BASIX[°]Certificate

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

Multi Dwelling

Certificate number: 660335M

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 18/09/2014 published by Planning & Infrastructure. This document is available at www.basix.nsw.gov.au

Director-General Date of issue: Sunday, 06 September 2015 To be valid, this certificate must be lodged within 3 months of the date of issue.



Project summary	
Project name	Hume Developments
Street address	311 Hume Highway Liverpool 2170
Local Government Area	Liverpool City Council
Plan type and plan number	deposited 1004792
Lot no.	71
Section no.	-
No. of residential flat buildings	3
No. of units in residential flat buildings	307
No. of multi-dwelling houses	0
No. of single dwelling houses	0
Project score	
Water	V 43 Target 40
Thermal Comfort	V Pass Target Pass
Energy	V 21 Target 20

Certificate Prepared by	
Name / Company Name: Hume Developments Pty Ltd	
ABN (if applicable): 52305342998	

Description of project

Project address

Project name	Hume Developments
Street address	311 Hume Highway Liverpool 2170
Local Government Area	Liverpool City Council
Plan type and plan number	deposited 1004792
Lot no.	71
Section no.	-
Project type	
No. of residential flat buildings	3
No. of units in residential flat buildings	307
No. of multi-dwelling houses	0
No. of single dwelling houses	0
Site details	
Site area (m²)	4632
Roof area (m ²)	1151
Non-residential floor area (m ²)	636
Residential car spaces	329
Non-residential car spaces	23

Common area landscape		
Common area lawn (m ²)	2259	
Common area garden (m ²)	703	
Area of indigenous or low water use species (m ²)	703	
Assessor details		
Assessor number	20470	
Certificate number	1008096487	
Climate zone	28	
Project score		
Water	43	Target 40
Thermal Comfort	V Pass	Target Pass
Energy	v 21	Target 20

Description of project

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

Residential flat buildings - Building A, 37 dwellings, 8 storeys above ground

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)	Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)	Dwelling no.	No. of bedrooms		Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)	Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
A101	3	85.44	5.0	0	0	A102	1	52.5	5.0	0	0	A103	2	75.7	5.0	0	0	A104	3	88.5	5.0	0	0
A201	3	85.44	5.0	0	0	A202	1	52.5	5.0	0	0	A203	2	75.7	5.0	0	0	A204	3	92.5	5.0	0	0
A205	2	76.7	5.0	0	0	A301	3	85.44	5.0	0	0	A302	1	52.5	5.0	0	0	A303	2	75.7	5.0	0	0
A304	3	92.5	5.0	0	0	A401	3	85.44	5.0	0	0	A402	1	52.5	5.0	0	0	A403	2	75.7	5.0	0	0
A404	3	92.5	5.0	0	0	A405	2	76.72	5.0	0	0	A501	3	85.44	5.0	0	0	A502	1	52.5	5.0	0	0
A503	2	75.7	5.0	0	0	A504	3	92.5	5.0	0	0	A601	3	85.44	5.0	0	0	A602	1	52.5	5.0	0	0
A603	2	75.7	5.0	0	0	A604	3	92.5	5.0	0	0	A605	2	76.72	5.0	0	0	A701	3	85.44	5.0	0	0
A702	1	52.5	5.0	0	0	A703	2	75.7	5.0	0	0	A704	3	92.5	5.0	0	0	AG01	1	52.35	5.0	0	0
AG02	1	54.0	5.0	0	0	AG03	1	86.0	5.0	0	0	AG04	3	86.52	5.0	0	0	AG05	2	79.86	5.0	0	0
AG06	1	52.35	5.0	0	0	LI				1		L		1	1	1]		1		1	1	

Residential flat buildings - Building B, 30 dwellings, 8 storeys above ground

Dwelling no.	No. of bedrooms	iditioned a (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)	Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)	Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)	Dwelling no.	No. of bedrooms	iditioned a (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
B101	3	98.15	5.0	0	0	B102	3	87.83	5.0	0	0	B103	1	46.61	5.0	0	0	B104	2	73.4	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)	Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)	Dwelling no.	No. of bedrooms		Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)	Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
B201	3	98.15	5.0	0	0	B202	3	87.83	5.0	0	0	B203	1	46.61	5.0	0	0	B204	2	73.4	5.0	0	0
B301	3	98.15	5.0	0	0	B302	3	87.83	5.0	0	0	B303	1	46.61	5.0	0	0	B304	2	73.4	5.0	0	0
B401	3	98.15	5.0	0	0	B402	3	87.83	5.0	0	0	B403	1	46.61	5.0	0	0	B404	2	73.4	5.0	0	0
B501	3	98.15	5.0	0	0	B502	3	87.83	5.0	0	0	B503	1	46.61	5.0	0	0	B504	2	73.4	5.0	0	0
B601	3	98.15	5.0	0	0	B602	3	87.83	5.0	0	0	B603	1	46.61	5.0	0	0	B604	2	73.4	5.0	0	0
B701	3	98.15	5.0	0	0	B702	3	87.83	5.0	0	0	B703	1	46.61	5.0	0	0	B704	2	73.4	5.0	0	0
BG01	1	45.07	5.0	0	0	BG02	2	72.69	5.0	0	0				1	1]	L	1		1	1]

Residential flat buildings - Building C, 240 dwellings, 30 storeys above ground

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)	Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)	Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)	Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
C201	2	66.39	5.0	0	0	C202	2	70.97	5.0	0	0	C203	2	76.83	5.0	0	0	C204	2	82.07	5.0	0	0
C205	2	76.35	5.0	0	0	C206	2	80.63	5.0	0	0	C207	2	75.61	5.0	0	0	C208	2	67.95	5.0	0	0
C301	2	66.39	5.0	0	0	C302	2	70.97	5.0	0	0	C303	2	76.83	5.0	0	0	C304	2	82.07	5.0	0	0
C305	2	76.35	5.0	0	0	C306	2	80.63	5.0	0	0	C307	2	75.61	5.0	0	0	C308	2	67.95	5.0	0	0
C401	2	63.38	5.0	0	0	C402	2	65.22	5.0	0	0	C403	2	70.21	5.0	0	0	C404	2	74.02	5.0	0	0
C405	2	73.29	5.0	0	0	C406	2	70.65	5.0	0	0	C407	2	69.13	5.0	0	0	C408	2	67.95	5.0	0	0
C501	2	66.39	5.0	0	0	C502	2	70.97	5.0	0	0	C503	2	76.83	5.0	0	0	C504	2	82.07	5.0	0	0
C505	2	76.35	5.0	0	0	C506	2	80.63	5.0	0	0	C507	2	75.61	5.0	0	0	C508	2	67.95	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)	Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)	Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)	Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
C601	2	66.39	5.0	0	0	C602	2	70.97	5.0	0	0	C603	2	76.83	5.0	0	0	C604	2	82.07	5.0	0	0
C605	2	76.35	5.0	0	0	C606	2	80.63	5.0	0	0	C607	2	75.61	5.0	0	0	C608	2	67.95	5.0	0	0
C701	2	66.39	5.0	0	0	C702	2	70.97	5.0	0	0	C703	2	76.83	5.0	0	0	C704	2	82.07	5.0	0	0
C705	2	76.35	5.0	0	0	C706	2	80.63	5.0	0	0	C707	2	75.61	5.0	0	0	C708	2	67.95	5.0	0	0
C801	2	66.39	5.0	0	0	C802	2	70.97	5.0	0	0	C803	2	76.83	5.0	0	0	C804	2	82.07	5.0	0	0
C805	2	76.35	5.0	0	0	C806	2	80.63	5.0	0	0	C807	2	75.61	5.0	0	0	C808	2	67.95	5.0	0	0
C901	2	66.39	5.0	0	0	C902	2	70.97	5.0	0	0	C903	2	76.83	5.0	0	0	C904	2	82.07	5.0	0	0
C905	2	76.35	5.0	0	0	C906	2	80.63	5.0	0	0	C907	2	75.61	5.0	0	0	C908	2	67.95	5.0	0	0
C1001	1	66.39	5.0	0	0	C1002	2 1	70.97	5.0	0	0	C1003	1	76.83	5.0	0	0	C1004	1	82.07	5.0	0	0
C1005	2	76.35	5.0	0	0	C1006	6 2	80.63	5.0	0	0	C1007	2	75.61	5.0	0	0	C1008	2	67.95	5.0	0	0
C1101	2	66.39	5.0	0	0	C1102	2 2	70.97	5.0	0	0	C1103	2	76.83	5.0	0	0	C1104	2	82.07	5.0	0	0
C1105	2	76.35	5.0	0	0	C1106	6 2	80.63	5.0	0	0	C1107	2	75.61	5.0	0	0	C1108	2	67.95	5.0	0	0
C1201	2	66.39	5.0	0	0	C1202	2 2	70.97	5.0	0	0	C1203	2	76.83	5.0	0	0	C1204	2	82.07	5.0	0	0
C1205	2	76.35	5.0	0	0	C1206	6 2	80.63	5.0	0	0	C1207	2	75.61	5.0	0	0	C1208	2	67.95	5.0	0	0
C1301	2	66.39	5.0	0	0	C1302	2 2	70.97	5.0	0	0	C1303	2	76.83	5.0	0	0	C1304	2	82.07	5.0	0	0
C1305	2	76.35	5.0	0	0	C1306	6 2	80.63	5.0	0	0	C1307	2	75.61	5.0	0	0	C1308	2	67.95	5.0	0	0
C1401	2	66.39	5.0	0	0	C1402	2 2	70.97	5.0	0	0	C1403	2	76.83	5.0	0	0	C1404	2	82.07	5.0	0	0
C1405	2	76.35	5.0	0	0	C1406	6 2	80.63	5.0	0	0	C1407	2	75.61	5.0	0	0	C1408	2	67.95	5.0	0	0
C1501	2	66.39	5.0	0	0	C1502	2 2	70.97	5.0	0	0	C1503	2	76.83	5.0	0	0	C1504	2	82.07	5.0	0	0
C1505	2	76.35	5.0	0	0	C1506	6 2	80.63	5.0	0	0	C1507	2	75.61	5.0	0	0	C1508	2	67.95	5.0	0	0
C1601	2	66.39	5.0	0	0	C1602	2 2	70.97	5.0	0	0	C1603	2	76.83	5.0	0	0	C1604	2	82.07	5.0	0	0
C1605	2	76.35	5.0	0	0	C1606	6 2	80.63	5.0	0	0	C1607	2	75.61	5.0	0	0	C1608	2	67.95	5.0	0	0
C1701	1	66.39	5.0	0	0	C1702	2 1	70.97	5.0	0	0	C1703	1	76.83	5.0	0	0	C1704	1	82.07	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)	Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)	Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)	Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
C1705	1	76.35	5.0	0	0	C1706	1	80.63	5.0	0	0	C1707	1	75.61	5.0	0	0	C1708	1	67.95	5.0	0	0
C1801	1	63.38	5.0	0	0	C1802	1	65.22	5.0	0	0	C1803	1	70.21	5.0	0	0	C1804	1	74.02	5.0	0	0
C1805	1	73.29	5.0	0	0	C1806	1	70.65	5.0	0	0	C1807	1	69.13	5.0	0	0	C1808	1	67.95	5.0	0	0
C1901	1	66.39	5.0	0	0	C1902	1	70.97	5.0	0	0	C1903	1	76.83	5.0	0	0	C1904	1	82.07	5.0	0	0
C1905	1	76.35	5.0	0	0	C1906	1	80.63	5.0	0	0	C1907	1	75.61	5.0	0	0	C1908	1	67.95	5.0	0	0
C2001	1	66.39	5.0	0	0	C2002	1	70.97	5.0	0	0	C2003	1	76.83	5.0	0	0	C2004	1	82.07	5.0	0	0
C2005	1	76.35	5.0	0	0	C2006	1	80.63	5.0	0	0	C2007	2	75.61	5.0	0	0	C2008	2	67.95	5.0	0	0
C2101	2	66.39	5.0	0	0	C2102	2	70.97	5.0	0	0	C2103	2	76.83	5.0	0	0	C2104	2	82.07	5.0	0	0
C2105	2	76.35	5.0	0	0	C2106	2	80.63	5.0	0	0	C2107	2	75.61	5.0	0	0	C2108	2	67.95	5.0	0	0
C2201	2	66.39	5.0	0	0	C2202	2	70.97	5.0	0	0	C2203	2	76.83	5.0	0	0	C2204	2	82.07	5.0	0	0
C2205	2	76.35	5.0	0	0	C2206	2	80.63	5.0	0	0	C2207	2	75.61	5.0	0	0	C2208	2	67.95	5.0	0	0
C2301	2	66.39	5.0	0	0	C2302	2	70.97	5.0	0	0	C2303	2	76.83	5.0	0	0	C2304	2	82.07	5.0	0	0
C2305	2	76.35	5.0	0	0	C2306	2	80.63	5.0	0	0	C2307	2	75.61	5.0	0	0	C2308	2	67.95	5.0	0	0
C2401	2	66.39	5.0	0	0	C2402	2	70.97	5.0	0	0	C2403	2	76.83	5.0	0	0	C2404	2	82.07	5.0	0	0
C2405	2	76.35	5.0	0	0	C2406	2	80.63	5.0	0	0	C2407	2	75.61	5.0	0	0	C2408	2	67.95	5.0	0	0
C2501	2	66.39	5.0	0	0	C2502	2	70.97	5.0	0	0	C2503	2	76.83	5.0	0	0	C2504	2	82.07	5.0	0	0
C2505	2	76.35	5.0	0	0	C2506	2	80.63	5.0	0	0	C2507	2	75.61	5.0	0	0	C2508	2	67.95	5.0	0	0
C2601	2	66.39	5.0	0	0	C2602	2	70.97	5.0	0	0	C2603	2	76.83	5.0	0	0	C2604	2	82.07	5.0	0	0
C2605	2	76.35	5.0	0	0	C2606	2	80.63	5.0	0	0	C2607	2	75.61	5.0	0	0	C2608	2	67.95	5.0	0	0
C2701	2	66.39	5.0	0	0	C2702	2	70.97	5.0	0	0	C2703	2	76.83	5.0	0	0	C2704	2	82.07	5.0	0	0
C2705	2	76.35	5.0	0	0	C2706	2	80.63	5.0	0	0	C2707	2	75.61	5.0	0	0	C2708	2	67.95	5.0	0	0
C2801	2	66.39	5.0	0	0	C2802	2	70.97	5.0	0	0	C2803	2	76.83	5.0	0	0	C2804	2	82.07	5.0	0	0
C2805	2	76.35	5.0	0	0	C2806	2	80.63	5.0	0	0	C2807	2	75.61	5.0	0	0	C2808	2	67.95	5.0	0	0

BASIX Planning & Infrastructure

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)	Dwelling no.	No. of bedrooms Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)	Dwelling no.	No. of bedrooms	idit a (r	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)	Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
C2901	2	66.39	5.0	0	0	C2902	2 70.9	5.0	0	0	C2903	2	76.83	5.0	0	0	C2904	2	82.07	5.0	0	0
C2905	2	76.35	5.0	0	0	C2906	2 80.6	5.0	0	0	C2907	2	75.61	5.0	0	0	C2908	2	67.95	5.0	0	0
C3001	2	63.38	5.0	0	0	C3002	2 65.2	2 5.0	0	0	C3003	2	70.21	5.0	0	0	C3004	2	74.02	5.0	0	0
C3005	2	73.29	5.0	0	0	C3006	2 70.6	5 5.0	0	0	C3007	2	69.13	5.0	0	0	C3008	2	67.95	5.0	0	0
C3101	2	63.38	5.0	0	0	C3102	2 65.2	2 5.0	0	0	C3103	2	70.21	5.0	0	0	C3104	2	74.02	5.0	0	0
C3105	2	73.29	5.0	0	0	C3106	2 70.6	5 5.0	0	0	C3107	2	69.13	5.0	0	0	C3108	2	67.95	5.0	0	0

Description of project

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

Common areas of unit building - Building A

Common area	Floor area (m²)	Common area	Floor area (m²)
Lift car (No. 1)	-	Garbage room (No. 1)	73

Common areas of unit building - Building B

Common area	Floor area (m²)
Lift car (No. 2)	-

Common areas of unit building - Building C

Common area	Floor area (m²)	Common area	Floor area (m²)
Lift car (No. 3)	-	Lift car (No. 4)	-

Schedule of BASIX commitments

1. Commitments for Residential flat buildings - Building A

(a) Dwellings

(i) Water

(ii) Energy

(iii) Thermal Comfort

(b) Common areas and central systems/facilities

(i) Water

(ii) Energy

2. Commitments for Residential flat buildings - Building B

(a) Dwellings

(i) Water

(ii) Energy

(iii) Thermal Comfort

(b) Common areas and central systems/facilities

(i) Water

(ii) Energy

3. Commitments for Residential flat buildings - Building C

(a) Dwellings

(i) Water

(ii) Energy

(iii) Thermal Comfort

(b) Common areas and central systems/facilities

(i) Water

(ii) Energy

4. Commitments for multi-dwelling houses

5. Commitments for single dwelling houses

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

(i) Water

(ii) Energy

Schedule of BASIX commitments

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

1. Commitments for Residential flat buildings - Building A

(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.		 Image: A set of the set of the	~
(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					Appli	ances	Individual pool				Individual spa		
Dwelling no.	All shower- heads	All toilet flushing systems	All kitchen taps	All bathroom taps	HW recirculation or diversion	All clothes washers	All dish- washers	Volume (max volume)	Pool cover	Pool location	Pool shaded	Volume (max volume)	Spa cover	Spa shaded
All dwellings	3 star (> 4.5 but <= 6 L/min)	5 star	6 star	6 star	On demand HW recirculation	-	-	-	-	-	-	-	-	-

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

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

ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check	
(f) This commitment applies to each room or area of the dwelling which is referred to in a heading to the "Natural lighting" column of the table below (but only to the extent specified for that room or area). The applicant must ensure that each such room or area is fitted with a window and/or skylight.	~	~	~	
(g) This commitment applies if the applicant installs a water heating system for the dwelling's pool or spa. The applicant must:				
(aa) install the system specified for the pool in the "Individual Pool" column of the table below (or alternatively must not install any system for the pool). If specified, the applicant must install a timer, to control the pool's pump; and		~		
(bb) install the system specified for the spa in the "Individual Spa" column of the table below (or alternatively must not install any system for the spa). If specified, the applicant must install a timer to control the spa's pump.		~		
(h) The applicant must install in the dwelling:				
(aa) the kitchen cook-top and oven specified for that dwelling in the "Appliances & other efficiency measures" column of the table below;		~		
(bb) each appliance for which a rating is specified for that dwelling in the "Appliances & other efficiency measures" column of the table, and ensure that the appliance has that minimum rating; and		 Image: A second s	~	
(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 ven	tilation system	Kitchen vent	ilation system	Laundry vent	ilation system
Dwelling no.	Hot water system	Each bathroom	Operation control	Each kitchen	Operation control	Each laundry	Operation control
All dwellings	electric instantaneous	no mechanical ventilation (ie. natural)	-	individual fan, ducted to façade or roof	manual switch on/off	individual fan, ducted to façade or roof	manual switch on/off

	Coc	oling	Heating		Artificial lighting				Natural lig	phting		
Dwelling no.	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or dining rooms	Each kitchen	All bathrooms/ toilets	Each Iaundry	All hallways	No. of bathrooms &/or toilets	Main kitcher
All dwellings	1-phase airconditioning 3.5 Star (new rating)	-	-	-	1 (dedicated)	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	1	yes

	Individual pool		Individual spa		Appliances & other efficiency measures							
Dwelling no.	Pool heating system	Timer	Spa heating system	Timer	Kitchen cooktop/oven	Refrigerator	Well ventilated fridge space	Dishwasher	Clothes washer	Clothes dryer	Indoor or sheltered clothes drying line	Private outdoor or unsheltered clothes drying line
All dwellings	-	-	-	-	electric cooktop & electric oven	-	yes	4.5 star	-	-	no	no

(iii) Thermal Comfort	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.			

(iii) Thermal Comfort	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(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.	~	v	~

		Thermal loads
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)
A101	57	48
A102	11	24
A104	48	48
AG01	33	27
AG04	46	49
AG05	45	30
AG06	57	27
AG02, AG03	7	33
A205, A405, A605	46	34
A201, A301, A401, A501, A601, A701	76	39
A202, A302, A402, A502, A602, A702	11	23
A204, A304, A404, A504, A604, A704	49	47
All other dwellings	3	30

(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	no common facility	5 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.	~	v	~

	Common area v	entilation 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 car (No. 1)	-	-	halogen	none	No		
Garbage room (No. 1)	ventilation supply only	-	compact fluorescent	motion sensors	No		

Central energy systems	Туре	Specification
Lift (No. 1)	gearless traction with V V V F motor	Number of levels (including basement): 12

2. Commitments for Residential flat buildings - Building B

(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		 Image: A second s	-
(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.		 Image: A second s	~
(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).		 Image: A set of the set of the	
(g) The pool or spa must be located as specified in the table.	~	 Image: A set of the set of the	
(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			Appli	Appliances Individual pool			Individual spa						
Dwelling no.	All shower- heads	All toilet flushing systems	All kitchen taps	All bathroom taps	HW recirculation or diversion	All clothes washers	All dish- washers	Volume (max volume)	Pool cover	Pool location	Pool shaded	Volume (max volume)	Spa cover	Spa shaded
All dwellings	3 star (> 4.5 but <= 6 L/min)	5 star	6 star	6 star	On demand HW recirculation	-	-	-	-	-	-	-	-	-

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

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

ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check		
(f) This commitment applies to each room or area of the dwelling which is referred to in a heading to the "Natural lighting" column of the table below (but only to the extent specified for that room or area). The applicant must ensure that each such room or area is fitted with a window and/or skylight.	below (but only to the extent specified for that room or area). The applicant must ensure that each such room or area is				
(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		 Image: A second s	~		
(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 ven	tilation system	Kitchen vent	ilation system	Laundry ventilation system		
Dwelling no.	Hot water system	Each bathroom	Operation control	Each kitchen	Operation control	Each laundry	Operation control	
All dwellings	electric instantaneous	no mechanical ventilation (ie. natural)	-	individual fan, ducted to façade or roof	manual switch on/off	individual fan, ducted to façade or roof	manual switch on/off	

	Coo	ling	Неа	ting			Artificial	lighting			Natural lig	ghting
Dwelling no.	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or dining rooms	Each kitchen	All bathrooms/ toilets	Each Iaundry	All hallways	No. of bathrooms &/or toilets	Main kitcher
All dwellings	1-phase airconditioning 3.5 Star (new rating)	-	-	-	1 (dedicated)	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	1	yes

	Individual pe	lividual pool Individual spa			Appliances & other efficiency measures							
Dwelling no.	Pool heating system	Timer	Spa heating system	Timer	Kitchen cooktop/oven	Refrigerator	Well ventilated fridge space	Dishwasher	Clothes washer	Clothes dryer	Indoor or sheltered clothes drying line	Private outdoor or unsheltered clothes drying line
All dwellings	-	-	-	-	electric cooktop & electric oven	-	yes	4.5 star	-	-	no	no

(iii) Thermal Comfort	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.			

(iii) Thermal Comfort	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(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.	~	v	~

	Therma	al loads
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)
BG01	52	19
BG02	2	65
B101, B201, B301, B401, B501, B601, B701	75	55
B102, B202, B302, B402, B502, B602, B702	38	31
B103, B203, B303, B403, B503, B603, B703	24	30
All other dwellings	1	56

(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	no common facility	5 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.	~	v	~

	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 car (No. 2)	-	-	halogen	none	No	

Central energy systems	Туре	Specification
Lift (No. 2)	gearless traction with V V V F motor	Number of levels (including basement): 12

3. Commitments for Residential flat buildings - Building C

(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.	~	~	~

			Fixtur	es		Appli	ances		Indi	vidual pool		Ir	dividual	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
C201, C202, C203, C204, C205, C206, C207, C208, C301, C302, C303, C304, C305, C306, C307, C308, C401, C402, C403, C404, C405, C404, C405, C406, C407, C408, C501, C502, C503, C504, C505, C506, C507, C508, C507, C508, C604, C605, C606, C607, C608, C608, C607, C608, C608, C607, C608, C608, C607, C608, C	3 star (> 4.5 but <= 6 L/min)	5 star	6 star	6 star	On demand HW recirculation									

			Fixtur				ances		Indi	vidual pool			dividual	-
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
C701, C702, C703, C704, C705, C706, C707, C708, C801, C802, C803, C804, C805, C806, C807, C902, C903, C904, C905, C906, C907, C908, C1001, C1002, C1003, C1004, C1005, C1004, C1005, C1006, C1007, C1008, C1101, C1102, C1103, C1104, C1105, C1106, C1107, C1108,														

	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
$\begin{array}{c} C1201,\\ C1202,\\ C1203,\\ C1204,\\ C1205,\\ C1206,\\ C1207,\\ C1208,\\ C1301,\\ C1301,\\ C1302,\\ C1303,\\ C1304,\\ C1305,\\ C1305,\\ C1306,\\ C1307,\\ C1308,\\ C1401,\\ C1402,\\ C1403,\\ C1404 \end{array}$														

			Fixtur	es		Appl	iances		Indi	vidual pool		Ir	ndividual	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
C1405, C1406, C1407, C1408, C1501, C1502, C1503, C1504, C1505, C1506, C1507, C1508, C1601, C1602, C1603, C1604, C1605, C1607, C1606, C1607, C1608, C1607, C1608, C1607, C1608, C1607, C1608, C1701, C1702, C1703, C1704, C1705, C1706, C1707, C1708, C1706, C1707, C1708, C1707, C1708, C1707, C1708, C1707, C1708, C1801, C1802, C1803, C1804, C1805, C1804, C1805, C1804, C1805, C1807, C1808, C1907, C1908, C1908, C1907, C1903, C1904, C1903, C1904, C1903, C1904, C1904, C1903, C1904, C1	3 star (> 4.5 but <= 6 L/min)	5 star	6 star	6 star	On demand HW recirculation					-				

			F irston			A			le eli				dividual	
Duralling	A 11		Fixtur All	All	HW	All	ances All dish-			vidual pool	Pool			-
Dwelling no.	All shower- heads	All toilet flushing systems	kitchen taps	All bathroom taps	recirculation or diversion	All clothes washers	washers	Volume (max volume)	Pool cover	Pool location	shaded	Volume (max volume)	Spa cover	Spa shaded
C1905,														
C1906, C1907,														
C1908,														
C2001,														
C2002, C2003,														
C2004,														
C2005,														
C2006, C2007,														
C2008,														
C2101,														
C2102, C2103,														
C2103,														
C2105,														
C2106, C2107,														
C2107, C2108,														
C2201,														
C2202, C2203,														
C2203, C2204,														
C2205,														
C2206,														
C2207, C2208,														
C2301,														
C2302,														
C2303, C2304,														
C2305,														
C2306,														
C2307, C2308,														
C2401,														
C2402,														
C2403, C2404,														
JZ404,												<u> </u>		

	Fixtures						Individual pool				Individual spa			
							ances		Indi	vidual pool		In	dividual	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
C2405, C2406, C2407, C2408, C2501, C2502, C2503, C2504, C2505, C2506, C2507, C2508, C2601, C2602, C2603, C2604, C2605, C2606, C2607, C2606, C2701, C2703, C2704, C2703, C2704, C2705, C2706, C2707, C2708, C2707, C2708, C2707, C2708, C2707, C2708, C2707, C2708, C2707, C2708, C2707, C2708, C2707, C2708, C2707, C2708, C2707, C2708, C2707, C2708, C2707, C2708, C2707, C2708, C2707, C2708, C2707, C2801, C2802, C2803, C2801, C2802, C2803, C2801, C2802, C2803, C2801, C2802, C2803, C2801, C2802, C2803, C2801, C2802, C2803, C2801, C2802, C2803, C2801, C2802, C2803, C2801, C2802, C2803, C2801, C2802, C2803, C2801, C2802, C2803, C2801, C2802, C2803, C2801, C2802, C2803, C2801, C2802, C2803, C2801, C2802, C2803, C2801, C2802, C2803, C2901, C2902, C2803, C2901, C2903, C2904, C2903, C2904, C2		Systems	laps											

			Fixtur	es		Appli	ances		Indi	vidual pool	1	In	dividual	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
$\begin{array}{c} C2905, \\ C2906, \\ C2907, \\ C2908, \\ C3001, \\ C3002, \\ C3003, \\ C3004, \\ C3005, \\ C3006, \\ C3007, \\ C3008, \\ C3101, \\ C3102, \\ C3103, \\ C3104, \\ C3105, \\ C3106, \\ C3107, \\ C3108 \end{array}$														

			Alternative water sou	rce				
Dwelling no.	Alternative water supply systems	Size	Configuration	Landscape connection	Toilet connection (s)	Laundry connection	Pool top-up	Spa top-up

(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".		~	

	Hot water	Bathroom ven	tilation system	Kitchen venti	lation system	Laundry ventilation system		
Dwelling no.	Hot water system	Each bathroom	Operation control	Each kitchen	Operation control	Each laundry	Operation control	
All dwellings	electric instantaneous	no mechanical ventilation (ie. natural)	-	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 bedrooms &/or study	No. of living &/or dining rooms	Each kitchen	All bathrooms/ toilets	Each Iaundry	All hallways	No. of bathrooms &/or toilets	Main kitcher
All dwellings	1-phase airconditioning 3.5 Star (new rating)	-	-	-	1 (dedicated)	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	1	yes

	Individual pe	Individual pool Individu		dual spa				Appliances & other efficiency measures				
Dwelling no.	Pool heating system	Timer	Spa heating system	Timer	Kitchen cooktop/oven	Refrigerator	Well ventilated fridge space	Dishwasher	Clothes washer	Clothes dryer	Indoor or sheltered clothes drying line	Private outdoor or unsheltered clothes drying line
All dwellings	-	-	-	-	electric cooktop & electric oven	-	yes	4.5 star	-	-	no	no

(iii) Thermal Comfort	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.			

(iii) Thermal Comfort	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(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.	~	v	~

	Therma	al loads
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)
C201, C301, C401, C501, C601, C701, C801, C901, C1001, C1101, C1201, C1301, C1401, C1501, C1601, C1701, C1801, C1901, C2001, C2101, C2201, C2301, C2401, C2501, C2601, C2701, C2801, C2901, C3001, C3101	5	26
C202, C302, C402, C502, C602, C702, C802, C902, C1002, C1102, C1202, C1302, C1402, C1502, C1602, C1702, C1802, C1902, C2002, C2102, C2202, C2302, C2402, C2502, C2602, C2702, C2802, C2902, C3002, C3102	9	44

		Thermal loads
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)
C203, C303, C403, C503, C603, C703, C803, C903, C1003, C1103, C1203, C1303, C1403, C1503, C1603, C1703, C1803, C1903, C2003, C2103, C2203, C2303, C2403, C2503, C2603, C2703, C2803, C2903, C3003, C3103	17	28
C206, C306, C406, C506, C606, C706, C806, C906, C1006, C1106, C1206, C1306, C1406, C1506, C1606, C1706, C1806, C1906, C2006, C2106, C2206, C2306, C2406, C2506, C2606, C2706, C2806, C2906, C3006, C3106	6	41
C207, C307, C407, C507, C607, C707, C807, C907, C1007, C1107, C1207, C1307, C1407, C1507, C1607, C1707, C1807, C1907, C2007, C2107, C2207, C2307, C2407, C2507, C2607, C2707, C2807, C2907, C3007, C3107	7	37
C208, C308, C408, C508, C608, C708, C808, C908, C1008, C1108, C1208, C1308, C1408, C1508, C1608, C1708, C1808, C1908, C2008, C2108, C2208, C2308, C2408, C2508, C2608, C2708, C2808, C2908, C3008, C3108	21	50
All other dwellings	6	52

(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	no common facility	5 star	6 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.		~	~

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

	Common area ventilation system		Common area lighting		
Common area	Ventilation system type	Ventilation efficiency measure	Primary type of artificial lighting	Lighting efficiency measure	Lighting control system/BMS
Lift car (No. 3)	-	-	halogen	none	No
Lift car (No. 4)	-	-	halogen	none	No

Central energy systems	Туре	Specification
Lift (No. 3)	gearless traction with V V V F motor	Number of levels (including basement): 35
Lift (No. 4)	gearless traction with V V V F motor	Number of levels (including basement): 35

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

(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.		v	
(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	no common facility	5 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.	~	~	~

3. 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	1. In these commitments, "applicant" means the person carrying out the development.	
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. 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). If a star or other rating is specified in a commitment, this is a minimum rating. 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	specifications accompanying the application for a construction certificate / complying development certificate, for the proposed development,	
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	residential and non-residential purposes). Commitments in this certificate which are specified to apply to a "common area" of a building or the	
3. 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		ng within the development, then that
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	5. If a star or other rating is specified in a commitment, this is a minimum rating.	

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).