BASIX™Report

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

Project summary

Project name	338 Pitt St - North Tower
Street address	338-348 PITT STREET SYDNEY 2000
Local Government Area	SYDNEY
Plan type and plan number	Deposited Plan 857070
Lot No.	10
Section no.	-
No. of residential flat buildings	1
Residential flat buildings: no. of dwellings	324
Multi-dwelling housing: no. of dwellings	0
No. of single dwelling houses	0

Project score

Water	50	Target 40
Thermal Performance	Pass	Target Pass
Energy	64	Target 63
Materials	-100	Target n/a

Description of project

Project address	
Project name	338 Pitt St - North Tower
Street address	338-348 PITT STREET SYDNEY 2000
Local Government Area	SYDNEY
Plan type and plan number	Deposited Plan 857070
Lot No.	10
Section no.	-

Project type	
No. of residential flat buildings	1
Residential flat buildings: no. of dwellings	324
Multi-dwelling housing: no. of dwellings	0
No. of single dwelling houses	0

Site details	
Site area (m²)	6091
Roof area (m²)	2321
Non-residential floor area (m²)	6029
Residential car spaces	223
Non-residential car spaces	23

Common area landscape	
Common area lawn (m²)	0
Common area garden (m²)	22
Area of indigenous or low water use species (m²)	0

Assessor details and thermal loads	
Assessor number	10228
Certificate number	HR-JVYZQA-01
Climate zone	17

Project score		
Water	50	Target 40
Thermal Performance	Pass	Target Pass
Energy	64	Target 63
Materials	-100	Target n/a

Description of project

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

Residential flat buildings - North Tower, 324 dwellings, 71 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)
03.N1	1	51.7	0	0	0
04.N2	2	85	0	0	0
05.N4	2	91.7	0	0	0
06.N3	2	86.5	0	0	0
07.N2	1	53.6	0	0	0
07.N6	1	51.8	0	0	0
08.N4	2	84.2	0	0	0
09.N2	1	53.6	0	0	0
09.N6	1	51.8	0	0	0
10.N4	2	84.2	0	0	0
11.N2	1	53.6	0	0	0
11.N6	1	51.8	0	0	0
12.N4	2	84.2	0	0	0
13.N2	1	53.6	0	0	0
13.N6	1	51.8	0	0	0
14.N4	2	84.2	0	0	0
15.N2	1	53.6	0	0	0
15.N6	1	51.8	0	0	0
16.N4	2	84.2	0	0	0
17.N2	1	53.6	0	0	0
17.N6	1	51.8	0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
03.N2	1	51.7	0	0	0
05.N1	3	131.2	0	0	0
05.N5	1	48.5	0	0	0
06.N4	2	84.2	0	0	0
07.N3	2	86.5	0	0	0
08.N1	1	51.6	0	0	0
08.N5	1	55.6	0	0	0
09.N3	2	86.5	0	0	0
10.N1	1	51.6	0	0	0
10.N5	1	55.6	0	0	0
11.N3	2	86.5	0	0	0
12.N1	1	51.6	0	0	0
12.N5	1	55.6	0	0	0
13.N3	2	86.5	0	0	0
14.N1	1	51.6	0	0	0
14.N5	1	55.6	0	0	0
15.N3	2	86.5	0	0	0
16.N1	1	51.6	0	0	0
16.N5	1	55.6	0	0	0
17.N3	2	86.5	0	0	0
18.N1	1	51.6	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)
03.N3	1	67.8	0	0	0
05.N2	2	98.2	0	0	0
06.N1	1	51.6	0	0	0
06.N5	1	55.6	0	0	0
07.N4	2	84.2	0	0	0
08.N2	1	53.6	0	0	0
08.N6	1	51.8	0	0	0
09.N4	2	84.2	0	0	0
10.N2	1	53.6	0	0	0
10.N6	1	51.8	0	0	0
11.N4	2	84.2	0	0	0
12.N2	1	53.6	0	0	0
12.N6	1	51.8	0	0	0
13.N4	2	84.2	0	0	0
14.N2	1	53.6	0	0	0
14.N6	1	51.8	0	0	0
15.N4	2	84.2	0	0	0
16.N2	1	53.6	0	0	0
16.N6	1	51.8	0	0	0
17.N4	2	84.2	0	0	0
18.N2	1	53.6	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)
04.N1	1	68.1	0	0	0
05.N3	2	83.2	0	0	0
06.N2	1	53.6	0	0	0
07.N1	1	51.6	0	0	0
07.N5	1	55.6	0	0	0
08.N3	2	86.5	0	0	0
09.N1	1	51.6	0	0	0
09.N5	1	55.6	0	0	0
10.N3	2	86.5	0	0	0
11.N1	1	51.6	0	0	0
11.N5	1	55.6	0	0	0
12.N3	2	86.5	0	0	0
13.N1	1	51.6	0	0	0
13.N5	1	55.6	0	0	0
14.N3	2	86.5	0	0	0
15.N1	1	51.6	0	0	0
15.N5	1	55.6	0	0	0
16.N3	2	86.5	0	0	0
17.N1	1	51.6	0	0	0
17.N5	1	55.6	0	0	0
18.N3	2	86.5	0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
18.N4	2	84.2	0	0	0
19.N2	1	53.6	0	0	0
19.N6	1	51.8	0	0	0
20.N4	2	84.2	0	0	0
21.N2	1	53.6	0	0	0
21.N6	1	51.8	0	0	0
22.N4	2	84.2	0	0	0
23.N2	1	53.6	0	0	0
23.N6	1	51.8	0	0	0
24.N4	2	84.2	0	0	0
25.N2	1	53.6	0	0	0
25.N6	1	51.8	0	0	0
26.N4	2	79.7	0	0	0
27.N4	2	82.7	0	0	0
28.N2	2	81.9	0	0	0
29.N4	3	97.7	0	0	0
30.N4	3	97.7	0	0	0
31.N4	3	97.7	0	0	0
32.N4	3	97.7	0	0	0
33.N4	3	97.7	0	0	0
34.N4	3	97.7	0	0	0
35.N4	3	97.7	0	0	0
36.N4	3	97.7	0	0	0
37.N4	3	97.7	0	0	0
38.N4	3	97.7	0	0	0
39.N4	3	97.7	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)
18.N5	1	55.6	0	0	0
19.N3	2	86.5	0	0	0
20.N1	1	51.6	0	0	0
20.N5	1	55.6	0	0	0
21.N3	2	86.5	0	0	0
22.N1	1	51.6	0	0	0
22.N5	1	55.6	0	0	0
23.N3	2	86.5	0	0	0
24.N1	1	51.6	0	0	0
24.N5	1	55.6	0	0	0
25.N3	2	86.5	0	0	0
26.N1	2	80.1	0	0	0
27.N1	1	51.7	0	0	0
27.N5	1	53.2	0	0	0
29.N1	2	88.7	0	0	0
30.N1	2	88.7	0	0	0
31.N1	2	88.7	0	0	0
32.N1	2	88.7	0	0	0
33.N1	2	88.7	0	0	0
34.N1	2	88.7	0	0	0
35.N1	2	88.7	0	0	0
36.N1	2	88.7	0	0	0
37.N1	2	88.7	0	0	0
38.N1	2	88.7	0	0	0
39.N1	2	88.7	0	0	0
40.N1	2	88.7	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)
18.N6	1	51.8	0	0	0
19.N4	2	84.2	0	0	0
20.N2	1	53.6	0	0	0
20.N6	1	51.8	0	0	0
21.N4	2	84.2	0	0	0
22.N2	1	53.6	0	0	0
22.N6	1	51.8	0	0	0
23.N4	2	84.2	0	0	0
24.N2	1	53.6	0	0	0
24.N6	1	51.8	0	0	0
25.N4	2	84.2	0	0	0
26.N2	3	117.5	0	0	0
27.N2	1	51.9	0	0	0
27.N6	1	51.8	0	0	0
29.N2	3	106.6	0	0	0
30.N2	3	106.6	0	0	0
31.N2	3	106.6	0	0	0
32.N2	3	106.6	0	0	0
33.N2	3	106.6	0	0	0
34.N2	3	106.6	0	0	0
35.N2	3	106.6	0	0	0
36.N2	3	106.6	0	0	0
37.N2	3	106.6	0	0	0
38.N2	3	106.6	0	0	0
39.N2	3	106.6	0	0	0
40.N2	3	106.6	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)
19.N1	1	51.6	0	0	0
19.N5	1	55.6	0	0	0
20.N3	2	86.5	0	0	0
21.N1	1	51.6	0	0	0
21.N5	1	55.6	0	0	0
22.N3	2	86.5	0	0	0
23.N1	1	51.6	0	0	0
23.N5	1	55.6	0	0	0
24.N3	2	86.5	0	0	0
25.N1	1	51.6	0	0	0
25.N5	1	55.6	0	0	0
26.N3	3	119.3	0	0	0
27.N3	2	83.9	0	0	0
28.N1	3	116.8	0	0	0
29.N3	3	153.2	0	0	0
30.N3	3	153.2	0	0	0
31.N3	3	153.2	0	0	0
32.N3	3	153.2	0	0	0
33.N3	3	153.2	0	0	0
34.N3	3	153.2	0	0	0
35.N3	3	153.2	0	0	0
36.N3	3	153.2	0	0	0
37.N3	3	153.2	0	0	0
38.N3	3	153.2	0	0	0
39.N3	3	153.2	0	0	0
40.N3	3	153.2	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)
40.N4	3	97.7	0	0	0
41.N4	3	97.7	0	0	0
42.N4	3	97.7	0	0	0
43.N4	3	97.7	0	0	0
44.N4	3	97.7	0	0	0
45.N4	3	97.6	0	0	0
46.N4	3	97.6	0	0	0
47.N4	3	97.6	0	0	0
48.N4	2	91.7	0	0	0
49.N4	2	94.2	0	0	0
50.N4	2	90.2	0	0	0
52.N4	3	99.8	0	0	0
53.N4	3	99.8	0	0	0
54.N4	3	99.8	0	0	0
55.N4	3	99.8	0	0	0
56.N4	3	99.8	0	0	0
57.N4	3	99.8	0	0	0
58.N4	3	99.8	0	0	0
59.N4	3	99.8	0	0	0
60.N4	3	99.8	0	0	0
61.N4	3	99.8	0	0	0
62.N4	3	99.8	0	0	0
63.N4	3	99.8	0	0	0
64.N4	3	99.8	0	0	0
65.N4	3	99.8	0	0	0
66.N4	3	99.8	0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
41.N1	2	88.7	0	0	0
42.N1	2	88.7	0	0	0
43.N1	2	88.7	0	0	0
44.N1	2	88.7	0	0	0
45.N1	2	88.8	0	0	0
46.N1	2	88.8	0	0	0
47.N1	2	88.8	0	0	0
48.N1	2	86.4	0	0	0
49.N1	2	84.1	0	0	0
50.N1	2	86.3	0	0	0
52.N1	2	91.4	0	0	0
53.N1	2	91.4	0	0	0
54.N1	2	91.4	0	0	0
55.N1	2	91.4	0	0	0
56.N1	2	91.4	0	0	0
57.N1	2	91.4	0	0	0
58.N1	2	91.4	0	0	0
59.N1	2	91.4	0	0	0
60.N1	2	91.4	0	0	0
61.N1	2	91.4	0	0	0
62.N1	2	91.4	0	0	0
63.N1	2	91.4	0	0	0
64.N1	2	91.4	0	0	0
65.N1	2	91.4	0	0	0
66.N1	2	91.4	0	0	0
67.N1	2	91.4	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)
41.N2	3	106.6	0	0	0
42.N2	3	106.6	0	0	0
43.N2	3	106.6	0	0	0
44.N2	3	106.6	0	0	0
45.N2	3	107.6	0	0	0
46.N2	3	107.6	0	0	0
47.N2	3	107.6	0	0	0
48.N2	3	128.1	0	0	0
49.N2	2	102.8	0	0	0
50.N2	3	128.3	0	0	0
52.N2	3	108.8	0	0	0
53.N2	3	108.8	0	0	0
54.N2	3	108.8	0	0	0
55.N2	3	108.8	0	0	0
56.N2	3	108.8	0	0	0
57.N2	3	108.8	0	0	0
58.N2	3	108.8	0	0	0
59.N2	3	108.8	0	0	0
60.N2	3	108.8	0	0	0
61.N2	3	108.8	0	0	0
62.N2	3	108.8	0	0	0
63.N2	3	108.8	0	0	0
64.N2	3	108.8	0	0	0
65.N2	3	108.8	0	0	0
66.N2	3	108.8	0	0	0
67.N2	3	108.8	0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
41.N3	3	153.2	0	0	0
42.N3	3	153.2	0	0	0
43.N3	3	153.2	0	0	0
44.N3	3	153.2	0	0	0
45.N3	3	153.2	0	0	0
46.N3	3	153.2	0	0	0
47.N3	3	153.2	0	0	0
48.N3	2	121.2	0	0	0
49.N3	3	145.8	0	0	0
50.N3	2	123	0	0	0
52.N3	3	155.8	0	0	0
53.N3	3	155.8	0	0	0
54.N3	3	155.8	0	0	0
55.N3	3	155.8	0	0	0
56.N3	3	155.8	0	0	0
57.N3	3	155.8	0	0	0
58.N3	3	155.8	0	0	0
59.N3	3	155.8	0	0	0
60.N3	3	155.8	0	0	0
61.N3	3	155.8	0	0	0
62.N3	3	155.8	0	0	0
63.N3	3	155.8	0	0	0
64.N3	3	155.8	0	0	0
65.N3	3	155.8	0	0	0
66.N3	3	155.8	0	0	0
67.N3	3	155.8	0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
67.N4	3	99.8	0	0	0
68.N4	3	99.8	0	0	0
69.N4	3	99.8	0	0	0
71.N1	3	103.3	0	0	0
72.N2	3	155.7	0	0	0
73.N3	4+	212.1	0	0	0
75.N1	4+	244.5	0	0	0
77.N1	4+	244.5	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)
68.N1	2	91.4	0	0	0
69.N1	2	91.4	0	0	0
70.N1	3	103.3	0	0	0
71.N2	3	155.7	0	0	0
72.N3	4+	212.1	0	0	0
74.N1	3	103.3	0	0	0
75.N2	4+	242.1	0	0	0
77.N2	4+	242.1	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)
68.N2	3	108.8	0	0	0
69.N2	3	108.8	0	0	0
70.N2	3	155.7	0	0	0
71.N3	4+	212.1	0	0	0
73.N1	3	103.3	0	0	0
74.N2	3	155.7	0	0	0
76.N1	4+	244.5	0	0	0
78.N1	4+	379.8	0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
68.N3	3	155.8	0	0	0
69.N3	3	155.8	0	0	0
70.N3	4+	212.1	0	0	0
72.N1	3	103.3	0	0	0
73.N2	3	155.7	0	0	0
74.N3	4+	212.1	0	0	0
76.N2	4+	242.1	0	0	0
78.N2	4+	375.7	0	0	0

Description of project

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

Common areas of unit building - North Tower

Common area	Floor area (m²)
Lift bank (No. 1)	-
Lift bank (No. 4)	-
Undercover car park area (No. 1)	1620
Undercover car park area (No. 4)	1620
Lift motor room (No. 2)	26
Pump room (No. 1)	37
Change rooms	44

Common area	Floor area (m²)
Lift bank (No. 2)	-
Indoor swimming pool and/or spa area (No. 1)	153
Undercover car park area (No. 2)	1620
Undercover car park area (No. 5)	1620
Lift motor room (No. 3)	13
Fire Pump room (No. 1)	71
Ground floor lobby type (No. 1)	93

Common area	Floor area (m²)
Lift bank (No. 3)	-
Gym area (No. 1)	148
Undercover car park area (No. 3)	1620
Lift motor room (No. 1)	26
Lift motor room (No. 4)	13
Plant or service room (No. 1)	659
Hallway/lobby type (No. 1)	2500

Schedule of BASIX commitments

1. Commitments for Residential flat buildings - North Tower

- (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 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 carriedout. It is a condition of any development consent granted, or complying development certificate issued, for the proposed development, that BASIX commitments be complied with.

1. Commitments for Residential flat buildings - North Tower

(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	52396	-	-

External wall types

External wall type	Construction type	Area (m2)	Low emissions option	Insulation
External wall type 1	framed (metal clad),frame:light steel frame	27609.5	-	-

Internal wall types

Internal wall type	Construction type	Area (m2)	Insulation
Internal wall type 1	plasterboard, frame:light steel frame	46716	-

Reinforcement concrete frames/columns		
Building has reinforced concrete frame/columns?	Volume (m³)	Low emissions option
yes	22568.5	-

Ceiling and roof types			
Ceiling and roof type	Area (m²)	Roof Insulation	Ceiling Insulation
concrete - plasterboard internal, frame: light steel frame	52082.5	-	-

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)
-	13576	-	13576	-	-	-	-

(b) Dwellings

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

	Fixtures					Appliances		Individual pool				Individual spa		
Dwelling no.	All shower-heads	All toilet flushing systems	All kitchen taps	All bathroom taps	HW recirculation or diversion	All clothes washers	All dish-washers	Volume (max volume)	Pool cover	Pool location	Pool shaded	Volume (max volume)	Spa cover	Spa shaded
All dwellings	4 star (> 6 but <= 7.5 L/min)	4 star	5 star	5 star	-	4.5 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	No alternative water supply	-	-	-	-	-	-	-

(ii) Energy	**Show on DA plans**	**Show on CC/CDC plans & specs**	**Certifier check**
(a) The applicant must comply with the commitments listed below in carrying out the development of a dwelling listed in a table below.			
(b) The applicant must install each hot water system specified for the dwelling in the table below, so that the dwelling's hot water is supplied by that system. If the table specifies a central hot water system for the dwelling, then the applicant must connect that central system to the dwelling, so that the dwelling's hot water is supplied by that central system.	✔	✔	✔
(c) The applicant must install, in each bathroom, kitchen and laundry of the dwelling, the ventilation system specified for that room in the table below. Each such ventilation system must have the operation control specified for it in the table.		✔	✔
(d) The applicant must install the cooling and heating system/s specified for the dwelling under the "Living areas" and "Bedroom areas" headings of the "Cooling" and "Heating" columns in the table below, in/for at least 1 living/bedroom area of the dwelling. If no cooling or heating system is specified in the table for "Living areas" or "Bedroom areas", then no systems may be installed in any such areas. If the term "zoned" is specified beside an air conditioning system, then the system must provide for day/night zoning between living areas and bedrooms.		✔	✔
(e) This commitment applies to each room or area of the dwelling which is referred to in a heading to the "Artificial lighting" column of the table below (but only to the extent specified for that room or area). The applicant must ensure that the "primary type of artificial lighting" for each such room in the dwelling is fluorescent lighting or light emitting diode (LED) lighting. If the term "dedicated" is specified for a particular room or area, then the light fittings in that room or area must only be capable of being used for fluorescent lighting or light emitting diode (LED) lighting.		✔	✔
(f) This commitment applies to each room or area of the dwelling which is referred to in a heading to the "Natural lighting" column of the table below (but only to the extent specified for that room or area). The applicant must ensure that each such room or area is fitted with a window and/or skylight.	✔	✔	✔
(g) This commitment applies if the applicant installs a water heating system for the dwelling's pool or spa. The applicant must:			
(aa) install the system specified for the pool in the "Individual Pool" column of the table below (or alternatively must not install any system for the pool). If specified, the applicant must install a timer, to control the pool's pump; and		✔	
(bb) install the system specified for the spa in the "Individual Spa" column of the table below (or alternatively must not install any system for the spa). If specified, the applicant must install a timer to control the spa's pump.		✔	
(h) The applicant must install in the dwelling:			
(aa) the kitchen cook-top and oven specified for that dwelling in the "Appliances & other efficiency measures" column of the table below;		✔	

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

	Hot water	Bathroom ventilation system		Kitchen ventilation system		Laundry ventilation system	
Dwelling no.	Hot water system	Each bathroom	Operation control	Each kitchen	Operation control	Each laundry	Operation control
All dwellings	Central hot water system (No. 1)	individual fan, ducted to façade or roof	manual switch on/off	individual fan, ducted to façade or roof	manual switch on/off	individual fan, ducted to façade or roof	manual switch on/off

	Cooling		Heating		Natural lighting	
Dwelling no.	living areas	bedroom areas	living areas	bedroom areas	No. of bathrooms or toilets	Main kitchen
All dwellings	1-phase airconditioning - ducted / EER 2.5 - 3.0	1-phase airconditioning - ducted / EER 2.5 - 3.0	1-phase airconditioning - ducted / EER 2.5 - 3.0	1-phase airconditioning - ducted / EER 2.5 - 3.0	0	no

	Individual pool			Individual spa		Appliances other efficiency measures				
Dwelling no.	Pool heating system	Pool Pump	Timer	Spa heating system	Timer	Kitchen cooktop/oven	Dishwasher	Clothes dryer	Indoor or sheltered clothes drying line	Private outdoor or unsheltered clothes drying line
All dwellings	-	-	-	-	-	electric cooktop & electric oven	4 star	9.0 star	no	no

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

	Thermal loads		
Dwelling no.	Area adjusted heating load (in MJ/m²/yr)	Area adjusted cooling load (in MJ/m²/yr)	Area adjusted total load (in MJ/m²/yr)
03.N1	20.1	4.2	24.300
03.N2	20.5	7.4	27.900
03.N3	24.8	13.1	37.900
04.N1	13.3	3.9	17.200

	Thermal loads		
Dwelling no.	Area adjusted heating load (in MJ/m²/yr)	Area adjusted cooling load (in MJ/m²/yr)	Area adjusted total load (in MJ/m²/yr)
04.N2	31.8	7.1	38.900
05.N2	15.6	7	22.600
05.N3	21.4	3.9	25.300
05.N4	21.8	9.3	31.100
05.N5	28.1	7.9	36.000
06.N1	16.6	8.5	25.100
06.N2	23.7	6.6	30.300
06.N4	18.7	4.5	23.200
06.N5	24.4	5.2	29.600
07.N1	19.4	9.3	28.700
07.N2	21.8	6.3	28.100
07.N3	20.4	7.4	27.800
07.N4	16.9	4.8	21.700
07.N6	27.4	10.4	37.800
08.N1	11.2	10	21.200
08.N2	19.1	6.3	25.400
08.N3	20.1	8.0	28.100
08.N4	18.4	4	22.400
08.N5	18.9	12.3	31.200
08.N6	28.5	10	38.500
09.N1	13.4	8.9	22.300
09.N2	17.5	6.2	23.700
09.N3	20.9	7.3	28.200
09.N4	20.9	4.6	25.500
09.N5	22.5	6.4	28.900
09.N6	30.1	7.2	37.300
10.N1	14.7	8.6	23.300
10.N2	18.4	6.1	24.500
10.N4	13	13.3	26.300
10.N5	25.2	8.2	33.400
11.N1	13.1	8.9	22.000

	Thermal loads		
Dwelling no.	Area adjusted heating load (in MJ/m²/yr)	Area adjusted cooling load (in MJ/m²/yr)	Area adjusted total load (in MJ/m²/yr)
11.N2	16.7	6.8	23.500
11.N3	19.2	7.6	26.800
11.N4	21.6	3.4	25.000
11.N5	23.2	8.7	31.900
12.N1	14.1	8.8	22.900
12.N2	19	6.1	25.100
12.N3	19.8	7.4	27.200
12.N4	23.7	3.2	26.900
12.N5	25.9	7.8	33.700
12.N6	31.8	6.8	38.600
13.N1	14.2	8.8	23.000
13.N2	19.2	5.8	25.000
13.N3	19.6	7.6	27.200
13.N4	19.6	4.6	24.200
13.N5	26.1	8	34.100
13.N6	32.1	6.9	39.000
14.N1	13.6	9	22.600
14.N2	17.4	6.6	24.000
14.N3	20.8	7.6	28.400
14.N4	21.8	3.5	25.300
14.N5	26.3	7.8	34.100
14.N6	31.9	6.9	38.800
15.N1	13.7	9.1	22.800
15.N2	19.6	5.9	25.500
15.N3	19.6	7.5	27.100
15.N4	19.8	3.5	23.300
15.N5	24.1	8.3	32.400
15.N6	31.6	6.9	38.500
16.N1	14	8.8	22.800
16.N2	17.8	6.5	24.300
16.N3	14.3	7.1	21.400

	Thermal loads		
Dwelling no.	Area adjusted heating load (in MJ/m²/yr)	Area adjusted cooling load (in MJ/m²/yr)	Area adjusted total load (in MJ/m²/yr)
16.N4	21.5	3.1	24.600
16.N5	26.8	7.5	34.300
17.N1	15.4	8	23.400
17.N2	18	6.5	24.500
17.N3	19.4	7.3	26.700
17.N4	20.4	3.5	23.900
17.N5	24.4	8.1	32.500
18.N1	14.3	8.7	23.000
18.N2	18.1	6.4	24.500
18.N3	15.8	6.7	22.500
18.N5	23	8.3	31.300
18.N6	31.8	7.2	39.000
19.N1	14.4	8.7	23.100
19.N2	17.8	6.3	24.100
19.N3	19.1	7.1	26.200
19.N4	20.7	3.3	24.000
19.N5	22.9	8.2	31.100
19.N6	30.7	7.1	37.800
20.N1	14.6	8.9	23.500
20.N2	18.5	6.5	25.000
20.N3	20.3	6.9	27.200
20.N4	20.5	3.7	24.200
20.N5	22.8	8.1	30.900
21.N1	14.7	9	23.700
21.N2	18.6	6.4	25.000
21.N3	20.2	7	27.200
21.N5	22.8	8.2	31.000
21.N6	31.1	7.7	38.800
22.N1	14.9	9	23.900
22.N2	18.8	6.4	25.200
22.N4	20.6	3.6	24.200

	Thermal loads		
Dwelling no.	Area adjusted heating load (in MJ/m²/yr)	Area adjusted cooling load (in MJ/m²/yr)	Area adjusted total load (in MJ/m²/yr)
22.N5	23	8.2	31.200
22.N6	30.6	7.5	38.100
23.N1	15	8.9	23.900
23.N2	18.9	6.6	25.500
23.N3	20.8	6.8	27.600
23.N4	21	3.2	24.200
23.N5	23.2	8.3	31.500
23.N6	31.8	6.9	38.700
24.N1	15.1	8.9	24.000
24.N2	21	5.9	26.900
24.N3	21	6.8	27.800
24.N4	22.7	3.1	25.800
24.N5	23.9	7.4	31.300
25.N1	16.9	9.3	26.200
25.N2	20.1	7.5	27.600
25.N3	21.1	6.9	28.000
25.N4	21.5	4.3	25.800
25.N5	22.6	8.4	31.000
26.N1	29.9	6.3	36.200
26.N2	19.2	5.4	24.600
26.N3	12.1	6	18.100
26.N4	33.5	5.2	38.700
27.N1	30.8	7.9	38.700
27.N2	27.4	8.7	36.100
27.N3	27.2	4.2	31.400
27.N4	24.8	4.8	29.600
27.N5	27.9	10.9	38.800
27.N6	29.7	8.6	38.300
28.N1	21.2	5.9	27.100
28.N2	23.8	4.9	28.700
29.N1	30.9	7.7	38.600

	Thermal loads		
Dwelling no.	Area adjusted heating load (in MJ/m²/yr)	Area adjusted cooling load (in MJ/m²/yr)	Area adjusted total load (in MJ/m²/yr)
29.N2	21.5	5	26.500
29.N4	28	6.1	34.100
30.N1	30.6	7.1	37.700
30.N2	20.6	5.2	25.800
30.N3	17.9	6.9	24.800
30.N4	31.1	4.9	36.000
31.N1	30.7	7.2	37.900
31.N2	20.9	5.2	26.100
31.N4	29.3	5.5	34.800
32.N1	31.5	6.8	38.300
32.N3	17.8	7.3	25.100
32.N4	29.5	5.7	35.200
33.N1	25.9	8.5	34.400
33.N2	20.8	5.3	26.100
33.N3	16.5	7.7	24.200
33.N4	26.9	6.5	33.400
34.N1	31	6.8	37.800
34.N4	31.6	4.8	36.400
35.N1	30.3	7	37.300
35.N4	30.3	4.9	35.200
36.N1	31	7	38.000
36.N2	21	5.1	26.100
36.N3	18.2	7.1	25.300
36.N4	31.7	4.8	36.500
37.N2	21	5.2	26.200
37.N3	18.3	7.5	25.800
38.N1	31.1	6.9	38.000
38.N2	21.2	5	26.200
38.N3	18.3	7.1	25.400
39.N1	31.2	6.7	37.900
39.N3	18.5	7.1	25.600

	Thermal loads		
Dwelling no.	Area adjusted heating load (in MJ/m²/yr)	Area adjusted cooling load (in MJ/m²/yr)	Area adjusted total load (in MJ/m²/yr)
40.N1	31.2	6.8	38.000
40.N3	18.5	7.3	25.800
41.N1	31.4	6.8	38.200
41.N2	21.2	5.1	26.300
41.N3	18.6	7.3	25.900
41.N4	32.1	4.9	37.000
42.N1	31.4	6.9	38.300
42.N3	18.7	7.2	25.900
42.N4	32.1	4.8	36.900
43.N1	31.5	7.3	38.800
43.N2	21.3	5.1	26.400
43.N3	18.8	7	25.800
43.N4	31.1	5.4	36.500
44.N1	31.6	7	38.600
44.N2	22.8	5.3	28.100
44.N3	17.6	7.6	25.200
44.N4	30.2	5.6	35.800
45.N1	29.8	6.9	36.700
45.N2	13	4.6	17.600
45.N3	19.1	7.2	26.300
46.N1	29.5	7.1	36.600
46.N2	16.6	3.7	20.300
47.N1	32.3	6.4	38.700
47.N2	19.4	5.1	24.500
47.N3	18.2	7.7	25.900
47.N4	30.4	6.2	36.600
48.N1	26.7	8.6	35.300
48.N2	16.3	4.6	20.900
48.N3	15.2	6.8	22.000
48.N4	31.3	7.7	39.000
49.N1	32.8	4.4	37.200

	Thermal loads		
Dwelling no.	Area adjusted heating load (in MJ/m²/yr)	Area adjusted cooling load (in MJ/m²/yr)	Area adjusted total load (in MJ/m²/yr)
49.N2	15.2	3.7	18.900
49.N3	14.4	6	20.400
49.N4	32.5	5.4	37.900
50.N1	28.6	5.6	34.200
50.N2	22.4	5.4	27.800
50.N3	24.5	9.1	33.600
50.N4	29.3	6.1	35.400
52.N2	10.6	5.4	16.000
52.N4	29.1	5.1	34.200
53.N2	15.5	5.8	21.300
53.N3	17.4	7.5	24.900
54.N2	13.9	5.9	19.800
54.N3	15.3	7.7	23.000
55.N2	13.8	5.8	19.600
55.N3	15.2	8.2	23.400
56.N1	31.1	7.1	38.200
56.N2	14	5.9	19.900
56.N3	15.4	8.1	23.500
56.N4	28.1	5.00	33.100
57.N2	14	5.8	19.800
57.N3	15.4	7.9	23.300
57.N4	28.1	5.1	33.200
58.N2	15.4	5.5	20.900
58.N3	17.7	7.5	25.200
59.N2	15.6	5.7	21.300
59.N3	17.7	7.6	25.300
59.N4	28.2	5.3	33.500
60.N1	30.9	6.8	37.700
60.N2	13.6	4.3	17.900
60.N3	15.4	6.8	22.200
61.N1	30.7	6.9	37.600

	Thermal loads		
Dwelling no.	Area adjusted heating load (in MJ/m²/yr)	Area adjusted cooling load (in MJ/m²/yr)	Area adjusted total load (in MJ/m²/yr)
61.N2	15.2	4.3	19.500
61.N3	17.7	7	24.700
61.N4	28.3	5.2	33.500
62.N2	13.8	4.4	18.200
62.N3	15.5	6.8	22.300
62.N4	28.4	5.1	33.500
63.N2	13.9	4.3	18.200
63.N3	15.7	6.6	22.300
64.N1	31.2	7	38.200
64.N2	15.5	4.1	19.600
64.N3	18.9	6.5	25.400
65.N2	15.4	4.3	19.700
65.N3	18.9	6.7	25.600
66.N1	31.7	6.8	38.500
66.N2	14	4.2	18.200
66.N3	15.7	7	22.700
66.N4	28.6	5.2	33.800
67.N1	31.7	6.9	38.600
67.N2	15.6	4.1	19.700
67.N3	19.1	6.4	25.500
67.N4	28.6	5.3	33.900
68.N1	31.7	7	38.700
68.N2	15.5	4.3	19.800
68.N3	19.1	6.5	25.600
68.N4	28.7	5.3	34.000
69.N1	30.8	7.3	38.100
69.N2	14.6	4.6	19.200
69.N3	17	7.1	24.100
69.N4	28.7	4.9	33.600
70.N1	30.1	5.5	35.600
70.N3	23.5	7.1	30.600

	Thermal loads		
Dwelling no.	Area adjusted heating load (in MJ/m²/yr)	Area adjusted cooling load (in MJ/m²/yr)	Area adjusted total load (in MJ/m²/yr)
71.N1	30.5	5.4	35.900
71.N2	23.7	5.2	28.900
71.N3	24.2	7.1	31.300
72.N1	29.6	5.4	35.000
72.N2	23.5	5.1	28.600
73.N1	29.6	5.6	35.200
73.N3	23.6	7.5	31.100
74.N1	29.5	5.8	35.300
74.N2	25.9	5.1	31.000
75.N1	20.1	7.4	27.500
75.N2	21.1	6.4	27.500
76.N2	20.8	6.4	27.200
77.N2	21	6.2	27.200
78.N1	22.7	13.4	36.100
78.N2	22.5	13.5	36.000
05.N1, 32.N2	20.9	5.3	26.200
06.N3, 22.N3	20.6	6.8	27.400
07.N5, 10.N3	19.9	7.4	27.300
18.N4, 21.N4	20.7	3.5	24.200
29.N3, 34.N3	18	7.6	25.600
31.N3, 46.N3	19.1	7.3	26.400
34.N2, 35.N2	20.9	5.1	26.000
35.N3, 52.N3	18	7.5	25.500
37.N1, 62.N1	31.1	7	38.100
37.N4, 38.N4	30.6	5.4	36.000
39.N4, 40.N4	31.9	4.8	36.700
45.N4, 46.N4	32.6	5	37.600
53.N1, 54.N1	30.9	7.1	38.000
58.N1, 59.N1	31.2	7.1	38.300
58.N4, 60.N4	28.3	5.3	33.600
70.N2, 73.N2	23.6	5.1	28.700

	Thermal loads		
Dwelling no.	**Area adjusted heating load (in MJ/m²/yr)**	**Area adjusted cooling load (in MJ/m²/yr)**	**Area adjusted total load (in MJ/m²/yr)**
72.N3, 74.N3	23.5	7.3	30.800
76.N1, 77.N1	20	7.4	27.400
10.N6, 63.N1, 65.N1	31.5	6.9	38.400
11.N6, 24.N6, 25.N6	31.6	7.1	38.700
16.N6, 17.N6, 52.N1	31.8	7	38.800
20.N6, 55.N1, 57.N1	30.9	7.2	38.100
39.N2, 40.N2, 42.N2	21.1	5.2	26.300
53.N4, 54.N4, 55.N4	28	5	33.000
All other dwellings	28.5	5.2	33.700

(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	5 star	no common laundry facility

Central systems	Size	Configuration	Connection (to allow for...)
Fire sprinkler system (No. 1)	-	So that fire sprinkler test water is contained within the fire sprinkler system for re-use, rather than disposed.	-
Fire sprinkler system (No. 2)	-	So that fire sprinkler test water is contained within the fire sprinkler system for re-use, rather than disposed.	-
Fire sprinkler system (No. 4)	-	So that fire sprinkler test water is contained within the fire sprinkler system for re-use, rather than disposed.	-
Fire sprinkler system (No. 5)	-	-	-

(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 bank (No. 1)	ventilation (supply + exhaust)	-	light-emitting diode	connected to lift call button	yes
Lift bank (No. 2)	no mechanical ventilation	-	light-emitting diode	connected to lift call button	yes
Lift bank (No. 3)	no mechanical ventilation	-	light-emitting diode	connected to lift call button	yes
Lift bank (No. 4)	ventilation (supply + exhaust)	-	light-emitting diode	connected to lift call button	yes
Indoor swimming pool and/or spa area (No. 1)	tempered supply air only	time clock or BMS controlled	light-emitting diode	zoned switching	yes
Gym area (No. 1)	air conditioning system	time clock or BMS controlled	light-emitting diode	zoned switching	yes
Undercover car park area (No. 1)	ventilation (supply + exhaust)	carbon monoxide monitor + VSD fan	light-emitting diode	zoned switching with daylight sensor	yes
Undercover car park area (No. 2)	ventilation (supply + exhaust)	carbon monoxide monitor + VSD fan	light-emitting diode	zoned switching with motion sensor	yes
Undercover car park area (No. 3)	ventilation (supply + exhaust)	carbon monoxide monitor + VSD fan	light-emitting diode	zoned switching with motion sensor	yes
Undercover car park area (No. 4)	ventilation (supply + exhaust)	carbon monoxide monitor + VSD fan	light-emitting diode	zoned switching with motion sensor	yes
Undercover car park area (No. 5)	ventilation (supply + exhaust)	carbon monoxide monitor + VSD fan	light-emitting diode	zoned switching with motion sensor	yes
Lift motor room (No. 1)	ventilation exhaust only	interlocked to light	light-emitting diode	motion sensors	yes
Lift motor room (No. 2)	ventilation exhaust only	interlocked to light	light-emitting diode	motion sensors	yes
Lift motor room (No. 3)	ventilation exhaust only	interlocked to light	light-emitting diode	motion sensors	yes
Lift motor room (No. 4)	ventilation exhaust only	interlocked to light	light-emitting diode	motion sensors	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**
Pump room (No. 1)	ventilation (supply + exhaust)	thermostatically controlled	light-emitting diode	motion sensors	yes
Garbage room (No. 1)	ventilation (supply + exhaust)	-	light-emitting diode	motion sensors	yes
Fire Pump room (No. 1)	ventilation exhaust only	thermostatically controlled	light-emitting diode	motion sensors	yes
Plant or service room (No. 1)	ventilation (supply + exhaust)	thermostatically controlled	light-emitting diode	motion sensors	yes
Change rooms	ventilation (supply + exhaust)	time clock or BMS controlled	light-emitting diode	time clock and motion sensors	yes
Ground floor lobby type (No. 1)	tempered supply air only	time clock or BMS controlled	light-emitting diode	time clock and motion sensors	yes
Hallway/lobby type (No. 1)	tempered supply air only	time clock or BMS controlled	light-emitting diode	time clock and motion sensors	yes

Central energy systems	Type	Specification
Lift bank (No. 1)	permanent magnet synchronous motor (PMSM) and regenerative drive	Number of levels (including basement): 71 number of levels from the bottom of the lift shaft to the top of the lift shaft: 79 number of lifts: 2 lift load capacity: >= 1001 kg but <= 1500kg
Lift bank (No. 2)	permanent magnet synchronous motor (PMSM) and regenerative drive	Number of levels (including basement): 71 number of levels from the bottom of the lift shaft to the top of the lift shaft: 79 number of lifts: 2 lift load capacity: >= 1001 kg but <= 1500kg
Lift bank (No. 3)	permanent magnet synchronous motor (PMSM) and regenerative drive	Number of levels (including basement): 25 number of levels from the bottom of the lift shaft to the top of the lift shaft: 28 number of lifts: 1 lift load capacity: >= 1001 kg but <= 1500kg
Lift bank (No. 4)	permanent magnet synchronous motor (PMSM) and regenerative drive	Number of levels (including basement): 25 number of levels from the bottom of the lift shaft to the top of the lift shaft: 28 number of lifts: 1 lift load capacity: >= 1001 kg but <= 1500kg
Central hot water system (No. 1)	electric heat pump – air sourced	Piping insulation (ringmain & supply risers): (a) Piping external to building: no external pipework; (b) Piping internal to building: R1.0 (~38 mm) (c) Unit Efficiency: 3.5 < COP <= 4.0

Central energy systems	Type	Specification
Central cooling system (No. 1)	chilled water fan coil units	Energy source: electric driven compressor Heat rejection method: evaporative cooled condenser Unit efficiency (min): low – COP < 3.5
Central heating system (No. 1)	water source packaged units + heated water	Energy source: electric heat pump Unit efficiency low – COP < 3.5

2. 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:	30458	-	none

External wall types

External wall type	Construction type	Area (m2)	Low emissions option	Insulation
External wall type 1	framed (metal clad),frame:light steel frame	8095.5	-	-
External wall type 2	concrete panel/ plasterboard,frame:no frame	3145	-	-

Internal wall types

Internal wall type	Construction type	Area (m2)	Insulation
Internal wall type 1	block with low cement content and reconstituted sawdust, frame:no frame	23617.5	-

Reinforcement concrete frames/columns		
Building has reinforced concrete frame/columns?	Volume (m³)	Low emissions option
yes	5553.5	-

Ceiling and roof types			
Ceiling and roof type	Area (m²)	Roof Insulation	Ceiling Insulation
concrete - plasterboard internal, frame: light steel frame	857.50	-	-
concrete - bare internal, frame: no frame	31017	-	-

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)
-	-	-	-	-	-	-	-

(b) Common areas and central systems/facilities

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

Common area	Showerheads rating	Toilets rating	Taps rating	Clothes washers rating
All common areas	4 star (> 6 but <= 7.5 L/min)	4 star	5 star	no common laundry facility

Central systems	Size	Configuration	Connection (to allow for...)
Swimming pool (No. 1)	Volume: 72 kLs	Location: Indoor swimming pool and/or spa area (No. 1)	-
Central water tank - rainwater or stormwater (No. 1)	10000	To collect run-off from at least: - 341 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 22 square metres of common landscaped area on the site - car washing in 0 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.		✔	✔

(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.	✔	✔	✔

Central energy systems	Type	Specification
Swimming pool (No. 1)	Heating source: electric heat pump	Pump controlled by timer: yes
Alternative energy supply	Photovoltaic system	Rated electrical output (min): 13 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).