

# BASIX<sup>®</sup>Certificate

Building Sustainability Index [www.basix.nsw.gov.au](http://www.basix.nsw.gov.au)

## Multi Dwelling

Certificate number: 236354M\_05

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 29/06/2006 published by the Department of Planning. This document is available at [www.basix.nsw.gov.au](http://www.basix.nsw.gov.au)

This certificate is a revision of certificate number 236354M lodged with the consent authority or certifier on 10 March 2009 with application MP 06\_027-MOD 1.

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

Director-General  
Date of issue: Tuesday, 07 September 2010



Project summary		
Project name	Sydney Olympic Park Site 3 (March 09)_05	
Street address	Site 3 Australia Avenue Homebush Bay 2127	
Local Government Area	Auburn Council	
Plan type and plan number	deposited 1	
Lot no.	Site 3	
Section no.	-	
No. of unit buildings	1	
No. of units in unit buildings	216	
No. of attached dwelling houses	0	
No. of separate dwelling houses	0	
Project score		
Water	✓ 52	Target 40
Thermal Comfort	✓ Pass	Target Pass
Energy	✓ 24	Target 20

### Certificate Prepared by (please complete before submitting to Council or PCA)

Name / Company Name: ecospecifier Pty Ltd

ABN (if applicable): ABN 83 124 037 841

# Description of project

## Project address

Project name	Sydney Olympic Park Site 3 (March 09)_05
Street address	Site 3 Australia Avenue Homebush Bay 2127
Local Government Area	Auburn Council
Plan type and plan number	deposited 1
Lot no.	Site 3
Section no.	-

## Project type

No. of unit buildings	1
No. of units in unit buildings	216
No. of attached dwelling houses	0
No. of separate dwelling houses	0

## Site details

Site area (m <sup>2</sup> )	4518
Roof area (m <sup>2</sup> )	1372
Non-residential floor area (m <sup>2</sup> )	860
Residential car spaces	277
Non-residential car spaces	14

## Common area landscape

Common area lawn (m <sup>2</sup> )	50
Common area garden (m <sup>2</sup> )	65
Area of indigenous or low water use species (m <sup>2</sup> )	60

## Assessor details

Assessor number	20047
Certificate number	26622803

## Project score

Water	✓ 52	Target 40
Thermal Comfort	✓ Pass	Target Pass
Energy	✓ 24	Target 20

## Description of project

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

### Unit building - Building1, 216 dwellings, 26 storeys above ground

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
A1.01	4 or more bedrooms	136.4	0.0	0	0
A1.05	2	88.9	0.0	0	0
A1002	2	79.5	0.0	0	0
A1006	2	86.2	0.0	0	0
A1103	2	91.9	0.0	0	0
A1107	1	48.4	0.0	0	0
A1204	1	55.8	0.0	0	0
A1301	1	63.1	0.0	0	0
A1305	2	80.7	0.0	0	0
A1402	2	79.5	0.0	0	0
A1406	2	86.2	0.0	0	0
A1504	1	55.8	0.0	0	0
A1602	2	79.5	0.0	0	0
A1701	3	116.9	0.0	0	0
A1705	2	90.2	0.0	0	0
A1804	2	89.7	0.0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
A1.02	1	61.1	0.0	0	0
A1.06	2	84.5	0.0	0	0
A1003	2	91.9	0.0	0	0
A1007	1	48.4	0.0	0	0
A1104	1	55.8	0.0	0	0
A1201	1	63.1	0.0	0	0
A1205	2	80.7	0.0	0	0
A1302	2	79.5	0.0	0	0
A1306	2	86.2	0.0	0	0
A1403	2	91.9	0.0	0	0
A1501	3	116.9	0.0	0	0
A1505	2	80.7	0.0	0	0
A1603	2	91.9	0.0	0	0
A1702	2	79.5	0.0	0	0
A1801	3	116.9	0.0	0	0
A1805	2	90.2	0.0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
A1.03	2	91.9	0.0	0	0
A1.07	1	54.6	0.0	0	0
A1004	1	55.8	0.0	0	0
A1101	1	63.1	0.0	0	0
A1105	2	80.7	0.0	0	0
A1202	2	79.5	0.0	0	0
A1206	2	86.2	0.0	0	0
A1303	2	91.9	0.0	0	0
A1307	1	48.4	0.0	0	0
A1404	1	55.8	0.0	0	0
A1502	2	79.5	0.0	0	0
A1506	2	86.2	0.0	0	0
A1604	2	88.3	0.0	0	0
A1703	2	91.9	0.0	0	0
A1802	2	79.5	0.0	0	0
A1901	3	116.9	0.0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
A1.04	1	55.8	0.0	0	0
A1001	1	63.1	0.0	0	0
A1005	2	80.7	0.0	0	0
A1102	2	79.5	0.0	0	0
A1106	2	86.2	0.0	0	0
A1203	2	91.9	0.0	0	0
A1207	1	48.4	0.0	0	0
A1304	1	55.8	0.0	0	0
A1401	3	116.9	0.0	0	0
A1405	2	80.7	0.0	0	0
A1503	2	91.9	0.0	0	0
A1601	3	116.9	0.0	0	0
A1605	2	90.2	0.0	0	0
A1704	2	89.7	0.0	0	0
A1803	2	91.9	0.0	0	0
A1902	2	79.5	0.0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
A1903	2	91.9	0.0	0	0
A2.02	1	61.1	0.0	0	0
A2.06	1	61.5	0.0	0	0
A2003	2	91.9	0.0	0	0
A2103	3	121.2	0.0	0	0
A2203	3	121.2	0.0	0	0
A2303	3	121.2	0.0	0	0
A3.02	1	61.1	0.0	0	0
A3.06	1	61.5	0.0	0	0
A4.03	2	91.9	0.0	0	0
A4.07	1	53.1	0.0	0	0
A5.04	1	55.8	0.0	0	0
A6.01	2	106.9	0.0	0	0
A6.05	2	80.7	0.0	0	0
A7.02	2	79.5	0.0	0	0
A7.06	2	86.2	0.0	0	0
A8.03	2	91.9	0.0	0	0
A8.07	1	48.4	0.0	0	0
A9.04	1	55.8	0.0	0	0
B1.01	1	66.7	0.0	0	0
B1002	1	66.3	0.0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
A1904	2	89.7	0.0	0	0
A2.03	2	91.9	0.0	0	0
A2.07	1	53.1	0.0	0	0
A2004	2	89.7	0.0	0	0
A2104	2	95.3	0.0	0	0
A2204	2	95.3	0.0	0	0
A2304	2	95.3	0.0	0	0
A3.03	2	91.9	0.0	0	0
A3.07	1	53.1	0.0	0	0
A4.04	1	55.8	0.0	0	0
A5.01	2	106.9	0.0	0	0
A5.05	2	80.7	0.0	0	0
A6.02	1	61.1	0.0	0	0
A6.06	1	61.5	0.0	0	0
A7.03	2	91.9	0.0	0	0
A7.07	1	48.4	0.0	0	0
A8.04	1	55.8	0.0	0	0
A9.01	1	63.1	0.0	0	0
A9.05	2	80.7	0.0	0	0
B1.02	1	50.9	0.0	0	0
B1003	2	104.2	0.0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
A1905	2	90.2	0.0	0	0
A2.04	1	55.8	0.0	0	0
A2001	3	116.9	0.0	0	0
A2005	2	90.2	0.0	0	0
A2201	3	116.9	0.0	0	0
A2301	3	116.9	0.0	0	0
A2401	2	95.6	5.1	0	0
A3.04	1	55.8	0.0	0	0
A4.01	2	106.9	0.0	0	0
A4.05	2	80.7	0.0	0	0
A5.02	1	61.1	0.0	0	0
A5.06	1	61.5	0.0	0	0
A6.03	2	91.9	0.0	0	0
A6.07	1	53.1	0.0	0	0
A7.04	1	55.8	0.0	0	0
A8.01	1	63.1	0.0	0	0
A8.05	2	80.7	0.0	0	0
A9.02	2	79.5	0.0	0	0
A9.06	2	86.2	0.0	0	0
B1.03	1	52.8	0.0	0	0
B1004	2	92.4	0.0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
A2.01	2	106.9	0.0	0	0
A2.05	2	80.7	0.0	0	0
A2002	2	79.5	0.0	0	0
A2101	4 or more bedrooms	213.3	0.0	0	0
A2202	2	95.2	0.0	0	0
A2302	2	95.2	0.0	0	0
A3.01	2	106.9	0.0	0	0
A3.05	2	80.7	0.0	0	0
A4.02	1	61.1	0.0	0	0
A4.06	1	61.5	0.0	0	0
A5.03	2	91.9	0.0	0	0
A5.07	1	53.1	0.0	0	0
A6.04	1	55.8	0.0	0	0
A7.01	1	63.1	0.0	0	0
A7.05	2	80.7	0.0	0	0
A8.02	2	79.5	0.0	0	0
A8.06	2	86.2	0.0	0	0
A9.03	2	91.9	0.0	0	0
A9.07	1	48.4	0.0	0	0
B1001	2	86.5	0.0	0	0
B1005	2	83.0	0.0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
B1101	2	86.5	0.0	0	0
B1105	2	83.0	0.0	0	0
B1204	2	92.4	0.0	0	0
B1303	2	104.2	0.0	0	0
B1402	1	66.3	0.0	0	0
B1502	1	66.3	0.0	0	0
B2.02	1	66.3	0.0	0	0
B2.06	1	52.8	0.0	0	0
B3.04	1	66.7	0.0	0	0
B4.02	1	66.3	0.0	0	0
B4.06	1	52.8	0.0	0	0
B5.04	1	66.7	0.0	0	0
B6.02	1	66.3	0.0	0	0
B6.06	1	52.8	0.0	0	0
B7.04	2	92.4	0.0	0	0
B8.03	2	104.2	0.0	0	0
B9.02	1	66.3	0.0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
B1102	1	66.3	0.0	0	0
B1201	2	86.5	0.0	0	0
B1205	2	83.0	0.0	0	0
B1304	2	92.4	0.0	0	0
B1403	2	104.2	0.0	0	0
B1503	2	104.2	0.0	0	0
B2.03	2	104.2	0.0	0	0
B3.01	2	86.5	0.0	0	0
B3.05	1	50.9	0.0	0	0
B4.03	2	104.2	0.0	0	0
B5.01	2	86.5	0.0	0	0
B5.05	1	50.9	0.0	0	0
B6.03	2	104.2	0.0	0	0
B7.01	2	86.5	0.0	0	0
B7.05	2	83.0	0.0	0	0
B8.04	2	92.4	0.0	0	0
B9.03	2	104.2	0.0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
B1103	2	104.2	0.0	0	0
B1202	1	66.3	0.0	0	0
B1301	2	86.5	0.0	0	0
B1305	2	83.0	0.0	0	0
B1404	2	94.7	0.0	0	0
B1504	2	94.7	0.0	0	0
B2.04	1	66.7	0.0	0	0
B3.02	1	66.3	0.0	0	0
B3.06	1	52.8	0.0	0	0
B4.04	1	66.7	0.0	0	0
B5.02	1	66.3	0.0	0	0
B5.06	1	52.8	0.0	0	0
B6.04	1	66.7	0.0	0	0
B7.02	1	66.3	0.0	0	0
B8.01	2	86.5	0.0	0	0
B8.05	2	83.0	0.0	0	0
B9.04	2	92.4	0.0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
B1104	2	92.4	0.0	0	0
B1203	2	104.2	0.0	0	0
B1302	1	66.3	0.0	0	0
B1401	2	86.5	0.0	0	0
B1501	2	86.5	0.0	0	0
B2.01	2	86.5	0.0	0	0
B2.05	1	50.9	0.0	0	0
B3.03	2	104.2	0.0	0	0
B4.01	2	86.5	0.0	0	0
B4.05	1	50.9	0.0	0	0
B5.03	2	104.2	0.0	0	0
B6.01	2	86.5	0.0	0	0
B6.05	1	50.9	0.0	0	0
B7.03	2	104.2	0.0	0	0
B8.02	1	66.3	0.0	0	0
B9.01	2	86.5	0.0	0	0
B9.05	2	83.0	0.0	0	0

## Description of project

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

### Common areas of unit building - Building1

Common area	Floor area (m²)
Car park (motion sensor + natural vent)	1585
Car park (NO sensor + natural vent)	396
Lift car (No. 1)	-
Lift car (No. 4)	-
Garbage Shutes and Cupboards	76
Roof plant	195
Store rooms	79
Lobbies level 1	116

Common area	Floor area (m²)
Car park (motion sensor + mech exhaust)	1355
Car park (NO sensor + mech exhaust)	339
Lift car (No. 2)	-
Pump Room, Comms Room, Switch Room	54
Toilets	17
Internal Corridors	1309
Staff room	9

Common area	Floor area (m²)
Car park (motion sensor +supply/exhaust)	4268
Car park (NO sensor +supply/exhaust)	1067
Lift car (No. 3)	-
Garbage rooms	152
Plant rooms	236
Air Locks	61
Ground floor lobbies	131

# Schedule of BASIX commitments

## 1. Commitments for unit building - Building1

### (a) Dwellings

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

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

- (i) Water
- (ii) Energy

## 2. Commitments for attached dwelling houses

## 3. Commitments for separate dwelling houses

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

- (i) Water
- (ii) Energy

## Schedule of BASIX commitments

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

### 1. Commitments for unit building - Building1

#### (a) Dwellings

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

	Fixtures					Appliances		Individual pool				Individual spa		
Dwelling no.	All shower-heads	All toilet flushing systems	All kitchen taps	All bathroom taps	HW recirculation or diversion	All clothes washers	All dish-washers	Volume (max volume)	Pool cover	Pool location	Pool shaded	Volume (max volume)	Spa cover	Spa shaded
All dwellings	3 star	4 star	6 star	6 star	no	4 star	3 star	-	-	-	-	-	-	-



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

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

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

	Hot water	Bathroom ventilation system		Kitchen ventilation system		Laundry ventilation system	
Dwelling no.	Hot water system	Each bathroom	Operation control	Each kitchen	Operation control	Each laundry	Operation control
All dwellings	central hot water system 1	individual fan, ducted to façade or roof	manual on / timer off	individual fan, not ducted	manual switch on/off	individual fan, ducted to façade or roof	manual on / timer off

	Cooling		Heating		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 kitchen
A2401	3-phase airconditioning EER 3.0 - 3.5 (zoned)	3-phase airconditioning EER 3.0 - 3.5 (zoned)	3-phase airconditioning EER 3.0 - 3.5 (zoned)	3-phase airconditioning EER 3.0 - 3.5 (zoned)	2	2	yes	yes	yes	yes	1	yes
A1.01, A2101	3-phase airconditioning EER 3.0 - 3.5 (zoned)	3-phase airconditioning EER 3.0 - 3.5 (zoned)	3-phase airconditioning EER 3.0 - 3.5 (zoned)	3-phase airconditioning EER 3.0 - 3.5 (zoned)	4	2	yes	yes	yes	yes	0	yes

Dwelling no.	Cooling		Heating		Artificial lighting						Natural lighting	
	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or dining rooms	Each kitchen	All bathrooms/toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
A2.01, A2202, A2302, A3.01, A4.01, A5.01, A6.01	1-phase airconditioning 5 Star (zoned)	1-phase airconditioning 5 Star (zoned)	1-phase airconditioning 5 Star (zoned)	1-phase airconditioning 5 Star (zoned)	2	2	yes	yes	yes	yes	0	yes
A1.07, A2.07, A3.07, A4.07, A5.07, A6.07, A7.01, A7.07	1-phase airconditioning 5 Star (zoned)	1-phase airconditioning 5 Star (zoned)	1-phase airconditioning 5 Star (zoned)	1-phase airconditioning 5 Star (zoned)	1	2	yes	yes	yes	yes	0	yes
A1501, A1601, A1701, A1801, A1901, A2201, A2203, A2204, A2301, A2303, A2304	1-phase airconditioning 5 Star (zoned)	1-phase airconditioning 5 Star (zoned)	1-phase airconditioning 5 Star (zoned)	1-phase airconditioning 5 Star (zoned)	3	2	yes	yes	yes	yes	0	yes

Dwelling no.	Cooling		Heating		Artificial lighting						Natural lighting	
	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or dining rooms	Each kitchen	All bathrooms/toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
A1.04, A1004, A1104, A1204, A1304, A1404, A1504, A2.04, A3.04, A4.04, A5.04, A6.04, A7.04, A8.04, A9.04	1-phase airconditioning 5 Star (zoned)	1-phase airconditioning 5 Star (zoned)	1-phase airconditioning 6 Star (zoned)	1-phase airconditioning 6 Star (zoned)	1	2	yes	yes	yes	yes	0	no

Dwelling no.	Cooling		Heating		Artificial lighting						Natural lighting	
	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or dining rooms	Each kitchen	All bathrooms/toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
A1.03, A1003, A1103, A1203, A1303, A1401, A1403, A1503, A1603, A1605, A1703, A1704, A1705, A1803, A1804, A1805, A1903, A1904, A1905, A2.03, A2001, A2003, A2004, A2005, A2103, A2104, A3.03, A4.03, A5.03, A6.03, A7.03, A8.03, A9.03	1-phase airconditioning 5 Star (zoned)	1-phase airconditioning 5 Star (zoned)	1-phase airconditioning 6 Star (zoned)	1-phase airconditioning 6 Star (zoned)	3	2	yes	yes	yes	yes	0	yes

Dwelling no.	Cooling		Heating		Artificial lighting						Natural lighting	
	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or dining rooms	Each kitchen	All bathrooms/toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
A1.02, A1001, A1007, A1101, A1107, A1201, A1207, A1301, A1307, A2.02, A2.06, A3.02, A3.06, A4.02, A4.06, A5.02, A5.06, A6.02, A6.06, A8.01, A8.07, A9.01, A9.07, B1.01, B1.02, B1.03, B2.04, B2.05, B2.06, B3.04, B3.05, B3.06, B4.04, B4.05, B4.06, B5.04, B5.05, B5.06, B6.04,	1-phase airconditioning 5 Star (zoned)	1-phase airconditioning 5 Star (zoned)	1-phase airconditioning 6 Star (zoned)	1-phase airconditioning 6 Star (zoned)	1	2	yes	yes	yes	yes	0	yes

	Cooling		Heating		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 kitchen
B6.05, B6.06												

Dwelling no.	Cooling		Heating		Artificial lighting						Natural lighting	
	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or dining rooms	Each kitchen	All bathrooms/toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
A1.05, A1.06, A1002, A1005, A1006, A1102, A1105, A1106, A1202, A1205, A1206, A1302, A1305, A1306, A1402, A1405, A1406, A1502, A1505, A1506, A1602, A1604, A1702, A1802, A1902, A2.05, A2002, A3.05, A4.05, A5.05, A6.05, A7.02, A7.05, A7.06, A8.02, A8.05, A8.06, A9.02, A9.05,	1-phase airconditioning 5 Star (zoned)	1-phase airconditioning 5 Star (zoned)	1-phase airconditioning 6 Star (zoned)	1-phase airconditioning 6 Star (zoned)	2	2	yes	yes	yes	yes	0	yes



	Cooling		Heating		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 kitchen
A9.06, B1001, B1002, B1003, B1004, B1005, B1101, B1102, B1103, B1104, B1105, B1201, B1202, B1203, B1204, B1205, B1301, B1302, B1303, B1304, B1305, B1401, B1402, B1403, B1404, B1501, B1502, B1503, B1504, B2.01, B2.02, B2.03, B3.01, B3.02, B3.03, B4.01, B4.02, B4.03, B5.01,												

Dwelling no.	Cooling		Heating		Artificial lighting						Natural lighting	
	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or dining rooms	Each kitchen	All bathrooms/toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
B5.02, B5.03, B6.01, B6.02, B6.03, B7.01, B7.02, B7.03, B7.04, B7.05, B8.01, B8.02, B8.03, B8.04, B8.05, B9.01, B9.02, B9.03, B9.04, B9.05												

Dwelling no.	Individual pool		Individual spa		Appliances & other efficiency measures							
	Pool heating system	Timer	Spa heating system	Timer	Kitchen cooktop/oven	Refrigerator	Well ventilated fridge space	Dishwasher	Clothes washer	Clothes dryer	Indoor or sheltered clothes drying line	Private outdoor or unsheltered clothes drying line
All dwellings	-	-	-	-	gas cooktop & electric oven	-	no	3 star	4.5 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) Commitment (h) below, applies to the rooms or areas of a dwelling which are listed in the "Cross Ventilation" table below as comprising a breeze path for the dwelling.			
(h) The applicant must construct the dwelling so that at least one ventilation opening is provided in each such room or area. (If only one room or area of a dwelling is mentioned for a breeze path, then that room or area must have at least two ventilation openings).		✓	✓
(i) The two ventilation openings referred to in (h), must meet the following specifications: (aa) be located as specified for the breeze path in the table; (bb) not be more than 15 metres apart; (cc) if the dwelling is below the 10th storey of the building, be at least 1 square metre in size, or if the dwelling is on or above the 10th storey, be at least 0.5 square metres in size and be located above door head level in the room; and (dd) have only 1 doorway, or opening less than 2 square metres in size, located in the direct path between them.			

Thermal loads			
Dwelling no.	Heating load (in mJ/m <sup>2</sup> /yr)	Cooling load (in mJ/m <sup>2</sup> /yr)	Corrected Cooling load (in mJ/m <sup>2</sup> /yr)
A1.01	18.0	19.4	19.4

	Thermal loads		
Dwelling no.	Heating load (in mJ/m²/yr)	Cooling load (in mJ/m²/yr)	Corrected Cooling load (in mJ/m²/yr)
A1.02	29.5	2.7	2.7
A1.04	51.6	7.2	7.2
A1.05	23.4	11.0	11.0
A1.06	51.0	10.8	10.8
A1.07	99.2	15.6	15.6
A1103	28.2	9.8	9.8
A1301	53.6	34.1	34.1
A1303	26.6	9.1	9.1
A1307	11.5	6.2	6.2
A1503	28.4	10.8	10.8
A1504	56.9	8.0	8.0
A1505	54.7	14.8	14.8
A1604	56.0	12.2	12.2
A2002	45.6	6.6	6.6
A2003	48.1	15.3	15.3
A2004	49.0	18.6	18.6
A2005	15.5	15.8	15.8
A2101	22.0	27.0	27.0
A2202	30.9	15.3	15.3
A2301	43.9	34.1	34.1
A2302	60.3	23.6	23.6
A2303	85.2	22.8	22.8
A2304	21.9	34.0	34.0
A2401	132.5	67.5	67.5
A6.01	31.8	20.0	20.0
A6.02	27.0	4.4	4.4
A6.03	28.2	9.7	9.7

	Thermal loads		
Dwelling no.	Heating load (in mJ/m²/yr)	Cooling load (in mJ/m²/yr)	Corrected Cooling load (in mJ/m²/yr)
A6.06	18.6	12.0	12.0
A6.07	10.3	10.8	10.8
A8.03	27.8	9.6	9.6
A9.03	28.0	10.2	10.2
B1.01	137.7	7.9	7.9
B1.02	86.6	15.9	15.9
B1.03	121.7	15.8	15.8
B1304	21.7	16.5	16.5
B1305	22.9	28.0	28.0
B1403	59.0	20.8	20.8
B1404	23.9	14.8	14.8
B1501	43.7	15.8	15.8
B1502	37.2	20.0	20.0
B1503	83.5	30.3	30.3
B1504	41.3	20.9	20.9
B2.02	8.4	16.4	16.4
B2.03	106.9	34.9	34.9
B6.04	12.5	11.4	11.4
B6.05	3.4	18.0	18.0
B6.06	12.8	16.2	16.2
A1203, A3.03	28.2	9.9	9.9
A1302, A1502	26.5	4.4	4.4
A1304, A6.04	54.0	7.5	7.5
A1305, A6.05	35.1	12.5	12.5
A1306, A1506	11.6	16.4	16.4
A1501, A2001	26.2	26.8	26.8
A1903, A5.03	28.4	10.3	10.3

Dwelling no.	Thermal loads		
	Heating load (in mJ/m²/yr)	Cooling load (in mJ/m²/yr)	Corrected Cooling load (in mJ/m²/yr)
A2103, A2203	52.9	15.4	15.4
A2104, A2204	17.7	15.9	15.9
A7.02, A8.02	22.0	2.8	2.8
B1301, B6.01	25.1	12.4	12.4
B1302, B6.02	14.6	16.8	16.8
B1303, B6.03	65.8	24.0	24.0
A1704, A1804, A1904	44.3	16.2	16.2
A1403, A1703, A1803, A2.03	28.4	9.9	9.9
A1605, A1705, A1805, A1905	15.0	15.2	15.2
A2.01, A3.01, A4.01, A5.01	29.4	18.8	18.8
A2.02, A3.02, A4.02, A5.02	23.6	2.7	2.7
A2.06, A3.06, A4.06, A5.06	17.8	9.8	9.8
A2.07, A3.07, A4.07, A5.07	11.6	12.3	12.3
B2.04, B3.04, B4.04, B5.04	10.4	11.1	11.1
B2.05, B3.05, B4.05, B5.05	1.9	16.2	16.2
B2.06, B3.06, B4.06, B5.06	9.4	15.0	15.0
A1.03, A1003, A1603, A4.03, A7.03	26.2	8.3	8.3
A1001, A1101, A1201, A7.01, A8.01, A9.01	48.3	30.3	30.3
A1007, A1107, A1207, A7.07, A8.07, A9.07	12.1	5.6	5.6

	Thermal loads		
Dwelling no.	Heating load (in mJ/m²/yr)	Cooling load (in mJ/m²/yr)	Corrected Cooling load (in mJ/m²/yr)
A1401, A1601, A1701, A1801, A1901, A2201	23.2	24.5	24.5
B1004, B1104, B1204, B7.04, B8.04, B9.04	8.7	12.3	12.3
B1005, B1105, B1205, B7.05, B8.05, B9.05	8.2	20.5	20.5
A1006, A1106, A1206, A1406, A7.06, A8.06, A9.06	11.2	15.3	15.3
A1002, A1102, A1202, A1402, A1602, A1702, A1802, A1902, A9.02	23.2	3.2	3.2
B1003, B1103, B1203, B3.03, B4.03, B5.03, B7.03, B8.03, B9.03	61.4	20.8	20.8
B1002, B1102, B1202, B1402, B3.02, B4.02, B5.02, B7.02, B8.02, B9.02	4.8	16.3	16.3
A1004, A1104, A1204, A1404, A2.04, A3.04, A4.04, A5.04, A7.04, A8.04, A9.04	50.6	7.0	7.0
A1005, A1105, A1205, A1405, A2.05, A3.05, A4.05, A5.05, A7.05, A8.05, A9.05	33.1	11.6	11.6
All other dwellings	25.9	12.0	12.0

	Cross ventilation			
Dwelling no.	Breeze path 1	Breeze path 2	Breeze path 3	Breeze path 4
All dwellings	-	-	-	-

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

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

<b>Common area</b>	<b>Showerheads rating</b>	<b>Toilets rating</b>	<b>Taps rating</b>	<b>Clothes washers rating</b>
All common areas	no common facility	4 star	6 star	no common laundry facility

<b>Central systems</b>	<b>Size</b>	<b>Configuration</b>	<b>Connection (to allow for...)</b>
Fire sprinkler system (No. 1)	-	-	-
Fire sprinkler system (No. 2)	-	-	-
Fire sprinkler system (No. 3)	-	-	-
Fire sprinkler system (No. 4)	-	-	-
Fire sprinkler system (No. 5)	-	-	-



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

	Common area ventilation system		Common area lighting		
Common area	Ventilation system type	Ventilation efficiency measure	Primary type of artificial lighting	Lighting efficiency measure	Lighting control system/BMS
Car park (motion sensor + natural vent)	no mechanical ventilation	-	fluorescent	motion sensors	Yes
Car park (motion sensor + mech exhaust)	ventilation exhaust only	carbon monoxide monitor + VSD fan	fluorescent	motion sensors	Yes
Car park (motion sensor +supply/exhaust)	ventilation (supply + exhaust)	carbon monoxide monitor + VSD fan	fluorescent	motion sensors	Yes
Car park (NO sensor + natural vent)	no mechanical ventilation	-	fluorescent	none	No
Car park (NO sensor + mech exhaust)	ventilation exhaust only	carbon monoxide monitor + VSD fan	fluorescent	none	No
Car park (NO sensor +supply/exhaust)	ventilation (supply + exhaust)	carbon monoxide monitor + VSD fan	fluorescent	none	No
Lift car (No. 1)	-	-	fluorescent	none	No
Lift car (No. 2)	-	-	fluorescent	none	No
Lift car (No. 3)	-	-	fluorescent	none	No
Lift car (No. 4)	-	-	fluorescent	none	No
Pump Room, Comms Room, Switch Room	ventilation supply only	thermostatically controlled	fluorescent	manual on / manual off	No

Common area	Common area ventilation system		Common area lighting		
	Ventilation system type	Ventilation efficiency measure	Primary type of artificial lighting	Lighting efficiency measure	Lighting control system/BMS
Garbage rooms	ventilation exhaust only	-	fluorescent	manual on / manual off	No
Garbage Shutes and Cupboards	ventilation exhaust only	-	compact fluorescent	motion sensors	Yes
Toilets	ventilation exhaust only	time clock or BMS controlled	fluorescent	manual on / manual off	No
Plant rooms	ventilation exhaust only	none ie. continuous	fluorescent	manual on / manual off	No
Roof plant	no mechanical ventilation	-	fluorescent	manual on / manual off	No
Internal Corridors	ventilation supply only	none ie. continuous	compact fluorescent	time clock and motion sensors	Yes
Air Locks	no mechanical ventilation	-	compact fluorescent	time clock and motion sensors	Yes
Store rooms	no mechanical ventilation	-	fluorescent	manual on / manual off	No
Staff room	air conditioning system	time clock or BMS controlled	compact fluorescent	manual on / manual off	No
Ground floor lobbies	ventilation supply only	none ie. continuous	compact fluorescent	time clock and motion sensors	Yes
Lobbies level 1	ventilation supply only	none ie. continuous	compact fluorescent	time clock and motion sensors	Yes

Central energy systems	Type	Specification
Central hot water system (No. 1)	solar - gas boosted	Solar collector area (minimum, in square metres): 100 Piping insulation (ringmain & supply risers): (b) Piping internal to building: R0.45 (~20 mm)
Lift (No. 1)	gearless traction with V V V F motor	Number of levels (including basement): 27
Lift (No. 2)	gearless traction with V V V F motor	Number of levels (including basement): 28
Lift (No. 3)	gearless traction with V V V F motor	Number of levels (including basement): 19
Lift (No. 4)	gearless traction with V V V F motor	Number of levels (including basement): 19

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

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

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

Common area	Showerheads rating	Toilets rating	Taps rating	Clothes washers rating
All common areas	no common facility	4 star	6 star	no common laundry facility

(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.	✓	✓	✓

## Notes

1. In these commitments, "applicant" means the person carrying out the development.
2. The applicant must identify each dwelling, building and common area listed in this certificate, on the plans accompanying any development application, and on the plans and specifications accompanying the application for a construction certificate / complying development certificate, for the proposed development, using the same identifying letter or reference as is given to that dwelling, building or common area in this certificate.
3. This note applies if the proposed development involves the erection of a building for both residential and non-residential purposes (or the change of use of a building for both residential and non-residential purposes). Commitments in this certificate which are specified to apply to a "common area" of a building or the development, apply only to that part of the building or development to be used for residential purposes.
4. If this certificate lists a central system as a commitment for a dwelling or building, and that system will also service any other dwelling or building within the development, then that system need only be installed once (even if it is separately listed as a commitment for that other dwelling or building).
5. If a star or other rating is specified in a commitment, this is a minimum rating.
6. All alternative water systems to be installed under these commitments (if any), must be installed in accordance with the requirements of all applicable regulatory authorities. NOTE: NSW Health does not recommend that stormwater, recycled water or private dam water be used to irrigate edible plants which are consumed raw, or that rainwater be used for human consumption in areas with potable water supply.

## Legend

1. Commitments identified with a "✓" in the "Show on DA plans" column must be shown on the plans accompanying the development application for the proposed development (if a development application is to be lodged for the proposed development).
2. Commitments identified with a "✓" in the "Show on CC/CDC plans and specs" column must be shown in the plans and specifications accompanying the application for a construction certificate / complying development certificate for the proposed development.
3. Commitments identified with a "✓" in the "Certifier check" column must be certified by a certifying authority as having been fulfilled. (Note: a certifying authority must not issue an occupation certificate (either interim or final) for a building listed in this certificate, or for any part of such a building, unless it is satisfied that each of the commitments whose fulfilment it is required to monitor in relation to the building or part, has been fulfilled).