# **BASIX**<sup>®</sup>Report

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

KReport	Project summary		
pility Index www.basix.nsw.gov.au	Project name	Telopea - Buildings A, B, C	0
Jinty muck www.basix.nsw.gov.au	Street address	Sturt Street Telopea 2117	
	Local Government Area	Parramatta City Council	
	Plan type and plan number	deposited 128229	
	Lot no.	5,6,7	
	Section no.	- 0.	
	No. of residential flat buildings	3	
	No. of units in residential flat buildings	252	
	No. of multi-dwelling houses	0	
	No. of single dwelling houses	0	
	Project score		
	Water	41	Target 40
	Thermal Comfort	Pass	Target Pass
	Energy	32	Target 25
This is not a			

# **Description of project**

# Project address

Project name	Telopea - Buildings A, B, C
Street address	Sturt Street Telopea 2117
Local Government Area	Parramatta City Council
Plan type and plan number	deposited 128229
Lot no.	5,6,7
Section no.	-
Project type	
No. of residential flat buildings	3
No. of units in residential flat buildings	252
No. of multi-dwelling houses	0
No. of single dwelling houses	0
Site details	
Site area (m <sup>2</sup> )	7210.56
Roof area (m²)	2321.51
Non-residential floor area (m <sup>2</sup> )	0.0
Residential car spaces	231

Common area landscape		
Common area lawn (m²)	138.82	
Common area garden (m <sup>2</sup> )	2433.2	
Area of indigenous or low water use species (m <sup>2</sup> )	0.0	
Assessor details		
Assessor number	HERA10033	
Certificate number	0005100350	
Climate zone	56	
Ceiling fan in at least one bedroom	No	
Ceiling fan in at least one living room or other conditioned area	No	
Project score		
Water	41	Target 40
Thermal Comfort	Pass	Target Pass
Energy	32	Target 25

# **Description of project**

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

# Residential flat buildings - Building A, 22 dwellings, 6 storeys above ground

Dwelling no.	No. of hedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)		Dwelling no. No. of hedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)	Dwelling no.	<u>No. of hedrooms</u>	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)	:	Dwelling no. No. of hedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)	Dwelling no.	No. of hedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
01.01	12	67.0	0.0	0.0	0.0	01.02 1	49.0	0.0	0.0	0.0	01.03	1 4	49.0	0.0	0.0	0.0	C	01.04 3	108.0	0.0	0.0	0.0	01.05	53	98.0	0.0	0.0	0.0
02.01	12	67.0	0.0	0.0	0.0	02.02 1	49.0	0.0	0.0	0.0	02.03	1 4	49.0	0.0	0.0	0.0	C	02.04 3	101.0	0.0	0.0	0.0	B1.0	11	66.0	0.0	0.0	0.0
B1.02	2 1	49.0	0.0	0.0	0.0	B1.03 3	98.0	0.0	0.0	0.0	B2.01	3 9	98.0	0.0	0.0	0.0	A	.G.01 2	67.0	0.0	0.0	0.0	LG.0	21	49.0	0.0	0.0	0.0
LG.0	33	108.0	0.0	0.0	0.0	LG.04 3	98.0	0.0	0.0	0.0	UG.0	12 (	67.0	0.0	0.0	0.0	J.	JG.021	49.0	0.0	0.0	0.0	UG.0	31	49.0	0.0	0.0	0.0
UG.0	43	108.0	0.0	0.0	0.0	UG.053	98.0	0.0	0.0	0.0	L				12	11			1	1	I		L					

# Residential flat buildings - Building B, 175 dwellings, 15 storeys above ground

Dwelling no.	No. of hedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	ea of gaı wn (m²)	Indigenous species (min area m²)	Dwelling no.	<u>No. or neorooms</u> Conditioned floor area (m²)	Unconditioned floor area (m²)	ea of ga /n (m²)	in ji	Dwelling no.	<u>No. of hedrooms</u> Conditioned floor	ea (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)	Dwelling no.	No. of hedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)	Dwelling no.	No. of hedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	rea of gal wn (m²)	Indigenous species (min area m²)
01.01	1	59.0	0.0	0.0	0.0	01.02 1	51.0	0.0	0.0	0.0	01.03	2 70	0.0	0.0	0.0	0.0	01.04	11	53.0	0.0	0.0	0.0	01.05	51	55.0	0.0	0.0	0.0
01.06	51	75.0	0.0	0.0	0.0	01.07 2	81.0	0.0	0.0	0.0	01.08	2 81	1.0	0.0	0.0	0.0	01.09	91	52.0	0.0	0.0	0.0	01.10	) 2	76.0	0.0	0.0	0.0
01.11	2	77.0	0.0	0.0	0.0	01.12 1	49.0	0.0	0.0	0.0	02.01	2 10	0.00	0.0	0.0	0.0	02.02	2 2	100.0	0.0	0.0	0.0	02.03	32	100.0	0.0	0.0	0.0
02.04	12	100.0	0.0	0.0	0.0	02.05 2	103.0	0.0	0.0	0.0	02.06	2 72	2.0	0.0	0.0	0.0	02.07	71	64.0	0.0	0.0	0.0	02.08	3 1	64.0	0.0	0.0	0.0
02.09	92	77.0	0.0	0.0	0.0	02.10 2	70.0	0.0	0.0	0.0	02.11	1 52	2.0	0.0	0.0	0.0	02.12	2 1	55.0	0.0	0.0	0.0	02.13	3 1	75.0	0.0	0.0	0.0
02.14	12	81.0	0.0	0.0	0.0	02.15 2	81.0	0.0	0.0	0.0	02.16	1 75	5.0	0.0	0.0	0.0	02.17	72	76.0	0.0	0.0	0.0	02.18	3 2	77.0	0.0	0.0	0.0

Dwelling no. No of bedroome	ומ ביו	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)	Dwelling no.	No. of hedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)	Dwelling no.	<u>No. of hedrooms</u>	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)	Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)	Dwelling no.	No. of hedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
02.19 1	49.0	0.0	0.0	0.0	02.20	) 1	63.0	0.0	0.0	0.0	02.21	1	63.0	0.0	0.0	0.0	02.2	22	110.0	0.0	0.0	0.0	02.23	2 1	00.0	0.0	0.0	0.0
02.24 2	100.0	0.0	0.0	0.0	02.25	52	100.0	0.0	0.0	0.0	03.01	1	59.0	0.0	0.0	0.0	03.0	21	51.0	0.0	0.0	0.0	03.03	2 7	0.0	0.0	0.0	0.0
03.04 1	50.0	0.0	0.0	0.0	03.05	51	55.0	0.0	0.0	0.0	03.06	51	75.0	0.0	0.0	0.0	03.0	72	81.0	0.0	0.0	0.0	03.08	2 8	31.0	0.0	0.0	0.0
03.09 1	75.0	0.0	0.0	0.0	03.10	2	77.0	0.0	0.0	0.0	03.11	2	77.0	0.0	0.0	0.0	03.1	21	48.0	0.0	0.0	0.0	04.01	1 4	9.0	0.0	0.0	0.0
04.02 2	76.0	0.0	0.0	0.0	04.03	2	76.0	0.0	0.0	0.0	04.04	2	75.0	0.0	0.0	0.0	04.0	51	61.0	0.0	0.0	0.0	04.06	3 9	95.0	0.0	0.0	0.0
04.07 2	86.0	0.0	0.0	0.0	04.08	2	77.0	0.0	0.0	0.0	04.09	) 2	77.0	0.0	0.0	0.0	04.1	01	49.0	0.0	0.0	0.0	04.11	1 4	9.0	0.0	0.0	0.0
04.12 2	80.0	0.0	0.0	0.0	04.13	2	80.0	0.0	0.0	0.0	04.14	1	49.0	0.0	0.0	0.0	05.0	1 1	49.0	0.0	0.0	0.0	05.02	2 7	6.0	0.0	0.0	0.0
05.03 2	76.0	0.0	0.0	0.0	05.04	2	75.0	0.0	0.0	0.0	05.05	51	61.0	0.0	0.0	0.0	05.0	63	95.0	0.0	0.0	0.0	05.07	2 8	86.0	0.0	0.0	0.0
05.08 2	77.0	0.0	0.0	0.0	05.09	2	77.0	0.0	0.0	0.0	05.10	) 1	49.0	0.0	0.0	0.0	05.1	1 1	49.0	0.0	0.0	0.0	05.12	2 8	80.0	0.0	0.0	0.0
05.13 2	80.0	0.0	0.0	0.0	05.14	- 1	49.0	0.0	0.0	0.0	06.01	1	49.0	0.0	0.0	0.0	06.0	22	76.0	0.0	0.0	0.0	06.03	2 7	6.0	0.0	0.0	0.0
06.04 2	75.0	0.0	0.0	0.0	06.05	5 1	61.0	0.0	0.0	0.0	06.06	63	95.0	0.0	0.0	0.0	06.0	72	86.0	0.0	0.0	0.0	06.08	2 7	7.0	0.0	0.0	0.0
06.09 2	77.0	0.0	0.0	0.0	06.10	) 1	49.0	0.0	0.0	0.0	06.11	1	49.0	0.0	0.0	0.0	06.1	22	80.0	0.0	0.0	0.0	06.13	2 8	80.0	0.0	0.0	0.0
06.14 1	49.0	0.0	0.0	0.0	07.01	1	49.0	0.0	0.0	0.0	07.02	2 2	76.0	0.0	0.0	0.0	07.0	32	76.0	0.0	0.0	0.0	07.04	2 7	<b>'</b> 5.0	0.0	0.0	0.0
07.05 1	61.0	0.0	0.0	0.0	07.06	; 3	95.0	0.0	0.0	0.0	07.07	2	86.0	0.0	0.0	0.0	07.0	82	77.0	0.0	0.0	0.0	07.09	2 7	7.0	0.0	0.0	0.0
07.10 1	49.0	0.0	0.0	0.0	07.11	1	49.0	0.0	0.0	0.0	07.12	2 2	80.0	0.0	0.0	0.0	07.1	32	80.0	0.0	0.0	0.0	07.14	1 4	9.0	0.0	0.0	0.0
08.01 1	49.0	0.0	0.0	0.0	08.02	2	76.0	0.0	0.0	0.0	08.03	32	76.0	0.0	0.0	0.0	08.0	42	75.0	0.0	0.0	0.0	08.05	1 6	61.0	0.0	0.0	0.0
08.06 3	95.0	0.0	0.0	0.0	08.07	2	86.0	0.0	0.0	0.0	09.01	1	49.0	0.0	0.0	0.0	09.0	22	76.0	0.0	0.0	0.0	09.03	2 7	6.0	0.0	0.0	0.0
09.04 2	75.0	0.0	0.0	0.0	09.05	1	61.0	0.0	0.0	0.0	09.06	63	95.0	0.0	0.0	0.0	09.0	72	86.0	0.0	0.0	0.0	10.01	1 4	9.0	0.0	0.0	0.0
10.02 2	76.0	0.0	0.0	0.0	10.03	2	76.0	0.0	0.0	0.0	10.04	2	75.0	0.0	0.0	0.0	10.0	51	61.0	0.0	0.0	0.0	10.06	3 9	95.0	0.0	0.0	0.0
10.07 2	86.0	0.0	0.0	0.0	11.01	1	49.0	0.0	0.0	0.0	11.02	2 2	76.0	0.0	0.0	0.0	11.0	32	76.0	0.0	0.0	0.0	11.04	2 7	<b>'</b> 5.0	0.0	0.0	0.0
11.05 1	61.0	0.0	0.0	0.0	11.06	3	95.0	0.0	0.0	0.0	11.07	2	86.0	0.0	0.0	0.0	12.0	1 1	49.0	0.0	0.0	0.0	12.02	2 7	6.0	0.0	0.0	0.0
12.03 2	76.0	0.0	0.0	0.0	12.04	- 2	75.0	0.0	0.0	0.0	12.05	51	61.0	0.0	0.0	0.0	12.0	63	95.0	0.0	0.0	0.0	12.07	2 8	86.0	0.0	0.0	0.0
13.01 1	49.0	0.0	0.0	0.0	13.02	2	76.0	0.0	0.0	0.0	13.03	32	76.0	0.0	0.0	0.0	13.0	42	75.0	0.0	0.0	0.0	13.05	1 6	51.0	0.0	0.0	0.0
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Dwelling no. No of hedroome	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)	Dwelling no.	No. of hedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)		Dwelling no. No. of hedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	ea of ga /n (m²)	<u> </u>	Dwelling no.	No. of hedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & Iawn (m²)		Dwelling no.	No. of hedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
13.06 3	95.0	0.0	0.0	0.0	13.07	72	86.0	0.0	0.0	0.0	LG.01 1	60.0	0.0	0.0	0.0	LG.0	21	67.0	0.0	0.0	0.0	LG.0	32	81.0	0.0	0.0	0.0
LG.042	76.0	0.0	0.0	0.0	LG.0	52	89.0	0.0	0.0	0.0	UG.012	91.0	0.0	0.0	0.0	UG.0	22	100.0	0.0	0.0	0.0	UG.0	32	100.0	0.0	0.0	0.0
UG.041	100.0	0.0	0.0	0.0	UG.0	52	94.0	0.0	0.0	0.0	UG.062	74.0	0.0	0.0	0.0	UG.0	71	64.0	0.0	0.0	0.0	UG.0	81	64.0	0.0	0.0	0.0
UG.093	95.0	0.0	0.0	0.0	UG.1	03	99.0	0.0	0.0	0.0	UG.111	60.0	0.0	0.0	0.0	UG.1	22	81.0	0.0	0.0	0.0	UG.1	32	81.0	0.0	0.0	0.0
UG.141	60.0	0.0	0.0	0.0	UG.1	51	62.0	0.0	0.0	0.0	UG.162	81.0	0.0	0.0	0.0	UG.1	71	49.0	0.0	0.0	0.0	UG.1	81	63.0	0.0	0.0	0.0
UG.191	63.0	0.0	0.0	0.0	UG.2	02	113.0	0.0	0.0	0.0	UG.212	100.0	0.0	0.0	0.0	UG.2	32	100.0	0.0	0.0	0.0	UG.2	42	94.0	0.0	0.0	0.0

# Residential flat buildings - Building C, 55 dwellings, 9 storeys above ground

Dwelling no.	No. of hedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)	Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	ea of ga vn (m²)		Dwelling no.	<u>Conditioned floor</u> area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)		Dwelling no.	No. of hedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & Iawn (m²)	Indigenous species (min area m²)	Dwelling no.	No. of hedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
01.01	1	59.0	0.0	0.0	0.0	01.0	21	53.0	0.0	0.0	0.0	01.03 1	51.0	0.0	0.0	0.0	01.04	12	75.0	0.0	0.0	0.0	01.05	2	74.0	0.0	0.0	0.0
01.06	1	54.0	0.0	0.0	0.0	01.0	72	76.0	0.0 ٵ	0.0	0.0	01.08 1	47.0	0.0	0.0	0.0	02.01	11	59.0	0.0	0.0	0.0	02.02	1	53.0	0.0	0.0	0.0
02.03	1	51.0	0.0	0.0	0.0	02.0	42	75.0	0.0	0.0	0.0	02.05 2	74.0	0.0	0.0	0.0	02.06	51	54.0	0.0	0.0	0.0	02.07	2	76.0	0.0	0.0	0.0
02.08	1	47.0	0.0	0.0	0.0	03.0	1 1	59.0	0.0	0.0	0.0	03.02 1	53.0	0.0	0.0	0.0	03.03	31	51.0	0.0	0.0	0.0	03.04	2	75.0	0.0	0.0	0.0
03.05	2	74.0	0.0	0.0	0.0	03.0	61	54.0	0.0	0.0	0.0	03.07 2	76.0	0.0	0.0	0.0	03.08	31	47.0	0.0	0.0	0.0	04.01	1	59.0	0.0	0.0	0.0
04.02	1	53.0	0.0	0.0	0.0	04.0	31	51.0	0.0	0.0	0.0	04.04 1	75.0	0.0	0.0	0.0	04.05	51	74.0	0.0	0.0	0.0	05.01	1	59.0	0.0	0.0	0.0
05.02	1	53.0	0.0	0.0	0.0	05.0	31	51.0	0.0	0.0	0.0	05.04 2	75.0	0.0	0.0	0.0	05.05	52	74.0	0.0	0.0	0.0	06.01	1	59.0	0.0	0.0	0.0
06.02	1	53.0	0.0	0.0	0.0	06.0	31	51.0	0.0	0.0	0.0	06.04 2	75.0	0.0	0.0	0.0	06.05	52	74.0	0.0	0.0	0.0	07.01	1	59.0	0.0	0.0	0.0
07.02	1	53.0	0.0	0.0	0.0	07.0	31	51.0	0.0	0.0	0.0	07.04 2	57.0	0.0	0.0	0.0	07.05	52	74.0	0.0	0.0	0.0	08.01	1	59.0	0.0	0.0	0.0

Dwelling no. No. of hedrooms Conditioned floor area (m²) Unconditioned floor area (m²) Area of garden & lawn (m²) Indigenous species (min area m²)	Dwelling no.No. of hedroomsNo. of hedroomsConditioned floorarea (m²)Unconditionedfloor area (m²)floor area (m²)lawn (m²)Indigenous species(min area m²)		Dwelling no.No. of bedroomsNo. of bedroomsConditioned floorarea (m²)Unconditionedfloor area (m²)Area of garden &floor area (m²)Indigenous species(min area m²)Dwelling no.No. of hedroomsConditioned floorarea (m²)Unconditioned floorarea (m²)Unconditioned floorarea (m²)Unconditioned floorarea of garden &lawn (m²)Indigenous species(min area m²)floor area (m²)Area of garden &lawn (m²)Indigenous species(min area m²)Indigenous species(min area m²)
08.02 1 53.0 0.0 0.0 0.0	08.03 1 51.0 0.0 0.0 0.0	08.04 2 75.0 0.0 0.0 0.0	08.05 2 74.0 0.0 0.0 0.0 UG.011 59.0 0.0 0.0 0.0
UG.021 53.0 0.0 0.0 0.0			08.05         2         74.0         0.0         0.0         0.0         UG.011         59.0         0.

# **Description of project**

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

#### Common areas of unit building - Building A

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

# Common areas of unit building - Building B

Common area	Floor area (m²)	Common area
Lift car (No.2)	-	Lift car (No.3)
Lift car (No.5)	-	

# Common areas of unit building - Building C

Common area	Floor area (m <sup>2</sup> )	Common area	Floor area (m²)
Lift car (No.6)	-	Lift car (No.7)	-

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

Common area	Floor area (m²)	Common area	Floor area (m²)	Common area	Floor area (m²)
Car park	9923.2	Comms & MSR	61.0	Garbage rooms	422.71
Plant	545.32	Roof plants & toilet	258.0	Mail rooms	30.56
Store rooms	24.0	Ground floor lobbies	302.67	Hallways	1668.7

Floor area (m<sup>2</sup>)

-

Floor area (m<sup>2</sup>)

-

Ficate

Common area Lift car (No.4)

# Schedule of BASIX commitments

#### 1. Commitments for Residential flat buildings - Building A

- (a) Dwellings
  - (i) Water
  - (ii) Energy
  - (iii) Thermal Comfort
- (b) Common areas and central systems/facilities
  - (i) Water
  - (ii) Energy
- ading C to the total of to 2. Commitments for Residential flat buildings - Building B
  - (a) Dwellings
    - (i) Water
    - (ii) Energy
    - (iii) Thermal Comfort
  - (b) Common areas and central systems/facilities
    - (i) Water
    - (ii) Energy
- 3. Commitments for Residential flat buildings Building C
  - (a) Dwellings
    - (i) Water
    - (ii) Energy
    - (iii) Thermal Comfort
  - (b) Common areas and central systems/facilities
    - (i) Water
    - (ii) Energy
- 4. Commitments for multi-dwelling houses
- 5. Commitments for single dwelling houses



# Schedule of BASIX commitments

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

## 1. Commitments for Residential flat buildings - Building A

#### (a) Dwellings

			1
(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.	$(I_{I_{i}})$		
(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.		<b>~</b>	~
(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.	~	<b>~</b>	
(f) If specified in the table, that pool or spa (or both) must have a pool cover or shading (or both).		<b>v</b>	
(g) The pool or spa must be located as specified in the table.	~	<b>~</b>	
(h) The applicant must install, for the dwelling, each alternative water supply system, with the specified size, listed for that dwelling in the table below. Each system must be configured to collect run-off from the areas specified (excluding any area which supplies any other alternative water supply system), and to divert overflow as specified. Each system must be connected as specified.	~	~	~

	Fixtures			Appli		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
	4 star (> 6 but <= 7.5 L/min)	4 star	5 star	5 star	no	-	3.5 star	-	-	-	-	20	- )	-

		Alternative water source								
Dwelling no.	Alternative water supply systems	Size	Configuration		andscape onnection	Toilet connection (s)	Laundry connection	Pool top-up	Spa top-up	
None	-	-	-	-		-	-	-	-	
			<i></i>		)					

(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.		~	~

i) 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		all	
(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.	.50	jo. ,	
(h) The applicant must install in the dwelling:	4111		
(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>v</b>	

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

	Coo	ling	Hea	ting			Natural lighting					
Dwelling no.	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or dining rooms	Each kitchen	All bathrooms/ toilets	Each Iaundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
All dwellings	1-phase airconditioning 3 star (average zone)	ceiling fans	1-phase airconditioning 3 star (average zone)	-	0	1	yes	yes	yes	yes	0	no

	Individual po	ool	Individual s	ра		Appliances & other efficiency measures						
Dwelling no.	Pool heating system	Timer	Spa heating system	Timer	Kitchen cooktop/oven	Refrigerator	Well ventilated fridge space	Dishwasher	Clothes washer	Clothes dryer	Indoor or sheltered clothes drying line	Private outdoor or unsheltered clothes drying line
All dwellings	-	-	-	-	induction cooktop & electric oven	1	no	3.5 star	-	2 star	no	no
	× O											

(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.	~		

i) Thermal Comfort	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
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.	t	~	
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.		10	~
g) Where there is an in-slab heating or cooling system, the applicant must:	. 40	;0.	~
(aa) Install insulation with an R-value of not less than 1.0 around the vertical edges of the perimeter of the slab; or	1/18		
(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.	(r)		
h) The applicant must construct the floors and walls of the development in accordance with the specifications listed in the table below.	~	<b>v</b>	~

		Thermal loads
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)
01.01	23.4	21.9
01.02	25.7	14.8
01.03	15.7	14.8
01.04	11.7	13.6
01.05	16.4	17.1
02.01	23.7	10.0
02.02	18.6	15.9
02.03	11.3	16.7
02.04	9.7	22.5
B1.01	16.7	28.4
B1.02	11.5	15.1

) Welling no.		Thermal loads
	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)
31.03	5.9	25.0
32.01	6.0	17.0
.G.01	22.4	23.9
G.02	25.6	16.1
G.03	12.9	13.6
G.04	6.3	24.2
JG.01	23.3	22.0
JG.02	25.9	14.5
JG.03	29.0	13.9
JG.04	9.8	13.8
Il other dwellings	6.5	23.5
	6.5	

(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.		ate	~
(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.	$\cdot \epsilon ($	~ ~	
(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.	Cr.	~	
(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.		~	~
12/10	1	1	1

Common area	Showerheads rating	Toilets rating	Taps rating	Clothes wa	shers rating			
All common areas	no common facility	4 star	5 star	no common	common laundry facility			
			)~	· · ·				
(ii) Energy		:6	-	Show DA pla		Certifier check		
			to service a common area specified in mon area, and must meet the efficience		~	~		
specified in	the table below, the lighting specified ant must also install a centralised light	for that common area. This	pe of artificial lighting" for each commo lighting must meet the efficiency mea ng Management System (BMS) for the	sure specified.	~	~		
	nt must install the systems and fixtur	es specified in the "Central e	nergy systems" column of the table be listed for it in the table.	elow. In each				

	Common area ve	entilation system		Common area lighting	
Common area	Ventilation system type	Ventilation efficiency measure	Primary type of artificial lighting	Lighting efficiency measure	Lighting control system/BMS
Lift car (No.1)	-	-	light-emitting diode	connected to lift call button	No

		× 0.
Central energy systems	Туре	Specification
Lift (No. 1)	gearless traction with V V V F motor	Number of levels (including basement): 6
		ot a valid Certini
	12:	ota
· · ·	This is	

# 2. Commitments for Residential flat buildings - Building B

### (a) Dwellings

i) Water	Show on DA plans	Show on CC/CDC plans & specs	Certifie check
(a) The applicant must comply with the commitments listed below in carrying out the development of a dwelling listed in a table below.		×C,	
(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).		3.5	
(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.	911	~	~
(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		<b>~</b>	~
(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.		<ul> <li>Image: A second s</li></ul>	~
(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.	~	~	~
THIS	1		I

		Fixtures				Appli		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
	4 star (> 6 but <= 7.5 L/min)	4 star	5 star	5 star	no	-	3.5 star	-	-	-	-	20	- )	-

		Alternative water source									
Dwelling no.	Alternative water supply systems	Size	Configuration		andscape onnection	Toilet connection (s)	Laundry connection	Pool top-up	Spa top-up		
None	-	-	-	-		-	-	-	-		
			<i></i>		)						

(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.		~	~

i) 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		all	
(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.	.50	jo. ,	
(h) The applicant must install in the dwelling:	4111		
(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>v</b>	

	Hot water	Bathroom ven	tilation system	Kitchen vent	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	interlocked to light	individual fan, ducted to façade or roof	manual switch on/off	individual fan, ducted to façade or roof	interlocked to light
		This					

	Cooling Heating					Artificial lighting						
Dwelling no.	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or dining rooms	Each kitchen	All bathrooms/ toilets	Each Iaundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
All dwellings	1-phase airconditioning 3 star (average zone)	ceiling fans	1-phase airconditioning 3 star (average zone)	-	0	1	yes	yes	yes	yes	0	no

	Individual po	ool	Individual s	ра			Appliance	es & other effic	iency meas	ures		
Dwelling no.	Pool heating system	Timer	Spa heating system	Timer	Kitchen cooktop/oven	Refrigerator	Well ventilated fridge space	Dishwasher	Clothes washer	Clothes dryer	Indoor or sheltered clothes drying line	Private outdoor or unsheltered clothes drying line
All dwellings	-	-	-	-	induction cooktop & electric oven	1	no	3.5 star	-	2 star	no	no
					X	<i>'</i> 0.						

(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.	~		

~	✓ ⊘	<b>~</b>
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•	¥	~
¥		✓ ✓

		Thermal loads
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)
01.01	9.3	24.3
01.02	16.6	16.8
01.03	13.4	18.9
01.04	7.2	26.7
01.05	1.3	12.7
01.06	5.4	10.5
01.07	12.4	13.6
01.08	12.8	14.5
01.09	2.0	27.0
01.10	17.0	17.3
01.11	6.6	25.4

		Thermal loads
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)
01.12	16.1	20.1
02.01	10.6	12.1
02.02	7.8	22.4
02.03	8.7	16.7
02.04	7.9	22.3
02.05	29.1	13.5
02.06	12.1	25.0
02.07	7.0	27.5
02.08	6.2	21.5
02.09	15.1	18.4
02.10	12.1	18.6
02.11	7.3	28.3
02.12	2.9	10.8
02.13	5.9	10.4
02.14	12.9	13.4
02.15	13.5	14.3
02.16	2.4	26.3
02.17	20.4	13.7
02.18	19.1	27.8
02.19	16.7	20.0
02.20	20.8	12.6
02.21	38.5	13.3
02.22	34.3	19.7
02.23	11.0	16.4
02.24	10.8	14.9
02.25	12.1	19.3
03.01	14.9	22.0

		Thermal loads
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)
03.02	18.6	19.8
03.03	15.2	19.2
03.04	3.1	25.9
03.05	4.1	10.4
03.06	19.8	7.1
03.07	27.8	10.3
03.08	28.1	10.6
03.09	12.8	20.6
03.10	20.9	13.4
03.11	19.7	27.1
03.12	16.9	12.9
04.02	23.6	15.2
04.03	18.5	21.2
04.04	18.6	22.7
04.05	9.4	24.6
04.06	27.4	27.6
04.07	17.7	26.9
04.08	21.8	12.9
04.09	20.1	26.4
04.10	20.6	14.2
04.11	21.7	15.3
04.12	21.5	16.8
04.13	35.6	17.9
04.14	34.4	10.8
05.01	15.7	15.0
05.02	25.2	18.1
05.03	25.3	25.4

		Thermal loads
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)
05.04	17.6	24.3
05.06	27.7	27.3
05.07	18.1	27.4
05.08	20.3	13.6
05.09	20.6	26.1
05.10	21.1	14.0
05.11	19.3	14.8
05.12	22.1	16.3
05.13	26.1	12.9
05.14	34.7	11.1
06.01	15.4	15.4
06.02	23.6	18.3
06.03	26.2	25.5
06.04	18.1	24.2
06.06	30.2	22.8
06.07	18.2	27.9
06.08	20.6	13.9
06.09	20.9	25.7
06.10	21.5	14.0
06.11	19.6	14.4
06.12	24.8	14.7
06.13	26.6	12.7
06.14	33.8	11.1
07.01	26.0	12.9
07.02	23.0	18.6
07.03	26.0	25.5
07.04	18.1	23.8

		Thermal loads
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)
07.05	9.5	23.9
07.06	30.3	22.8
07.07	18.3	27.4
07.08	25.5	12.6
07.09	26.7	22.9
07.10	23.3	19.3
07.11	31.4	12.2
07.12	30.5	13.0
07.13	23.1	8.8
07.14	33.5	11.4
08.01	15.4	15.1
08.02	22.8	18.6
08.03	25.8	25.7
08.04	18.8	23.4
08.05	9.6	23.7
08.06	30.4	22.9
08.07	18.4	27.0
09.02	22.7	18.5
09.03	25.7	25.3
09.04	19.0	23.5
09.05	9.9	23.3
09.06	30.6	22.7
09.07	18.7	26.4
10.01	15.9	15.0
10.02	24.4	15.8
10.03	27.5	21.8
10.04	20.9	21.0

		Thermal loads
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)
10.05	11.1	21.7
10.06	31.0	22.6
10.07	18.9	26.1
11.01	16.2	14.9
11.02	24.7	15.9
11.03	27.8	21.5
11.04	21.1	20.9
11.05	11.4	21.2
11.06	31.1	22.6
11.07	19.1	25.9
12.01	16.4	14.9
12.02	24.8	15.9
12.03	27.9	21.2
12.04	21.2	20.7
12.05	11.5	21.1
12.06	31.4	22.1
12.07	19.3	25.8
13.01	27.3	12.4
13.02	34.1	14.0
13.03	36.4	17.6
13.04	31.1	16.5
13.05	21.1	17.6
13.06	37.5	20.1
13.07	27.9	21.0
LG.01	16.9	17.2
LG.02	8.7	22.6
LG.03	19.3	19.6

		Thermal loads
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)
LG.04	27.2	18.4
LG.05	40.5	21.1
UG.01	11.2	14.7
UG.02	12.2	20.7
UG.03	13.3	13.3
UG.04	13.4	20.0
UG.05	24.3	14.4
UG.06	24.1	28.4
UG.07	21.9	29.1
UG.08	14.6	23.7
UG.09	31.8	22.3
UG.10	3.2	20.1
UG.11	4.1	22.6
UG.12	19.9	14.2
UG.13	20.3	14.2
UG.14	0.3	26.8
UG.15	14.5	11.2
UG.16	11.1	23.2
UG.17	16.2	18.4
UG.18	21.5	10.6
UG.19	31.9	13.7
UG.20	39.0	19.8
UG.21	17.9	16.6
UG.23	14.9	19.6
UG.24	15.7	11.4
04.01, 09.01	15.7	15.2
All other dwellings	9.6	24.5

(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.		ate	~
(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.	$\cdot \epsilon ($	~ ~	
(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.	Cr.	~	
(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.		~	~
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Common area	Showerheads rating	Toilets rating	Taps rating	Clothes washe	rs rating		
All common areas	no common facility	4 star	5 star	no common lau	ndry facility		
			)`				
(ii) Energy		:6	~	Show on DA plans	Show on CC/CDC plans & specs	Certifier check	
			to service a common area specified ir mon area, and must meet the efficien		~	~	
specified in	the table below, the lighting specified nt must also install a centralised lightir	for that common area. This	vpe of artificial lighting" for each comm s lighting must meet the efficiency mea ng Management System (BMS) for the	asure specified.	~	~	
(c) The applicar	nt must install the systems and fixtures stem or fixture must be of the type, ar	s specified in the "Central e	energy systems" column of the table be	elow. In each			

	Common area	ventilation system		Common area lighting				
Common area	Ventilation system type	Ventilation efficiency measure	Primary type of artificial lighting	Lighting efficiency measure	Lighting control system/BMS			
Lift car (No.2)	-	-	light-emitting diode	connected to lift call button	No			
Lift car (No.3)	-	-	light-emitting diode	connected to lift call button	No			
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			

Central energy systems	Туре	Specification
Lift (No. 2)	gearless traction with V V V F motor	Number of levels (including basement): 17
Lift (No. 3)	gearless traction with V V V F motor	Number of levels (including basement): 17
Lift (No. 4)	gearless traction with V V V F motor	Number of levels (including basement): 17
Lift (No. 5)	gearless traction with V V V F motor	Number of levels (including basement): 17
•	This is n	

# 3. Commitments for Residential flat buildings - Building C

### (a) Dwellings

i) Water	Show on DA plans	Show on CC/CDC plans & specs	Certifie check
(a) The applicant must comply with the commitments listed below in carrying out the development of a dwelling listed in a table below.		×C,	
(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).		3.5	
(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.	911	~	~
(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		<b>~</b>	~
(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.		<ul> <li>Image: A second s</li></ul>	~
(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.	~	~	~
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	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
	4 star (> 6 but <= 7.5 L/min)	4 star	5 star	5 star	no	-	3.5 star	-	-	-	-	20	- )	-

			Alternative water sou	rce				
Dwelling no.	Alternative water supply systems	Size	Configuration	Landscape connection	Toilet connection (s)	Laundry connection	Pool top-up	Spa top-up
None	-	-	-	20	-	-	-	-
			i) iiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii	O				

(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.		~	~

i) 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		all	
(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.	1.8.0	jo. ,	
(h) The applicant must install in the dwelling:	4111		
(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.		~	
<ul> <li>(i) If specified in the table, the applicant must carry out the development so that each refrigerator space in the dwelling is "well ventilated".</li> </ul>		<b>v</b>	

	Hot water	Bathroom ven	tilation system	Kitchen vent	ilation system	Laundry ventilation system		
Dwelling no.	Hot water system	Each bathroom	Operation control	Each kitchen	Operation control	Each laundry	Operation control	
All dwellings	central hot water system 1	individual fan, ducted to façade or roof	interlocked to light	individual fan, ducted to façade or roof	manual switch on/off	individual fan, ducted to façade or roof	interlocked to light	
		This						

	Coo	ling	Hea	ting			Artificia	l lighting			Natural lig	hting
Dwelling no.	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or dining rooms	Each kitchen	All bathrooms/ toilets	Each Iaundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
All dwellings	1-phase airconditioning 3 star (average zone)	ceiling fans	1-phase airconditioning 3 star (average zone)	-	0	1	yes	yes	yes	yes	0	no

	Individual po	ool	Individual s	ра			Appliance	es & other effic	iency meas	ures		
Dwelling no.	Pool heating system	Timer	Spa heating system	Timer	Kitchen cooktop/oven	Refrigerator	Well ventilated fridge space	Dishwasher	Clothes washer	Clothes dryer	Indoor or sheltered clothes drying line	Private outdoor or unsheltered clothes drying line
All dwellings	-	-	-	-	induction cooktop & electric oven	1	no	3.5 star	-	2 star	no	no
					X	<i>'</i> 0.						

(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.	~		

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		Thermal loads				
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)				
01.01	14.8	21.2				
01.02	26.0	10.8				
01.03	20.7	11.8				
01.04	13.5	12.9				
01.05	8.7	17.0				
01.06	2.1	24.4				
01.07	19.2	15.8				
01.08	22.7	24.6				
02.01	13.7	24.5				
02.02	26.3	10.3				
02.03	20.9	12.3				

		Thermal loads
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)
02.04	13.8	12.6
02.05	9.1	16.8
02.06	2.3	24.0
02.07	16.7	16.8
02.08	18.8	27.1
03.01	16.9	18.4
03.02	27.9	12.8
03.03	19.1	11.9
03.04	18.1	9.7
03.05	11.5	13.5
03.06	4.4	20.5
03.07	32.0	11.0
03.08	27.1	21.8
04.01	16.6	21.5
04.02	27.9	13.1
04.03	24.7	10.4
04.04	18.3	9.7
04.05	11.8	13.3
05.01	16.5	21.5
05.02	27.5	13.5
05.03	24.8	10.8
05.04	18.6	10.0
05.05	12.1	13.1
06.01	12.0	24.1
06.02	26.2	10.9
06.03	24.0	11.0
06.04	18.4	10.3

	Thermal loads			
elling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)		
)5	12.3	12.9		
)1	17.0	21.1		
02	27.5	13.7		
)3	25.7	10.3		
)4	19.2	10.1		
)5	12.8	13.2		
)1	28.6	17.1		
)2	28.8	12.8		
)3	37.5	8.7		
)4	37.4	28.9		
)5	21.5	11.1		
01	15.4	19.6		
02	29.4	20.5		
03	27.5	11.3		
04	18.5	14.3		
05	24.6	19.3		
other dwellings	34.0	17.8		
03 04 05	27.5 18.5 24.6	11.3 14.3 19.3		

(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.		ate	~
(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.	$\cdot \epsilon ($	<i>у</i> ,	
(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.	Cr.	~	
(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.		~	~
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Common area	Showerheads rating	Toilets rating	Taps rating	Clothes washe	hes washers rating		
All common areas	no common facility	4 star	5 star	no common lau	common laundry facility		
			)*				
(ii) Energy		:61	-	Show on DA plans	Show on CC/CDC plans & specs	Certifier check	
			em to service a common area specified in ommon area, and must meet the efficienc		~	~	
specified in	the table below, the lighting specified ant must also install a centralised light	for that common area. T	type of artificial lighting" for each common his lighting must meet the efficiency meas ding Management System (BMS) for the	sure specified.	~	~	
(c) The applicar			al energy systems" column of the table be s, listed for it in the table.	elow. In each			

	Common area y	entilation system		Common area lighting	
Common area	Ventilation system type	Ventilation efficiency measure	Primary type of artificial lighting	Lighting efficiency measure	Lighting control system/BMS
Lift car (No.6)	-	-	light-emitting diode	connected to lift call button	No
Lift car (No.7)	-	-	light-emitting diode	connected to lift call button	No

Central energy systems         Type         Specification           Lift (No. 6)         gearless traction with V V V Fmotor         Number of levels (including basement): 12           Lift (No. 7)         gearless traction with V V V Pmotor         Number of levels (including basement): 12			
F motor       Lift (No. 7)     gearless traction with V V V F motor	Central energy systems	Туре	Specification
F motor	Lift (No. 6)	gearless traction with V V V F motor	Number of levels (including basement): 12
This is not a valid Us	Lift (No. 7)	gearless traction with V V V F motor	Number of levels (including basement): 12
		isisn	otavalid
		11.	

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

(i) Water	Show on DA plans	Show on CC/CDC plans & specs	Certifie 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.		10	~
(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.	. Ý (	;0.	~
(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.	$\mathcal{O}$	~	
(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	5 star	no common laundry facility

Central systems	Size	Configuration	Connection (to allow for)
Central water tank - rainwater or stormwater (No. 1)	50000.0	To collect run-off from at least: - 2321.5 square metres of roof area of buildings in the development - 162.43 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).	<ul> <li>irrigation of 2504.3 square metres of common landscaped area on the site</li> <li>car washing in 1 car washing bays on the site</li> </ul>

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.		3.	~
(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.	fil.	~	~
(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.	~	~	~
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	Common area ventilation system		Common area lighting		
Common area	Ventilation system type	Ventilation efficiency measure	Primary type of artificial lighting	Lighting efficiency measure	Lighting control system/BMS
Car park	ventilation (supply + exhaust)	carbon monoxide monitor + VSD fan	light-emitting diode	zoned switching with motion sensor	No
Comms & MSR	air conditioning system	interlocked to light	light-emitting diode	manual on / manual off	No
Garbage rooms	ventilation exhaust only	C	light-emitting diode	motion sensors	No
Plant	no mechanical ventilation	3	light-emitting diode	manual on / manual off	No
Roof plants & toilet	no mechanical ventilation	2	light-emitting diode	manual on / manual off	No
Mail rooms	ventilation supply only	time clock or BMS controlled	light-emitting diode	motion sensors	No
Store rooms	ventilation supply only	time clock or BMS controlled	light-emitting diode	motion sensors	No
Ground floor lobbies	no mechanical ventilation	-	light-emitting diode	time clocks	No
Hallways	no mechanical ventilation	-	light-emitting diode	zoned switching with motion sensor	No

Central energy systems	Туре	Specification
Central hot water system (No. 1)	electric heat pump - air sourced	Piping insulation (ringmain & supply risers): (a) Piping external to building: R0.6 (~25 mm); (b) Piping internal to building: R0.6 (~25 mm)
Alternative energy supply	Photovoltaic system	Rated electrical output (min): 100.0 peak kW
	hisisn	(a) Piping internal to building: R0.6 (-25 mm); (b) Piping internal to building: R0.6 (-25 mm); Rated electrical output (min): 100.0 peak kW

1. In these commitments, "applicant" means the p	person carrying out the development.
	ding and common area listed in this certificate, on the plans accompanying any development application, and on the plans and or a construction certificate / complying development certificate, for the proposed development, using the same identifying letter or or common area in this certificate.
3. This note applies if the proposed development residential and non-residential purposes). Cor the building or development to be used for res	involves the erection of a building for both residential and non-residential purposes (or the change of use of a building for both nmitments in this certificate which are specified to apply to a "common area" of a building or the development, apply only to that part of sidential purposes.
	mitment for a dwelling or building, and that system will also service any other dwelling or building within the development, then that is separately listed as a commitment for that other dwelling or building).
5. If a star or other rating is specified in a commit	ment, this is a minimum rating.
6. All alternative water systems to be installed un NSW Health does not recommend that storm human consumption in areas with potable wa	der these commitments (if any), must be installed in accordance with the requirements of all applicable regulatory authorities. NOTE: water, recycled water or private dam water be used to irrigate edible plants which are consumed raw, or that rainwater be used for the supply.
egend	12/10
<ol> <li>Commitments identified with a "         " in the "Sho development application is to be lodged for th</li> </ol>	ow on DA plans" column must be shown on the plans accompanying the development application for the proposed development (if a e proposed development).
<ol> <li>Commitments identified with a " " in the "Sho certificate / complying development certificate</li> </ol>	ow on CC/CDC plans and specs" column must be shown in the plans and specifications accompanying the application for a construction for the proposed development.
· · · · · · · · · · · · · · · · · · ·	tifier check" column must be certified by a certifying authority as having been fulfilled. (Note: a certifying authority must not issue an or 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 ng or part, has been fulfilled).
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