	2.5	6	8.500
All other dwellings	6.5	14.9	21.400

(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	6 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
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
Gym	air conditioning system	time clock or BMS controlled	light-emitting diode	zoned switching	yes
Main Switch Room - C	ventilation supply only	thermostatically controlled	light-emitting diode	manual on / manual off	yes
Exhaust Plant - C	no mechanical ventilation	-	light-emitting diode	manual on / manual off	yes
SP Plant - C	no mechanical ventilation	-	light-emitting diode	manual on / manual off	yes
VC Room	air conditioning system	time clock or BMS controlled	light-emitting diode	motion sensors	yes
Co-working Space	air conditioning system	time clock or BMS controlled	light-emitting diode	zoned switching with motion sensor	yes
Lobby - C	air conditioning system	time clock or BMS controlled	light-emitting diode	zoned switching with motion sensor	yes
Hallway - C	ventilation supply only	time clock or BMS controlled	light-emitting diode	motion sensors	yes

Central energy systems	Type	Specification
Lift bank (No. 2)	gearless traction with V V V F motor and regenerative drive	Number of levels (including basement): 19 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 but <= 1500kg

3. 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.		✓	

4. 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.		✓	

5. 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
concrete slab on ground, frame:	983.79	-	30% cement substitute
floors above habitable rooms, frame: suspended concrete slab	12000.10	fibreglass batts or roll	-
suspended floor above garage, frame: suspended concrete slab	200.10	fibreglass batts or roll	-

External wall types

External wall type	Construction type	Area (m2)	Low emissions option	Insulation
External wall type 1	concrete block/ plasterboard,frame:light steel frame	41550	-	fibreglass batts or roll
External wall type 2	brick veneer,frame:timber - untreated softwood	5000	-	fibreglass batts or roll
External wall type 3	concrete block/ plasterboard,frame:no frame	500	-	polyester minimum 85% post- consumer recycled content

Internal wall types			
Internal wall type	Construction type	Area (m2)	Insulation
Internal wall type 1	plasterboard, frame:light steel frame	12500	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
framed - metal roof, frame: light steel frame	90	foil/sarking	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)
-	23000	-	-	23000	-	-	-

(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	6 star	no common laundry facility

Central systems	Size	Configuration	Connection (to allow for...)
Swimming pool (No. 1)	Volume: 195 kLs	Location: Other Pool shaded: no	-
Central water tank - rainwater or stormwater (No. 1)	20000	To collect run-off from at least: - 284.5 square metres of roof area of buildings in the development - 0 square metres of impervious area in the development - 0 square metres of garden/lawn area in the development - 0 square metres of planter box area in the development (excluding, in each case, any area which drains to, or supplies, any other alternative water supply system).	- irrigation of 593.5 square metres of common landscaped area on the site - car washing in 1 car washing bays on the site

Central systems	Size	Configuration	Connection (to allow for...)
Central water tank - rainwater or stormwater (No. 2)	20000	To collect run-off from at least: - 284.5 square metres of roof area of buildings in the development - 0 square metres of impervious area in the development - 0 square metres of garden/lawn area in the development - 0 square metres of planter box area in the development (excluding, in each case, any area which drains to, or supplies, any other alternative water supply system).	- irrigation of 593.5 square metres of common landscaped area on the site - car washing in 1 car washing bays on the site

(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
Car Park	ventilation (supply + exhaust)	carbon monoxide monitor + VSD fan	light-emitting diode	zoned switching with motion sensor	yes
BB Chute / Storage	ventilation exhaust only	-	light-emitting diode	motion sensors	yes
BC Chute / Storage	ventilation exhaust only	-	light-emitting diode	motion sensors	yes
Residential Waste Store	ventilation exhaust only	-	light-emitting diode	motion sensors	yes
Residential Recycling Store	ventilation exhaust only	-	light-emitting diode	motion sensors	yes
CPE & CPS Fan room	no mechanical ventilation	-	light-emitting diode	manual on / manual off	yes
Grease Arrestor	no mechanical ventilation	-	light-emitting diode	manual on / manual off	yes
Generator Fuel Tank Room and Pump set	ventilation (supply + exhaust)	thermostatically controlled	light-emitting diode	manual on / manual off	yes
NBN Entrance	no mechanical ventilation	-	light-emitting diode	manual on / manual off	yes
BB Hot Water	no mechanical ventilation	-	light-emitting diode	manual on / manual off	yes

	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
Combined chillers. ETS & DHW Plant	ventilation supply only	thermostatically controlled	light-emitting diode	manual on / manual off	yes
Fire Pump & water tank	ventilation supply only	thermostatically controlled	light-emitting diode	manual on / manual off	yes
Main SPD and Supply SR	no mechanical ventilation	-	light-emitting diode	manual on / manual off	yes
Hot Water - TA	no mechanical ventilation	-	light-emitting diode	manual on / manual off	yes
OSD	no mechanical ventilation	-	light-emitting diode	manual on / manual off	yes
Exhaust Fan Room	no mechanical ventilation	-	light-emitting diode	manual on / manual off	yes
Mech Car Park Fan Room	no mechanical ventilation	-	light-emitting diode	manual on / manual off	yes
Supply Fan Room	no mechanical ventilation	-	light-emitting diode	manual on / manual off	yes
Cooling Tower	no mechanical ventilation	-	light-emitting diode	manual on / manual off	yes
Heat Pump	no mechanical ventilation	-	light-emitting diode	manual on / manual off	yes
Fire Stairs - Basement	no mechanical ventilation	-	light-emitting diode	motion sensors	yes
Fire Stairs - B	no mechanical ventilation	-	light-emitting diode	motion sensors	yes
Other internal common area (No. 3)	no mechanical ventilation	-	light-emitting diode	motion sensors	yes
MEZ Corridor	no mechanical ventilation	-	light-emitting diode	motion sensors	yes
FCR	air conditioning system	time clock or BMS controlled	light-emitting diode	motion sensors	yes
Office	air conditioning system	time clock or BMS controlled	light-emitting diode	zoned switching with motion sensor	yes

Central energy systems	Type	Specification
Swimming pool (No. 1)	Heating source: electric heat pump	Pump controlled by timer: yes
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: $3.0 < COP \leq 3.5$
Central hot water system (No. 2)	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: $3.0 < COP \leq 3.5$

Central energy systems	Type	Specification
Central cooling system (No. 1)	variable refrigerant volume units	Energy source: electric driven compressor Heat rejection method: water cooled condenser Unit efficiency (min): high – COP > 5.5
Central cooling system (No. 2)	variable refrigerant volume units	Energy source: electric driven compressor Heat rejection method: water cooled condenser Unit efficiency (min): high – COP > 5.5
Central heating system (No. 1)	variable refrigerant volume units	Energy source: electric driven compressor + water sourced evaporator Unit efficiency high – COP > 5.5
Central heating system (No. 2)	variable refrigerant volume units	Energy source: electric driven compressor + water sourced evaporator Unit efficiency high – COP > 5.5
Alternative energy supply	Photovoltaic system	Rated electrical output (min): 85 peak kW
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).