

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

Multi Dwelling

Certificate number: 566959M

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 29/06/2009 published by Planning & Infrastructure. This document is available at www.basix.nsw.gov.au

Director-General

BASIX

Date of issue: Wednesday, 13 August 2014

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



Project summary				
Project name	MPV- Stage 1			
Street address	110-111 Herring Road Ma	cquarie Park 2113		
Local Government Area	Ryde City Council			
Plan type and plan number	strata DP780314			
Lot no.	1			
Section no.	-			
No. of residential flat buildings	4			
No. of units in residential flat buildings	343			
No. of multi-dwelling houses	0			
No. of single dwelling houses	0			
Project score				
Water	✓ 42	Target 40		
Thermal Comfort	✓ Pass	Target Pass		
Energy	✓ 21	Target 20		

Certificate Prepared by
Name / Company Name: Inhabitgroup
ABN (if applicable): 77 136 869 942

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Description of project

Project address	
Project name	MPV- Stage 1
Street address	110-111 Herring Road Macquarie Park 2113
Local Government Area	Ryde City Council
Plan type and plan number	strata DP780314
Lot no.	1
Section no.	-
Project type	
No. of residential flat buildings	4
No. of units in residential flat buildings	343
No. of multi-dwelling houses	0
No. of single dwelling houses	0
Site details	
Site area (m²)	22433
Roof area (m²)	2708
Non-residential floor area (m²)	0
Residential car spaces	378
Non-residential car spaces	7

Common area landscape		
Common area lawn (m²)	901	
Common area garden (m²)	1868	
Area of indigenous or low water use species (m²)	934	
Assessor details		
Assessor number	60832	
Certificate number	1006717902	
Climate zone	56	
Project score		
Water	✓ 42	Target 40
Thermal Comfort	✓ Pass	Target Pass
Energy	✓ 21	Target 20

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Description of project

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

Residential flat buildings - Adelaide, 74 dwellings, 8 storeys above ground

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
AD101	1	54.8	4.8	0	0
AD106	1	54.1	8.8	0	0
AD110	1	51.5	8.1	0	0
AD202	2	73.1	4.9	0	0
AD207	2	78.4	4.8	0	0
AD211	2	75.9	3.9	0	0
AD303	2	63.2	8.1	0	0
AD308	1	53.6	8.5	0	0
AD312	1	51.5	8.1	0	0
AD501	2	81.6	4.8	0	0
AD506	2	51.5	3.9	0	0
AD603	1	51.5	8.1	0	0
AD608	1	59.8	4.6	0	0
AD705	1	51.5	8.1	0	0
AD801	2	81.6	4.8	0	0
AD806	1	51.5	8.1	0	0
ADG02	2	67.2	4.9	0	0
ADG07	' 2	78.4	4.4	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
AD102	2	73.1	4.9	0	0
AD107	2	78.4	4.8	0	0
AD111	2	75.9	3.9	0	0
AD203	2	72.3	4.7	0	0
AD208	1	51.5	8.1	0	0
AD212	1	59.8	4.6	0	0
AD305	1	53.6	8.5	0	0
AD309	1	53.6	8.1	0	0
AD313	1	51.5	8.1	0	0
AD502	1	78.4	8.1	0	0
AD507	1	75.9	4.6	0	0
AD605	1	51.5	8.1	0	0
AD701	2	81.6	4.8	0	0
AD706	1	51.5	8.1	0	0
AD802	2	78.4	4.4	0	0
AD807	2	76.7	3.9	0	0
ADG03	3 2	72.3	4.7	0	0
ADG08	3 1	51.5	8.1	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
AD103	2	72.3	4.7	0	0
AD108	1	51.4	8.1	0	0
AD112	1	59.8	4.6	0	0
AD205	1	54.1	8.8	0	0
AD209	1	51.5	8.1	0	0
AD301	1	54.8	4.8	0	0
AD306	1	53.6	8.5	0	0
AD310	2	78.4	4.8	0	0
AD315	2	75.9	3.9	0	0
AD503	1	51.5	8.1	0	0
AD601	2	81.6	4.8	0	0
AD606	1	51.5	8.1	0	0
AD702	2	78.4	4.8	0	0
AD707	2	75.9	3.9	0	0
AD803	1	51.5	8.1	0	0
AD808	1	59.8	4.6	0	0
ADG05	5 1	54.1	6.5	0	0
ADG09	1	54.5	6.5	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
AD105	1	54.1	8.8	0	0
AD109	1	54.4	6.5	0	0
AD201	1	54.8	4.8	0	0
AD206	1	54.1	8.8	0	0
AD210	1	51.5	8.1	0	0
AD302	2	73.1	4.9	0	0
AD307	1	53.6	8.5	0	0
AD311	1	51.5	8.1	0	0
AD316	1	59.8	4.6	0	0
AD505	1	51.5	8.1	0	0
AD602	2	78.4	4.8	0	0
AD607	2	75.9	3.9	0	0
AD703	1	51.5	8.1	0	0
AD708	1	59.8	4.6	0	0
AD805	1	51.5	8.1	0	0
ADG01	1	54.8	4.8	0	0
ADG06	1	54.1	6.5	0	0
ADG10	1	51.5	8.1	0	0

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Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
ADG11	2	75.9	4.6	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
ADG12	2 1	59.8	4.6	0	0

Dwelli No. of Condi area (Uncor floor a lawn (Indige	Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
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Dwelling no.

No. of bedrooms

Conditioned floor
area (m²)

Unconditioned
floor area (m²)

Area of garden & lawn (m²)

Indigenous species
(min area m²)

Residential flat buildings - Darwin, 61 dwellings, 8 storeys above ground

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
DA101	2	72.0	4.1	0	0
DA106	2	51.5	8.8	0	0
DA201	2	72.0	4.1	0	0
DA206	2	51.5	8.8	0	0
DA301	2	72.0	4.1	0	0
DA306	1	51.5	8.8	0	0
DA501	2	72.0	4.1	0	0
DA506	2	51.5	8.8	0	0
DA601	2	72.0	4.1	0	0
DA606	1	51.5	8.8	0	0
DA702	2	51.5	8.8	0	0
DA707	2	70.1	5.3	0	0
DA803	1	54.5	7.0	0	0
DA808	2	70.1	5.3	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
DA102	2	51.5	8.8	0	0
DA107	1	39.9	3.9	0	0
DA202	2	51.5	8.8	0	0
DA207	1	39.9	3.9	0	0
DA302	2	51.5	8.8	0	0
DA307	1	39.9	3.9	0	0
DA502	1	51.5	8.8	0	0
DA507	1	39.9	3.9	0	0
DA602	2	51.5	8.8	0	0
DA607	2	70.1	5.3	0	0
DA703	1	54.5	7.0	0	0
DA708	1	70.1	5.3	0	0
DA805	1	51.5	8.8	0	0
DAG01	2	51.4	8.8	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
DA103	1	54.5	7.0	0	0
DA108	2	70.1	5.3	0	0
DA203	1	54.5	7.0	0	0
DA208	2	70.1	5.3	0	0
DA303	2	54.5	7.0	0	0
DA308	2	70.1	5.3	0	0
DA503	1	54.5	7.0	0	0
DA508	2	70.1	5.3	0	0
DA603	1	54.5	7.0	0	0
DA608	2	70.1	5.3	0	0
DA705	1	51.5	8.8	0	0
DA801	2	72.0	4.1	0	0
DA806	1	51.5	8.8	0	0
DAG02	2 1	54.5	7.0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & Iawn (m²)	Indigenous species (min area m²)
DA105	2	51.5	8.8	0	0
DA109	2	70.1	5.3	0	0
DA205	2	51.5	8.8	0	0
DA209	2	70.1	5.3	0	0
DA305	1	51.5	8.8	0	0
DA309	2	70.1	5.3	0	0
DA505	1	51.5	8.8	0	0
DA509	2	70.1	5.3	0	0
DA605	1	51.5	8.8	0	0
DA701	2	72.0	4.1	0	0
DA706	1	51.5	8.8	0	0
DA802	2	51.5	8.8	0	0
DA807	2	70.1	5.3	0	0
DAG03	3 2	51.5	8.8	0	0

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Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
DAG05	5 2	51.5	8.8	0	0
DAG09	1	72.0	4.1	0	0

Dwelling no.	No. of bedrooms Conditioned floor	area (m²) Unconditioned	floor area (m²) Area of garden &	lawn (m²) Indigenous species (min area m²)
DAG06 1	39	.9 9.9	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
DAG06	2	70.1	5.3	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & Iawn (m²)	Indigenous species (min area m²)
DAG08	3 2	70.1	5.3	0	0

Residential flat buildings - Perth, 78 dwellings, 10 storeys above ground

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
P1001	2	81.1	5.0	0	0
PE201	2	61.5	4.7	0	0
PE206	1	62.4	4.8	0	0
PE210	2	68.8	6.4	0	0
PE303	2	80.0	9.1	0	0
PE308	1	43.5	8.0	0	0
PE501	2	61.5	4.7	0	0
PE506	1	62.4	4.8	0	0
PE510	2	68.8	6.4	0	0
PE603	1	49.4	8.8	0	0
PE608	1	43.5	8.0	0	0
PE701	1	61.5	4.7	0	0
PE706	1	62.4	4.8	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
P1002	1	45.2	6.2	0	0
PE202	2	64.4	7.1	0	0
PE207	1	43.5	8.0	0	0
PE211	2	61.5	4.7	0	0
PE305	1	49.4	8.8	0	0
PE309	2	61.5	4.2	0	0
PE502	2	64.4	7.1	0	0
PE507	1	43.5	8.0	0	0
PE511	2	61.5	4.7	0	0
PE605	1	49.4	8.8	0	0
PE609	2	61.5	4.2	0	0
PE702	1	64.4	7.1	0	0
PE707	1	43.5	8.0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
P1003	2	76.0	5.8	0	0
PE203	2	80.0	9.1	0	0
PE208	1	62.4	4.8	0	0
PE301	2	61.5	4.7	0	0
PE306	1	43.5	8.0	0	0
PE310	2	68.8	6.4	0	0
PE503	2	80.0	9.1	0	0
PE508	1	62.4	4.8	0	0
PE601	2	61.5	4.7	0	0
PE606	1	43.5	8.0	0	0
PE610	2	68.8	6.4	0	0
PE703	1	49.4	8.8	0	0
PE708	1	62.4	4.8	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & Iawn (m²)	Indigenous species (min area m²)
P1005	2	85.0	4.8	0	0
PE205	1	49.4	8.8	0	0
PE209	2	61.5	4.2	0	0
PE302	2	64.4	7.1	0	0
PE307	1	62.4	4.8	0	0
PE311	2	61.5	4.7	0	0
PE505	1	49.4	8.8	0	0
PE509	2	61.5	4.2	0	0
PE602	2	64.4	7.1	0	0
PE607	1	62.4	4.8	0	0
PE611	2	61.5	4.7	0	0
PE705	1	49.4	8.8	0	0
PE709	2	61.5	4.2	0	0

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Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & Iawn (m²)	Indigenous species (min area m²)
PE710	2	68.8	6.4	0	0
PE803	1	49.4	8.8	0	0
PE808	1	43.5	8.0	0	0
PE901	2	81.1	5.0	0	0
PEG01	2	61.7	7.0	0	0
PEG06	1	54.0	4.8	0	0
PEG10	1	54.0	4.8	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
PE711	2	61.5	4.7	0	0
PE805	1	62.4	4.8	0	0
PE809	2	61.5	4.2	0	0
PE902	1	45.2	6.2	0	0
PEG02	2 1	54.0	4.8	0	0
PEG07	' 1	54.0	4.8	0	0
PEG11	2	70.1	7.0	0	0
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Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & Iawn (m²)	Indigenous species (min area m²)
PE801	2	61.5	4.7	0	0
PE806	1	43.5	8.0	0	0
PE810	2	68.8	6.4	0	0
PE903	2	76.0	5.8	0	0
PEG03	1	54.0	4.8	0	0
PEG08	1	54.0	4.8	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
PE802	2	64.4	7.1	0	0
PE807	1	62.4	4.8	0	0
PE811	2	61.5	4.7	0	0
PE905	2	85.0	4.8	0	0
PEG05	1	54.0	4.8	0	0
PEG09	1	54.0	4.8	0	0

Residential flat buildings - Brisbane, 130 dwellings, 11 storeys above ground

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
B201	1	58.7	6.2	0	0
B206	2	69.9	4.1	0	0
B210	1	60.3	5.6	0	0
B301	1	58.7	6.2	0	0
B306	2	69.9	4.1	0	0
B310	1	60.3	5.6	0	0
B501	1	58.7	6.2	0	0
B506	2	69.9	4.1	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & Iawn (m²)	Indigenous species (min area m²)
B202	2	74.1	4.3	0	0
B207	1	49.2	4.4	0	0
B211	2	78.5	7.4	0	0
B302	2	74.1	4.3	0	0
B307	1	49.2	4.4	0	0
B311	2	78.5	7.4	0	0
B502	2	74.1	4.3	0	0
B507	1	49.2	4.4	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
B203	2	81.3	7.4	0	0
B208	1	49.2	4.4	0	0
B212	2	75.3	4.4	0	0
B303	2	81.3	7.4	0	0
B308	1	49.2	4.4	0	0
B312	2	75.3	4.4	0	0
B503	2	78.5	7.4	0	0
B508	1	49.2	4.4	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
B205	1	44.2	6.7	0	0
B209	2	69.9	4.1	0	0
B213	2	60.3	5.6	0	0
B305	1	44.2	6.7	0	0
B309	2	69.9	4.1	0	0
B313	2	60.3	5.6	0	0
B505	1	44.2	6.7	0	0
B509	2	69.9	4.1	0	0

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Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & Iawn (m²)	Indigenous species (min area m²)	Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & Iawn (m²)	Indigenous species (min area m²)	Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)	Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
B510 1		60.3	5.6	0	0	B511	2	78.5	7.4	0	0	B512	2	75.3	4.4	0	0	B513	2	60.3	5.6	0	0
B601 1		58.7	6.2	0	0	B602	2	74.1	4.3	0	0	B603	2	78.5	7.4	0	0	B605	1	44.2	6.7	0	0
B606 2	2	69.9	4.1	0	0	B607	1	49.2	4.4	0	0	B608	1	49.2	4.4	0	0	B609	2	69.9	4.1	0	0
B610 1		60.3	5.6	0	0	B611	2	78.5	7.4	0	0	B612	2	75.3	4.4	0	0	B613	2	60.3	5.6	0	0
B701 1		58.7	6.2	0	0	B702	2	74.1	4.3	0	0	B703	2	78.5	7.4	0	0	B705	1	44.2	6.7	0	0
B706 2	2	69.9	4.1	0	0	B707	1	49.2	4.4	0	0	B708	1	49.2	4.4	0	0	B709	2	69.9	4.1	0	0
B710 1		60.3	5.6	0	0	B711	2	78.5	7.4	0	0	B712	2	75.3	4.4	0	0	B713	2	60.3	5.6	0	0
B801 1		58.7	6.2	0	0	B802	2	74.1	4.3	0	0	B803	2	78.5	7.4	0	0	B805	1	44.2	6.7	0	0
B806 2	2	69.9	4.1	0	0	B807	1	49.2	4.4	0	0	B808	1	49.2	4.4	0	0	B809	2	69.9	4.1	0	0
B810 1		60.3	5.6	0	0	B811	2	78.5	7.4	0	0	B812	2	75.3	4.4	0	0	B813	2	60.3	5.6	0	0
B901 1		56.5	6.2	0	0	B902	2	74.1	4.3	0	0	B903	2	78.5	7.4	0	0	B905	1	44.2	6.7	0	0
B906 2	2	69.9	4.1	0	0	B907	1	49.2	4.4	0	0	B908	2	77.6	7.4	0	0	B909	2	78.5	7.4	0	0
B910 2)	75.8	4.4	0	0	B911	2	55.9	5.6	0	0	BG01	2	86.8	7.0	0	0	BG02	1	50.4	4.8	0	0
BG03 2	2	80.8	4.8	0	0	BG05	1	50.4	4.8	0	0	BG06	1	50.4	4.8	0	0	BG07	1	50.4	4.8	0	0
BG08 1		50.4	4.8	0	0	BG09	1	50.4	4.8	0	0	BG10	2	80.8	4.8	0	0	BG11	1	50.4	4.8	0	0
BG12 2	2	86.8	7.0	0	0	B1001	1	56.5	6.2	0	0	B1002	2	74.1	4.3	0	0	B1003	2	78.5	7.4	0	0
B1005 1		44.2	6.7	0	0	B1006	2	69.9	4.1	0	0	B1007	1	49.2	4.4	0	0	B1008	2	77.6	7.4	0	0
B1009 2	2	78.5	7.4	0	0	B1010	2	75.8	4.4	0	0	B1011	2	55.9	5.6	0	0	B1101	1	56.5	6.2	0	0
B1102 2	2	74.1	4.3	0	0	B1103	2	87.0	7.0	0	0	B1105	2	73.3	4.0	0	0	B1106	1	49.2	4.4	0	0
B1107 2	2	77.6	7.4	0	0	B1108	2	78.5	7.4	0	0	B1109	2	75.8	4.4	0	0	B1110	2	55.9	5.6	0	0
B1201 1		56.5	6.2	0	0	B1202	2	74.1	4.3	0	0	B1203	2	87.0	7.0	0	0	B1205	2	73.3	4.0	0	0
B1206 1		49.2	4.4	0	0	B1207	2	77.6	7.4	0	0	B1208	2	78.5	7.4	0	0	B1209	2	75.8	4.4	0	0
B1210 2	2	55.9	5.6	0	0	B1301	1	56.5	6.2	0	0	B1302	2	74.1	4.3	0	0	B1303	2	87.0	7.0	0	0

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Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
B1305	2	73.3	4.0	0	0
B1309	2	75.8	4.4	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
B1306	1	49.2	4.4	0	0
B1310	2	55.9	5.6	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & Iawn (m²)	Indigenous species (min area m²)
B1307	2	77.6	7.4	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & Iawn (m²)	Indigenous species (min area m²)
B1308	2	78.5	7.4	0	0

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Description of project

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

Common areas of unit building - Adelaide

Common area	Floor area (m²)
Lift car (No. 1)	-
Darwin Lifts	104
Stairs Adelaide	250.16

Common area	Floor area (m²)
Lift car (No. 9)	-
Recycling Rooms Adelaide	76.8
Adeladie G	94.68

Common area	Floor area (m²)
Adelaide Lifts	58.5
Recycling Rooms Perth	262.4
Hallway/lobby type Adeladie	487.32

Common areas of unit building - Darwin

Common area	Floor area (m²)
Lift car (No. 2)	-
Staris Darwin	104

Common area	Floor area (m²)
Lift car (No. 10)	-
DarwinG	33.84

Common area	Floor area (m²)
Recycling Rooms Darwin	71.68
Hallway/lobby type Darwin	247.8

Common areas of unit building - Perth

Common area	Floor area (m²)
Lift car (No. 3)	-
Perth Lifts	299.2
Perth G	35.2

Common area	Floor area (m²)
Lift car (No. 4)	-
Main Garbage	85.12
Hallway/lobby type Perth	887.52

Common area	Floor area (m²)
Lift car (No. 5)	-
Staris Perth	666.54

Common areas of unit building - Brisbane

Common area	Floor area (m²)
Lift car (No. 6)	-
Brisbane Lifts	158.4
Brisbane G	42.24

Common area	Floor area (m²)
Lift car (No. 7)	-
Recycling Rooms Brisbane	155.4
Hallway/lobby type Brisbane	552.96

Common area	Floor area (m²)
Lift car (No. 8)	-
Staris Brisbane	267.84

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Common areas of the development (non-building specific)

Common area	Floor area (m²)
Level B1	7310.87

Common area	Floor area (m²)
LevelB2	7310.87

Common area	Floor area (m²)
Level B3	3373.13

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Schedule of BASIX commitments

- 1. Commitments for Residential flat buildings Adelaide
 - (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 Darwin
 - (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 Perth
 - (a) Dwellings
 - (i) Water
 - (ii) Energy
 - (iii) Thermal Comfort
 - (b) Common areas and central systems/facilities
 - (i) Water
 - (ii) Energy
- 4. Commitments for Residential flat buildings Brisbane
 - (a) Dwellings

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(i) Water (ii) Energy (iii) Thermal Comfort (b) Common areas and central systems/facilities (i) Water (ii) Energy 5. Commitments for multi-dwelling houses 6. Commitments for single dwelling houses 7. Commitments for common areas and central systems/facilities for the development (non-building specific) (i) Water (ii) Energy

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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 - Adelaide

(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.		~	V
(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.		~	V
(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.		✓	V
(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.	V	~	
(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.	V	~	
(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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			Fixtur	es		Appli		Individual pool				Individual spa		
Dwelling no.	All shower- heads	All toilet flushing systems	All kitchen taps	All bathroom taps	HW recirculation or diversion	All clothes washers	All dish- washers	Volume (max volume)	Pool cover	Pool location	Pool shaded	Volume (max volume)	Spa cover	Spa shaded
AD305, AD306, AD307, AD308, AD309, AD310, AD315, AD316, AD507, AD601, AD608, AD701, AD708, AD801, AD802, AD803, AD805, AD806, AD807, AD808	3 star (> 4.5 but <= 6 L/min)	4 star	4 star	4 star	-	-	5 star		-	-	-	-	-	-

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			Fixtur	es		Appliances Individual pool						Individual spa			
Dwelling no.	All shower- heads	All toilet flushing systems	All kitchen taps	All bathroom taps	HW recirculation or diversion	All clothes washers	All dish- washers	Volume (max volume)	Pool cover	Pool location	Pool shaded	Volume (max volume)	Spa cover	Spa shaded	
AD101, AD102, AD103, AD105, AD106, AD107, AD108, AD109, AD110, AD111, AD201, AD202, AD203, AD205, AD206, AD207, AD208, AD2010, AD211, AD301, AD301, AD301, AD301, AD303, AD311, AD303, AD311, AD303, AD304, AD305, AD306, AD306, AD306, AD307, AD307, AD308, AD308, AD309, A	3 star (> 4.5 but <= 6 L/min)	4 star	4 star	4 star	-	- Washers	5 star	-				- Volume)			

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			Fixtur	es		Appliances		Individual pool			Individual spa			
Dwelling no.	All shower- heads	All toilet flushing systems	All kitchen taps	All bathroom taps	HW recirculation or diversion	All clothes washers	All dish- washers	Volume (max volume)	Pool cover	Pool location	Pool shaded	Volume (max volume)	Spa cover	Spa shaded
AD705, AD706, AD707, ADG01, ADG02, ADG03, ADG05, ADG06, ADG07, ADG08, ADG09, ADG10, ADG11, ADG12														

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

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must comply with the commitments listed below in carrying out the development of a dwelling listed in a table below.			
(b) The applicant must install each hot water system specified for the dwelling in the table below, so that the dwelling's hot water is supplied by that system. If the table specifies a central hot water system for the dwelling, then the applicant must connect that central system to the dwelling, so that the dwelling's hot water is supplied by that central system.	~	~	~
(c) The applicant must install, in each bathroom, kitchen and laundry of the dwelling, the ventilation system specified for that room in the table below. Each such ventilation system must have the operation control specified for it in the table.		~	V

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(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(d) The applicant must install the cooling and heating system/s specified for the dwelling under the "Living areas" and "Bedroom areas" headings of the "Cooling" and "Heating" columns in the table below, in/for at least 1 living/bedroom area of the dwelling. If no cooling or heating system is specified in the table for "Living areas" or "Bedroom areas", then no systems may be installed in any such areas. If the term "zoned" is specified beside an air conditioning system, then the system must provide for day/night zoning between living areas and bedrooms.		~	~
(e) This commitment applies to each room or area of the dwelling which is referred to in a heading to the "Artificial lighting" column of the table below (but only to the extent specified for that room or area). The applicant must ensure that the "primary type of artificial lighting" for each such room in the dwelling is fluorescent lighting or light emitting diode (LED) lighting. If the term "dedicated" is specified for a particular room or area, then the light fittings in that room or area must only be capable of being used for fluorescent lighting or light emitting diode (LED) lighting.		~	~
(f) This commitment applies to each room or area of the dwelling which is referred to in a heading to the "Natural lighting" column of the table below (but only to the extent specified for that room or area). The applicant must ensure that each such room or area is fitted with a window and/or skylight.	~	~	~
(g) This commitment applies if the applicant installs a water heating system for the dwelling's pool or spa. The applicant must:			
(aa) install the system specified for the pool in the "Individual Pool" column of the table below (or alternatively must not install any system for the pool). If specified, the applicant must install a timer, to control the pool's pump; and		→	
(bb) install the system specified for the spa in the "Individual Spa" column of the table below (or alternatively must not install any system for the spa). If specified, the applicant must install a timer to control the spa's pump.		✓	
(h) The applicant must install in the dwelling:			
(aa) the kitchen cook-top and oven specified for that dwelling in the "Appliances & other efficiency measures" column of the table below;		✓	
(bb) each appliance for which a rating is specified for that dwelling in the "Appliances & other efficiency measures" column of the table, and ensure that the appliance has that minimum rating; and		~	V
(cc) any clothes drying line specified for the dwelling in the "Appliances & other efficiency measures" column of the table.		~	
(i) If specified in the table, the applicant must carry out the development so that each refrigerator space in the dwelling is "well ventilated".		~	

	Hot water	Bathroom ven	tilation system	Kitchen vent	ilation system	Laundry ventilation system		
Dwelling no.	Hot water system	Each bathroom	Operation control	Each kitchen	Operation control	Each laundry	Operation control	
All dwellings	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	

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	Coo	ling	Hea	ting			Artificial	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 laundry	All hallways	No. of bathrooms &/or toilets	Main kitchei
AD315	1-phase airconditioning 4.5 Star (new rating) (zoned)	1-phase airconditioning 4.5 Star (new rating) (zoned)	1-phase airconditioning 4.5 Star (new rating) (zoned)	1-phase airconditioning 4.5 Star (new rating) (zoned)	1	1	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	0	no
AD316	1-phase airconditioning 4.5 Star (new rating) (zoned)	1-phase airconditioning 4.5 Star (new rating) (zoned)	1-phase airconditioning 4.5 Star (new rating) (zoned)	1-phase airconditioning 4.5 Star (new rating) (zoned)	2	1	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	0	no
AD103, AD111, AD203, AD211, AD303, AD305, AD312, AD506, AD607, AD707, AD807, ADG03, ADG11	1-phase airconditioning 4.5 Star (new rating) (zoned)	1-phase airconditioning 4.5 Star (new rating) (zoned)	1-phase airconditioning 4.5 Star (new rating) (zoned)	1-phase airconditioning 4.5 Star (new rating) (zoned)	2 (dedicated)	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	1	no

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	Coo	ling	Hea	ting			Artificial	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 laundry	All hallways	No. of bathrooms &/or toilets	Main kitchei
AD102, AD107, AD112, AD202, AD207, AD212, AD302, AD313, AD501, AD507, AD601, AD602, AD608, AD701, AD702, AD708, AD801, AD802, AD808, ADG02, ADG07, ADG12	1-phase airconditioning 4.5 Star (new rating) (zoned)	1-phase airconditioning 4.5 Star (new rating) (zoned)	1-phase airconditioning 4.5 Star (new rating) (zoned)	1-phase airconditioning 4.5 Star (new rating) (zoned)	2 (dedicated)	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	0	no

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	Coo	ling	Hea	ting			Artificial	lighting			Natural lig	ghting_
Dwelling no.	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or dining rooms	Each kitchen	All bathrooms/ toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitche
AD101, AD105, AD106, AD109, AD109, AD110, AD201, AD205, AD206, AD209, AD210, AD306, AD307, AD306, AD307, AD308, AD309, AD310, AD311, AD502, AD503, AD605, AD606, AD703, AD705, AD706, AD806, AD806, AD806, AD806, AD606, AD606, AD606, AD606, AD606, AD606, AD606, AD606, AD606, AD606, AD606, AD606, AD606, AD606, AD606, AD606, AD609, AD	1-phase airconditioning 4.5 Star (new rating) (zoned)	1-phase airconditioning 4.5 Star (new rating) (zoned)	1-phase airconditioning 4.5 Star (new rating) (zoned)	1-phase airconditioning 4.5 Star (new rating) (zoned)	1 (dedicated)	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	0	no

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	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	-	-	-	-	gas cooktop & electric oven	2.5 star (new rating)	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:	V	~	V
(aa) Install insulation with an R-value of not less than 1.0 around the vertical edges of the perimeter of the slab; or			
(bb) On a suspended floor, install insulation with an R-value of not less than 1.0 underneath the slab and around the vertical edges of the perimeter of the slab.			
(h) The applicant must construct the floors and walls of the development in accordance with the specifications listed in the table below.	V	~	V

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		Thermal loads
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)
AD109	6.2	30.2
AD211	10.7	24.1
AD301	52.4	29.6
AD302	45.3	46.6
AD303	33.2	46.4
AD309	18	50.8
AD801	35.4	33.8
AD802	27.4	25.6
AD807	24.9	26.4
AD808	51.1	58.8
ADG01	49.6	14.3
ADG02	57.9	36.4
ADG03	14.5	20.7
ADG07	9.5	16
ADG09	60.2	26.1
ADG11	11	14.4
ADG12	63.2	27.8
AD101, AD201	42.5	23.1
AD102, AD202	32.7	38.4
AD103, AD203	14.1	54
AD105, AD205	10.9	50.8
AD106, AD206	10.5	50.7
AD601, AD701	19.5	28.4
ADG05, ADG06	10	34.9
ADG08, ADG10	9	22.9
AD112, AD316, AD608	42.4	57.2
AD212, AD507, AD708	41.4	44.1

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	Thermal loads					
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)				
AD803, AD805, AD806	31.6	36.6				
AD305, AD306, AD307, AD308	37.4	47.2				
AD111, AD315, AD506, AD607, AD707	10.7	26.7				
AD107, AD207, AD310, AD501, AD602, AD702	8.8	23.1				
All other dwellings	11.2	31.9				

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(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.		-	V
(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.	V	→	
(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.		<u> </u>	
(e) The applicant must install each fire sprinkler system listed in the table so that the system is configured as specified in the table.		→	V
(f) The applicant must ensure that the central cooling system for a cooling tower is configured as specified in the table.		•	V

Common area	Showerheads rating	Toilets rating	Taps rating	Clothes washers rating
All common areas	3 star (> 7.5 but <= 9 L/min)	4 star	4 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.		~	~

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(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.	V	~	~

	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)	-	-	fluorescent	connected to lift call button	Yes		
Lift car (No. 9)	-	-	fluorescent	connected to lift call button	Yes		
Adelaide Lifts	no mechanical ventilation	-	fluorescent	motion sensors	Yes		
Darwin Lifts	no mechanical ventilation	-	fluorescent	motion sensors	Yes		
Recycling Rooms Adelaide	ventilation exhaust only	-	fluorescent	motion sensors	Yes		
Recycling Rooms Perth	ventilation exhaust only	-	fluorescent	motion sensors	Yes		
Stairs Adelaide	no mechanical ventilation	-	fluorescent	motion sensors	Yes		
Adeladie G	ventilation supply only	time clock or BMS controlled	fluorescent	motion sensors	Yes		
Hallway/lobby type Adeladie	ventilation supply only	time clock or BMS controlled	fluorescent	motion sensors	Yes		

Central energy systems	Туре	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	Number of levels (including basement): 11
Lift (No. 9)	gearless traction with V V V F motor	Number of levels (including basement): 11

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2. Commitments for Residential flat buildings - Darwin

(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.		-	V
(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.		-	V
(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.	V	-	
(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				
Dwelling no.	All shower- heads	All toilet flushing systems	All kitchen taps	All bathroom taps	HW recirculation or diversion	All clothes washers	All dish- washers	Volume (max volume)	Pool cover	Pool location	Pool shaded	Volume (max volume)	Spa cover	Spa shaded
All dwellings	3 star (> 4.5 but <= 6 L/min)	4 star	4 star	4 star	-	-	5 star	-	-	-	-	-	-	-

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

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(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 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 2	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	

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	Coo	ling	Hea	ting			Artificial	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 laundry	All hallways	No. of bathrooms &/or toilets	Main kitche
DA106, DA206, DA306, DA506, DA606, DA706, DA806, DAG06	1-phase airconditioning 4.5 Star (new rating) (zoned)	1-phase airconditioning 4.5 Star (new rating) (zoned)	1-phase airconditioning 4.5 Star (new rating) (zoned)	1-phase airconditioning 4.5 Star (new rating) (zoned)	2 (dedicated)	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	1	no
DA108, DA109, DA208, DA209, DA308, DA309, DA508, DA509, DA607, DA608, DA707, DA708, DA807, DA808, DAG09	1-phase airconditioning 4.5 Star (new rating) (zoned)	1-phase airconditioning 4.5 Star (new rating) (zoned)	1-phase airconditioning 4.5 Star (new rating) (zoned)	1-phase airconditioning 4.5 Star (new rating) (zoned)	2 (dedicated)	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	0	no

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	Coo	ling	Hea	ting			Artificial	lighting			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 laundry	All hallways	No. of bathrooms &/or toilets	Main kitch	
DA101, DA102, DA103, DA105, DA107, DA201, DA202, DA203, DA205, DA207, DA303, DA305, DA305, DA501, DA502, DA503, DA505, DA507, DA601, DA602, DA603, DA701, DA702, DA703, DA705, DA801, DA705, DA803, DA705, DA906,	1-phase airconditioning 4.5 Star (new rating) (zoned)	1-phase airconditioning 4.5 Star (new rating) (zoned)	1-phase airconditioning 4.5 Star (new rating) (zoned)	1-phase airconditioning 4.5 Star (new rating) (zoned)	1 (dedicated)	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	0	no	

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	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	-	-	-	-	gas cooktop & electric oven	2.5 star (new rating)	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:	V	~	~
(aa) Install insulation with an R-value of not less than 1.0 around the vertical edges of the perimeter of the slab; or			
(bb) On a suspended floor, install insulation with an R-value of not less than 1.0 underneath the slab and around the vertical edges of the perimeter of the slab.			
(h) The applicant must construct the floors and walls of the development in accordance with the specifications listed in the table below.	V	~	V

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		Thermal loads
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)
DA507	41.5	44.2
DA801	27.5	54.1
DA802	30.6	46.3
DA803	22.4	34.7
DA805	27.2	35.1
DA806	42.9	55.9
DA807	52.8	55.4
DA808	55.2	46.1
DAG01	14	30.5
DAG02	7.7	20
DAG03	7.2	22
DAG05	25.4	39.9
DAG06	50.9	47
DAG06	20.7	28
DAG08	39.6	25
DAG09	14	26.6
DA107, DA207, DA307	27.6	46.4
DA108, DA208, DA308	52.1	46.1
DA508, DA607, DA707	56.6	57.2
DA101, DA201, DA301, DA501, DA601, DA701	5	25.9
DA102, DA202, DA302, DA502, DA602, DA702	11.6	42.9
DA103, DA203, DA303, DA503, DA603, DA703	4.2	29.1
DA105, DA205, DA305, DA505, DA605, DA705	8.2	30.6
DA106, DA206, DA306, DA506, DA606, DA706	21.2	49.4

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	Thermal loads			
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)		
All other dwellings	37.2	46.4		

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(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.		-	V
(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.	V	→	
(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.		<u> </u>	
(e) The applicant must install each fire sprinkler system listed in the table so that the system is configured as specified in the table.		→	V
(f) The applicant must ensure that the central cooling system for a cooling tower is configured as specified in the table.		•	V

Common area	Showerheads rating	Toilets rating	Taps rating	Clothes washers rating
All common areas	3 star (> 7.5 but <= 9 L/min)	4 star	4 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.		~	~

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(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.	V	V	~

Common area ventilation system			Common area lighting		
Common area	Ventilation system type	Ventilation efficiency measure	Primary type of artificial lighting	Lighting efficiency measure	Lighting control system/BMS
Lift car (No. 2)	-	-	fluorescent	connected to lift call button	Yes
Lift car (No. 10)	-	-	fluorescent	connected to lift call button	Yes
Recycling Rooms Darwin	ventilation exhaust only	-	fluorescent	motion sensors	Yes
Staris Darwin	no mechanical ventilation	-	fluorescent	motion sensors	Yes
DarwinG	ventilation supply only	time clock or BMS controlled	fluorescent	motion sensors	Yes
Hallway/lobby type Darwin	ventilation supply only	time clock or BMS controlled	fluorescent	motion sensors	Yes

Central energy systems	Туре	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. 2)	gearless traction with V V V F motor	Number of levels (including basement): 11
Lift (No. 10)	gearless traction with V V V F motor	Number of levels (including basement): 11

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3. Commitments for Residential flat buildings - Perth

(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.		~	V
(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		✓	V
(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.	V	→	
(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				Appli	Individual pool				Individual spa			
Dwelling no.	All shower- heads	All toilet flushing systems	All kitchen taps	All bathroom taps	HW recirculation or diversion	All clothes washers	All dish- washers	Volume (max volume)	Pool cover	Pool location	Pool shaded	Volume (max volume)	Spa cover	Spa shaded
All dwellings	3 star (> 4.5 but <= 6 L/min)	4 star	4 star	4 star	-	-	5 star	-	-	-	-	-	-	-

			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	-	-	-	-	-	-	-	-

(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.	~	~	V
(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.		~	V
(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.		~	~

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(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		~	V
(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".		V	

	Hot water	Bathroom ven	tilation system	Kitchen vent	ilation system	Laundry vent	ilation system
Dwelling no.	Hot water system	Each bathroom	Operation control	Each kitchen	Operation control	Each laundry	Operation control
All dwellings	central hot water system 3	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

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	Coo	ling	Hea	ting			Artificial	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 laundry	All hallways	No. of bathrooms &/or toilets	Main kitche
PE302, PE502, PE602, PE702, PE802, PE902, PEG01, PEG11	1-phase airconditioning 4.5 Star (new rating) (zoned)	1-phase airconditioning 4.5 Star (new rating) (zoned)	1-phase airconditioning 4.5 Star (new rating) (zoned)	1-phase airconditioning 4.5 Star (new rating) (zoned)	2 (dedicated)	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	1	no

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	Coo	ling	Hea	ting			Artificial	lighting			Natural lig	ghting
Dwelling no.	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or dining rooms	Each kitchen	All bathrooms/ toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitch
P1002, PE202, PE209, PE210, PE211, PE301, PE311, PE501, PE511, PE501, PE511, PE601, PE611, PE701, PE711, PE701, PE711, PE701, PE711, PE801, PE801, PE801, PEG02, PEG03, PEG05, PEG06, PEG06, PEG09, PEG09, PEG09, PEG10	1-phase airconditioning 4.5 Star (new rating) (zoned)	1-phase airconditioning 4.5 Star (new rating) (zoned)	1-phase airconditioning 4.5 Star (new rating) (zoned)	1-phase airconditioning 4.5 Star (new rating) (zoned)	1 (dedicated)	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	0	no

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	Coo	ling	Hea	ting			Artificial	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 laundry	All hallways	No. of bathrooms &/or toilets	Main kitche
P1001, P1003, P1003, P1005, PE201, PE203, PE205, PE206, PE207, PE308, PE303, PE305, PE306, PE503, PE505, PE506, PE607, PE608, PE607, PE608, PE703, PE705, PE706, PE707, PE708, PE708, PE808, PE803, PE808, PE8093, PE808, PE8093, PE8093, PE8093, PE905	1-phase airconditioning 4.5 Star (new rating) (zoned)	1-phase airconditioning 4.5 Star (new rating) (zoned)	1-phase airconditioning 4.5 Star (new rating) (zoned)	1-phase airconditioning 4.5 Star (new rating) (zoned)	2 (dedicated)	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	0	no

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	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	-	-	-	-	gas cooktop & electric oven	2.5 star (new rating)	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:	V	~	V
(aa) Install insulation with an R-value of not less than 1.0 around the vertical edges of the perimeter of the slab; or			
(bb) On a suspended floor, install insulation with an R-value of not less than 1.0 underneath the slab and around the vertical edges of the perimeter of the slab.			
(h) The applicant must construct the floors and walls of the development in accordance with the specifications listed in the table below.	V	~	V

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		Thermal loads
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)
P1001	48.5	30.6
P1002	22.1	33.5
P1003	42.2	40.9
P1005	58	37.9
PE901	27.2	21.5
PE902	8.7	27.5
PE903	27	35.5
PE905	46.9	29.6
PEG01	20.3	56.6
PEG05	4.6	58.2
PEG06	30.5	51.4
PEG07	45	45.1
PEG11	36.5	44.8
PE203, PE303, PE503	3.9	48.8
PEG02, PEG03, PEG08, PEG09, PEG10	7	57
PE201, PE301, PE501, PE601, PE701, PE801	43.1	27.6
PE202, PE302, PE502, PE602, PE702, PE802	22	37
PE210, PE310, PE510, PE610, PE710, PE810	30.6	29.1
PE211, PE311, PE511, PE611, PE711, PE811	32.8	34.2
PE205, PE305, PE505, PE603, PE605, PE703, PE705, PE803	13.6	26.4
PE206, PE208, PE307, PE506, PE508, PE607, PE706, PE708, PE805, PE807	0.3	38.6
All other dwellings	4.9	58.8

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(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.		~	V
(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.	V	~	
(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.		~	V
(f) The applicant must ensure that the central cooling system for a cooling tower is configured as specified in the table.		V	~

Common area	Showerheads rating	Toilets rating	Taps rating	Clothes washers rating
All common areas	3 star (> 7.5 but <= 9 L/min)	4 star	4 star	no common laundry facility

Central systems	Size	Configuration	Connection (to allow for)
Fire sprinkler system (No. 3)	-	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.		~	~

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(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.	V	•	~

	Common area	ventilation system		Common area lighting	
Common area	Ventilation system type	Ventilation efficiency measure	Primary type of artificial lighting	Lighting efficiency measure	Lighting control system/BMS
Lift car (No. 3)	-	-	fluorescent	connected to lift call button	Yes
Lift car (No. 4)	-	-	fluorescent	connected to lift call button	Yes
Lift car (No. 5)	-	-	fluorescent	connected to lift call button	Yes
Perth Lifts	no mechanical ventilation	-	fluorescent	motion sensors	Yes
Main Garbage	ventilation exhaust only	-	fluorescent	motion sensors	Yes
Staris Perth	no mechanical ventilation	-	fluorescent	motion sensors	Yes
Perth G	ventilation supply only	time clock or BMS controlled	fluorescent	motion sensors	Yes
Hallway/lobby type Perth	ventilation supply only	time clock or BMS controlled	fluorescent	motion sensors	Yes

Central energy systems	Туре	Specification
Central hot water system (No. 3)	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. 3)	gearless traction with V V V F motor	Number of levels (including basement): 11
Lift (No. 4)	gearless traction with V V V F motor	Number of levels (including basement): 21
Lift (No. 5)	gearless traction with V V V F motor	Number of levels (including basement): 21

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4. Commitments for Residential flat buildings - Brisbane

(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.		~	V
(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.		~	V
(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		✓	V
(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.		✓	V
(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.	V	→	
(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					Appli	Appliances		Individual pool				Individual spa		
Dwelling no.	All shower- heads	All toilet flushing systems	All kitchen taps	All bathroom taps	HW recirculation or diversion	All clothes washers	All dish- washers	Volume (max volume)	Pool cover	Pool location	Pool shaded	Volume (max volume)	Spa cover	Spa shaded	
B201, B202, B203, B205	3 star (> 4.5 but <= 6 L/min)	4 star	4 star	4 star	no	-	5 star	-	-	-	-	-	-	-	
B206, B207, B208, B209, B210, B211	3 star (> 4.5 but <= 6 L/min)	4 star	4 star	4 star	-	-	5 star	-	-	-	-	-	-	-	

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			Fixtur	es		Appl	iances		Indi	vidual pool		In	dividual	spa
Dwelling no.	All shower- heads	All toilet flushing systems	All kitchen taps	All bathroom taps	HW recirculation or diversion	All clothes washers	All dish- washers	Volume (max volume)	Pool cover	Pool location	Pool shaded	Volume (max volume)	Spa cover	Spa shaded
B212, B213, B301, B302, B303, B305, B306, B307, B308, B310, B311, B312, B313, B501, B502, B503, B506, B507, B508, B509, B511, B511, B512, B513, B601, B602, B603, B604, B604, B605, B606, B607, B608, B609, B610, B611, B612, B613, B701, B702,	3 star (> 4.5 but <= 6 L/min)	4 star	4 star	4 star			5 star					-		

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			Fixtur	es		Appl	iances		Indi	vidual pool		In	dividual	spa
Owelling 10.	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
3703,														
705, 706,														
707,														
708,														
709, 710,														
710, 711,														
712,														
713,														
801, 802,														
803,														
805,														
806, 807,														
807, 808,														
809,														
810,														
811, 812,														
813,														
901,														
902, 903,														
905,														
906,														
907,														
908, 909,														
910,														
911,														
G01, G02,														
G03,														
G05,														
G06, G07,														
G07, G08,														
G09,														

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			Fixtur	es		Appl	iances		Indi	vidual pool		In	dividual	spa
Dwelling no.	All shower- heads	All toilet flushing systems	All kitchen taps	All bathroom taps	HW recirculation or diversion	All clothes washers	All dish- washers	Volume (max volume)	Pool cover	Pool location	Pool shaded	Volume (max volume)	Spa cover	Spa shaded
BG10, BG11, BG11, BG12, B1001, B1002, B1003, B1005, B1006, B1007, B1008, B1009, B1010, B1110, B1103, B1105, B1106, B1107, B1108, B1109, B1201, B1202, B1203, B1205, B1206, B1207, B1208, B1208, B1209, B1301, B1301, B1301, B1302, B1303, B1305, B1306, B1307, B1308, B1308, B1309, B1309, B1310,														

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

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

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(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(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 vent	ilation system	Laundry ventilation system		
Dwelling no.	Hot water system	Each bathroom	Operation control	Each kitchen	Operation control	Each laundry	Operation control	
B201, B202, B203, B205	central hot water system 4	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	

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	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	
B206, B207, B208, B209, B210, B211, B212, B213, B301, B302, B303, B305, B306, B307, B308, B310, B311, B312, B313, B501, B502, B503, B505, B506, B507, B508, B509, B510, B511, B512, B513, B601, B602, B603, B605, B606, B607, B608, B609, B610,	central hot water system 4	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	

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	Hot water	Bathroom ve	entilation system	Kitchen ve	entilation system	Laundry v	entilation system
Dwelling no.	Hot water system	Each bathroom	Operation control	Each kitchen	Operation control	Each laundry	Operation control
B611,							
3612,							
3613,							
701,							
702,							
702, 703,							
705, 705,							
706,							
700, 707,							
707, 708,							
700, 709,							
709, 710,							
710, 711,							
711, 712,							
712, 713,							
7 13, 801,							
801, 802,							
802, 803,							
805,							
806,							
000,							
807,							
808, 809,							
0009,							
810,							
811,							
812,							
813,							
901,							
902,							
903,							
905,							
906,							
907,							
908,							
909,							
910,							
911,							
G01,							
G02,							
G03,							
BG05,							

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	Hot water	Bathroom v	entilation system	Kitchen ve	entilation system	Laundry v	entilation system
Dwelling no.	Hot water system	Each bathroom	Operation control	Each kitchen	Operation control	Each laundry	Operation control
BG06,							
3G07,							
3G08,							
G09,							
G10,							
G11,							
G12,							
1001,							
1002, 1003,							
1005,							
1005,							
1007,							
1008,							
1009,							
1010,							
1011,							
1101,							
1102,							
31103, 31105,							
1105,							
1100,							
1108,							
1109,							
1110,							
1201,							
1202,							
1203,							
1205,							
1206, 1207,							
1207, 1208,							
1200, 1209,							
1210,							
1301,							
1302,							
1303,							
1305,							
31306,							
31307,							

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	Hot water Bathroom ventilation system		ntilation system	Kitchen vent	lation system	Laundry ventilation system		
Dwelling no.	Hot water system	Each bathroom	Operation control	Each kitchen	Operation control	Each laundry	Operation control	
B1308, B1309, B1310								

	Coo	ling	Hea	ting			Artificial	lighting			Natural lig	ghting
Dwelling no.	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or dining rooms	Each kitchen	All bathrooms/ toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
B205	1-phase airconditioning 4.5 Star (new rating) (zoned)	1-phase airconditioning 4.5 Star (new rating) (zoned)	1-phase airconditioning 4.5 Star (new rating) (zoned)	1-phase airconditioning 4.5 Star (new rating) (zoned)	1 (dedicated)	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	0	no
B201, B202, B203	-	-	-	-	-	-	-	-	-	-	-	-
B311, BG01, BG12	1-phase airconditioning 4.5 Star (new rating) (zoned)	1-phase airconditioning 4.5 Star (new rating) (zoned)	1-phase airconditioning 4.5 Star (new rating) (zoned)	1-phase airconditioning 4.5 Star (new rating) (zoned)	2 (dedicated)	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	1	no

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	Coo	ling	Hea	ting			Artificial	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 laundry	All hallways	No. of bathrooms &/or toilets	Main kitch
B208, B210, B211, B301, B303, B307, B309, B313, B501, B503, B508, B509, B511, B602, B606, B609, B612, B701, B702, B701, B702, B701, B702, B701, B702, B701, B702, B701, B702, B701, B702, B701, B701, B702, B701, B702, B701,	1-phase airconditioning 4.5 Star (new rating) (zoned)	1-phase airconditioning 4.5 Star (new rating) (zoned)	1-phase airconditioning 4.5 Star (new rating) (zoned)	1-phase airconditioning 4.5 Star (new rating) (zoned)	1 (dedicated)	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	0	no

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	Co	oling	He	ating			Artificial	lighting			Natural li	ghting
Dwelling no.	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or dining rooms	Each kitchen	All bathrooms/ toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitche
B1003, B1005, B1007, B1010, B1011, B1102, B1106, B1107, B1202, B1203, B1206, B1209, B1210, B1302, B1306, B1307, B1309												

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	Coo	ling	Hea	ting			Artificial	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 laundry	All hallways	No. of bathrooms &/or toilets	Main kitch
B206, B207, B209, B212, B213, B302, B305, B306, B306, B310, B312, B502, B505, B511, B512, B513, B603, B605, B607, B611, B613, B703, B705, B707, B710, B711, B713, B711, B713, B711, B713, B711, B713, B711, B713, B711, B713, B711, B713, B711, B713, B711, B713, B711, B713, B711, B713, B711, B713, B711, B713, B711, B713, B711, B713, B711, B713, B711, B713, B711, B713, B711, B713, B713, B714, B715, B716, B717, B717, B718, B718, B718, B718, B719, B711, B711, B713, B711, B713, B711, B713, B714, B715, B716, B717, B717, B718, B718, B718, B719,	1-phase airconditioning 4.5 Star (new rating) (zoned)	1-phase airconditioning 4.5 Star (new rating) (zoned)	1-phase airconditioning 4.5 Star (new rating) (zoned)	1-phase airconditioning 4.5 Star (new rating) (zoned)	2 (dedicated)	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	0	no

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Co	ooling	Hea	ating			Artificial	lighting			Natural lig	ghting
Dwelling living areas no.	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 kitch
B910, BG03, BG05, BG06, BG07, BG08, BG09, BG10, B1001, B1002, B1006, B1008, B1009, B1101, B1103, B1110, B1201, B1201, B1205, B1207, B1208, B1301, B1303, B1305, B1308, B1308, B1308,											

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	Individual p	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
B205	-	-	-	-	gas cooktop & electric oven	2.5 star (new rating)	no	3.5 star	-	2 star	no	no
B201, B202, B203	-	-	-	-	gas cooktop & electric oven	2.5 star (new rating)	no	3.5 star	-	2 star	-	-

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	Individual p	oool	Individual	spa			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
B206, B207, B208, B209, B210, B211, B212, B213, B301, B302, B303, B305, B306, B307, B308, B309, B311, B312, B313, B501, B502, B503, B505, B506, B507, B508, B509, B511, B512, B513, B601, B602, B603, B605, B606, B607,					gas cooktop & electric oven	2.5 star (new rating)	no	3.5 star		2 star	no	no

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	Individual	pool	Individual	spa			Appliance	es & other effic	iency meas	ures		
Dwelling 10.	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
3608,												
609,												
3610, 3611,												
3612,												
3613,												
3701,												
3702,												
3703, 3705,												
705, 706,												
3707,												
3708,												
3709,												
3710, 3711,												
3711, 3712,												
3713,												
3801,												
3802,												
3803, 3805,												
3806,												
3807,												
3808,												
3809,												
3810, 3811,												
3812,												
3813,												
901,												
8902,												
3903, 3905,												
3905, 3906,												
3907,												
3908,												
3909,												

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	Individual	pool	Individual	spa			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
3910, 3911, 3601, 3602, 3603, 3605, 3606, 3607, 3608, 3610, 3611, 31002, 31003, 31005, 31006, 31007, 31008, 31011, 31101, 31101, 31102, 31103, 31101, 31101, 31101, 31101, 31101, 31101, 31102, 31103, 31105, 31106, 31107, 31108, 31109, 3												

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	Individual p	ool	Individual	spa	Appliances & other efficiency measures							
Dwelling no.	Pool heating system	Timer	Spa heating system	Timer	Kitchen cooktop/oven	Refrigerator	Well ventilated fridge space	Dishwasher	Clothes washer	Clothes dryer	Indoor or sheltered clothes drying line	Private outdoor or unsheltered clothes drying line
B1208, B1209, B1210, B1301, B1302, B1303, B1305, B1306, B1307, B1308, B1309, B1310												

(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.		~	~

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(iii) Thermal Comfort	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(g) Where there is an in-slab heating or cooling system, the applicant must:	V	V	V
(aa) Install insulation with an R-value of not less than 1.0 around the vertical edges of the perimeter of the slab; or			
(bb) On a suspended floor, install insulation with an R-value of not less than 1.0 underneath the slab and around the vertical edges of the perimeter of the slab.			
(h) The applicant must construct the floors and walls of the development in accordance with the specifications listed in the table below.	V	V	V

		Thermal loads				
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)				
B201	8	30.5				
B202	16	11.8				
B203	25.9	35.6				
B205	22.1	56.8				
B303	25.9	35.6				
B313	8.2	21.0				
B1007	6.6	17.8				
B1301	17.9	36.9				
B1302	29.3	30.7				
B1303	52	32.5				
B1305	35.8	49.9				
B1306	23.7	18.8				
B1307	31.9	28.6				
B1309	28	17.3				
B1310	18.8	32.9				
BG01, BG12	7.3	57.6				
BG02, BG11	24.5	50.2				

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		Thermal loads
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)
BG03, BG10	50.3	41.6
BG05, BG09	13.9	51.6
B1103, B1203	40.9	25.5
B1105, B1205	18.1	40.8
B1106, B1206	6.7	17.5
BG06, BG07, BG08	6.8	56.8
B901, B1001, B1101, B1201	4.2	31.1
B902, B1002, B1102, B1202	15.6	24.4
B908, B1008, B1107, B1207	18.4	23.1
B910, B1010, B1109, B1209	12.8	15.9
B911, B1011, B1110, B1210	4.8	24.5
B213, B513, B613, B713, B813	8.2	21
B301, B501, B601, B701, B801	8	30.5
B302, B502, B602, B702, B802	12	29.4
B909, B1009, B1108, B1208, B1308	22.3	50.7
B209, B309, B509, B609, B709, B809	17.5	29.7
B210, B310, B510, B610, B710, B810	5	19.1
B211, B311, B511, B611, B711, B811	18.1	44.9
B212, B312, B512, B612, B712, B812	15.2	11.8
B503, B603, B703, B803, B903, B1003	22.7	53.2
B305, B505, B605, B705, B805, B905, B1005	22.1	56.8
B206, B306, B506, B606, B706, B806, B906, B1006	12.1	58.6

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	Thermal loads						
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)					
All other dwellings	6.4	18.5					

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(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.	V	~				
(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.		~	V			
(f) The applicant must ensure that the central cooling system for a cooling tower is configured as specified in the table.		V	~			

Common area	Showerheads rating	Toilets rating	Taps rating	Clothes washers rating
All common areas	3 star (> 7.5 but <= 9 L/min)	4 star	4 star	no common laundry facility

Central systems	Size	Configuration	Connection (to allow for)
Fire sprinkler system (No. 4)	-	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.		~	~

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(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.	V	~	~

	Common area ventilation system Common area lighting				
Common area	Ventilation system type	Ventilation efficiency measure	Primary type of artificial lighting	Lighting efficiency measure	Lighting control system/BMS
Lift car (No. 6)	-	-	fluorescent	connected to lift call button	Yes
Lift car (No. 7)	-	-	fluorescent	connected to lift call button	Yes
Lift car (No. 8)	-	-	fluorescent	connected to lift call button	Yes
Brisbane Lifts	no mechanical ventilation	-	fluorescent	motion sensors	Yes
Recycling Rooms Brisbane	ventilation exhaust only	-	fluorescent	motion sensors	Yes
Staris Brisbane	no mechanical ventilation	-	fluorescent	motion sensors	Yes
Brisbane G	ventilation supply only	time clock or BMS controlled	fluorescent	motion sensors	Yes
Hallway/lobby type Brisbane	ventilation supply only	time clock or BMS controlled	fluorescent	motion sensors	Yes

Central energy systems	Туре	Specification
Central hot water system (No. 4)	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. 6)	gearless traction with V V V F motor	Number of levels (including basement): 21
Lift (No. 7)	gearless traction with V V V F motor	Number of levels (including basement): 14
Lift (No. 8)	gearless traction with V V V F motor	Number of levels (including basement): 14

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7. 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.		~	V
(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.	V	~	
(d) A pool or spa listed in the table must have a cover or shading if specified for the pool or spa in the table.		V	
(e) The applicant must install each fire sprinkler system listed in the table so that the system is configured as specified in the table.		~	V
(f) The applicant must ensure that the central cooling system for a cooling tower is configured as specified in the table.		V	V

Common area	Showerheads rating	Toilets rating	Taps rating	Clothes washers rating
All common areas	3 star (> 7.5 but <= 9 L/min)	4 star	4 star	no common laundry facility

Central systems	Size	Configuration	Connection (to allow for)
Central water tank - rainwater or stormwater (No. 1)	42000	To collect run-off from at least: - 1354 square metres of roof area of buildings in the development - 0 square metres of impervious area in the development - 0 square metres of garden/lawn area in the development - 0 square metres of planter box area in the development (excluding, in each case, any area which drains to, or supplies, any other alternative water supply system).	- irrigation of 1868 square metres of common landscaped area on the site - car washing in 0 car washing bays on the site

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Central systems	Size	Configuration	Connection (to allow for)
Pool (No. 1)	Volume: 223 kLs	Location: Other Pool shaded: no	-

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

	Common area v	entilation system	Common area lighting		
Common area	Ventilation system type	Ventilation efficiency measure	Primary type of artificial lighting	Lighting efficiency measure	Lighting control system/BMS
Level B1	ventilation (supply + exhaust)	carbon monoxide monitor + VSD fan	fluorescent	none	Yes
LevelB2	ventilation (supply + exhaust)	carbon monoxide monitor + VSD fan	fluorescent	none	Yes
Level B3	ventilation (supply + exhaust)	carbon monoxide monitor + VSD fan	fluorescent	none	Yes

Central energy systems	Туре	Specification
Pool (No. 1)	Heating source: gas	Solar collector area (minimum, in square metres): 100 Pump controlled by timer: yes

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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 fulfillment it is required to monitor in relation to the building or part, has been fulfilled).

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