

BASIX[®]Certificate

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

Multi Dwelling

Certificate number: 1090989M_03

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

Secretary

Date of issue: Friday, 03 September 2021

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



Planning,
Industry &
Environment

If any changes to this BASIX certificate are required, please contact Vipac with following details:

- Project reference: Stage 4, 43-53 Cudgegong Rd, Rouse Hill
- Contact number: 0430 108 801

Project summary

Project name	Stage 4, 43-53 Cudgegong Rd, Rouse H_03
Street address	43-53 Cudgegong Road Rouse Hill 2155
Local Government Area	Blacktown City Council
Plan type and plan number	deposited 208203
Lot no.	72&73
Section no.	-
No. of residential flat buildings	2
No. of units in residential flat buildings	231
No. of multi-dwelling houses	0
No. of single dwelling houses	0

Project score

Water	✓ 42	Target 40
Thermal Comfort	✓ Pass	Target Pass
Energy	✓ 31	Target 25

Certificate Prepared by

Name / Company Name: Vipac

ABN (if applicable): 33005453627

Description of project

Project address

Project name	Stage 4, 43-53 Cudgegong Rd, Rouse H_03
Street address	43-53 Cudgegong Road Rouse Hill 2155
Local Government Area	Blacktown City Council
Plan type and plan number	deposited 208203
Lot no.	72&73
Section no.	-

Project type

No. of residential flat buildings	2
No. of units in residential flat buildings	231
No. of multi-dwelling houses	0
No. of single dwelling houses	0

Site details

Site area (m²)	9203
Roof area (m²)	2853.9
Non-residential floor area (m²)	-
Residential car spaces	307
Non-residential car spaces	293

Common area landscape

Common area lawn (m²)	186.0
Common area garden (m²)	2340.0
Area of indigenous or low water use species (m²)	468.0

Assessor details

Assessor number	BDAV/16/1757
Certificate number	0004484468
Climate zone	28
Ceiling fan in at least one bedroom	No
Ceiling fan in at least one living room or other conditioned area	No

Project score

Water	✓ 42	Target 40
Thermal Comfort	✓ Pass	Target Pass
Energy	✓ 31	Target 25

Description of project

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

Residential flat buildings - BuildingA, 133 dwellings, 8 storeys above ground

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
A11012	77.0	7.0	8.0	0.0	
A11062	76.0	2.0	0.0	0.0	
A12022	76.0	5.0	0.0	0.0	
A12072	76.0	2.0	0.0	0.0	
A13032	75.0	5.0	0.0	0.0	
A13082	77.0	6.0	0.0	0.0	
A14042	75.0	5.0	0.0	0.0	
A14093	97.0	6.0	0.0	0.0	
A15052	75.0	5.0	0.0	0.0	
A16012	77.0	7.0	0.0	0.0	
A16062	76.0	2.0	0.0	0.0	
A17022	76.0	5.0	0.0	0.0	
A1U013	90.0	5.0	0.0	0.0	
A21052	71.0	5.0	0.0	0.0	
A21102	69.0	5.0	0.0	0.0	
A22031	49.0	6.0	7.0	0.0	
A22082	72.0	6.0	10.0	0.0	
A23012	72.0	5.0	0.0	0.0	
Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
A11022	76.0	5.0	8.0	0.0	
A11072	76.0	2.0	0.0	0.0	
A12032	75.0	5.0	0.0	0.0	
A12082	77.0	6.0	0.0	0.0	
A13042	75.0	5.0	0.0	0.0	
A13093	97.0	6.0	0.0	0.0	
A14052	75.0	5.0	0.0	0.0	
A15012	77.0	7.0	0.0	0.0	
A15062	76.0	2.0	0.0	0.0	
A16022	76.0	5.0	0.0	0.0	
A16072	76.0	2.0	0.0	0.0	
A17032	75.0	5.0	0.0	0.0	
A21012	72.0	5.0	0.0	0.0	
A21062	73.0	7.0	0.0	0.0	
A21113	89.0	5.0	0.0	0.0	
A22041	49.0	6.0	7.0	0.0	
A22092	72.0	5.0	10.0	0.0	
A23021	49.0	6.0	0.0	0.0	
Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
A11032	75.0	5.0	8.0	0.0	
A11082	77.0	6.0	0.0	0.0	
A12042	75.0	5.0	0.0	0.0	
A12093	97.0	6.0	0.0	0.0	
A13052	75.0	5.0	0.0	0.0	
A14012	77.0	7.0	0.0	0.0	
A14062	76.0	2.0	0.0	0.0	
A15022	76.0	5.0	0.0	0.0	
A15072	76.0	2.0	0.0	0.0	
A16032	75.0	5.0	0.0	0.0	
A16082	77.0	6.0	0.0	0.0	
A17042	76.0	2.0	0.0	0.0	
A21021	49.0	6.0	0.0	0.0	
A21072	72.0	6.0	0.0	0.0	
A21122	74.0	5.0	0.0	0.0	
A22052	71.0	5.0	8.0	0.0	
A22102	69.0	5.0	10.0	0.0	
A23031	49.0	6.0	0.0	0.0	
Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
A11042	75.0	5.0	8.0	0.0	
A11092	82.0	6.0	0.0	0.0	
A12052	75.0	5.0	0.0	0.0	
A13012	77.0	7.0	0.0	0.0	
A13062	76.0	2.0	0.0	0.0	
A14022	76.0	5.0	0.0	0.0	
A14072	76.0	2.0	0.0	0.0	
A15032	75.0	5.0	0.0	0.0	
A15082	77.0	6.0	0.0	0.0	
A16042	75.0	5.0	0.0	0.0	
A16093	97.0	6.0	0.0	0.0	
A17052	77.0	6.0	0.0	0.0	
A21031	49.0	6.0	0.0	0.0	
A21082	72.0	6.0	0.0	0.0	
A22012	72.0	5.0	5.0	0.0	
A22062	73.0	7.0	15.0	0.0	
A22113	89.0	5.0	10.0	0.0	
A23041	49.0	6.0	0.0	0.0	
Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
A11052	75.0	5.0	10.0	0.0	
A12012	77.0	7.0	0.0	0.0	
A12062	76.0	2.0	0.0	0.0	
A13022	76.0	5.0	0.0	0.0	
A13072	76.0	2.0	0.0	0.0	
A14032	75.0	5.0	0.0	0.0	
A14082	77.0	6.0	0.0	0.0	
A15042	75.0	5.0	0.0	0.0	
A15093	97.0	6.0	0.0	0.0	
A16052	75.0	5.0	0.0	0.0	
A17012	77.0	7.0	0.0	0.0	
A17063	97.0	6.0	0.0	0.0	
A21041	49.0	6.0	0.0	0.0	
A21092	72.0	5.0	0.0	0.0	
A22021	49.0	6.0	5.0	0.0	
A22072	72.0	6.0	10.0	0.0	
A22122	74.0	5.0	15.0	0.0	
A23052	71.0	5.0	0.0	0.0	

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
A23062	73.0	7.0	0.0	0.0	0.0
A23113	89.0	5.0	0.0	0.0	0.0
A24041	49.0	6.0	0.0	0.0	0.0
A24092	72.0	5.0	0.0	0.0	0.0
A25021	49.0	6.0	0.0	0.0	0.0
A25072	72.0	6.0	0.0	0.0	0.0
A25122	74.0	5.0	0.0	0.0	0.0
A26052	71.0	5.0	0.0	0.0	0.0
A26102	69.0	5.0	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
A23072	72.0	6.0	0.0	0.0	0.0
A23122	74.0	5.0	0.0	0.0	0.0
A24052	71.0	5.0	0.0	0.0	0.0
A24102	69.0	5.0	0.0	0.0	0.0
A25031	49.0	6.0	0.0	0.0	0.0
A25082	72.0	6.0	0.0	0.0	0.0
A26012	72.0	5.0	0.0	0.0	0.0
A26062	73.0	7.0	0.0	0.0	0.0
A26113	89.0	5.0	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
A23082	72.0	6.0	0.0	0.0	0.0
A24012	72.0	5.0	0.0	0.0	0.0
A24062	73.0	7.0	0.0	0.0	0.0
A24113	89.0	5.0	0.0	0.0	0.0
A25041	49.0	6.0	0.0	0.0	0.0
A25092	72.0	5.0	0.0	0.0	0.0
A26021	49.0	6.0	0.0	0.0	0.0
A26072	72.0	6.0	0.0	0.0	0.0
A26122	74.0	5.0	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
A23092	72.0	5.0	0.0	0.0	0.0
A24021	49.0	6.0	0.0	0.0	0.0
A24072	72.0	6.0	0.0	0.0	0.0
A24122	74.0	5.0	0.0	0.0	0.0
A25052	71.0	5.0	0.0	0.0	0.0
A25102	69.0	5.0	0.0	0.0	0.0
A26031	49.0	6.0	0.0	0.0	0.0
A26082	72.0	6.0	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
A23102	69.0	5.0	0.0	0.0	0.0
A24031	49.0	6.0	0.0	0.0	0.0
A24082	72.0	6.0	0.0	0.0	0.0
A25012	72.0	5.0	0.0	0.0	0.0
A25062	73.0	7.0	0.0	0.0	0.0
A25113	89.0	5.0	0.0	0.0	0.0
A26041	49.0	6.0	0.0	0.0	0.0
A26092	72.0	5.0	0.0	0.0	0.0

Residential flat buildings - BuildingB, 98 dwellings, 8 storeys above ground

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
B11013	86.0	8.0	21.0	0.0	0.0
B12012	76.0	6.0	10.0	0.0	0.0
B12062	74.0	6.0	0.0	0.0	0.0
B13042	70.0	6.0	0.0	0.0	0.0
B14021	53.0	8.0	0.0	0.0	0.0
B14073	98.0	5.0	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
B11023	122.0	3.0	5.0	0.0	0.0
B12021	53.0	8.0	0.0	0.0	0.0
B12073	98.0	5.0	10.0	0.0	0.0
B13052	70.0	6.0	0.0	0.0	0.0
B14032	73.0	6.0	0.0	0.0	0.0
B15012	76.0	6.0	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
B11033	107.0	3.0	5.0	0.0	0.0
B12032	73.0	6.0	0.0	0.0	0.0
B13012	76.0	6.0	0.0	0.0	0.0
B13062	74.0	6.0	0.0	0.0	0.0
B14042	70.0	6.0	0.0	0.0	0.0
B15021	53.0	8.0	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
B11042	74.0	6.0	10.0	0.0	0.0
B12042	70.0	6.0	0.0	0.0	0.0
B13021	53.0	8.0	0.0	0.0	0.0
B13073	98.0	5.0	0.0	0.0	0.0
B14052	70.0	6.0	0.0	0.0	0.0
B15032	73.0	6.0	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
B11053	98.0	5.0	10.0	0.0	0.0
B12052	70.0	6.0	0.0	0.0	0.0
B13032	73.0	6.0	0.0	0.0	0.0
B14012	76.0	6.0	0.0	0.0	0.0
B14062	74.0	6.0	0.0	0.0	0.0
B15042	70.0	6.0	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
B15052	70.0	6.0	0.0	0.0	
B16032	73.0	6.0	0.0	0.0	
B17012	76.0	6.0	0.0	0.0	
B17063	98.0	5.0	0.0	0.0	
B21011	57.0	6.0	10.0	0.0	
B21061	63.0	5.0	5.0	0.0	
B22011	57.0	6.0	0.0	0.0	
B22062	71.0	5.0	0.0	0.0	
B23012	87.0	7.0	0.0	0.0	
B23061	54.0	6.0	0.0	0.0	
B24032	74.0	5.0	0.0	0.0	
B24082	77.0	5.0	0.0	0.0	
B25051	50.0	5.0	0.0	0.0	
B26041	54.0	6.0	0.0	0.0	

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
B15062	74.0	6.0	0.0	0.0	
B16042	70.0	6.0	0.0	0.0	
B17021	53.0	8.0	0.0	0.0	
B1U012	74.0	5.0	0.0	0.0	
B21021	52.0	5.0	6.0	0.0	
B21072	73.0	6.0	10.0	0.0	
B22021	52.0	5.0	0.0	0.0	
B22072	73.0	6.0	0.0	0.0	
B23023	108.0	7.0	0.0	0.0	
B23071	50.0	5.0	0.0	0.0	
B24042	71.0	5.0	0.0	0.0	
B25013	111.0	6.0	0.0	0.0	
B25062	82.0	5.0	0.0	0.0	
B26051	50.0	5.0	0.0	0.0	

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
B15073	98.0	5.0	0.0	0.0	
B16052	70.0	6.0	0.0	0.0	
B17032	70.0	6.0	0.0	0.0	
B1U021	56.0	5.0	0.0	0.0	
B21032	71.0	5.0	8.0	0.0	
B21081	54.0	6.0	5.0	0.0	
B22032	71.0	5.0	0.0	0.0	
B22081	54.0	6.0	0.0	0.0	
B23032	74.0	5.0	0.0	0.0	
B23082	77.0	5.0	0.0	0.0	
B24052	73.0	6.0	0.0	0.0	
B25023	116.0	5.0	0.0	0.0	
B26012	82.0	6.0	0.0	0.0	
B26062	77.0	5.0	0.0	0.0	

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
B16012	76.0	6.0	0.0	0.0	
B16062	74.0	6.0	0.0	0.0	
B17042	70.0	6.0	0.0	0.0	
B1U032	76.0	4.0	0.0	0.0	
B21042	80.0	5.0	15.0	0.0	
B21091	50.0	5.0	5.0	0.0	
B22043	93.0	5.0	0.0	0.0	
B22091	50.0	5.0	0.0	0.0	
B23042	71.0	5.0	0.0	0.0	
B24012	87.0	7.0	0.0	0.0	
B24061	54.0	6.0	0.0	0.0	
B25032	73.0	6.0	0.0	0.0	
B26022	71.0	5.0	0.0	0.0	

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
B16021	53.0	8.0	0.0	0.0	
B16073	98.0	5.0	0.0	0.0	
B17052	74.0	6.0	0.0	0.0	
B1U042	76.0	4.0	0.0	0.0	
B21053	101.0	5.0	20.0	0.0	
B21101	49.0	5.0	5.0	0.0	
B22052	75.0	0.0	0.0	0.0	
B22102	49.0	5.0	0.0	0.0	
B23052	73.0	6.0	0.0	0.0	
B24022	78.0	5.0	0.0	0.0	
B24071	50.0	5.0	0.0	0.0	
B25041	54.0	6.0	0.0	0.0	
B26032	73.0	6.0	0.0	0.0	

Description of project

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

Common areas of unit building - BuildingA

Common area	Floor area (m²)
Lift car (No.1)	-
Lift car (No.4)	-

Common area	Floor area (m²)
Lift car (No.2)	-
Building A - Garbage room	108.0

Common area	Floor area (m²)
Lift car (No.3)	-
Building A - Hallway/lobby	1200.4

Common areas of unit building - BuildingB

Common area	Floor area (m²)
Lift car (No.5)	-
Lift car (No.8)	-

Common area	Floor area (m²)
Lift car (No.6)	-
Building B - Garbage room	152.1

Common area	Floor area (m²)
Lift car (No.7)	-
Building B - Hallway/lobby	986.3

Common areas of the development (non-building specific)

Common area	Floor area (m²)
Car park area	11045.0
Plant or service room	839.4

Common area	Floor area (m²)
Switch room	82.5
Ground floor lobby type	82.0

Common area	Floor area (m²)
Main Garbage room	96.7

Schedule of BASIX commitments

1. Commitments for Residential flat buildings - BuildingA

(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 - BuildingB

(a) Dwellings

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

(b) Common areas and central systems/facilities

- (i) Water
- (ii) Energy

3. Commitments for multi-dwelling houses

4. Commitments for single dwelling houses

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

- (i) Water
- (ii) Energy

Schedule of BASIX commitments

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

1. Commitments for Residential flat buildings - BuildingA

(a) Dwellings

(i) Water	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must comply with the commitments listed below in carrying out the development of a dwelling listed in a table below.			
(b) The applicant must plant indigenous or low water use species of vegetation throughout the area of land specified for the dwelling in the "Indigenous species" column of the table below, as private landscaping for that dwelling. (This area of indigenous vegetation is to be contained within the "Area of garden and lawn" for the dwelling specified in the "Description of Project" table).	✓	✓	
(c) If a rating is specified in the table below for a fixture or appliance to be installed in the dwelling, the applicant must ensure that each such fixture and appliance meets the rating specified for it.		✓	✓
(d) The applicant must install an on demand hot water recirculation system which regulates all hot water use throughout the dwelling, where indicated for a dwelling in the "HW recirculation or diversion" column of the table below.		✓	✓
(e) The applicant must install:			
(aa) a hot water diversion system to all showers, kitchen sinks and all basins in the dwelling, where indicated for a dwelling in the "HW recirculation or diversion" column of the table below; and		✓	✓
(bb) a separate diversion tank (or tanks) connected to the hot water diversion systems of at least 100 litres. The applicant must connect the hot water diversion tank to all toilets in the dwelling.		✓	✓
(e) The applicant must not install a private swimming pool or spa for the dwelling, with a volume exceeding that specified for it in the table below.	✓	✓	
(f) If specified in the table, that pool or spa (or both) must have a pool cover or shading (or both).		✓	
(g) The pool or spa must be located as specified in the table.	✓	✓	
(h) The applicant must install, for the dwelling, each alternative water supply system, with the specified size, listed for that dwelling in the table below. Each system must be configured to collect run-off from the areas specified (excluding any area which supplies any other alternative water supply system), and to divert overflow as specified. Each system must be connected as specified.	✓	✓	✓

	Fixtures					Appliances		Individual pool				Individual spa		
Dwelling no.	All shower-heads	All toilet flushing systems	All kitchen taps	All bathroom taps	HW recirculation or diversion	All clothes washers	All dish-washers	Volume (max volume)	Pool cover	Pool location	Pool shaded	Volume (max volume)	Spa cover	Spa shaded
All dwellings	3 star (> 4.5 but <= 6 L/min)	4 star	6 star	6 star	no	-	4 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.	✓	✓	✓
(c) The applicant must install, in each bathroom, kitchen and laundry of the dwelling, the ventilation system specified for that room in the table below. Each such ventilation system must have the operation control specified for it in the table.		✓	✓
(d) The applicant must install the cooling and heating system/s specified for the dwelling under the "Living areas" and "Bedroom areas" headings of the "Cooling" and "Heating" columns in the table below, in/for at least 1 living/bedroom area of the dwelling. If no cooling or heating system is specified in the table for "Living areas" or "Bedroom areas", then no systems may be installed in any such areas. If the term "zoned" is specified beside an air conditioning system, then the system must provide for day/night zoning between living areas and bedrooms.		✓	✓
(e) This commitment applies to each room or area of the dwelling which is referred to in a heading to the "Artificial lighting" column of the table below (but only to the extent specified for that room or area). The applicant must ensure that the "primary type of artificial lighting" for each such room in the dwelling is fluorescent lighting or light emitting diode (LED) lighting. If the term "dedicated" is specified for a particular room or area, then the light fittings in that room or area must only be capable of being used for fluorescent lighting or light emitting diode (LED) lighting.		✓	✓

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(f) This commitment applies to each room or area of the dwelling which is referred to in a heading to the "Natural lighting" column of the table below (but only to the extent specified for that room or area). The applicant must ensure that each such room or area is fitted with a window and/or skylight.	✓	✓	✓
(g) This commitment applies if the applicant installs a water heating system for the dwelling's pool or spa. The applicant must: (aa) install the system specified for the pool in the "Individual Pool" column of the table below (or alternatively must not install any system for the pool). If specified, the applicant must install a timer, to control the pool's pump; and (bb) install the system specified for the spa in the "Individual Spa" column of the table below (or alternatively must not install any system for the spa). If specified, the applicant must install a timer to control the spa's pump.		✓ ✓	
(h) The applicant must install in the dwelling: (aa) the kitchen cook-top and oven specified for that dwelling in the "Appliances & other efficiency measures" column of the table below; (bb) each appliance for which a rating is specified for that dwelling in the "Appliances & other efficiency measures" column of the table, and ensure that the appliance has that minimum rating; and (cc) any clothes drying line specified for the dwelling in the "Appliances & other efficiency measures" column of the table.		✓ ✓ ✓	✓
(i) If specified in the table, the applicant must carry out the development so that each refrigerator space in the dwelling is "well ventilated".		✓	

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

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
A1209, A1309, A1409, A1509, A1609, A1706, A1U01, A2111, A2211, A2311, A2411, A2511, A2611	1-phase airconditioning 5 star (average zone)	1-phase airconditioning 5 star (average zone)	1-phase airconditioning 5 star (average zone)	1-phase airconditioning 5 star (average zone)	3 (dedicated)	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	0	-
A2102, A2103, A2104, A2202, A2203, A2204, A2302, A2303, A2304, A2402, A2403, A2404, A2502, A2503, A2504, A2602, A2603, A2604	1-phase airconditioning 5 star (average zone)	1-phase airconditioning 5 star (average zone)	1-phase airconditioning 5 star (average zone)	1-phase airconditioning 5 star (average zone)	1 (dedicated)	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	0	-
All other dwellings	1-phase airconditioning 5 star (average zone)	1-phase airconditioning 5 star (average zone)	1-phase airconditioning 5 star (average zone)	1-phase airconditioning 5 star (average zone)	2 (dedicated)	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	0	-

	Individual pool		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
All dwellings	-	-	-	-	gas cooktop & electric oven	-	-	3.5 star	-	5 star	-	-

(iii) Thermal Comfort	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must attach the certificate referred to under "Assessor details" on the front page of this BASIX certificate (the "Assessor Certificate") to the development application and construction certificate application for the proposed development (or, if the applicant is applying for a complying development certificate for the proposed development, to that application). The applicant must also attach the Assessor Certificate to the application for a final occupation certificate for the proposed development.			
(b) The Assessor Certificate must have been issued by an Accredited Assessor in accordance with the Thermal Comfort Protocol.			
(c) The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX Certificate, including the details shown in the "Thermal Loads" table below.			
(d) The applicant must show on the plans accompanying the development application for the proposed development, all matters which the Thermal Comfort Protocol requires to be shown on those plans. Those plans must bear a stamp of endorsement from the Accredited Assessor, to certify that this is the case.	✓		
(e) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all thermal performance specifications set out in the Assessor Certificate, and all aspects of the proposed development which were used to calculate those specifications.		✓	
(f) The applicant must construct the development in accordance with all thermal performance specifications set out in the Assessor Certificate, and in accordance with those aspects of the development application or application for a complying development certificate which were used to calculate those specifications.		✓	✓
(g) Where there is an in-slab heating or cooling system, the applicant must: (aa) Install insulation with an R-value of not less than 1.0 around the vertical edges of the perimeter of the slab; or (bb) On a suspended floor, install insulation with an R-value of not less than 1.0 underneath the slab and around the vertical edges of the perimeter of the slab.	✓	✓	✓
(h) The applicant must construct the floors and walls of the development in accordance with the specifications listed in the table below.	✓	✓	✓

	Thermal loads	
Dwelling no.	Area adjusted heating load (in mJ/m ² /yr)	Area adjusted cooling load (in mJ/m ² /yr)
A1101	19.9	39.4
A1102	9.7	38.4
A1103	4.1	36.0
A1104	20.9	35.9
A1105	9.3	34.3
A1106	24.4	38.7
A1107	22.8	39.5
A1108	12.3	31.7
A1109	18.4	46.5
A1201	22.2	36.3
A1202	11.4	33.0
A1203	5.4	31.2
A1204	23.2	31.6
A1205	11.0	29.6
A1206	26.8	34.3
A1207	25.2	36.4
A1208	14.1	27.7
A1209	18.8	38.1
A1301	22.8	37.8
A1302	11.7	32.6
A1303	5.6	30.6
A1304	23.6	31.3
A1305	11.2	28.8
A1306	27.2	33.9
A1307	25.5	35.9
A1308	14.4	27.5
A1309	19.2	37.7

	Thermal loads	
Dwelling no.	Area adjusted heating load (in mJ/m ² /yr)	Area adjusted cooling load (in mJ/m ² /yr)
A1401	22.3	40.6
A1402	12.0	32.0
A1403	5.8	30.3
A1404	24.0	31.0
A1405	11.5	28.8
A1406	27.6	33.3
A1407	26.0	36.0
A1408	14.8	26.9
A1409	19.4	37.5
A1501	21.5	43.0
A1502	12.2	32.4
A1503	6.0	30.1
A1504	24.3	30.9
A1505	11.7	28.3
A1506	27.8	32.9
A1507	26.2	35.7
A1508	15.0	27.0
A1509	19.7	37.3
A1601	19.1	43.6
A1602	12.4	32.5
A1603	6.1	30.0
A1604	37.5	27.9
A1605	23.6	26.2
A1606	39.6	31.0
A1607	26.4	35.7
A1608	15.2	26.5
A1609	20.1	37.2

	Thermal loads	
Dwelling no.	Area adjusted heating load (in mJ/m ² /yr)	Area adjusted cooling load (in mJ/m ² /yr)
A1701	24.4	42.2
A1702	11.3	28.0
A1703	26.1	27.8
A1704	41.3	33.2
A1705	28.2	24.9
A1706	26.7	33.3
A1U01	29.3	62.0
A2101	10.3	17.9
A2102	21.4	62.3
A2103	20.2	53.3
A2104	11.0	60.0
A2105	12.2	60.4
A2106	20.6	40.4
A2107	32.6	41.2
A2108	52.6	34.3
A2109	49.5	39.7
A2110	34.7	40.5
A2111	31.9	51.7
A2112	8.8	33.8
A2201	12.4	16.9
A2202	24.2	53.3
A2203	23.5	46.3
A2204	13.6	51.8
A2206	23.1	35.5
A2207	35.6	36.6
A2208	55.4	32.9
A2209	52.9	35.5

	Thermal loads	
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)
A2210	38.0	36.8
A2211	35.0	45.8
A2212	10.7	29.7
A2301	12.7	16.9
A2302	25.2	51.6
A2303	23.8	45.7
A2304	13.9	51.6
A2306	23.5	35.2
A2307	36.1	36.3
A2308	55.9	32.8
A2309	53.4	35.6
A2310	38.7	36.4
A2311	35.4	45.6
A2312	11.0	29.0
A2401	13.0	16.8
A2402	25.7	51.0
A2403	24.1	45.3
A2404	14.3	51.4
A2406	23.8	35.2
A2407	36.7	36.3
A2408	56.5	32.5
A2409	53.9	35.3
A2410	39.2	36.0
A2411	35.9	45.3
A2412	11.2	28.6
A2501	13.3	16.7
A2502	26.0	50.2

	Thermal loads	
Dwelling no.	Area adjusted heating load (in mJ/m ² /yr)	Area adjusted cooling load (in mJ/m ² /yr)
A2503	24.4	44.5
A2504	14.6	51.3
A2505	15.9	49.8
A2506	24.1	34.8
A2507	37.0	36.1
A2508	56.9	32.6
A2509	54.3	35.5
A2510	39.7	36.0
A2511	36.2	44.7
A2512	11.4	28.2
A2601	25.5	15.5
A2602	31.6	44.9
A2603	30.4	40.8
A2604	20.6	45.4
A2605	21.2	44.4
A2606	34.3	31.8
A2607	49.3	33.7
A2608	62.4	32.4
A2609	57.8	37.0
A2610	51.4	34.1
A2611	46.5	40.7
A2612	24.3	27.0
All other dwellings	14.9	51.5

(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	5 star	no common laundry facility

Central systems	Size	Configuration	Connection (to allow for...)
Central water tank - rainwater or stormwater (No. 1)	10000.0	To collect run-off from at least: - 500.0 square metres of roof area of buildings in the development - 0.0 square metres of impervious area in the development - 0.0 square metres of garden/lawn area in the development - 0.0 square metres of planter box area in the development (excluding, in each case, any area which drains to, or supplies, any other alternative water supply system).	- irrigation of 700.0 square metres of common landscaped area on the site - car washing in 0 car washing bays on the site

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

Common area	Common area ventilation system		Common area lighting		
	Ventilation system type	Ventilation efficiency measure	Primary type of artificial lighting	Lighting efficiency measure	Lighting control system/BMS
Lift car (No.1)	-	-	light-emitting diode	connected to lift call button	No
Lift car (No.2)	-	-	light-emitting diode	connected to lift call button	No
Lift car (No.3)	-	-	light-emitting diode	connected to lift call button	No
Lift car (No.4)	-	-	light-emitting diode	connected to lift call button	No
Building A - Garbage room	ventilation exhaust only	-	light-emitting diode	motion sensors	No
Building A - Hallway/lobby	no mechanical ventilation	-	light-emitting diode	motion sensors	No

Central energy systems	Type	Specification
Central hot water system (No. 1)	gas-fired boiler	Piping insulation (ringmain & supply risers): (a) Piping external to building: R0.75 (~32 mm); (b) Piping internal to building: R0.75 (~32 mm)
Lift (No. 1)	gearless traction with V V V F motor	Number of levels (including basement): 12
Lift (No. 2)	gearless traction with V V V F motor	Number of levels (including basement): 12
Lift (No. 3)	gearless traction with V V V F motor	Number of levels (including basement): 12

Central energy systems	Type	Specification
Lift (No. 4)	gearless traction with V V V F motor	Number of levels (including basement): 12

2. Commitments for Residential flat buildings - BuildingB

(a) Dwellings

(i) Water	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must comply with the commitments listed below in carrying out the development of a dwelling listed in a table below.			
(b) The applicant must plant indigenous or low water use species of vegetation throughout the area of land specified for the dwelling in the "Indigenous species" column of the table below, as private landscaping for that dwelling. (This area of indigenous vegetation is to be contained within the "Area of garden and lawn" for the dwelling specified in the "Description of Project" table).	✓	✓	
(c) If a rating is specified in the table below for a fixture or appliance to be installed in the dwelling, the applicant must ensure that each such fixture and appliance meets the rating specified for it.		✓	✓
(d) The applicant must install an on demand hot water recirculation system which regulates all hot water use throughout the dwelling, where indicated for a dwelling in the "HW recirculation or diversion" column of the table below.		✓	✓
(e) The applicant must install:			
(aa) a hot water diversion system to all showers, kitchen sinks and all basins in the dwelling, where indicated for a dwelling in the "HW recirculation or diversion" column of the table below; and		✓	✓
(bb) a separate diversion tank (or tanks) connected to the hot water diversion systems of at least 100 litres. The applicant must connect the hot water diversion tank to all toilets in the dwelling.		✓	✓
(e) The applicant must not install a private swimming pool or spa for the dwelling, with a volume exceeding that specified for it in the table below.	✓	✓	
(f) If specified in the table, that pool or spa (or both) must have a pool cover or shading (or both).		✓	
(g) The pool or spa must be located as specified in the table.	✓	✓	
(h) The applicant must install, for the dwelling, each alternative water supply system, with the specified size, listed for that dwelling in the table below. Each system must be configured to collect run-off from the areas specified (excluding any area which supplies any other alternative water supply system), and to divert overflow as specified. Each system must be connected as specified.	✓	✓	✓

	Fixtures					Appliances		Individual pool				Individual spa		
Dwelling no.	All shower-heads	All toilet flushing systems	All kitchen taps	All bathroom taps	HW recirculation or diversion	All clothes washers	All dish-washers	Volume (max volume)	Pool cover	Pool location	Pool shaded	Volume (max volume)	Spa cover	Spa shaded
All dwellings	3 star (> 4.5 but <= 6 L/min)	4 star	6 star	6 star	no	-	4 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.	✓	✓	✓
(c) The applicant must install, in each bathroom, kitchen and laundry of the dwelling, the ventilation system specified for that room in the table below. Each such ventilation system must have the operation control specified for it in the table.		✓	✓
(d) The applicant must install the cooling and heating system/s specified for the dwelling under the "Living areas" and "Bedroom areas" headings of the "Cooling" and "Heating" columns in the table below, in/for at least 1 living/bedroom area of the dwelling. If no cooling or heating system is specified in the table for "Living areas" or "Bedroom areas", then no systems may be installed in any such areas. If the term "zoned" is specified beside an air conditioning system, then the system must provide for day/night zoning between living areas and bedrooms.		✓	✓
(e) This commitment applies to each room or area of the dwelling which is referred to in a heading to the "Artificial lighting" column of the table below (but only to the extent specified for that room or area). The applicant must ensure that the "primary type of artificial lighting" for each such room in the dwelling is fluorescent lighting or light emitting diode (LED) lighting. If the term "dedicated" is specified for a particular room or area, then the light fittings in that room or area must only be capable of being used for fluorescent lighting or light emitting diode (LED) lighting.		✓	✓

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(f) This commitment applies to each room or area of the dwelling which is referred to in a heading to the "Natural lighting" column of the table below (but only to the extent specified for that room or area). The applicant must ensure that each such room or area is fitted with a window and/or skylight.	✓	✓	✓
(g) This commitment applies if the applicant installs a water heating system for the dwelling's pool or spa. The applicant must: (aa) install the system specified for the pool in the "Individual Pool" column of the table below (or alternatively must not install any system for the pool). If specified, the applicant must install a timer, to control the pool's pump; and (bb) install the system specified for the spa in the "Individual Spa" column of the table below (or alternatively must not install any system for the spa). If specified, the applicant must install a timer to control the spa's pump.		✓ ✓	
(h) The applicant must install in the dwelling: (aa) the kitchen cook-top and oven specified for that dwelling in the "Appliances & other efficiency measures" column of the table below; (bb) each appliance for which a rating is specified for that dwelling in the "Appliances & other efficiency measures" column of the table, and ensure that the appliance has that minimum rating; and (cc) any clothes drying line specified for the dwelling in the "Appliances & other efficiency measures" column of the table.		✓ ✓ ✓	✓
(i) If specified in the table, the applicant must carry out the development so that each refrigerator space in the dwelling is "well ventilated".		✓	

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

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
B1101, B1102, B1103, B1105, B1207, B1307, B1407, B1507, B1607, B1706, B2105, B2204, B2302, B2501, B2502	1-phase airconditioning 5 star (average zone)	1-phase airconditioning 5 star (average zone)	1-phase airconditioning 5 star (average zone)	1-phase airconditioning 5 star (average zone)	3 (dedicated)	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes	0	-

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
B1202, B1302, B1402, B1502, B1602, B1702, B1U02, B2101, B2102, B2106, B2108, B2109, B2110, B2201, B2202, B2208, B2209, B2306, B2307, B2406, B2407, B2504, B2505, B2604, B2605	1-phase airconditioning 5 star (average zone)	1-phase airconditioning 5 star (average zone)	1-phase airconditioning 5 star (average zone)	1-phase airconditioning 5 star (average zone)	1 (dedicated)	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	0	-
All other dwellings	1-phase airconditioning 5 star (average zone)	1-phase airconditioning 5 star (average zone)	1-phase airconditioning 5 star (average zone)	1-phase airconditioning 5 star (average zone)	2 (dedicated)	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	0	-

	Individual pool		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
All dwellings	-	-	-	-	gas cooktop & electric oven	-	-	3.5 star	-	5 star	-	-

(iii) Thermal Comfort	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must attach the certificate referred to under "Assessor details" on the front page of this BASIX certificate (the "Assessor Certificate") to the development application and construction certificate application for the proposed development (or, if the applicant is applying for a complying development certificate for the proposed development, to that application). The applicant must also attach the Assessor Certificate to the application for a final occupation certificate for the proposed development.			
(b) The Assessor Certificate must have been issued by an Accredited Assessor in accordance with the Thermal Comfort Protocol.			
(c) The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX Certificate, including the details shown in the "Thermal Loads" table below.			
(d) The applicant must show on the plans accompanying the development application for the proposed development, all matters which the Thermal Comfort Protocol requires to be shown on those plans. Those plans must bear a stamp of endorsement from the Accredited Assessor, to certify that this is the case.	✓		
(e) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all thermal performance specifications set out in the Assessor Certificate, and all aspects of the proposed development which were used to calculate those specifications.		✓	
(f) The applicant must construct the development in accordance with all thermal performance specifications set out in the Assessor Certificate, and in accordance with those aspects of the development application or application for a complying development certificate which were used to calculate those specifications.		✓	✓
(g) Where there is an in-slab heating or cooling system, the applicant must: (aa) Install insulation with an R-value of not less than 1.0 around the vertical edges of the perimeter of the slab; or (bb) On a suspended floor, install insulation with an R-value of not less than 1.0 underneath the slab and around the vertical edges of the perimeter of the slab.	✓	✓	✓
(h) The applicant must construct the floors and walls of the development in accordance with the specifications listed in the table below.	✓	✓	✓

	Thermal loads	
Dwelling no.	Area adjusted heating load (in mJ/m ² /yr)	Area adjusted cooling load (in mJ/m ² /yr)
B1101	7.7	38.8
B1102	24.3	14.7
B1103	30.4	19.8
B1104	42.4	56.9
B1105	8.8	32.5
B1201	16.5	35.5
B1202	16.3	41.5
B1203	11.5	22.8
B1204	41.5	31.4
B1205	48.6	32.7
B1206	46.2	50.9
B1207	10.8	28.9
B1301	16.9	35.2
B1302	16.7	41.5
B1303	11.8	22.7
B1304	42.1	31.1
B1305	49.2	32.5
B1306	46.8	50.2
B1307	11.0	28.2
B1401	17.3	34.3
B1402	17.1	41.3
B1404	42.6	31.0
B1405	49.7	32.2
B1406	47.4	50.5
B1407	11.3	28.1
B1501	17.6	34.2
B1502	17.4	41.0

	Thermal loads	
Dwelling no.	Area adjusted heating load (in mJ/m ² /yr)	Area adjusted cooling load (in mJ/m ² /yr)
B1504	43.0	30.7
B1505	50.1	31.8
B1506	47.8	49.4
B1507	11.6	28.0
B1601	17.8	33.7
B1602	17.7	41.1
B1603	23.8	21.0
B1604	43.4	30.7
B1605	50.5	31.5
B1606	48.2	49.4
B1607	11.8	27.8
B1701	24.0	29.7
B1702	31.8	40.6
B1703	51.6	44.3
B1704	60.7	29.0
B1705	57.4	44.0
B1706	17.5	25.0
B1U01	3.3	29.2
B1U02	1.9	41.3
B1U03	2.9	31.0
B1U04	4.1	34.4
B2101	19.1	57.0
B2102	12.6	50.5
B2103	16.0	43.9
B2104	26.9	33.3
B2105	31.8	23.3
B2106	29.6	26.4

	Thermal loads	
Dwelling no.	Area adjusted heating load (in mJ/m ² /yr)	Area adjusted cooling load (in mJ/m ² /yr)
B2107	9.6	25.1
B2108	17.7	50.6
B2109	20.0	58.4
B2110	5.6	40.8
B2201	22.2	50.5
B2202	14.6	45.1
B2203	18.4	38.8
B2204	57.5	37.0
B2205	11.0	31.6
B2206	36.9	23.1
B2207	11.5	23.0
B2208	20.9	45.5
B2209	23.0	52.1
B2210	23.2	42.2
B2301	8.6	27.2
B2302	31.3	36.3
B2303	44.4	31.4
B2304	37.4	23.1
B2305	11.9	22.8
B2306	21.4	45.2
B2307	23.5	51.5
B2308	23.7	41.8
B2401	8.9	27.1
B2402	35.4	49.9
B2403	52.4	39.6
B2404	37.9	22.8
B2406	21.8	44.8

	Thermal loads	
Dwelling no.	Area adjusted heating load (in mJ/m ² /yr)	Area adjusted cooling load (in mJ/m ² /yr)
B2407	23.9	51.0
B2408	24.2	41.5
B2501	8.3	35.2
B2502	47.6	19.2
B2504	22.1	44.7
B2505	24.2	50.5
B2506	23.6	43.8
B2601	35.5	34.2
B2602	44.2	15.9
B2603	23.6	21.1
B2604	29.8	40.0
B2605	30.7	47.0
B2606	31.5	37.6
B1403, B2405	12.1	22.7
All other dwellings	12.3	22.3

(b) Common areas and central systems/facilities

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

Common area	Showerheads rating	Toilets rating	Taps rating	Clothes washers rating
All common areas	no common facility	4 star	5 star	no common laundry facility

Central systems	Size	Configuration	Connection (to allow for...)
Central water tank - rainwater or stormwater (No. 2)	10000.0	To collect run-off from at least: - 500.0 square metres of roof area of buildings in the development - 0.0 square metres of impervious area in the development - 0.0 square metres of garden/lawn area in the development - 0.0 square metres of planter box area in the development (excluding, in each case, any area which drains to, or supplies, any other alternative water supply system).	- irrigation of 700.0 square metres of common landscaped area on the site - car washing in 0 car washing bays on the site

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

Common area	Common area ventilation system		Common area lighting		
	Ventilation system type	Ventilation efficiency measure	Primary type of artificial lighting	Lighting efficiency measure	Lighting control system/BMS
Lift car (No.5)	-	-	light-emitting diode	connected to lift call button	No
Lift car (No.6)	-	-	light-emitting diode	connected to lift call button	No
Lift car (No.7)	-	-	light-emitting diode	connected to lift call button	No
Lift car (No.8)	-	-	light-emitting diode	connected to lift call button	No
Building B - Garbage room	ventilation exhaust only	-	incandescent	motion sensors	No
Building B - Hallway/lobby	no mechanical ventilation	-	light-emitting diode	motion sensors	No

Central energy systems	Type	Specification
Central hot water system (No. 2)	gas-fired boiler	Piping insulation (ringmain & supply risers): (a) Piping external to building: R0.75 (~32 mm); (b) Piping internal to building: R0.75 (~32 mm)
Lift (No. 5)	gearless traction with V V V F motor	Number of levels (including basement): 12
Lift (No. 6)	gearless traction with V V V F motor	Number of levels (including basement): 12
Lift (No. 7)	gearless traction with V V V F motor	Number of levels (including basement): 12

Central energy systems	Type	Specification
Lift (No. 8)	gearless traction with V V V F motor	Number of levels (including basement): 12

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

(b) Common areas and central systems/facilities

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

Common area	Showerheads rating	Toilets rating	Taps rating	Clothes washers rating
All common areas	no common facility	4 star	5 star	no common laundry facility

Central systems	Size	Configuration	Connection (to allow for...)
Pool (No. 1)	Volume: 172.0 kLs	Location: Other Pool shaded: no	-
Fire sprinkler system (No. 1)	-	-	-

(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	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
Car park area	ventilation (supply + exhaust)	carbon monoxide monitor + VSD fan	light-emitting diode	time clock and motion sensors	No
Switch room	ventilation (supply + exhaust)	thermostatically controlled	light-emitting diode	manual on / manual off	No
Main Garbage room	ventilation exhaust only	-	light-emitting diode	motion sensors	No
Plant or service room	ventilation (supply + exhaust)	interlocked to light	light-emitting diode	manual on / manual off	No
Ground floor lobby type	no mechanical ventilation	-	light-emitting diode	daylight sensor and motion sensor	No

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

Notes

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

Legend

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