

BASIX[®]Certificate

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

Multi Dwelling

Certificate number: 1340698M

This certificate confirms that the proposed development will meet the NSW government's requirements for sustainability, if it is built in accordance with the commitments set out below. Terms used in this certificate, or in the commitments, have the meaning given by the document entitled "BASIX Definitions" dated 10/09/2020 published by the Department. This document is available at www.basix.nsw.gov.au

Secretary

Date of issue: Friday, 04 November 2022

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



Planning,
Industry &
Environment

Project summary		
Project name	220029E-711 Hunter Street, Newcastle West	
Street address	711 Hunter Street Newcastle West 2302	
Local Government Area	Newcastle City Council	
Plan type and plan number	deposited 867617	
Lot no.	1	
Section no.	-	
No. of residential flat buildings	2	
No. of units in residential flat buildings	258	
No. of multi-dwelling houses	0	
No. of single dwelling houses	0	
Project score		
Water	✔ 40	Target 40
Thermal Comfort	✔ Pass	Target Pass
Energy	✔ 30	Target 20

Certificate Prepared by

Name / Company Name: Credwell Energy

ABN (if applicable): 625598352

Description of project

Project address	
Project name	220029E-711 Hunter Street, Newcastle West
Street address	711 Hunter Street Newcastle West 2302
Local Government Area	Newcastle City Council
Plan type and plan number	deposited 867617
Lot no.	1
Section no.	-
Project type	
No. of residential flat buildings	2
No. of units in residential flat buildings	258
No. of multi-dwelling houses	0
No. of single dwelling houses	0
Site details	
Site area (m ²)	4724
Roof area (m ²)	1460
Non-residential floor area (m ²)	0.0
Residential car spaces	288
Non-residential car spaces	12

Common area landscape	
Common area lawn (m ²)	211.3
Common area garden (m ²)	816.09
Area of indigenous or low water use species (m ²)	-
Assessor details	
Assessor number	101026
Certificate number	0008181010
Climate zone	15
Ceiling fan in at least one bedroom	Yes
Ceiling fan in at least one living room or other conditioned area	Yes
Project score	
Water	 40 Target 40
Thermal Comfort	 Pass Target Pass
Energy	 30 Target 20

Description of project

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

Residential flat buildings - North Building (NB), 136 dwellings, 26 storeys above ground

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
105013	114.0	0.0	30.1	0.0	
106021	50.4	0.0	0.0	0.0	
106071	50.7	0.0	0.0	0.0	
107042	77.4	0.0	0.0	0.0	
108012	86.9	0.0	0.0	0.0	
108062	79.2	0.0	0.0	0.0	
109032	75.4	0.0	0.0	0.0	
109081	54.1	0.0	0.0	0.0	
110052	77.3	0.0	0.0	0.0	
111021	50.4	0.0	0.0	0.0	
111071	50.7	0.0	0.0	0.0	
112042	77.4	0.0	0.0	0.0	
113012	86.9	0.0	0.0	0.0	
113062	79.2	0.0	0.0	0.0	
114032	75.4	0.0	0.0	0.0	
114081	54.1	0.0	0.0	0.0	
115052	77.3	0.0	0.0	0.0	
116021	50.4	0.0	0.0	0.0	
Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
105023	113.5	0.0	54.0	0.0	
106032	75.4	0.0	0.0	0.0	
106081	54.1	0.0	0.0	0.0	
107052	77.3	0.0	0.0	0.0	
108021	50.4	0.0	0.0	0.0	
108071	50.7	0.0	0.0	0.0	
109042	77.4	0.0	0.0	0.0	
110012	86.9	0.0	0.0	0.0	
110062	79.2	0.0	0.0	0.0	
111032	75.4	0.0	0.0	0.0	
111081	54.1	0.0	0.0	0.0	
112052	77.3	0.0	0.0	0.0	
113021	50.4	0.0	0.0	0.0	
113071	50.7	0.0	0.0	0.0	
114042	77.4	0.0	0.0	0.0	
115012	86.9	0.0	0.0	0.0	
115062	79.2	0.0	0.0	0.0	
116032	75.4	0.0	0.0	0.0	
Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
105032	80.0	0.0	26.0	0.0	
106042	77.4	0.0	0.0	0.0	
107012	86.9	0.0	0.0	0.0	
107062	79.2	0.0	0.0	0.0	
108032	75.4	0.0	0.0	0.0	
108081	54.1	0.0	0.0	0.0	
109052	77.3	0.0	0.0	0.0	
110021	50.4	0.0	0.0	0.0	
110071	50.7	0.0	0.0	0.0	
111042	77.4	0.0	0.0	0.0	
112012	86.9	0.0	0.0	0.0	
112062	79.2	0.0	0.0	0.0	
113032	75.4	0.0	0.0	0.0	
113081	54.1	0.0	0.0	0.0	
114052	77.3	0.0	0.0	0.0	
115021	50.4	0.0	0.0	0.0	
115071	50.7	0.0	0.0	0.0	
116042	77.4	0.0	0.0	0.0	
Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
105043	102.3	0.0	19.4	0.0	
106052	77.3	0.0	0.0	0.0	
107021	50.4	0.0	0.0	0.0	
107071	50.7	0.0	0.0	0.0	
108042	77.4	0.0	0.0	0.0	
109012	86.9	0.0	0.0	0.0	
109062	79.2	0.0	0.0	0.0	
110032	75.4	0.0	0.0	0.0	
110081	54.1	0.0	0.0	0.0	
111052	77.3	0.0	0.0	0.0	
112021	50.4	0.0	0.0	0.0	
112071	50.7	0.0	0.0	0.0	
113042	77.4	0.0	0.0	0.0	
114012	86.9	0.0	0.0	0.0	
114062	79.2	0.0	0.0	0.0	
115032	75.4	0.0	0.0	0.0	
115081	54.1	0.0	0.0	0.0	
116052	77.3	0.0	0.0	0.0	
Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
106012	86.9	0.0	0.0	0.0	
106062	79.2	0.0	0.0	0.0	
107032	75.4	0.0	0.0	0.0	
107081	54.1	0.0	0.0	0.0	
108052	77.3	0.0	0.0	0.0	
109021	50.4	0.0	0.0	0.0	
109071	50.7	0.0	0.0	0.0	
110042	77.4	0.0	0.0	0.0	
111012	86.9	0.0	0.0	0.0	
111062	79.2	0.0	0.0	0.0	
112032	75.4	0.0	0.0	0.0	
112081	54.1	0.0	0.0	0.0	
113052	77.3	0.0	0.0	0.0	
114021	50.4	0.0	0.0	0.0	
114071	50.7	0.0	0.0	0.0	
115042	77.4	0.0	0.0	0.0	
116012	86.9	0.0	0.0	0.0	
116062	79.2	0.0	0.0	0.0	

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
116071		50.7	0.0	0.0	0.0
117042		77.0	0.0	0.0	0.0
118032		77.0	0.0	0.0	0.0
119032		77.0	0.0	0.0	0.0
120032		77.0	0.0	0.0	0.0
121032		77.0	0.0	0.0	0.0
122032		77.0	0.0	0.0	0.0
123032		77.0	0.0	0.0	0.0
124032		77.0	0.0	0.0	0.0
125034	201.4 or more bedrooms	0.0	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
116081		54.1	0.0	0.0	0.0
117052		79.0	0.0	0.0	0.0
118042		79.0	0.0	0.0	0.0
119042		79.0	0.0	0.0	0.0
120042		79.0	0.0	0.0	0.0
121042		79.0	0.0	0.0	0.0
122042		79.0	0.0	0.0	0.0
123042		79.0	0.0	0.0	0.0
124042		79.0	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
117011		57.0	0.0	14.39	0.0
117061		51.0	0.0	0.0	0.0
118053		109.0	0.0	0.0	0.0
119053		109.0	0.0	0.0	0.0
120053		109.0	0.0	0.0	0.0
121053		109.0	0.0	0.0	0.0
122053		109.0	0.0	0.0	0.0
123053		109.0	0.0	0.0	0.0
124053		109.0	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
117022		74.0	0.0	0.0	0.0
118013		105.0	0.0	0.0	0.0
119013		105.0	0.0	0.0	0.0
120013		105.0	0.0	0.0	0.0
121013		105.0	0.0	0.0	0.0
122013		105.0	0.0	0.0	0.0
123013		105.0	0.0	0.0	0.0
124013		105.0	0.0	0.0	0.0
125013		134.5	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
117032		77.0	0.0	0.0	0.0
118023		99.0	0.0	0.0	0.0
119023		99.0	0.0	0.0	0.0
120023		99.0	0.0	0.0	0.0
121023		99.0	0.0	0.0	0.0
122023		99.0	0.0	0.0	0.0
123023		99.0	0.0	0.0	0.0
124023		99.0	0.0	0.0	0.0
125023		132.7	0.0	0.0	0.0

Residential flat buildings - South Building (SB), 122 dwellings, 26 storeys above ground

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
201011		67.25	0.0	0.0	0.0
202031		50.56	0.0	0.0	0.0
204022		84.05	0.0	0.0	0.0
205042		93.51	0.0	7.5	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
201022		84.05	0.0	0.0	0.0
203011		67.25	0.0	0.0	0.0
204031		50.56	0.0	0.0	0.0
206011		51.34	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
201031		50.56	0.0	0.0	0.0
203022		84.05	0.0	0.0	0.0
205012		82.33	0.0	15.8	0.0
206022		87.2	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
202011		67.25	0.0	0.0	0.0
203031		50.56	0.0	0.0	0.0
205022		97.92	0.0	8.3	0.0
206032		93.6	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
202022		84.05	0.0	0.0	0.0
204011		67.25	0.0	0.0	0.0
205033		104.5	0.0	75.8	0.0
206042		81.7	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
206052	85.2	0.0	0.0	0.0	0.0
207042	81.7	0.0	0.0	0.0	0.0
208032	93.57	0.0	0.0	0.0	0.0
209022	87.2	0.0	0.0	0.0	0.0
210011	51.3	0.0	0.0	0.0	0.0
210061	50.02	0.0	0.0	0.0	0.0
211052	85.2	0.0	0.0	0.0	0.0
212042	81.7	0.0	0.0	0.0	0.0
213032	93.57	0.0	0.0	0.0	0.0
214022	89.5	0.0	0.0	0.0	0.0
215022	89.5	0.0	0.0	0.0	0.0
216022	89.5	0.0	0.0	0.0	0.0
217022	89.0	0.0	0.0	0.0	0.0
218022	89.0	0.0	0.0	0.0	0.0
219022	89.0	0.0	0.0	0.0	0.0
220022	89.0	0.0	0.0	0.0	0.0
221022	89.0	0.0	0.0	0.0	0.0
222022	89.0	0.0	0.0	0.0	0.0
223022	89.0	0.0	0.0	0.0	0.0
224022	89.0	0.0	0.0	0.0	0.0
225023	171.7	0.0	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
206061	50.02	0.0	0.0	0.0	0.0
207052	85.2	0.0	0.0	0.0	0.0
208042	81.7	0.0	0.0	0.0	0.0
209032	93.57	0.0	0.0	0.0	0.0
210022	87.2	0.0	0.0	0.0	0.0
211011	51.3	0.0	0.0	0.0	0.0
211061	50.02	0.0	0.0	0.0	0.0
212052	85.2	0.0	0.0	0.0	0.0
213042	81.7	0.0	0.0	0.0	0.0
214032	91.7	0.0	0.0	0.0	0.0
215032	91.76	0.0	0.0	0.0	0.0
216032	97.8	0.0	0.0	0.0	0.0
217032	92.0	0.0	0.0	0.0	0.0
218032	92.0	0.0	0.0	0.0	0.0
219032	92.0	0.0	0.0	0.0	0.0
220032	92.0	0.0	0.0	0.0	0.0
221032	92.0	0.0	0.0	0.0	0.0
222032	92.0	0.0	0.0	0.0	0.0
223032	92.0	0.0	0.0	0.0	0.0
224032	92.0	0.0	0.0	0.0	0.0
225033	123.63	0.0	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
207011	51.34	0.0	0.0	0.0	0.0
207061	50.02	0.0	0.0	0.0	0.0
208052	85.2	0.0	0.0	0.0	0.0
209042	81.7	0.0	0.0	0.0	0.0
210032	93.57	0.0	0.0	0.0	0.0
211022	87.2	0.0	0.0	0.0	0.0
212011	51.34	0.0	0.0	0.0	0.0
212061	50.02	0.0	0.0	0.0	0.0
213052	85.2	0.0	0.0	0.0	0.0
214043	118.7	0.0	0.0	0.0	0.0
215043	118.7	0.0	0.0	0.0	0.0
216043	118.7	0.0	0.0	0.0	0.0
217043	119.0	0.0	0.0	0.0	0.0
218043	119.0	0.0	0.0	0.0	0.0
219043	119.0	0.0	0.0	0.0	0.0
220043	119.0	0.0	0.0	0.0	0.0
221043	119.0	0.0	0.0	0.0	0.0
222043	119.0	0.0	0.0	0.0	0.0
223043	119.0	0.0	0.0	0.0	0.0
224043	119.0	0.0	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
207022	87.2	0.0	0.0	0.0	0.0
208011	51.3	0.0	0.0	0.0	0.0
208061	50.02	0.0	0.0	0.0	0.0
209052	85.2	0.0	0.0	0.0	0.0
210042	81.7	0.0	0.0	0.0	0.0
211032	93.57	0.0	0.0	0.0	0.0
212022	87.2	0.0	0.0	0.0	0.0
213011	51.3	0.0	0.0	0.0	0.0
213061	50.02	0.0	0.0	0.0	0.0
214052	91.92	0.0	0.0	0.0	0.0
215052	91.92	0.0	0.0	0.0	0.0
216052	91.9	0.0	0.0	0.0	0.0
217052	92.0	0.0	0.0	0.0	0.0
218052	92.0	0.0	0.0	0.0	0.0
219052	92.0	0.0	0.0	0.0	0.0
220052	92.0	0.0	0.0	0.0	0.0
221052	92.0	0.0	0.0	0.0	0.0
222052	92.0	0.0	0.0	0.0	0.0
223052	92.0	0.0	0.0	0.0	0.0
224052	92.0	0.0	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
207032	93.57	0.0	0.0	0.0	0.0
208022	87.02	0.0	0.0	0.0	0.0
209011	51.34	0.0	0.0	0.0	0.0
209061	50.02	0.0	0.0	0.0	0.0
210052	85.21	0.0	0.0	0.0	0.0
211042	81.7	0.0	0.0	0.0	0.0
212032	93.57	0.0	0.0	0.0	0.0
213022	87.2	0.0	0.0	0.0	0.0
214011	51.4	0.0	0.0	0.0	0.0
215011	51.4	0.0	0.0	0.0	0.0
216011	51.4	0.0	0.0	0.0	0.0
217011	51.0	0.0	0.0	0.0	0.0
218011	51.0	0.0	0.0	0.0	0.0
219011	51.0	0.0	0.0	0.0	0.0
220011	51.0	0.0	0.0	0.0	0.0
221011	51.0	0.0	0.0	0.0	0.0
222011	51.0	0.0	0.0	0.0	0.0
223011	51.0	0.0	0.0	0.0	0.0
224011	51.0	0.0	0.0	0.0	0.0
225013	151.3	0.0	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 - North Building (NB)

Common area	Floor area (m ²)
Lift car (No.1)	-
NB - L1 - Secondary Switch	16.2
NB - L1 - Chute/ store	65.8
NB- L26 - Resi HW Plant	19.5
NB - L3 & L4 Store	56.2
North Bldg - GF - Lobby	39.35

Common area	Floor area (m ²)
Lift car (No.2)	-
North Bldg - GF - Retail waste/store	61.1
North Bldg - GF - BOH	56.3
NB - GF - Store	19.57
NB - L5 - Communal WC	5.76
NB - L1 - L25 Lobby	986.7

Common area	Floor area (m ²)
Lift car (No.3)	-
North Bldg - GF - Bulk Waste	19.6
NB - L1 - Secondary Comms/Elec	14.7
NB - GF - Mail room	18.3
NB - GF - L26 - Fire Stairs	531.9

Common areas of unit building - South Building (SB)

Common area	Floor area (m ²)
Lift car (No.4)	-
South Bldg - GF-shared retail/resi waste	26.8
SB - GF - Oily Water SEP	21.47
SB - GF - Fire Control Rm	22.45
SB - GF - RW Reuse pump&plant	10.9
SB - L1 - main comms	15.65
SB - L2 - Cold/Dry Store	15.7
South Bldg - GF - Lobby	46.35

Common area	Floor area (m ²)
Lift car (No.5)	-
South Bldg - GF - resi/retail waste	106.28
SB - GF - Fire Pump & Tank Rm	104.0
SB - GF - Substation 1 & 2	37.8
SB - GF - Domestic Water - pump	10.9
SB- L26 - Plant Rm (2x)	27.9
SB - L5 - Communal WC	5.25
SB - L1 - L25 Lobby	1446.2

Common area	Floor area (m ²)
SB - L1 - Main Switch Rm	38.3
South Bldg - GF - BOH	485.18
SB - GF - Gas Regulator	16.12
SB - GF - Comms	16.7
SB - GF - Loading Zone	89.6
SB - GF - WC	33.6
SB - GF-L26 - Fire Stairs	621.0

Common areas of the development (non-building specific)

Common area	Floor area (m ²)
Car park area (No. 1)	12060.0

Schedule of BASIX commitments

1. Commitments for Residential flat buildings - North Building (NB)

(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 - South Building (SB)

(a) Dwellings

- (i) Water
- (ii) Energy
- (iii) Thermal Comfort

(b) Common areas and central systems/facilities

- (i) Water
- (ii) Energy

3. Commitments for multi-dwelling houses

4. Commitments for single dwelling houses

5. 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 - North Building (NB)

(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: <ul style="list-style-type: none"> (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.	✓	✓	✓

Dwelling no.	Fixtures					Appliances		Individual pool				Individual spa		
	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)	3 star	3 star	3 star	no	-	3 star	-	-	-	-	0.0	no	no

Dwelling no.	Alternative water source							
	Alternative water supply systems	Size	Configuration	Landscape connection	Toilet connection (s)	Laundry connection	Pool top-up	Spa top-up
All dwellings	central water tank (no. 1)	See central systems	See central systems	no	yes	no	no	no
None	-	-	-	-	-	-	-	-

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

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(f) This commitment applies to each room or area of the dwelling which is referred to in a heading to the "Natural lighting" column of the table below (but only to the extent specified for that room or area). The applicant must ensure that each such room or area is fitted with a window and/or skylight.	✔	✔	✔
(g) This commitment applies if the applicant installs a water heating system for the dwelling's pool or spa. The applicant must: (aa) install the system specified for the pool in the "Individual Pool" column of the table below (or alternatively must not install any system for the pool). If specified, the applicant must install a timer, to control the pool's pump; and (bb) install the system specified for the spa in the "Individual Spa" column of the table below (or alternatively must not install any system for the spa). If specified, the applicant must install a timer to control the spa's pump.		✔ ✔	
(h) The applicant must install in the dwelling: (aa) the kitchen cook-top and oven specified for that dwelling in the "Appliances & other efficiency measures" column of the table below; (bb) each appliance for which a rating is specified for that dwelling in the "Appliances & other efficiency measures" column of the table, and ensure that the appliance has that minimum rating; and (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 1	individual fan, ducted to façade or roof	manual on / timer off	individual fan, ducted to façade or roof	manual on / timer off	individual fan, ducted to façade or roof	manual on / timer 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
12503	1-phase airconditioning EER 3.0 - 3.5 (zoned)	5 (dedicated)	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	0	yes			
10601, 10701, 10801, 10901, 11001, 11101, 11201, 11301, 11401, 11501, 11601	1-phase airconditioning EER 3.0 - 3.5 (zoned)	3 (dedicated)	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	0	yes			
11702, 11703, 11704, 11705, 11803, 11804, 11903, 11904, 12003, 12004, 12103, 12104, 12203, 12204, 12303, 12304, 12403, 12404	1-phase airconditioning EER 3.0 - 3.5 (zoned)	2 (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
10501, 10502, 10504, 11801, 11802, 11805, 11901, 11902, 11905, 12001, 12002, 12005, 12101, 12102, 12105, 12201, 12202, 12205, 12301, 12302, 12305, 12401, 12402, 12405, 12501, 12502	1-phase airconditioning EER 3.0 - 3.5 (zoned)	4 (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
10602, 10607, 10608, 10702, 10707, 10708, 10802, 10807, 10808, 10902, 10907, 10908, 11002, 11007, 11008, 11102, 11107, 11108, 11202, 11207, 11208, 11302, 11307, 11308, 11402, 11407, 11408, 11502, 11507, 11508, 11602, 11607, 11608, 11701, 11706	1-phase airconditioning EER 3.0 - 3.5 (zoned)	1 (dedicated)	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	0	no			
All other dwellings	1-phase airconditioning EER 3.0 - 3.5 (zoned)	3 (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.	✓	✓	✓

(iii) Thermal Comfort	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(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)
10501	21.9	6.1
10502	19.2	14.7
10503	26.6	10.1
10504	30.9	15.4
10601	24.4	9.4
10602	8.3	13.7
10603	19.1	11.6
10604	22.3	12.8
10606	26.0	18.1
10607	51.0	28.8
10608	47.9	4.5
10701	20.6	10.4
10702	8.5	13.7
10703	20.9	12.2
10704	22.6	12.7
10705	17.1	12.2
10706	26.5	17.7
10707	41.4	31.9
10708	36.4	5.6
10801	20.9	10.2

Dwelling no.	Thermal loads	
	Area adjusted heating load (in mJ/m ² /yr)	Area adjusted cooling load (in mJ/m ² /yr)
10802	8.6	13.6
10803	21.2	12.0
10804	22.9	12.8
10806	26.8	17.5
10807	41.7	31.7
10808	36.6	5.7
10901	21.0	10.1
10902	8.8	13.5
10903	21.5	12.1
10904	23.1	12.7
10905	17.5	12.3
10906	27.1	17.3
10907	42.1	30.5
10908	36.9	5.7
11001	21.3	10.4
11002	9.0	13.3
11003	21.8	12.0
11004	23.3	12.5
11005	17.7	12.2
11006	27.4	17.2
11007	42.3	30.5
11008	37.2	5.8
11101	21.6	10.2
11102	9.1	13.1
11103	22.1	12.0
11104	23.6	12.4
11105	17.9	12.2

Dwelling no.	Thermal loads	
	Area adjusted heating load (in mJ/m ² /yr)	Area adjusted cooling load (in mJ/m ² /yr)
11106	27.6	17.2
11107	42.7	30.6
11108	37.5	6.0
11201	21.8	10.0
11202	9.2	13.1
11203	22.4	12.2
11204	23.6	12.3
11205	17.7	12.0
11206	27.9	17.3
11207	43.0	30.3
11208	37.7	5.9
11301	22.1	10.0
11302	9.4	13.4
11303	22.7	12.2
11304	23.9	12.2
11305	17.8	12.1
11306	28.1	17.1
11307	43.3	30.0
11308	38.0	5.9
11401	22.1	10.2
11402	9.5	13.3
11403	22.8	12.2
11404	24.0	12.1
11405	17.9	12.1
11406	28.3	17.1
11407	43.5	30.3
11408	38.1	5.8

Dwelling no.	Thermal loads	
	Area adjusted heating load (in mJ/m ² /yr)	Area adjusted cooling load (in mJ/m ² /yr)
11501	22.4	10.1
11502	9.7	13.2
11503	23.1	12.2
11504	24.2	12.2
11505	18.2	12.3
11506	28.6	17.4
11507	43.8	29.8
11508	38.4	5.6
11601	26.3	11.1
11602	19.6	16.6
11603	23.3	12.3
11604	24.4	12.3
11605	18.3	12.0
11606	28.7	17.4
11607	44.0	29.6
11608	38.6	5.6
11701	24.1	11.3
11702	24.5	12.0
11703	18.8	12.3
11705	44.0	29.4
11706	33.8	6.2
11801	22.9	17.4
11802	23.7	12.5
11803	18.9	12.3
11805	48.2	13.0
11901	23.0	17.2
11902	23.3	12.6

Dwelling no.	Thermal loads	
	Area adjusted heating load (in mJ/m ² /yr)	Area adjusted cooling load (in mJ/m ² /yr)
11903	19.2	12.2
11904	29.3	16.9
11905	47.9	13.0
12001	23.1	17.2
12002	23.5	12.6
12003	19.3	12.0
12004	29.4	16.9
12005	48.1	13.1
12101	24.3	16.4
12102	24.4	11.5
12103	20.1	11.9
12104	30.6	16.2
12105	49.6	13.2
12201	24.4	16.3
12202	24.5	11.5
12203	20.2	12.2
12204	30.7	16.1
12205	49.8	13.2
12302	24.6	11.6
12303	20.2	11.9
12304	30.8	16.2
12305	49.9	13.1
12402	24.7	11.6
12403	24.2	13.1
12404	31.6	18.1
12405	50.1	13.1
12501	34.2	19.9

	Thermal loads	
Dwelling no.	Area adjusted heating load (in mJ/m ² /yr)	Area adjusted cooling load (in mJ/m ² /yr)
12502	41.3	13.1
12503	46.0	18.2
10605, 10805	17.3	12.2
11704, 11804	29.1	17.0
All other dwellings	24.6	16.3

(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	no common facility	4 star	6 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.	-

(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	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	No
Lift car (No.2)	-	-	light-emitting diode	connected to lift call button	No
Lift car (No.3)	-	-	light-emitting diode	connected to lift call button	No
NB - L1 - Secondary Switch	ventilation supply only	thermostatically controlled	light-emitting diode	motion sensors	No
North Bldg - GF - Retail waste/store	ventilation exhaust only	-	light-emitting diode	motion sensors	No
North Bldg - GF - Bulk Waste	ventilation exhaust only	-	light-emitting diode	motion sensors	No
NB - L1 - Chute/ store	ventilation exhaust only	-	light-emitting diode	motion sensors	No
North Bldg - GF - BOH	no mechanical ventilation	-	light-emitting diode	motion sensors	No
NB - L1 - Secondary Comms/Elec	ventilation supply only	thermostatically controlled	light-emitting diode	motion sensors	No
NB- L26 - Resi HW Plant	no mechanical ventilation	-	light-emitting diode	motion sensors	No
NB - GF - Store	no mechanical ventilation	-	light-emitting diode	motion sensors	No
NB - GF - Mail room	no mechanical ventilation	-	light-emitting diode	motion sensors	No
NB - L3 & L4 Store	no mechanical ventilation	-	light-emitting diode	motion sensors	No
NB - L5 - Communal WC	ventilation exhaust only	time clock or BMS controlled	light-emitting diode	motion sensors	No
NB - GF - L26 - Fire Stairs	no mechanical ventilation	-	light-emitting diode	motion sensors	No
North Bldg - GF - Lobby	no mechanical ventilation	-	light-emitting diode	motion sensors	No

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
NB - L1 - L25 Lobby	no mechanical ventilation	-	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): (a) Piping external to building: R1.0 (~38 mm); (b) Piping internal to building: R1.0 (~38 mm)
Lift (No. 1)	gearless traction with V V V F motor and regenerative drive	Number of levels (including basement): 27
Lift (No. 2)	gearless traction with V V V F motor and regenerative drive	Number of levels (including basement): 27
Lift (No. 3)	gearless traction with V V V F motor and regenerative drive	Number of levels (including basement): 27

2. Commitments for Residential flat buildings - South Building (SB)

(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: <ul style="list-style-type: none"> <li data-bbox="219 708 1541 762">(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 <li data-bbox="219 778 1509 833">(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.	✔	✔	✔

Dwelling no.	Fixtures					Appliances		Individual pool				Individual spa		
	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)	3 star	3 star	3 star	no	-	3 star	-	-	-	-	0.0	no	no

Dwelling no.	Alternative water source							
	Alternative water supply systems	Size	Configuration	Landscape connection	Toilet connection (s)	Laundry connection	Pool top-up	Spa top-up
All dwellings	central water tank (no. 1)	See central systems	See central systems	no	yes	no	no	no
None	-	-	-	-	-	-	-	-

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

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(f) This commitment applies to each room or area of the dwelling which is referred to in a heading to the "Natural lighting" column of the table below (but only to the extent specified for that room or area). The applicant must ensure that each such room or area is fitted with a window and/or skylight.	✔	✔	✔
(g) This commitment applies if the applicant installs a water heating system for the dwelling's pool or spa. The applicant must: (aa) install the system specified for the pool in the "Individual Pool" column of the table below (or alternatively must not install any system for the pool). If specified, the applicant must install a timer, to control the pool's pump; and (bb) install the system specified for the spa in the "Individual Spa" column of the table below (or alternatively must not install any system for the spa). If specified, the applicant must install a timer to control the spa's pump.		✔ ✔	
(h) The applicant must install in the dwelling: (aa) the kitchen cook-top and oven specified for that dwelling in the "Appliances & other efficiency measures" column of the table below; (bb) each appliance for which a rating is specified for that dwelling in the "Appliances & other efficiency measures" column of the table, and ensure that the appliance has that minimum rating; and (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 2	individual fan, ducted to façade or roof	manual on / timer off	individual fan, ducted to façade or roof	manual on / timer off	individual fan, ducted to façade or roof	manual on / timer 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
22501, 22503	1-phase airconditioning EER 3.0 - 3.5 (zoned)	4 (dedicated)	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	0	yes			
20503, 21404, 21504, 21604, 21704, 21804, 21904, 22004, 22104, 22204, 22304, 22404, 22502	1-phase airconditioning EER 3.0 - 3.5 (zoned)	4 (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
20501, 20502, 20603, 20604, 20703, 20704, 20803, 20804, 20903, 20904, 21003, 21004, 21103, 21104, 21203, 21204, 21303, 21304, 21403, 21503, 21603, 21703, 21803, 21903, 22003, 22103, 22203, 22303, 22403	1-phase airconditioning EER 3.0 - 3.5 (zoned)	2 (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
20101, 20103, 20201, 20203, 20301, 20303, 20401, 20403, 20601, 20606, 20701, 20706, 20801, 20806, 20901, 20906, 21001, 21006, 21101, 21106, 21201, 21206, 21301, 21306, 21401, 21501, 21601, 21701, 21801, 21901, 22001, 22101, 22201, 22301, 22401	1-phase airconditioning EER 3.0 - 3.5 (zoned)	1 (dedicated)	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	0	no			
All other dwellings	1-phase airconditioning EER 3.0 - 3.5 (zoned)	2 (dedicated)	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	0	yes			

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.	✓	✓	✓

(iii) Thermal Comfort	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(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)
20101	29.5	31.6
20102	30.1	25.0
20103	39.5	23.5
20201	29.8	31.0
20202	30.5	25.0
20203	40.0	23.4
20301	34.1	27.6
20302	33.9	23.1
20303	44.0	20.6
20401	33.8	26.8
20402	41.6	27.5
20403	51.3	23.6
20501	28.1	13.4
20502	28.3	10.8
20503	39.0	11.0
20504	47.2	15.7
20601	26.4	21.2
20602	16.6	13.0
20603	24.3	13.5
20604	40.9	8.8

Dwelling no.	Thermal loads	
	Area adjusted heating load (in mJ/m ² /yr)	Area adjusted cooling load (in mJ/m ² /yr)
20605	30.4	15.9
20606	29.5	19.8
20701	26.8	21.0
20702	16.2	12.7
20703	24.7	13.5
20704	41.4	8.7
20705	30.8	15.6
20706	30.0	19.7
20801	27.1	21.4
20802	16.4	12.9
20803	25.0	13.3
20804	41.7	8.7
20805	31.2	15.7
20806	30.3	19.5
20901	27.3	21.0
20902	16.5	12.7
20903	25.2	13.3
20904	42.0	8.8
20905	31.4	15.6
20906	30.7	19.1
21001	27.5	20.5
21002	16.6	12.6
21003	25.5	13.1
21004	42.3	8.7
21005	31.7	15.6
21006	30.8	19.4
21101	27.8	20.4

Dwelling no.	Thermal loads	
	Area adjusted heating load (in mJ/m ² /yr)	Area adjusted cooling load (in mJ/m ² /yr)
21102	16.8	12.6
21103	25.8	13.2
21104	42.5	8.6
21105	32.0	15.5
21106	31.1	19.3
21201	28.0	20.4
21202	17.0	12.6
21203	26.0	13.2
21204	42.8	8.6
21205	32.3	15.0
21206	31.3	19.4
21301	28.2	20.3
21302	17.2	12.5
21303	27.2	12.9
21304	43.1	8.7
21305	32.6	14.8
21306	31.6	19.5
21401	28.3	20.3
21402	17.3	11.5
21403	30.0	11.7
21404	30.0	9.0
21405	42.2	17.6
21501	28.6	20.3
21502	17.5	11.5
21503	30.2	11.7
21504	30.2	8.9
21505	42.5	17.6

Dwelling no.	Thermal loads	
	Area adjusted heating load (in mJ/m ² /yr)	Area adjusted cooling load (in mJ/m ² /yr)
21601	28.7	20.2
21602	17.5	11.4
21603	30.4	11.8
21605	42.6	17.6
21701	28.8	20.2
21702	17.7	11.5
21703	30.5	11.7
21705	42.8	17.4
21801	29.0	19.8
21802	17.9	11.5
21803	30.8	11.7
21804	30.7	8.8
21805	43.1	17.6
21901	29.1	19.7
21902	18.0	11.4
21903	31.0	11.6
21904	30.8	8.8
21905	43.2	17.5
22001	29.2	19.7
22002	18.1	11.5
22003	31.1	11.5
22004	30.9	8.9
22005	43.4	17.6
22101	29.3	19.7
22102	18.6	11.2
22103	32.2	10.9
22104	32.0	8.4

Dwelling no.	Thermal loads	
	Area adjusted heating load (in mJ/m ² /yr)	Area adjusted cooling load (in mJ/m ² /yr)
22105	44.6	17.5
22201	29.5	19.9
22202	18.7	11.2
22203	32.3	11.0
22204	32.1	8.4
22205	44.8	17.5
22301	29.6	19.8
22302	18.8	11.1
22303	32.5	11.2
22304	32.3	8.4
22305	44.9	17.4
22401	36.9	17.6
22402	19.0	11.1
22403	32.6	11.1
22404	32.4	8.6
22405	45.0	17.4
22501	30.6	21.7
22502	43.0	14.9
22503	51.9	21.5
All other dwellings	30.3	8.7

(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	no common facility	4 star	6 star	no common laundry facility

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

(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	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	No
Lift car (No.5)	-	-	light-emitting diode	connected to lift call button	No
SB - L1 - Main Switch Rm	ventilation supply only	thermostatically controlled	light-emitting diode	motion sensors	No
South Bldg - GF-shared retail/resi waste	ventilation exhaust only	-	light-emitting diode	motion sensors	No
South Bldg - GF - resi/retail waste	ventilation exhaust only	-	light-emitting diode	motion sensors	No
South Bldg - GF - BOH	no mechanical ventilation	-	light-emitting diode	motion sensors	No
SB - GF - Oily Water SEP	no mechanical ventilation	-	light-emitting diode	motion sensors	No
SB - GF - Fire Pump & Tank Rm	no mechanical ventilation	-	light-emitting diode	motion sensors	No
SB - GF - Gas Regulator	no mechanical ventilation	-	light-emitting diode	motion sensors	No
SB - GF - Fire Control Rm	no mechanical ventilation	-	light-emitting diode	motion sensors	No
SB - GF - Substation 1 & 2	ventilation supply only	thermostatically controlled	light-emitting diode	motion sensors	No
SB - GF - Comms	ventilation supply only	thermostatically controlled	light-emitting diode	motion sensors	No
SB - GF - RW Reuse pump&plant	no mechanical ventilation	-	light-emitting diode	motion sensors	No
SB - GF - Domestic Water - pump	no mechanical ventilation	-	light-emitting diode	motion sensors	No
SB - GF - Loading Zone	no mechanical ventilation	-	light-emitting diode	motion sensors	No

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
SB - L1 - main comms	ventilation supply only	thermostatically controlled	light-emitting diode	motion sensors	No
SB- L26 - Plant Rm (2x)	no mechanical ventilation	-	light-emitting diode	motion sensors	No
SB - GF - WC	ventilation exhaust only	time clock or BMS controlled	light-emitting diode	motion sensors	No
SB - L2 - Cold/Dry Store	no mechanical ventilation	-	light-emitting diode	motion sensors	No
SB - L5 - Communal WC	ventilation exhaust only	time clock or BMS controlled	light-emitting diode	motion sensors	No
SB - GF-L26 - Fire Stairs	no mechanical ventilation	-	light-emitting diode	motion sensors	No
South Bldg - GF - Lobby	no mechanical ventilation	-	light-emitting diode	motion sensors	No
SB - L1 - L25 Lobby	no mechanical ventilation	-	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): (a) Piping external to building: R1.0 (~38 mm); (b) Piping internal to building: R1.0 (~38 mm)
Lift (No. 4)	gearless traction with V V V F motor and regenerative drive	Number of levels (including basement): 27
Lift (No. 5)	gearless traction with V V V F motor and regenerative drive	Number of levels (including basement): 27

5. 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	no common facility	4 star	6 star	no common laundry facility

Central systems	Size	Configuration	Connection (to allow for...)
Central water tank - rainwater or stormwater (No. 1)	5500.0	To collect run-off from at least: - 1460.0 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 1027.3 square metres of common landscaped area on the site - car washing in 1 car washing bays on the site

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

	Common area ventilation system		Common area lighting		
Common area	Ventilation system type	Ventilation efficiency measure	Primary type of artificial lighting	Lighting efficiency measure	Lighting control system/BMS
Car park area (No. 1)	ventilation exhaust only	carbon monoxide monitor + VSD fan	light-emitting diode	motion sensors	No

Central energy systems	Type	Specification
Alternative energy supply	Photovoltaic system	Rated electrical output (min): 95.0 peak kW
Other	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).