

# BASIX<sup>®</sup>Certificate

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## Multi Dwelling

Certificate number: 628683M\_06

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 the Department. This document is available at [www.basix.nsw.gov.au](http://www.basix.nsw.gov.au)

This certificate is a revision of certificate number 628683M\_04 lodged with the consent authority or certifier on 04 March 2016 with application 6633.

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

Secretary

Date of issue: Friday, 16 June 2017

To be valid, this certificate must be lodged within 3 months of the date of issue.



### Project summary

Project name	SICEEP Darling Square South East Plot_06
Street address	82 Hay Street Haymarket 2000
Local Government Area	Sydney City Council
Plan type and plan number	deposited 827982
Lot no.	1
Section no.	-
No. of residential flat buildings	3
No. of units in residential flat buildings	390
No. of multi-dwelling houses	0
No. of single dwelling houses	0

### Project score

Water	✓ 43	Target 40
Thermal Comfort	✓ Pass	Target Pass
Energy	✓ 22	Target 20

### Certificate Prepared by

Name / Company Name: Lend Lease Project Management & Construction

ABN (if applicable): 97000098162

# Description of project

## Project address

Project name	SICEEP Darling Square South East Plot_06
Street address	82 Hay Street Haymarket 2000
Local Government Area	Sydney City Council
Plan type and plan number	deposited 827982
Lot no.	1
Section no.	-

## Project type

No. of residential flat buildings	3
No. of units in residential flat buildings	390
No. of multi-dwelling houses	0
No. of single dwelling houses	0

## Site details

Site area (m²)	4646
Roof area (m²)	2545
Non-residential floor area (m²)	1729.0
Residential car spaces	269
Non-residential car spaces	3

## Common area landscape

Common area lawn (m²)	2306.0
Common area garden (m²)	477.0
Area of indigenous or low water use species (m²)	0.0

## Assessor details

Assessor number	101142
Certificate number	1011175831
Climate zone	17

## Project score

Water	✓ 43	Target 40
Thermal Comfort	✓ Pass	Target Pass
Energy	✓ 22	Target 20

## Description of project

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

### Residential flat buildings - SE1, 292 dwellings, 29 storeys above ground

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
1	2	76.4	0.0	0.0	0.0
5	1	61.7	0.0	0.0	0.0
9	1	46.7	0.0	0.0	0.0
13	2	76.4	0.0	0.0	0.0
17	1	46.8	0.0	0.0	0.0
21	1	49.8	0.0	0.0	0.0
25	1	47.6	0.0	0.0	0.0
29	1	47.0	0.0	0.0	0.0
33	1	48.2	0.0	4.2	0.0
37	1	51.1	0.0	0.0	0.0
41	1	88.7	0.0	0.0	0.0
45	1	81.0	0.0	0.0	0.0
49	2	81.6	0.0	0.0	0.0
53	1	81.6	0.0	0.0	0.0
57	2	81.6	0.0	0.0	0.0
61	2	81.6	0.0	0.0	0.0
65	1	79.2	0.0	0.0	0.0
69	2	80.7	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
2	1	61.8	0.0	0.0	0.0
6	1	60.0	0.0	0.0	0.0
10	1	36.9	0.0	0.0	0.0
14	1	61.7	0.0	0.0	0.0
18	1	47.0	0.0	0.0	0.0
22	2	76.4	0.0	0.0	0.0
26	1	46.8	0.0	0.0	0.0
30	1	49.8	0.0	0.0	0.0
34	1	48.2	0.0	4.2	0.0
38	2	73.4	0.0	0.0	0.0
42	1	81.0	0.0	0.0	0.0
46	2	81.6	0.0	0.0	0.0
50	2	81.6	0.0	0.0	0.0
54	1	81.6	0.0	0.0	0.0
58	2	81.6	0.0	0.0	0.0
62	2	81.6	0.0	0.0	0.0
66	1	79.2	0.0	0.0	0.0
70	1	80.7	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
3	1	50.8	0.0	0.0	0.0
7	1	47.5	0.0	0.0	0.0
11	1	47.0	0.0	0.0	0.0
15	1	60.1	0.0	0.0	0.0
19	1	36.9	0.0	0.0	0.0
23	1	63.0	0.0	0.0	0.0
27	1	47.0	0.0	0.0	0.0
31	1	43.6	0.0	5.8	0.0
35	1	49.4	0.0	1.9	0.0
39	2	73.4	0.0	0.0	0.0
43	1	81.0	0.0	0.0	0.0
47	2	81.6	0.0	0.0	0.0
51	2	81.6	0.0	0.0	0.0
55	1	81.6	0.0	0.0	0.0
59	1	81.6	0.0	0.0	0.0
63	2	79.2	0.0	0.0	0.0
67	1	80.7	0.0	0.0	0.0
71	2	80.7	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
4	2	76.4	0.0	0.0	0.0
8	1	46.9	0.0	0.0	0.0
12	1	49.8	0.0	0.0	0.0
16	1	47.6	0.0	0.0	0.0
20	1	47.0	0.0	0.0	0.0
24	1	60.4	0.0	0.0	0.0
28	1	36.9	0.0	0.0	0.0
32	1	39.4	0.0	2.4	0.0
36	2	66.1	0.0	1.0	0.0
40	1	53.5	0.0	0.0	0.0
44	1	81.0	0.0	0.0	0.0
48	1	81.6	0.0	0.0	0.0
52	2	81.6	0.0	0.0	0.0
56	1	81.6	0.0	0.0	0.0
60	2	81.6	0.0	0.0	0.0
64	1	79.2	0.0	0.0	0.0
68	1	80.7	0.0	0.0	0.0
72	2	80.7	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
73	2	80.7	0.0	0.0	0.0
77	1	80.7	0.0	0.0	0.0
81	1	80.7	0.0	0.0	0.0
85	2	79.1	0.0	0.0	0.0
89	1	80.5	0.0	0.0	0.0
93	2	80.5	0.0	0.0	0.0
97	1	80.5	0.0	0.0	0.0
101	2	80.5	0.0	0.0	0.0
105	2	79.2	0.0	0.0	0.0
109	1	80.8	0.0	0.0	0.0
113	2	80.8	0.0	0.0	0.0
117	2	80.8	0.0	0.0	0.0
121	1	80.8	0.0	0.0	0.0
125	1	80.8	0.0	0.0	0.0
129	2	47.8	0.0	0.0	0.0
133	1	48.6	0.0	0.0	0.0
137	2	48.6	0.0	0.0	0.0
141	1	48.6	0.0	0.0	0.0
145	2	48.6	0.0	0.0	0.0
149	2	79.8	0.0	0.0	0.0
153	1	46.4	0.0	0.0	0.0
157	2	77.6	0.0	0.0	0.0
161	2	78.2	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
74	2	80.7	0.0	0.0	0.0
78	1	80.7	0.0	0.0	0.0
82	2	80.7	0.0	0.0	0.0
86	1	79.1	0.0	0.0	0.0
90	2	80.5	0.0	0.0	0.0
94	2	80.5	0.0	0.0	0.0
98	1	80.5	0.0	0.0	0.0
102	2	80.5	0.0	0.0	0.0
106	2	79.2	0.0	0.0	0.0
110	1	80.8	0.0	0.0	0.0
114	1	80.8	0.0	0.0	0.0
118	2	80.8	0.0	0.0	0.0
122	1	80.8	0.0	0.0	0.0
126	2	47.8	0.0	0.0	0.0
130	1	48.6	0.0	0.0	0.0
134	2	48.6	0.0	0.0	0.0
138	2	48.6	0.0	0.0	0.0
142	1	48.6	0.0	0.0	0.0
146	2	48.6	0.0	0.0	0.0
150	2	79.8	0.0	0.0	0.0
154	1	55.4	0.0	0.0	0.0
158	1	53.4	0.0	0.0	0.0
162	2	78.4	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
75	1	80.7	0.0	0.0	0.0
79	2	80.7	0.0	0.0	0.0
83	2	80.7	0.0	0.0	0.0
87	1	79.1	0.0	0.0	0.0
91	2	80.5	0.0	0.0	0.0
95	2	80.5	0.0	0.0	0.0
99	1	80.5	0.0	0.0	0.0
103	1	80.5	0.0	0.0	0.0
107	2	79.2	0.0	0.0	0.0
111	1	80.8	0.0	0.0	0.0
115	2	80.8	0.0	0.0	0.0
119	1	80.8	0.0	0.0	0.0
123	2	80.8	0.0	0.0	0.0
127	2	47.8	0.0	0.0	0.0
131	1	48.6	0.0	0.0	0.0
135	2	48.6	0.0	0.0	0.0
139	2	48.6	0.0	0.0	0.0
143	1	48.6	0.0	0.0	0.0
147	1	79.8	0.0	0.0	0.0
151	2	79.8	0.0	0.0	0.0
155	1	55.4	0.0	0.0	0.0
159	2	73.4	0.0	0.0	0.0
163	1	47.1	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
76	1	80.7	0.0	0.0	0.0
80	2	80.7	0.0	0.0	0.0
84	2	79.1	0.0	0.0	0.0
88	1	80.5	0.0	0.0	0.0
92	1	80.5	0.0	0.0	0.0
96	2	80.5	0.0	0.0	0.0
100	1	80.5	0.0	0.0	0.0
104	2	80.5	0.0	0.0	0.0
108	1	79.2	0.0	0.0	0.0
112	2	80.8	0.0	0.0	0.0
116	2	80.8	0.0	0.0	0.0
120	1	80.8	0.0	0.0	0.0
124	2	80.8	0.0	0.0	0.0
128	2	47.8	0.0	0.0	0.0
132	1	48.6	0.0	0.0	0.0
136	1	48.6	0.0	0.0	0.0
140	2	48.6	0.0	0.0	0.0
144	1	48.6	0.0	0.0	0.0
148	2	79.8	0.0	0.0	0.0
152	1	47.1	0.0	0.0	0.0
156	2	64.0	0.0	0.0	0.0
160	2	77.7	0.0	0.0	0.0
164	1	46.4	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
165	1	55.4	0.0	0.0	0.0
169	1	53.4	0.0	0.0	0.0
173	2	78.4	0.0	0.0	0.0
177	1	55.4	0.0	0.0	0.0
181	2	73.4	0.0	0.0	0.0
185	1	47.1	0.0	0.0	0.0
189	2	64.0	0.0	0.0	0.0
193	2	77.7	0.0	0.0	0.0
197	1	46.4	0.0	0.0	0.0
201	2	77.6	0.0	0.0	0.0
205	2	78.2	0.0	0.0	0.0
209	1	55.4	0.0	0.0	0.0
213	1	53.4	0.0	0.0	0.0
217	2	78.4	0.0	0.0	0.0
221	1	55.4	0.0	0.0	0.0
225	2	73.4	0.0	0.0	0.0
229	1	47.1	0.0	0.0	0.0
233	2	64.0	0.0	0.0	0.0
237	2	77.7	0.0	0.0	0.0
241	1	46.4	0.0	0.0	0.0
245	2	77.6	0.0	0.0	0.0
249	2	78.2	0.0	0.0	0.0
253	1	55.4	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
166	1	55.4	0.0	0.0	0.0
170	2	73.4	0.0	0.0	0.0
174	1	47.1	0.0	0.0	0.0
178	2	64.0	0.0	0.0	0.0
182	2	77.7	0.0	0.0	0.0
186	1	46.4	0.0	0.0	0.0
190	2	77.6	0.0	0.0	0.0
194	2	78.2	0.0	0.0	0.0
198	1	55.4	0.0	0.0	0.0
202	1	53.4	0.0	0.0	0.0
206	2	78.4	0.0	0.0	0.0
210	1	55.4	0.0	0.0	0.0
214	2	73.4	0.0	0.0	0.0
218	1	47.1	0.0	0.0	0.0
222	2	64.0	0.0	0.0	0.0
226	2	77.7	0.0	0.0	0.0
230	1	46.4	0.0	0.0	0.0
234	2	77.6	0.0	0.0	0.0
238	2	78.2	0.0	0.0	0.0
242	1	55.4	0.0	0.0	0.0
246	1	53.4	0.0	0.0	0.0
250	2	78.4	0.0	0.0	0.0
254	1	55.4	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
167	2	64.0	0.0	0.0	0.0
171	2	77.7	0.0	0.0	0.0
175	1	46.4	0.0	0.0	0.0
179	2	77.6	0.0	0.0	0.0
183	2	78.2	0.0	0.0	0.0
187	1	55.4	0.0	0.0	0.0
191	1	53.4	0.0	0.0	0.0
195	2	78.4	0.0	0.0	0.0
199	1	55.4	0.0	0.0	0.0
203	2	73.4	0.0	0.0	0.0
207	1	47.1	0.0	0.0	0.0
211	2	64.0	0.0	0.0	0.0
215	2	77.7	0.0	0.0	0.0
219	1	46.4	0.0	0.0	0.0
223	2	77.6	0.0	0.0	0.0
227	2	78.2	0.0	0.0	0.0
231	1	55.4	0.0	0.0	0.0
235	1	53.4	0.0	0.0	0.0
239	2	78.4	0.0	0.0	0.0
243	1	55.4	0.0	0.0	0.0
247	2	73.4	0.0	0.0	0.0
251	1	47.1	0.0	0.0	0.0
255	2	64.0	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
168	2	77.6	0.0	0.0	0.0
172	2	78.2	0.0	0.0	0.0
176	1	55.4	0.0	0.0	0.0
180	1	53.4	0.0	0.0	0.0
184	2	78.4	0.0	0.0	0.0
188	1	55.4	0.0	0.0	0.0
192	2	73.4	0.0	0.0	0.0
196	1	47.1	0.0	0.0	0.0
200	2	64.0	0.0	0.0	0.0
204	2	77.7	0.0	0.0	0.0
208	1	46.4	0.0	0.0	0.0
212	2	77.6	0.0	0.0	0.0
216	2	78.2	0.0	0.0	0.0
220	1	55.4	0.0	0.0	0.0
224	1	53.4	0.0	0.0	0.0
228	2	78.4	0.0	0.0	0.0
232	1	55.4	0.0	0.0	0.0
236	2	73.4	0.0	0.0	0.0
240	1	47.1	0.0	0.0	0.0
244	2	64.0	0.0	0.0	0.0
248	2	77.7	0.0	0.0	0.0
252	1	46.4	0.0	0.0	0.0
256	2	77.6	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
257	1	53.4	0.0	0.0	0.0
261	2	78.4	0.0	0.0	0.0
265	1	55.4	0.0	0.0	0.0
269	2	73.4	0.0	0.0	0.0
273	1	47.1	0.0	0.0	0.0
277	2	64.0	0.0	0.0	0.0
281	3	102.1	0.0	0.0	0.0
285	1	55.4	0.0	0.0	0.0
289	2	78.3	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
258	2	73.4	0.0	0.0	0.0
262	1	47.1	0.0	0.0	0.0
266	2	64.0	0.0	0.0	0.0
270	2	51.77	0.0	0.0	0.0
274	1	46.4	0.0	0.0	0.0
278	2	77.6	0.0	0.0	0.0
282	3	95.3	0.0	0.0	0.0
286	1	55.4	0.0	0.0	0.0
290	2	87.0	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
259	2	77.7	0.0	0.0	0.0
263	1	46.4	0.0	0.0	0.0
267	2	77.6	0.0	0.0	0.0
271	2	78.2	0.0	0.0	0.0
275	1	55.4	0.0	0.0	0.0
279	2	78.3	0.0	0.0	0.0
283	1	47.1	0.0	0.0	0.0
287	2	64.0	0.0	0.0	0.0
291	3	102.1	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
260	2	78.2	0.0	0.0	0.0
264	1	55.4	0.0	0.0	0.0
268	1	53.4	0.0	0.0	0.0
272	2	78.4	0.0	0.0	0.0
276	1	55.4	0.0	0.0	0.0
280	2	87.0	0.0	0.0	0.0
284	1	46.4	0.0	0.0	0.0
288	2	77.6	0.0	0.0	0.0
292	3	95.3	0.0	0.0	0.0

### Residential flat buildings - SE2, 28 dwellings, 9 storeys above ground

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
1	1	50.9	0.0	0.0	0.0
5	1	98.6	0.0	0.0	0.0
9	1	81.8	0.0	0.0	0.0
13	1	81.9	0.0	0.0	0.0
17	1	81.8	0.0	0.0	0.0
21	1	52.1	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
2	2	98.6	0.0	0.0	0.0
6	2	98.6	0.0	0.0	0.0
10	2	81.8	0.0	0.0	0.0
14	2	81.9	0.0	0.0	0.0
18	2	81.8	0.0	0.0	0.0
22	2	52.1	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
3	2	79.0	0.0	0.0	0.0
7	2	79.0	0.0	0.0	0.0
11	2	79.0	0.0	0.0	0.0
15	2	79.0	0.0	0.0	0.0
19	2	79.0	0.0	0.0	0.0
23	2	52.4	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
4	3	104.6	0.0	0.0	0.0
8	3	104.6	0.0	0.0	0.0
12	3	104.6	0.0	0.0	0.0
16	3	104.6	0.0	0.0	0.0
20	3	104.6	0.0	0.0	0.0
24	3	104.6	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
25	4 or more bedrooms	168.2	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
26	3	116.3	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
27	3	116.3	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
28	3	137.1	0.0	0.0	0.0

### Residential flat buildings - SE3, 70 dwellings, 9 storeys above ground

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
1	1	81.9	0.0	0.0	0.0
5	1	50.6	0.0	0.0	0.0
9	1	74.2	0.0	0.0	0.0
13	1	49.7	0.0	0.0	0.0
17	1	50.8	0.0	0.0	0.0
21	1	46.2	0.0	0.0	0.0
25	1	50.9	0.0	0.0	0.0
29	1	46.2	0.0	0.0	0.0
33	1	67.0	0.0	0.0	0.0
37	1	74.8	0.0	0.0	0.0
41	1	76.0	0.0	0.0	0.0
45	1	46.4	0.0	0.0	0.0
49	2	58.4	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
2	1	49.4	0.0	0.0	0.0
6	2	47.5	0.0	0.0	0.0
10	1	75.0	0.0	0.0	0.0
14	2	49.4	0.0	0.0	0.0
18	1	50.8	0.0	0.0	0.0
22	2	46.7	0.0	0.0	0.0
26	1	49.9	0.0	0.0	0.0
30	2	46.3	0.0	0.0	0.0
34	2	66.2	0.0	0.0	0.0
38	1	57.8	0.0	0.0	0.0
42	1	80.5	0.0	0.0	0.0
46	1	46.7	0.0	0.0	0.0
50	2	42.1	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
3	1	50.5	0.0	0.0	0.0
7	2	74.2	0.0	0.0	0.0
11	1	49.7	0.0	0.0	0.0
15	2	50.8	0.0	0.0	0.0
19	1	46.2	0.0	0.0	0.0
23	2	50.9	0.0	0.0	0.0
27	1	46.2	0.0	0.0	0.0
31	2	67.0	0.0	0.0	0.0
35	1	74.8	0.0	0.0	0.0
39	1	43.0	0.0	0.0	0.0
43	1	42.3	0.0	0.0	0.0
47	1	44.9	0.0	0.0	0.0
51	1	76.0	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
4	1	45.9	0.0	0.0	0.0
8	2	74.2	0.0	0.0	0.0
12	1	49.7	0.0	0.0	0.0
16	2	50.8	0.0	0.0	0.0
20	1	46.2	0.0	0.0	0.0
24	2	50.9	0.0	0.0	0.0
28	1	46.2	0.0	0.0	0.0
32	1	67.0	0.0	0.0	0.0
36	1	74.8	0.0	0.0	0.0
40	2	74.7	0.0	0.0	0.0
44	1	46.4	0.0	0.0	0.0
48	1	51.5	0.0	0.0	0.0
52	1	76.0	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
53	2	78.6	0.0	0.0	0.0
57	1	50.7	0.0	0.0	0.0
61	1	51.3	0.0	0.0	0.0
65	1	64.8	0.0	0.0	0.0
69	2	42.1	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
54	1	78.6	0.0	0.0	0.0
58	1	50.7	0.0	0.0	0.0
62	1	51.3	0.0	0.0	0.0
66	1	64.8	0.0	0.0	0.0
70	2	42.1	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
55	1	59.1	0.0	0.0	0.0
59	2	46.5	0.0	0.0	0.0
63	2	45.9	0.0	0.0	0.0
67	1	63.4	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
56	1	59.1	0.0	0.0	0.0
60	2	46.5	0.0	0.0	0.0
64	1	45.9	0.0	0.0	0.0
68	1	63.4	0.0	0.0	0.0



## Description of project

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

### Common areas of unit building - SE1

Common area	Floor area (m²)
Lift car (No. 1)	-
Garbage room SE1	82.0
Hallway/lobby type SE1 Apartments	2070.0

Common area	Floor area (m²)
Lift car (No. 2)	-
Condenser Plant Room SE1	437.0

Common area	Floor area (m²)
Lift car (No. 3)	-
Ground floor lobby type SE1	100.0

### Common areas of unit building - SE2

Common area	Floor area (m²)
Lift car (No. 4)	-
Ground floor lobby type SE2	66.0

Common area	Floor area (m²)
Garbage room SE2	21.0
Hallway/lobby type SE2 Apartments	288.0

Common area	Floor area (m²)
Condenser Plant Room SE2	124.0

### Common areas of unit building - SE3

Common area	Floor area (m²)
Lift car (No. 5)	-
Condenser Plant Room SE3	106.0

Common area	Floor area (m²)
Lift car (No. 6)	-
Ground floor lobby type SE3	52.0

Common area	Floor area (m²)
Garbage room SE3	31.0
Hallway/lobby type SE3 Apartments	531.0

### Common areas of the development (non-building specific)

Common area	Floor area (m²)
Car park	8800.0
Substation	142.0
Common services plant rooms	232.0
Shared Amenities	97.0
Bike Storage	103.0

Common area	Floor area (m²)
Car park open storage excl mezz	1043.0
Garbage room Common	31.0
Comms room	41.0
Storage	206.0
Hallway/lobby type Ground BOH	273.0

Common area	Floor area (m²)
Switch room	44.0
Community room SE2	184.0
Building distribution room	29.0
Building Manager	14.0

# Schedule of BASIX commitments

## 1. Commitments for Residential flat buildings - SE1

### (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 - SE2

### (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 - SE3

### (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 - SE1

#### (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.	✓	✓	✓

	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	3 star (> 4.5 but <= 6 L/min)	4 star	5 star	5 star	no	-	5 star	-	-	-	-	0.0	-	-

	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.		✓	✓

<b>(ii) Energy</b>	<b>Show on DA plans</b>	<b>Show on CC/CDC plans &amp; specs</b>	<b>Certifier check</b>
(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".		✓	

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

Dwelling no.	Cooling		Heating		Artificial lighting						Natural lighting	
	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 laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
273, 274, 283, 284	central cooling system 1 (zoned)	central cooling system 1 (zoned)	central heating system 1 (zoned)	central heating system 1 (zoned)	3 (dedicated)	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	0	no

Dwelling no.	Cooling		Heating		Artificial lighting						Natural lighting	
	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 laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
3, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 32, 35, 37, 38, 39, 40, 41, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 231, 232, 233, 234, 235, 236,	central cooling system 1 (zoned)	central cooling system 1 (zoned)	central heating system 1 (zoned)	central heating system 1 (zoned)	1 (dedicated)	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	0	no



Dwelling no.	Cooling		Heating		Artificial lighting						Natural lighting	
	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 laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 281, 282, 291, 292												
All other dwellings	central cooling system 1 (zoned)	central cooling system 1 (zoned)	central heating system 1 (zoned)	central heating system 1 (zoned)	2 (dedicated)	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	0	no

Dwelling no.	Individual pool		Individual spa		Appliances & other efficiency measures							
	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	-	-	-	-	gas cooktop & electric oven	-	no	3.5 star	-	2 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.			
(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.	✓	✓	✓

	Thermal loads	
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)
1	14.1	28.4
2	18.8	32.7
3	14.6	20.9
4	14.7	26.5
5	22.3	24.4

	Thermal loads	
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)
6	18.7	21.9
7	47.7	27.0
8	48.6	17.1
9	49.6	14.1
10	49.8	23.1
11	49.6	15.3
12	43.6	17.0
13	17.7	20.4
14	27.8	16.3
15	34.0	16.3
16	28.1	23.9
17	27.5	13.9
18	28.0	13.2
19	33.5	19.0
20	27.2	13.2
21	22.6	13.9
22	26.2	27.2
23	31.9	22.6
24	32.2	15.5
25	30.3	24.0
26	28.6	14.1
27	28.4	12.8
28	40.0	20.8
29	28.5	13.0
30	23.5	13.5
31	48.2	24.8
32	32.7	20.0

	Thermal loads	
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)
33	30.6	19.3
34	29.2	17.9
35	48.9	30.1
36	33.0	22.9
37	23.2	19.3
38	18.0	21.1
39	25.3	18.9
40	44.2	18.0
41	40.2	15.6
42	31.1	22.2
43	27.7	13.7
44	35.6	16.9
45	32.1	18.4
46	28.1	20.9
47	16.0	23.2
48	7.1	12.3
49	6.8	17.7
50	11.8	17.2
51	13.3	13.8
52	23.3	20.9
53	27.7	22.7
54	30.7	15.3
55	37.3	18.4
56	30.6	18.6
57	24.1	22.1
58	15.4	27.7
59	9.1	14.5

	Thermal loads	
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)
60	10.6	24.3
61	11.0	23.9
62	10.7	19.3
63	17.2	23.7
64	28.0	22.6
65	31.3	15.2
66	37.6	18.2
67	30.9	18.3
68	26.0	20.2
69	14.8	28.9
70	9.3	14.7
71	10.6	24.4
72	10.7	24.3
73	9.8	20.0
74	14.2	23.8
75	30.4	20.4
76	33.6	13.8
77	40.1	17.6
78	33.2	17.1
79	25.8	20.3
80	15.0	25.7
81	10.6	12.9
82	11.7	23.1
84	10.3	19.6
85	13.7	28.9
86	30.8	20.4
87	34.0	13.7

	Thermal loads	
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)
88	40.4	17.6
89	33.5	16.9
90	26.0	20.1
91	15.1	25.6
92	10.8	12.8
93	11.9	23.0
95	10.4	19.9
96	14.7	22.5
97	31.0	20.3
98	34.2	13.8
99	40.6	17.3
100	33.7	16.9
101	26.2	19.9
102	15.2	25.6
103	10.9	12.7
104	11.8	23.1
105	11.5	22.9
106	10.5	20.2
107	14.8	22.5
108	31.3	20.1
109	34.5	13.7
110	40.9	17.3
111	34.0	16.7
112	26.4	19.7
113	15.4	25.9
114	11.1	12.6
115	12.0	23.3

	Thermal loads	
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)
116	11.7	22.6
117	10.7	20.4
118	15.0	22.1
119	31.5	19.9
120	34.7	13.7
121	41.1	17.3
122	34.2	16.6
123	26.5	19.7
124	0.5	25.6
125	11.2	12.7
126	12.1	22.9
127	11.8	22.9
128	10.7	20.1
129	15.1	22.0
130	31.6	19.8
131	34.9	13.8
132	41.2	17.1
133	34.3	16.6
134	26.5	19.5
135	15.5	26.1
136	11.3	12.8
137	12.2	22.8
138	11.9	22.8
139	10.8	19.5
140	15.2	22.0
141	32.0	19.3
142	35.2	13.4

	Thermal loads	
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)
143	41.6	17.0
144	34.7	16.3
145	26.7	19.2
146	15.7	25.9
147	11.5	12.6
148	12.4	22.6
149	12.0	22.4
150	11.0	19.9
151	15.4	22.2
152	32.1	19.7
153	35.4	13.5
154	41.7	16.6
155	34.8	16.2
156	27.0	19.2
157	15.8	25.9
158	11.6	12.6
159	12.4	23.2
160	12.1	22.0
161	11.1	19.6
162	15.5	22.4
163	32.3	19.5
164	35.5	13.4
165	41.9	16.6
166	35.0	16.3
167	27.0	19.3
168	15.9	25.3
169	11.7	12.6



	Thermal loads	
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)
170	12.4	22.8
171	12.3	22.6
172	11.1	20.0
173	15.6	22.5
174	32.5	19.4
175	35.7	13.3
176	42.1	16.5
177	35.1	16.3
178	27.3	19.2
179	16.0	25.0
180	11.8	12.5
181	12.6	22.9
182	12.3	22.3
183	11.1	19.9
184	15.7	22.3
185	32.6	19.0
186	35.9	13.3
187	42.2	16.6
188	35.3	16.2
189	27.5	19.2
190	16.1	24.8
191	11.9	12.5
192	12.5	23.0
193	12.3	22.5
195	15.9	22.1
196	33.3	19.2
197	36.1	13.2

	Thermal loads	
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)
198	42.4	16.5
199	35.4	16.3
200	27.6	19.1
201	16.2	24.6
202	12.0	12.3
203	12.6	22.5
204	12.4	22.3
206	16.0	22.1
207	33.0	19.2
208	36.2	13.4
209	42.7	16.47
210	35.6	16.2
211	27.8	19.1
212	16.2	24.2
213	12.1	12.4
214	12.7	23.1
215	12.5	22.1
216	11.2	19.4
217	16.0	21.8
218	33.1	19.2
219	36.4	13.4
221	35.7	16.2
223	16.3	24.1
224	12.1	12.3
225	8.3	18.4
226	12.6	22.6
227	11.4	19.2

	Thermal loads	
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)
228	16.6	21.6
229	33.1	19.3
230	36.4	6.0
232	35.7	16.1
234	16.3	24.2
235	12.2	12.2
236	8.3	18.6
237	12.6	22.2
238	11.4	19.5
240	33.3	19.4
241	36.5	13.1
242	41.7	16.2
243	35.9	16.1
244	28.2	19.0
245	16.4	23.9
246	8.7	13.1
247	8.5	18.9
248	12.7	22.1
249	11.4	19.3
251	33.4	19.2
252	36.7	13.2
253	41.8	16.1
254	36.0	16.0
255	28.5	19.0
256	16.4	23.8
257	8.8	12.9
258	8.6	18.3

	Thermal loads	
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)
259	13.2	20.9
260	11.8	18.6
261	16.7	20.9
262	33.6	19.2
263	36.9	13.0
264	42.0	16.1
265	36.2	16.0
266	28.6	18.9
267	16.5	23.6
268	8.9	13.0
269	8.7	18.7
270	13.8	20.6
271	13.0	20.5
272	16.8	21.0
273	35.7	22.7
274	37.0	13.1
275	35.6	14.7
276	36.3	15.9
277	30.1	23.4
278	17.6	23.0
279	7.2	14.7
280	5.6	12.6
281	10.6	11.6
282	14.3	16.4
283	41.6	23.1
284	49.4	13.5
285	43.3	15.4

	Thermal loads	
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)
286	36.8	13.2
287	37.8	26.7
288	26.2	25.2
289	15.4	16.0
290	13.1	15.5
291	20.3	14.9
292	24.9	18.4
83, 94	11.4	22.9
194, 205	11.2	19.8
220, 231	42.7	16.4
222, 233	28.0	19.1
All other dwellings	16.7	21.1

**(b) Common areas and central systems/facilities**

<b>(i) Water</b>	<b>Show on DA plans</b>	<b>Show on CC/CDC plans &amp; specs</b>	<b>Certifier check</b>
(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.		✓	✓

<b>Common area</b>	<b>Showerheads rating</b>	<b>Toilets rating</b>	<b>Taps rating</b>	<b>Clothes washers rating</b>
All common areas	3 star (> 6 but <= 7.5 L/min)	4 star	5 star	no common laundry facility

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

<b>(ii) Energy</b>	<b>Show on DA plans</b>	<b>Show on CC/CDC plans &amp; specs</b>	<b>Certifier check</b>
(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	Common area ventilation system		Common area lighting		
	Ventilation system type	Ventilation efficiency measure	Primary type of artificial lighting	Lighting efficiency measure	Lighting control system/BMS
Lift car (No. 1)	-	-	light-emitting diode	connected to lift call button	Yes
Lift car (No. 2)	-	-	light-emitting diode	connected to lift call button	Yes
Lift car (No. 3)	-	-	light-emitting diode	connected to lift call button	Yes
Garbage room SE1	ventilation exhaust only	-	fluorescent	motion sensors	No
Condenser Plant Room SE1	no mechanical ventilation	-	fluorescent	motion sensors	No
Ground floor lobby type SE1	ventilation supply only	time clock or BMS controlled	light-emitting diode	motion sensors	Yes
Hallway/lobby type SE1 Apartments	ventilation supply only	time clock or BMS controlled	light-emitting diode	motion sensors	No

Central energy systems	Type	Specification
Central hot water system (No. 1)	gas-fired boiler	Piping insulation (ringmain & supply risers): (b) Piping internal to building: R1.0 (~38 mm)
Central cooling system (No. 1)	variable refrigerant volume units	Energy source: electric driven compressor Heat rejection method: air cooled condenser Unit efficiency (min): low - COP < 3.5
Central heating system (No. 1)	variable refrigerant volume units	Energy source: electric driven compressor + air sourced evaporator Unit efficiency: low - COP < 3.5
Lift (No. 1)	gearless traction with V V V F motor	Number of levels (including basement): 29

Central energy systems	Type	Specification
Lift (No. 2)	gearless traction with V V V F motor	Number of levels (including basement): 29
Lift (No. 3)	gearless traction with V V V F motor	Number of levels (including basement): 29



## 2. Commitments for Residential flat buildings - SE2

### (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.	✓	✓	✓

	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	3 star (> 4.5 but <= 6 L/min)	4 star	5 star	5 star	no	-	5 star	-	-	-	-	0.0	-	-

	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.		✓	✓

<b>(ii) Energy</b>	<b>Show on DA plans</b>	<b>Show on CC/CDC plans &amp; specs</b>	<b>Certifier check</b>
(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".		✓	

	<b>Hot water</b>	<b>Bathroom ventilation system</b>		<b>Kitchen ventilation system</b>		<b>Laundry ventilation system</b>	
<b>Dwelling no.</b>	<b>Hot water system</b>	<b>Each bathroom</b>	<b>Operation control</b>	<b>Each kitchen</b>	<b>Operation control</b>	<b>Each laundry</b>	<b>Operation control</b>
All dwellings	central hot water system 2	individual fan, ducted to façade or roof	manual switch on/off	individual fan, ducted to façade or roof	manual switch on/off	individual fan, ducted to façade or roof	manual switch on/off

Dwelling no.	Cooling		Heating		Artificial lighting						Natural lighting	
	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 laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
25, 26, 27	central cooling system 2 (zoned)	central cooling system 2 (zoned)	central heating system 2 (zoned)	central heating system 2 (zoned)	4 (dedicated)	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	0	no
1, 2, 3, 4, 5, 6, 28	central cooling system 2 (zoned)	central cooling system 2 (zoned)	central heating system 2 (zoned)	central heating system 2 (zoned)	3 (dedicated)	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	0	no
19, 20, 21, 22, 23, 24	central cooling system 2 (zoned)	central cooling system 2 (zoned)	central heating system 2 (zoned)	central heating system 2 (zoned)	1 (dedicated)	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	0	no
All other dwellings	central cooling system 2 (zoned)	central cooling system 2 (zoned)	central heating system 2 (zoned)	central heating system 2 (zoned)	2 (dedicated)	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	0	no

Dwelling no.	Individual pool		Individual spa		Appliances & other efficiency measures							
	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	-	-	-	-	gas cooktop & electric oven	-	no	3.5 star	-	2 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.			
(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.	✓	✓	✓

	Thermal loads	
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)
1	21.4	13.8
2	22.3	13.3
3	13.0	14.6
4	25.5	26.7
5	22.4	13.4

	Thermal loads	
Dwelling no.	Area adjusted heating load (in mJ/m <sup>2</sup> /yr)	Area adjusted cooling load (in mJ/m <sup>2</sup> /yr)
6	21.2	14.0
7	13.7	14.3
8	26.5	26.1
9	26.4	11.6
10	24.2	12.4
11	16.4	12.3
12	30.5	20.8
13	27.0	11.4
14	24.6	12.2
15	16.8	12.3
16	31.1	19.9
17	27.3	11.0
18	25.1	12.1
19	17.2	12.2
20	31.7	19.9
21	28.3	11.0
22	29.6	12.1
23	19.0	12.2
24	33.5	20.5
25	41.5	38.8
26	28.8	33.8
27	20.7	34.4
All other dwellings	35.2	37.6

**(b) Common areas and central systems/facilities**

<b>(i) Water</b>	<b>Show on DA plans</b>	<b>Show on CC/CDC plans &amp; specs</b>	<b>Certifier check</b>
(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.		✓	✓

<b>Common area</b>	<b>Showerheads rating</b>	<b>Toilets rating</b>	<b>Taps rating</b>	<b>Clothes washers rating</b>
All common areas	3 star (> 6 but <= 7.5 L/min)	4 star	5 star	no common laundry facility

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

<b>(ii) Energy</b>	<b>Show on DA plans</b>	<b>Show on CC/CDC plans &amp; specs</b>	<b>Certifier check</b>
(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	Common area ventilation system		Common area lighting		
	Ventilation system type	Ventilation efficiency measure	Primary type of artificial lighting	Lighting efficiency measure	Lighting control system/BMS
Lift car (No. 4)	-	-	light-emitting diode	connected to lift call button	Yes
Garbage room SE2	ventilation exhaust only	-	fluorescent	motion sensors	No
Condenser Plant Room SE2	no mechanical ventilation	-	fluorescent	motion sensors	No
Ground floor lobby type SE2	ventilation supply only	time clock or BMS controlled	light-emitting diode	motion sensors	Yes
Hallway/lobby type SE2 Apartments	ventilation supply only	time clock or BMS controlled	light-emitting diode	motion sensors	No

Central energy systems	Type	Specification
Central hot water system (No. 2)	gas-fired boiler	Piping insulation (ringmain & supply risers): (b) Piping internal to building: R1.0 (~38 mm)
Central cooling system (No. 2)	variable refrigerant volume units	Energy source: electric driven compressor Heat rejection method: air cooled condenser Unit efficiency (min): low - COP < 3.5
Central heating system (No. 2)	variable refrigerant volume units	Energy source: electric driven compressor + air sourced evaporator Unit efficiency: low - COP < 3.5
Lift (No. 4)	gearless traction with V V V F motor	Number of levels (including basement): 8



### 3. Commitments for Residential flat buildings - SE3

#### (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.	✓	✓	✓

	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	3 star (> 4.5 but <= 6 L/min)	4 star	5 star	5 star	no	-	5 star	-	-	-	-	0.0	-	-

	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.		✓	✓

<b>(ii) Energy</b>	<b>Show on DA plans</b>	<b>Show on CC/CDC plans &amp; specs</b>	<b>Certifier check</b>
(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".		✓	

	<b>Hot water</b>	<b>Bathroom ventilation system</b>		<b>Kitchen ventilation system</b>		<b>Laundry ventilation system</b>	
<b>Dwelling no.</b>	<b>Hot water system</b>	<b>Each bathroom</b>	<b>Operation control</b>	<b>Each kitchen</b>	<b>Operation control</b>	<b>Each laundry</b>	<b>Operation control</b>
All dwellings	central hot water system 3	individual fan, ducted to façade or roof	manual switch on/off	individual fan, ducted to façade or roof	manual switch on/off	individual fan, ducted to façade or roof	manual switch on/off

Dwelling no.	Cooling		Heating		Artificial lighting						Natural lighting	
	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 laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
1, 7, 8, 9, 10, 31, 32, 33, 34, 35, 36, 37, 40, 41, 42, 48, 51, 52, 53, 54, 55, 56, 65, 66, 67, 68	central cooling system 3 (zoned)	central cooling system 3 (zoned)	central heating system 3 (zoned)	central heating system 3 (zoned)	2 (dedicated)	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	0	no
All other dwellings	central cooling system 3 (zoned)	central cooling system 3 (zoned)	central heating system 3 (zoned)	central heating system 3 (zoned)	1 (dedicated)	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	0	no

Dwelling no.	Individual pool		Individual spa		Appliances & other efficiency measures							
	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	-	-	-	-	gas cooktop & electric oven	-	no	3.5 star	-	2 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.			
(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.	✓	✓	✓

	Thermal loads	
Dwelling no.	Area adjusted heating load (in mJ/m <sup>2</sup> /yr)	Area adjusted cooling load (in mJ/m <sup>2</sup> /yr)
1	19.3	25.5
2	28.4	28.3
3	28.2	24.3
4	30.4	25.8
5	26.3	26.7

	Thermal loads	
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)
6	10.4	35.1
7	46.2	12.4
8	21.3	27.4
9	11.2	21.3
10	9.6	23.9
11	11.4	28.0
12	12.2	32.7
13	10.7	29.9
14	7.7	30.9
15	24.7	11.4
16	8.2	22.7
17	11.6	16.5
18	13.4	20.5
19	11.3	18.9
20	17.4	25.0
21	11.8	24.0
22	8.3	22.4
23	24.9	11.1
24	8.5	22.4
25	12.3	17.2
26	8.9	21.2
27	11.9	24.1
28	10.8	21.2
29	10.9	23.9
30	9.0	23.2
31	49.7	17.2
32	42.3	16.9

	Thermal loads	
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)
33	46.3	20.5
34	10.2	25.4
35	12.6	18.2
36	8.5	21.3
37	15.7	22.9
38	9.7	21.3
39	10.9	19.3
40	10.6	23.6
41	28.1	17.1
42	39.0	19.4
43	30.1	24.9
44	14.4	35.3
45	17.8	34.8
46	14.7	37.1
47	18.4	33.7
48	14.3	37.3
49	20.2	14.9
50	25.4	21.0
51	31.7	16.4
52	41.9	16.5
53	11.7	40.7
54	11.8	20.3
55	10.9	19.9
56	9.9	18.2
57	12.8	18.7
58	18.8	38.5
59	22.4	20.5

	Thermal loads	
Dwelling no.	Area adjusted heating load (in mJ/m <sup>2</sup> /yr)	Area adjusted cooling load (in mJ/m <sup>2</sup> /yr)
60	25.2	19.9
61	40.0	17.6
62	46.1	18.8
63	12.1	39.8
64	18.7	21.0
65	17.4	21.1
66	15.7	18.9
67	20.2	19.7
68	17.3	37.3
69	29.4	20.6
All other dwellings	25.1	19.9



**(b) Common areas and central systems/facilities**

<b>(i) Water</b>	<b>Show on DA plans</b>	<b>Show on CC/CDC plans &amp; specs</b>	<b>Certifier check</b>
(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.		✓	✓

<b>Common area</b>	<b>Showerheads rating</b>	<b>Toilets rating</b>	<b>Taps rating</b>	<b>Clothes washers rating</b>
All common areas	3 star (> 6 but <= 7.5 L/min)	4 star	5 star	no common laundry facility

<b>Central systems</b>	<b>Size</b>	<b>Configuration</b>	<b>Connection (to allow for...)</b>
Fire sprinkler system (No. 3)	-	So that fire sprinkler test water is contained within the fire sprinkler system for re-use, rather than disposed.	-

<b>(ii) Energy</b>	<b>Show on DA plans</b>	<b>Show on CC/CDC plans &amp; specs</b>	<b>Certifier check</b>
(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	Common area ventilation system		Common area lighting		
	Ventilation system type	Ventilation efficiency measure	Primary type of artificial lighting	Lighting efficiency measure	Lighting control system/BMS
Lift car (No. 5)	-	-	light-emitting diode	connected to lift call button	Yes
Lift car (No. 6)	-	-	light-emitting diode	connected to lift call button	Yes
Garbage room SE3	ventilation exhaust only	-	fluorescent	motion sensors	No
Condenser Plant Room SE3	no mechanical ventilation	-	fluorescent	motion sensors	No
Ground floor lobby type SE3	ventilation supply only	time clock or BMS controlled	light-emitting diode	motion sensors	Yes
Hallway/lobby type SE3 Apartments	ventilation supply only	time clock or BMS controlled	light-emitting diode	motion sensors	No

Central energy systems	Type	Specification
Central hot water system (No. 3)	gas-fired boiler	Piping insulation (ringmain & supply risers): (b) Piping internal to building: R1.0 (~38 mm)
Central cooling system (No. 3)	variable refrigerant volume units	Energy source: electric driven compressor Heat rejection method: air cooled condenser Unit efficiency (min): low - COP < 3.5
Central heating system (No. 3)	variable refrigerant volume units	Energy source: electric driven compressor + air sourced evaporator Unit efficiency: low - COP < 3.5
Lift (No. 5)	gearless traction with V V V F motor	Number of levels (including basement): 9
Lift (No. 6)	gearless traction with V V V F motor	Number of levels (including basement): 9

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

### (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	3 star (> 6 but ≤ 7.5 L/min)	4 star	5 star	no common laundry facility

Central systems	Size	Configuration	Connection (to allow for...)
Central water tank - rainwater or stormwater (No. 1)	80000.0	To collect run-off from at least: - 2545.0 square metres of roof area of buildings in the development - 0.0 square metres of impervious area in the development - 0.0 square metres of garden/lawn area in the development - 0.0 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 683.0 square metres of common landscaped area on the site

Central systems	Size	Configuration	Connection (to allow for...)
Reticulated alternative water supply	-	Installation of plumbing to make provision for connection to No scheme found reticulated alternative water supply.	
Pool (No. 1)	Volume: 103.0 kLs	Location: Other Pool shaded: no	-

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

	Common area ventilation system		Common area lighting		
Common area	Ventilation system type	Ventilation efficiency measure	Primary type of artificial lighting	Lighting efficiency measure	Lighting control system/BMS
Car park	ventilation (supply + exhaust)	carbon monoxide monitor + VSD fan	light-emitting diode	time clock and motion sensors	No
Car park open storage excl mezz	ventilation (supply + exhaust)	carbon monoxide monitor + VSD fan	light-emitting diode	time clock and motion sensors	No
Switch room	ventilation exhaust only	none ie. continuous	fluorescent	motion sensors	No
Substation	no mechanical ventilation	-	fluorescent	manual on / manual off	No
Garbage room Common	ventilation exhaust only	-	fluorescent	motion sensors	No
Community room SE2	no mechanical ventilation	-	light-emitting diode	motion sensors	No
Common services plant rooms	ventilation exhaust only	none ie. continuous	fluorescent	motion sensors	No
Comms room	air conditioning system	thermostatically controlled	fluorescent	motion sensors	No

	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
Building distribution room	air conditioning system	thermostatically controlled	fluorescent	motion sensors	No
Shared Amenties	ventilation exhaust only	time clock or BMS controlled	fluorescent	motion sensors	No
Storage	ventilation supply only	time clock or BMS controlled	light-emitting diode	motion sensors	No
Building Manager	air conditioning system	time clock or BMS controlled	light-emitting diode	motion sensors	No
Bike Storage	ventilation exhaust only	time clock or BMS controlled	light-emitting diode	motion sensors	No
Hallway/lobby type Ground BOH	ventilation supply only	time clock or BMS controlled	fluorescent	motion sensors	No

Central energy systems	Type	Specification
Pool (No. 1)	Heating source: gas	Pump controlled by timer: yes
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).