

BASIX[®]Certificate

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

Multi Dwelling

Certificate number: 1156687M_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: Monday, 21 June 2021

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



Planning,
Industry &
Environment

Project summary		
Project name	11-13 Albert Rd & 2-6 Pilgrim Ave,S_03	
Street address	11-13 Albert & Pilgrim Ave Road Strathfield 2135	
Local Government Area	Strathfield Municipal Council	
Plan type and plan number	deposited 100558	
Lot no.	A&B	
Section no.	-	
No. of residential flat buildings	2	
No. of units in residential flat buildings	168	
No. of multi-dwelling houses	0	
No. of single dwelling houses	0	
Project score		
Water	 41	Target 40
Thermal Comfort	 Pass	Target Pass
Energy	 26	Target 25

Certificate Prepared by

Name / Company Name: Dural group Pty Ltd

ABN (if applicable): 91619721023

Description of project

Project address

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Project type

No. of residential flat buildings	2
No. of units in residential flat buildings	168
No. of multi-dwelling houses	0
No. of single dwelling houses	0

Site details

Site area (m²)	2868
Roof area (m²)	1648
Non-residential floor area (m²)	201.0
Residential car spaces	203
Non-residential car spaces	13




Common area landscape

Common area lawn (m²)	67.0
Common area garden (m²)	475.0
Area of indigenous or low water use species (m²)	50.0

Assessor details

Assessor number	DMN/19/1938
Certificate number	0005494240
Climate zone	56
Ceiling fan in at least one bedroom	No
Ceiling fan in at least one living room or other conditioned area	No

Project score

Water	 41	Target 40
Thermal Comfort	 Pass	Target Pass
Energy	 26	Target 25

Description of project

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

Residential flat buildings - Building-A, 70 dwellings, 10 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)
A011	2	57.0	0.0	0.0	0.0
A016	2	78.0	0.0	0.0	0.0
A023	2	76.0	0.0	0.0	0.0
A028	2	87.0	0.0	0.0	0.0
A035	2	84.0	0.0	0.0	0.0
A042	2	76.0	13.0	0.0	0.0
A047	1	51.0	0.0	0.0	0.0
A055	2	83.0	0.0	0.0	0.0
A063	2	76.0	0.0	0.0	0.0
A071	1	54.0	0.0	0.0	0.0
A076	2	78.0	0.0	0.0	0.0
A084	3	107.0	0.0	0.0	0.0
A093	2	76.0	0.0	0.0	0.0
A102	1	50.0	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)
A012	1	51.0	0.0	0.0	0.0
A017	1	61.0	0.0	0.0	0.0
A024	1	50.0	0.0	0.0	0.0
A031	1	57.0	0.0	0.0	0.0
A036	2	78.0	0.0	0.0	0.0
A043	2	86.0	0.0	0.0	0.0
A051	1	54.0	0.0	0.0	0.0
A056	2	78.0	0.0	0.0	0.0
A064	1	50.0	0.0	0.0	0.0
A072	1	50.0	0.0	0.0	0.0
A077	1	51.0	0.0	0.0	0.0
A085	2	78.0	0.0	0.0	0.0
A094	3	107.0	0.0	0.0	0.0
A103	2	76.0	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)
A013	2	76.0	0.0	0.0	0.0
A018	1	59.0	0.0	0.0	0.0
A025	2	84.0	0.0	0.0	0.0
A032	1	51.0	0.0	0.0	0.0
A037	1	61.0	0.0	0.0	0.0
A044	1	50.0	0.0	0.0	0.0
A052	1	50.0	0.0	0.0	0.0
A057	2	51.0	0.0	0.0	0.0
A065	2	83.0	0.0	0.0	0.0
A073	2	76.0	0.0	0.0	0.0
A081	1	54.0	0.0	0.0	0.0
A086	1	51.0	0.0	0.0	0.0
A095	2	78.0	0.0	0.0	0.0
A104	3	107.0	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)
A014	1	50.0	0.0	0.0	0.0
A021	1	57.0	0.0	0.0	0.0
A026	2	78.0	0.0	0.0	0.0
A033	2	76.0	0.0	0.0	0.0
A038	2	87.0	0.0	0.0	0.0
A045	2	84.0	0.0	0.0	0.0
A053	2	76.0	0.0	0.0	0.0
A061	1	54.0	0.0	0.0	0.0
A066	2	78.0	0.0	0.0	0.0
A074	1	50.0	0.0	0.0	0.0
A082	1	50.0	0.0	0.0	0.0
A091	1	54.0	0.0	0.0	0.0
A096	1	51.0	0.0	0.0	0.0
A105	2	78.0	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)
A015	2	84.0	0.0	0.0	0.0
A022	1	51.0	0.0	0.0	0.0
A027	1	61.0	0.0	0.0	0.0
A034	1	50.0	0.0	0.0	0.0
A041	3	102.0	0.0	0.0	0.0
A046	2	78.0	0.0	0.0	0.0
A054	1	50.0	0.0	0.0	0.0
A062	1	50.0	0.0	0.0	0.0
A067	1	51.0	0.0	0.0	0.0
A075	2	83.0	0.0	0.0	0.0
A083	2	76.0	0.0	0.0	0.0
A092	1	50.0	0.0	0.0	0.0
A101	1	54.0	0.0	0.0	0.0
A106	1	51.0	0.0	0.0	0.0

Residential flat buildings - Building-P, 98 dwellings, 14 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)
P001	1	72.0	0.0	0.0	0.0
P012	2	75.0	0.0	0.0	0.0
P017	1	51.0	4.0	0.0	0.0
P023	2	81.0	4.0	0.0	0.0
P028	2	71.0	0.0	0.0	0.0
P034	2	79.0	0.0	0.0	0.0
P039	2	86.0	0.0	0.0	0.0
P045	2	78.0	0.0	0.0	0.0
P053	2	81.0	0.0	0.0	0.0
P062	2	70.0	5.0	0.0	0.0
P071	2	75.0	0.0	0.0	0.0
P076	1	65.0	0.0	0.0	0.0
P085	2	78.0	0.0	0.0	0.0
P094	2	79.0	0.0	0.0	0.0
P103	2	81.0	0.0	0.0	0.0
P112	2	70.0	5.0	0.0	0.0
P121	2	75.0	0.0	0.0	0.0
P126	1	65.0	0.0	0.0	0.0
P135	2	78.0	0.0	0.0	0.0
P144	2	79.0	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
P002	2	79.0	0.0	0.0	0.0
P013	2	81.0	4.0	0.0	0.0
P018	2	77.0	0.0	0.0	0.0
P024	2	79.0	0.0	0.0	0.0
P029	2	86.0	0.0	0.0	0.0
P035	2	80.0	0.0	0.0	0.0
P041	2	75.0	0.0	0.0	0.0
P046	2	78.0	0.0	0.0	0.0
P054	2	79.0	0.0	0.0	0.0
P063	2	81.0	0.0	0.0	0.0
P072	2	70.0	5.0	0.0	0.0
P081	2	75.0	0.0	0.0	0.0
P086	1	65.0	0.0	0.0	0.0
P095	2	78.0	0.0	0.0	0.0
P104	2	79.0	0.0	0.0	0.0
P113	2	81.0	0.0	0.0	0.0
P122	2	70.0	5.0	0.0	0.0
P131	2	75.0	0.0	0.0	0.0
P136	1	65.0	0.0	0.0	0.0
P145	2	78.0	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)
P003	1	55.0	0.0	0.0	0.0
P014	2	80.0	4.0	0.0	0.0
P019	1	59.0	0.0	0.0	0.0
P025	2	80.0	0.0	0.0	0.0
P031	2	75.0	4.0	0.0	0.0
P036	2	78.0	0.0	0.0	0.0
P042	2	75.0	0.0	0.0	0.0
P047	2	85.0	0.0	0.0	0.0
P055	2	78.0	0.0	0.0	0.0
P064	2	79.0	0.0	0.0	0.0
P073	2	81.0	0.0	0.0	0.0
P082	2	70.0	5.0	0.0	0.0
P091	2	75.0	0.0	0.0	0.0
P096	1	65.0	0.0	0.0	0.0
P105	2	78.0	0.0	0.0	0.0
P114	2	79.0	0.0	0.0	0.0
P123	2	81.0	0.0	0.0	0.0
P132	2	70.0	5.0	0.0	0.0
P141	2	75.0	0.0	0.0	0.0
P146	1	65.0	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)
P004	1	54.0	0.0	0.0	0.0
P015	2	80.0	0.0	0.0	0.0
P021	2	75.0	0.0	0.0	0.0
P026	2	78.0	0.0	0.0	0.0
P032	2	75.0	4.0	0.0	0.0
P037	1	51.0	4.0	0.0	0.0
P043	2	81.0	0.0	0.0	0.0
P051	2	75.0	0.0	0.0	0.0
P056	1	65.0	0.0	0.0	0.0
P065	2	78.0	0.0	0.0	0.0
P074	2	79.0	0.0	0.0	0.0
P083	2	81.0	0.0	0.0	0.0
P092	2	70.0	5.0	0.0	0.0
P101	2	75.0	0.0	0.0	0.0
P106	1	65.0	0.0	0.0	0.0
P115	2	78.0	0.0	0.0	0.0
P124	2	79.0	0.0	0.0	0.0
P133	2	81.0	0.0	0.0	0.0
P142	2	70.0	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)
P011	2	75.0	0.0	0.0	0.0
P016	2	78.0	0.0	0.0	0.0
P022	2	75.0	4.0	0.0	0.0
P027	1	51.0	4.0	0.0	0.0
P033	2	81.0	0.0	0.0	0.0
P038	2	77.0	0.0	0.0	0.0
P044	2	79.0	0.0	0.0	0.0
P052	1	49.0	6.0	0.0	0.0
P061	2	75.0	0.0	0.0	0.0
P066	1	65.0	0.0	0.0	0.0
P075	2	78.0	0.0	0.0	0.0
P084	2	79.0	0.0	0.0	0.0
P093	2	81.0	0.0	0.0	0.0
P102	2	70.0	5.0	0.0	0.0
P111	2	75.0	0.0	0.0	0.0
P116	1	65.0	0.0	0.0	0.0
P125	2	78.0	0.0	0.0	0.0
P134	2	79.0	0.0	0.0	0.0
P143	2	81.0	0.0	0.0	0.0

Description of project

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

Common areas of unit building - Building-A

Common area	Floor area (m²)
Car park area (B-04)	2376.0
Car park area (B-01)	2355.0
Fire Pump room	40.0
Common Laundry &WC	15.0

Common area	Floor area (m²)
Car park area (B-03)	2355.0
Lift car (No.1)	-
Plant & Sprinkler Room	41.0
Hallway/lobby type (A)	620.0

Common area	Floor area (m²)
Car park area (B-02)	2355.0
Lift motor room (No.A)	10.0
Bicycle parking	127.0

Common areas of unit building - Building-P

Common area	Floor area (m²)
Lift car (No.2)	-
Waste room (No. A)	50.0
Substation room	27.0
Hallway/lobby type (P)	970.0

Common area	Floor area (m²)
Lift motor room (No. P)	10.0
Waste room (No. P)	55.0
Meter Room	20.0

Common area	Floor area (m²)
Bulky waste	70.0
Bin Room (Commercial)	10.0
Ground floor lobby type	131.0

Common areas of the development (non-building specific)

Common area	Floor area (m²)
Plant or service room	50.0

Schedule of BASIX commitments

1. Commitments for Residential flat buildings - Building-A

(a) Dwellings

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

(b) Common areas and central systems/facilities

- (i) Water
- (ii) Energy

2. Commitments for Residential flat buildings - Building-P

(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 - Building-A

(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	4 star (> 4.5 but <= 6 L/min)	4 star	5 star	5 star	no	-	-	-	-	-	-	-	-	-

	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	gas instantaneous 5.5 star	individual fan, ducted to façade or roof	manual switch on/off	individual fan, not ducted	manual switch on/off	individual fan, ducted to façade or roof	manual switch on/off

Dwelling no.	Cooling		Heating		Artificial lighting						Natural lighting	
	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or dining rooms	Each kitchen	All bathrooms/toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
All dwellings	1-phase airconditioning EER 2.5 - 3.0 (zoned)	1-phase airconditioning EER 2.5 - 3.0 (zoned)	1-phase airconditioning EER 2.5 - 3.0 (zoned)	1-phase airconditioning EER 2.5 - 3.0 (zoned)	2 (dedicated)	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	0	no

Dwelling no.	Individual pool		Individual spa		Appliances & other efficiency measures							
	Pool heating system	Timer	Spa heating system	Timer	Kitchen cooktop/oven	Refrigerator	Well ventilated fridge space	Dishwasher	Clothes washer	Clothes dryer	Indoor or sheltered clothes drying line	Private outdoor or unsheltered clothes drying line
All dwellings	-	-	-	-	gas cooktop & electric oven	-	yes	-	-	-	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.		✓	

(iii) Thermal Comfort	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(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.	✓	✓	✓

Dwelling no.	Thermal loads	
	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)
A011	41.0	21.6
A012	28.9	26.4
A013	27.8	21.1
A014	28.1	19.6
A015	24.2	11.3
A016	27.2	20.1
A017	23.8	10.1
A018	24.8	16.3
A021	40.3	23.2
A022	30.0	24.9
A023	28.7	19.9
A024	29.6	18.2
A025	25.3	11.2
A026	28.3	20.2

	Thermal loads	
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)
A027	24.8	9.5
A028	21.4	15.9
A031	44.8	18.7
A032	33.9	19.8
A033	33.3	13.6
A034	34.4	14.2
A035	29.5	9.7
A036	32.1	17.0
A037	28.2	8.4
A038	32.6	19.2
A041	30.8	19.5
A042	42.7	21.7
A043	26.8	23.1
A044	38.5	13.9
A045	35.9	9.9
A046	41.7	20.5
A047	29.9	28.3
A051	27.8	7.6
A052	33.1	19.1
A053	8.7	12.4
A054	36.1	14.0
A055	30.9	9.7
A056	42.5	20.0
A057	28.3	7.4
A061	43.8	20.6
A062	33.7	19.6
A063	10.1	13.1

	Thermal loads	
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)
A064	36.7	13.4
A065	31.5	9.6
A066	43.1	20.1
A067	28.6	7.3
A071	44.3	20.6
A072	34.0	18.7
A073	10.1	12.9
A074	37.1	13.3
A075	31.8	9.3
A076	43.5	19.5
A077	28.9	7.3
A081	44.4	20.6
A082	34.4	18.6
A083	10.4	12.9
A084	14.5	10.8
A085	44.0	19.4
A086	29.2	7.5
A091	44.7	20.1
A092	34.8	18.3
A093	10.6	12.4
A094	15.7	10.8
A095	44.4	19.5
A096	29.5	7.2
A101	44.6	17.2
A102	44.4	22.3
A103	11.8	10.7
A104	20.6	12.9

	Thermal loads	
Dwelling no.	Area adjusted heating load (in mJ/m ² /yr)	Area adjusted cooling load (in mJ/m ² /yr)
A105	40.5	16.5
All other dwellings	43.5	9.4

(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	no common facility	5 star

Central systems	Size	Configuration	Connection (to allow for...)
Fire sprinkler system (No. 1)	-	So that fire sprinkler test water is contained within the fire sprinkler system for re-use, rather than disposed.	-

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) If, in carrying out the development, the applicant installs a ventilation system to service a common area specified in the table below, then that ventilation system must be of the type specified for that common area, and must meet the efficiency measure specified.		✓	✓

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

Common area	Common area ventilation system		Common area lighting		
	Ventilation system type	Ventilation efficiency measure	Primary type of artificial lighting	Lighting efficiency measure	Lighting control system/BMS
Car park area (B-04)	ventilation (supply + exhaust)	carbon monoxide monitor + VSD fan	fluorescent	motion sensors	No
Car park area (B-03)	ventilation (supply + exhaust)	carbon monoxide monitor + VSD fan	fluorescent	motion sensors	No
Car park area (B-02)	ventilation (supply + exhaust)	carbon monoxide monitor + VSD fan	fluorescent	motion sensors	No
Car park area (B-01)	ventilation (supply + exhaust)	carbon monoxide monitor + VSD fan	fluorescent	motion sensors	No
Lift car (No.1)	-	-	light-emitting diode	connected to lift call button	No
Lift motor room (No.A)	ventilation supply only	interlocked to light	fluorescent	manual on / manual off	No
Fire Pump room	ventilation supply only	none ie. continuous	fluorescent	manual on / manual off	No
Plant & Sprinkler Room	ventilation supply only	interlocked to light	fluorescent	manual on / manual off	No
Bicycle parking	no mechanical ventilation	-	light-emitting diode	motion sensors	No
Common Laundry & WC	ventilation exhaust only	time clock or BMS controlled	light-emitting diode	manual on / manual off	No
Hallway/lobby type (A)	ventilation supply only	none ie. continuous	light-emitting diode	manual on / manual off	No

Central energy systems	Type	Specification
Lift (No. 1)	gearless traction with V V V F motor	Number of levels (including basement): 14

2. Commitments for Residential flat buildings - Building-P

(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	4 star (> 4.5 but <= 6 L/min)	4 star	5 star	5 star	no	-	-	-	-	-	-	-	-	-

	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	gas instantaneous 5.5 star	individual fan, ducted to façade or roof	manual switch on/off	individual fan, not ducted	manual switch on/off	individual fan, ducted to façade or roof	manual switch on/off

Dwelling no.	Cooling		Heating		Artificial lighting						Natural lighting	
	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or dining rooms	Each kitchen	All bathrooms/toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
All dwellings	1-phase airconditioning EER 2.5 - 3.0 (zoned)	1-phase airconditioning EER 2.5 - 3.0 (zoned)	1-phase airconditioning EER 2.5 - 3.0 (zoned)	1-phase airconditioning EER 2.5 - 3.0 (zoned)	2 (dedicated)	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	0	no

Dwelling no.	Individual pool		Individual spa		Appliances & other efficiency measures							
	Pool heating system	Timer	Spa heating system	Timer	Kitchen cooktop/oven	Refrigerator	Well ventilated fridge space	Dishwasher	Clothes washer	Clothes dryer	Indoor or sheltered clothes drying line	Private outdoor or unsheltered clothes drying line
All dwellings	-	-	-	-	gas cooktop & electric oven	-	yes	-	-	-	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.		✓	

(iii) Thermal Comfort	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(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.	✓	✓	✓

Dwelling no.	Thermal loads	
	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)
P001	33.3	17.0
P002	44.8	22.7
P003	32.5	18.7
P004	44.4	21.1
P011	30.7	8.1
P012	15.0	15.4
P013	36.1	12.0
P014	29.8	9.2
P015	27.6	9.9
P016	24.3	14.6
P017	23.5	8.3
P018	41.4	10.2
P019	24.5	16.7
P021	31.7	7.7

	Thermal loads	
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)
P022	15.8	14.1
P023	27.8	12.3
P024	19.7	10.2
P025	17.8	11.3
P026	23.7	16.7
P027	11.9	10.6
P028	31.1	8.9
P029	26.3	29.0
P031	35.2	6.7
P032	19.2	11.5
P033	32.6	11.2
P034	23.5	8.0
P035	26.6	7.9
P036	30.5	12.3
P037	12.5	10.5
P038	31.7	8.4
P039	27.1	28.2
P041	40.8	6.8
P042	23.3	11.1
P043	38.1	11.5
P044	28.6	8.2
P045	20.6	16.5
P046	35.9	11.1
P047	43.2	20.7
P051	38.4	6.9
P052	30.2	7.9
P053	34.1	10.7

	Thermal loads	
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)
P054	29.3	8.1
P055	39.6	10.8
P056	41.2	13.6
P061	38.8	6.6
P062	20.3	9.1
P063	34.7	10.8
P064	29.8	8.0
P065	40.1	10.9
P066	41.6	13.8
P071	39.1	6.6
P072	20.5	8.8
P073	35.1	10.6
P074	30.1	7.7
P075	40.5	10.7
P076	42.0	13.8
P081	39.6	6.5
P082	20.9	8.8
P083	35.6	10.4
P084	30.6	7.6
P085	41.1	10.6
P086	42.5	13.9
P091	39.8	6.5
P092	21.2	8.6
P093	36.0	10.4
P094	30.9	7.6
P095	41.5	10.8
P096	42.8	13.7

	Thermal loads	
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)
P101	40.1	6.2
P102	21.4	8.5
P103	36.4	10.3
P104	31.3	7.6
P105	41.9	10.7
P106	43.1	13.3
P111	40.4	6.3
P112	21.6	8.5
P113	36.8	10.3
P114	31.6	7.6
P115	42.3	10.4
P116	43.5	13.5
P121	40.5	6.3
P122	21.8	8.5
P123	37.0	10.3
P124	31.7	7.6
P125	42.4	10.4
P126	43.6	13.5
P131	40.8	6.3
P132	22.0	8.4
P133	37.3	10.2
P134	32.0	7.9
P135	42.8	10.2
P136	44.1	13.0
P141	41.5	11.8
P142	33.9	12.2
P143	43.6	12.6

	Thermal loads	
Dwelling no.	Area adjusted heating load (in mJ/m ² /yr)	Area adjusted cooling load (in mJ/m ² /yr)
P144	31.2	9.9
P145	44.2	13.5
All other dwellings	44.9	25.1

(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	no common facility	5 star

(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
Lift car (No.2)	-	-	light-emitting diode	connected to lift call button	No
Lift motor room (No. P)	ventilation supply only	interlocked to light	fluorescent	manual on / manual off	No
Bulky waste	ventilation exhaust only	-	fluorescent	motion sensors	No
Waste room (No. A)	ventilation exhaust only	-	fluorescent	motion sensors	No
Waste room (No. P)	ventilation exhaust only	-	fluorescent	motion sensors	No
Bin Room (Commercial)	ventilation exhaust only	-	fluorescent	motion sensors	No
Substation room	ventilation supply only	interlocked to light	fluorescent	manual on / manual off	No
Meter Room	ventilation supply only	interlocked to light	fluorescent	manual on / manual off	No
Ground floor lobby type	ventilation supply only	none ie. continuous	light-emitting diode	manual on / manual off	No
Hallway/lobby type (P)	ventilation supply only	none ie. continuous	light-emitting diode	manual on / manual off	No

Central energy systems	Type	Specification
Lift (No. 2)	gearless traction with V V V F motor	Number of levels (including basement): 18

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	no common facility	5 star

(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
Plant or service room	no mechanical ventilation	-	fluorescent	manual on / manual off	No

Central energy systems	Type	Specification
Alternative energy supply	Photovoltaic system	Rated electrical output (min): 35.0 peak kW

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).