

BASIX™ Certificate

Building Sustainability Index

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Multi Dwelling

Certificate number: 1369175M_04

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.planningportal.nsw.gov.au/definitions

This certificate is a revision of certificate number 1369175M lodged with the consent authority or certifier on 27 April 2023 with application PAN-322559.

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

Secretary

Date of issue: Thursday, 11 September 2025

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



When submitting this BASIX certificate with a development application or complying development certificate application, it must be accompanied by NatHERS certificate 0008489600.

Project summary		
Project name	O'Connell Street Caddens (AKLMN)_04	
Street address	68-80 O'CONNELL ST CADDENS 2747	
Local Government Area	-	
Plan type and plan number	Deposited Plan -	
Lot no.	-	
Section no.	-	
No. of residential flat buildings	4	
No. of units in residential flat buildings	127	
No. of multi-dwelling houses	0	
No. of single dwelling houses	0	
Project score		
Water	✓ 41	Target 40
Thermal Comfort	✓ Pass	Target Pass
Energy	✓ 38	Target 35

Certificate Prepared by
Name / Company Name: SLR Consulting Pty Ltd
ABN (if applicable): 29001584612

Description of project

Project address

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Project type

No. of residential flat buildings	4
No. of units in residential flat buildings	127
No. of multi-dwelling houses	0
No. of single dwelling houses	0

Site details

Site area (m ²)	13639.6
Roof area (m ²)	2215
Non-residential floor area (m ²)	0.00
Residential car spaces	176
Non-residential car spaces	0




Common area landscape

Common area lawn (m ²)	460
Common area garden (m ²)	1110
Area of indigenous or low water use species (m ²)	555

Assessor details and thermal loads

Assessor number	101556
Certificate number	0008489600
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	 41	Target 40
Thermal Comfort	 Pass	Target Pass
Energy	 38	Target 35

Description of project

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

Residential flat buildings - BuildingK, 23 dwellings, 5 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)
K101	3	124	0.00	0.00	0.00
K201	3	124	57.7	0.00	0.00
K301	3	124	0.00	0.00	0.00
K401	2	83	0.00	0.00	0.00
KG01	3	124	0.00	0.00	0.00
TH01	3	154	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)
K102	2	82	0.00	0.00	0.00
K202	2	82	0.00	0.00	0.00
K302	2	82	0.00	0.00	0.00
K402	1	55	0.00	0.00	0.00
KG02	1	54	0.00	0.00	0.00
TH02	2	140	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)
K103	2	82	0.00	0.00	0.00
K203	2	91	0.00	0.00	0.00
K303	2	91	0.00	0.00	0.00
K403	2	81	0.00	0.00	0.00
KG03	2	82	0.00	0.00	0.00
TH03	3	154	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)
K104	2	82	42.1	0.00	0.00
K204	2	91	0.00	0.00	0.00
K304	2	91	0.00	0.00	0.00
K404	1	60	0.00	0.00	0.00
KG04	2	82	0.00	0.00	0.00

Residential flat buildings - BuildingL, 32 dwellings, 6 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)
L101	3	135	0	0	0
L105	2	91	0	0	0
L204	2	91	0	0	0
L303	2	83	0	0	0
L402	2	89	0	0	0
LG01	2	92	0	0	0
LG05	2	82	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)
L102	3	122	0	0	0
L201	3	135	0	0	0
L205	2	91	0	0	0
L304	2	91	0	0	0
L403	2	83	0	0	0
LG02	2	102	0	0	0
LG06	2	61	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)
L103	2	83	0	0	0
L202	3	122	0	0	0
L301	3	135	0	0	0
L305	2	91	0	0	0
L404	2	91	0	0	0
LG03	1	61	0	0	0
LLG01	2	96	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)
L104	2	91	0	0	0
L203	2	83	0	0	0
L302	3	122	0	0	0
L401	3	127	0	0	0
L405	2	91	0	0	0
LG04	2	82	0	0	0
LLG02	1	68	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)
LLG03	2	81	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)
TH04	3	154	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)
TH05	2	140	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)
TH06	3	154	0	0	0

Residential flat buildings - BuildingM, 38 dwellings, 7 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)
M101	2	87	0	0	0
M105	1	58	0	0	0
M203	2	83	0	0	0
M301	2	87	0	0	0
M305	2	111	0	0	0
M403	2	83	0	0	0
M501	2	79	0	0	0
MG02	2	84	0	0	0
MLG01	1	56	0	0	0
TH08	2	140	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)
M102	2	103	0	0	0
M106	2	81	0	0	0
M204	1	61	0	0	0
M302	2	103	0	0	0
M306	2	81	0	0	0
M404	1	61	0	0	0
M502	3	112	0	0	0
MG03	3	104	0	0	0
MLG02	2	81	0	0	0
TH09	3	154	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)
M103	2	83	0	0	0
M201	2	87	0	0	0
M205	2	111	0	0	0
M303	2	83	0	0	0
M401	1	63	0	0	0
M405	2	80	0	0	0
M503	2	80	0	0	0
MG04	3	138	0	0	0
MLG03	3	138	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)
M104	2	97	0	0	0
M202	2	103	0	0	0
M206	2	81	0	0	0
M304	1	61	0	0	0
M402	2	103	0	0	0
M406	1	57	0	0	0
MG01	2	87	0	0	0
MG05	2	81	0	0	0
TH07	3	154	0	0	0

Residential flat buildings - BuildingN, 34 dwellings, 6 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)
N101	3	111	0	0	0
N105	2	83	0	0	0
N204	1	55	0	0	0
N303	1	61	0	0	0
N402	1	47	0	0	0
N501	2	100	0	0	0
NG02	2	90	0	0	0
NLG01	1	73	0	0	0
TH11	2	140	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)
N102	2	90	0	0	0
N201	3	111	0	0	0
N205	2	83	0	0	0
N304	3	98	0	0	0
N403	1	61	0	0	0
N502	2	108	0	0	0
NG03	1	51	0	0	0
NLG02	2	83	0	0	0
TH12	3	154	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)
N103	1	61	0	0	0
N202	2	90	0	0	0
N301	3	111	0	0	0
N305	2	83	0	0	0
N404	2	98	0	0	0
N503	3	87	0	0	0
NG04	3	131	0	0	0
NLG03	1	66	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)
N104	3	130	0	0	0
N203	2	95	0	0	0
N302	2	90	0	0	0
N401	2	90	0	0	0
N405	2	83	0	0	0
NG01	1	52	0	0	0
NG05	2	83	0	0	0
TH10	3	154	0	0	0

Description of project

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

Common areas of the development (non-building specific)

Common area	Floor area (m ²)	Common area	Floor area (m ²)	Common area	Floor area (m ²)
Carpark Area 1	1436	Carpark Area 2	2107	Carpark Area 3	4362
Main Switch Room	62	Residential Collection & Holding Rooms	168	Bulk Waste Rooms	60
Plant Room	28	Fire Pump Rooms	33	Storages	1462.10

Common areas of unit building - BuildingK

Common area	Floor area (m ²)	Common area	Floor area (m ²)	Common area	Floor area (m ²)
Lift car (No. 2)	0.00	Ground floor lobby type- Building K	82.5	Hallways/lobbies - Building K	263

Common areas of unit building - BuildingL

Common area	Floor area (m ²)	Common area	Floor area (m ²)	Common area	Floor area (m ²)
Lift car (No. 3)	0.00	Ground floor lobby type- Building L	69	Hallways/lobbies - Building L	50

Common areas of unit building - BuildingM

Common area	Floor area (m ²)	Common area	Floor area (m ²)	Common area	Floor area (m ²)
Lift car (No. 4)	0.00	Ground floor lobby type--Building M	78.7	Hallways/lobbies - Building M	309

Common areas of unit building - BuildingN

Common area	Floor area (m ²)	Common area	Floor area (m ²)	Common area	Floor area (m ²)
Lift car (No. 5)	0.00	Ground floor lobby type-Building N	58.6	Hallways/lobbies - Building N	343

Schedule of BASIX commitments

1. Commitments for Residential flat buildings - BuildingK

(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 - BuildingL

(a) Dwellings

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

(b) Common areas and central systems/facilities

- (i) Water
- (ii) Energy

3. Commitments for Residential flat buildings - BuildingM

(a) Dwellings

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

(b) Common areas and central systems/facilities

- (i) Water
- (ii) Energy

4. Commitments for Residential flat buildings - BuildingN

(a) Dwellings

(i) Water

(ii) Energy

(iii) Thermal Comfort

(b) Common areas and central systems/facilities

(i) Water

(ii) Energy

5. Commitments for single dwelling houses

6. Commitments for multi-dwelling houses

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

(a) Common areas and central systems/facilities

(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 - BuildingK








(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.	✓	✓	✓

Dwelling no.	Fixtures					Appliances		Individual pool				Individual spa		
	All shower-heads	All toilet flushing systems	All kitchen taps	All bathroom taps	HW recirculation or diversion	All clothes washers	All dish-washers	Volume (max volume)	Pool cover	Pool location	Pool shaded	Volume (max volume)	Spa cover	Spa shaded
All dwellings	4 star (> 4.5 but <= 6 L/min)	3 star	4 star	4 star	-	not specified	4 star	-	-	-	-	-	-	-

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

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

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(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 (No. 2)	individual fan, ducted to façade or roof	manual switch on/off	individual fan, ducted to façade or roof	manual switch on/off	individual fan, ducted to façade or roof	manual switch on/off

	Cooling		Heating		Artificial lighting					Natural lighting		
Dwelling no.	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or diningroom	Each kitchen	All bathrooms/toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
All dwellings	1-phase airconditioning / 4 star (average zone)(zoned)	1-phase airconditioning / 4 star (average zone)(zoned)	1-phase airconditioning / 4 star (average zone)(zoned)	1-phase airconditioning / 4 star (average zone)(zoned)	2	1	yes	yes	yes	yes	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	not specified	yes	4 star	not specified	4 star	no	no

(iii) Thermal Comfort	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must attach the certificate referred to under "Assessor details" on the front page of this BASIX certificate (the "Assessor Certificate") to the development application and construction certificate application for the proposed development (or, if the applicant is applying for a complying development certificate for the proposed development, to that application). The applicant must also attach the Assessor Certificate to the application for a final occupation certificate for the proposed development.			
(b) The Assessor Certificate must have been issued by an Accredited Assessor in accordance with the Thermal Comfort Protocol.			
(c) The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX Certificate, including the details shown in the "Thermal Loads" table below.			
(d) The applicant must show on the plans accompanying the development application for the proposed development, all matters which the Thermal Comfort Protocol requires to be shown on those plans. Those plans must bear a stamp of endorsement from the Accredited Assessor, to certify that this is the case.	✓		
(e) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all thermal performance specifications set out in the Assessor Certificate, and all aspects of the proposed development which were used to calculate those specifications.		✓	
(f) The applicant must construct the development in accordance with all thermal performance specifications set out in the Assessor Certificate, and in accordance with those aspects of the development application or application for a complying development certificate which were used to calculate those specifications.		✓	✓
(g) Where there is an in-slab heating or cooling system, the applicant must: (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/m ² /yr)	Area adjusted cooling load (in MJ/m ² /yr)
K101	16.5	58.7
K102	18.3	36.9
K103	27.1	50.8
K104	40.7	62.6
K201	16.9	58
K202	18.7	36.5
K203	38.1	53.1
K204	29	56.2
K301	22.3	57.4
K302	17.2	34.5
K303	30.2	55.4
K304	36.4	63
K401	18.6	56.9
K402	29.8	53.5
K403	45.8	32.2
K404	16.5	62.9
KG01	22.4	49.6
KG02	17.1	36.6
KG03	40.9	49.2
KG04	49.4	62.6
TH01	48.6	59.2
TH02	37.8	57.9
All other dwellings	56.2	57.2

(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	no common facility	no common facility	no common laundry facility

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

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. 2)	-	-	light-emitting diode	connected to lift call button	no
Ground floor lobby type- Building K	no mechanical ventilation	-	light-emitting diode	time clock and motion sensors	no
Hallways/lobbies - Building K	no mechanical ventilation	-	light-emitting diode	time clock and motion sensors	no

Central energy systems	Type	Specification
Lift (No. 2)	gearless traction with V V V F motor	Number of levels (including basement): 8

2. Commitments for Residential flat buildings - BuildingL

(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: <ul style="list-style-type: none"> (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.	✓	✓	✓

Dwelling no.	Fixtures					Appliances		Individual pool				Individual spa		
	All shower-heads	All toilet flushing systems	All kitchen taps	All bathroom taps	HW recirculation or diversion	All clothes washers	All dish-washers	Volume (max volume)	Pool cover	Pool location	Pool shaded	Volume (max volume)	Spa cover	Spa shaded
All dwellings	4 star (> 4.5 but <= 6 L/min)	3 star	4 star	4 star	-	not specified	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
All dwellings	No alternative water supply	-	-	-	-	-	-	-

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

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

	Hot water	Bathroom ventilation system		Kitchen ventilation system		Laundry ventilation system	
Dwelling no.	Hot water system	Each bathroom	Operation control	Each kitchen	Operation control	Each laundry	Operation control
All dwellings	Central hot water system (No. 3)	individual fan, ducted to façade or roof	manual switch on/off	individual fan, ducted to façade or roof	manual switch on/off	individual fan, ducted to façade or roof	manual switch on/off

	Cooling		Heating		Artificial lighting					Natural lighting		
Dwelling no.	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or diningroom	Each kitchen	All bathrooms/toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
All dwellings	1-phase airconditioning / 4 star (average zone)(zoned)	1-phase airconditioning / 4 star (average zone)(zoned)	1-phase airconditioning / 4 star (average zone)(zoned)	1-phase airconditioning / 4 star (average zone)(zoned)	2	1	yes	yes	yes	yes	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	not specified	yes	4 star	not specified	4 star	no	no

(iii) Thermal Comfort	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must attach the certificate referred to under "Assessor details" on the front page of this BASIX certificate (the "Assessor Certificate") to the development application and construction certificate application for the proposed development (or, if the applicant is applying for a complying development certificate for the proposed development, to that application). The applicant must also attach the Assessor Certificate to the application for a final occupation certificate for the proposed development.			
(b) The Assessor Certificate must have been issued by an Accredited Assessor in accordance with the Thermal Comfort Protocol.			
(c) The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX Certificate, including the details shown in the "Thermal Loads" table below.			
(d) The applicant must show on the plans accompanying the development application for the proposed development, all matters which the Thermal Comfort Protocol requires to be shown on those plans. Those plans must bear a stamp of endorsement from the Accredited Assessor, to certify that this is the case.	✓		
(e) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all thermal performance specifications set out in the Assessor Certificate, and all aspects of the proposed development which were used to calculate those specifications.		✓	
(f) The applicant must construct the development in accordance with all thermal performance specifications set out in the Assessor Certificate, and in accordance with those aspects of the development application or application for a complying development certificate which were used to calculate those specifications.		✓	✓
(g) Where there is an in-slab heating or cooling system, the applicant must: (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/m ² /yr)	Area adjusted cooling load (in MJ/m ² /yr)
L101	9.7	46.9
L102	37	42.8
L103	38	35.1
L104	18.5	41.2
L105	22.9	61.4
L201	10	46.2
L202	12.5	42.2
L203	21.1	49.1
L204	17.5	43
L205	23.3	59.5
L301	40.9	63.1
L302	41.6	40.1
L303	23	45
L304	21	36.7
L305	26	48.5
L401	12.6	56.9
L402	37	58
L403	52.2	42.3
L404	34.7	38.3
L405	37.36	45.7
LG01	7	21.6
LG02	6.3	19.5
LG03	23	56.6
LG04	29.8	44
LG05	20.6	62.7
LG06	41	52
LLG03	29	57.6
TH04	57.4	49.2
TH05	37.8	57.9
TH06	56.2	57.2
All other dwellings	34.6	54

(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	no common facility	no common facility	no common laundry facility

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

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. 3)	-	-	light-emitting diode	connected to lift call button	no
Ground floor lobby type- Building L	no mechanical ventilation	-	light-emitting diode	time clock and motion sensors	no
Hallways/lobbies - Building L	no mechanical ventilation	-	light-emitting diode	time clock and motion sensors	no

Central energy systems	Type	Specification
Lift (No. 3)	gearless traction with V V V F motor	Number of levels (including basement): 8

3. Commitments for Residential flat buildings - BuildingM

(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.	✓	✓	✓

Dwelling no.	Fixtures					Appliances		Individual pool				Individual spa		
	All shower-heads	All toilet flushing systems	All kitchen taps	All bathroom taps	HW recirculation or diversion	All clothes washers	All dish-washers	Volume (max volume)	Pool cover	Pool location	Pool shaded	Volume (max volume)	Spa cover	Spa shaded
All dwellings	4 star (> 4.5 but <= 6 L/min)	3 star	4 star	4 star	-	not specified	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
All dwellings	No alternative water supply	-	-	-	-	-	-	-

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

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

	Hot water	Bathroom ventilation system		Kitchen ventilation system		Laundry ventilation system	
Dwelling no.	Hot water system	Each bathroom	Operation control	Each kitchen	Operation control	Each laundry	Operation control
All dwellings	Central hot water system (No. 4)	individual fan, ducted to façade or roof	manual switch on/off	individual fan, ducted to façade or roof	manual switch on/off	individual fan, ducted to façade or roof	manual switch on/off

	Cooling		Heating		Artificial lighting					Natural lighting		
Dwelling no.	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or diningroom	Each kitchen	All bathrooms/toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
All dwellings	1-phase airconditioning / 4 star (average zone)(zoned)	1-phase airconditioning / 4 star (average zone)(zoned)	1-phase airconditioning / 4 star (average zone)(zoned)	1-phase airconditioning / 4 star (average zone)(zoned)	2	1	yes	yes	yes	yes	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	not specified	yes	4 star	not specified	4 star	no	no

(iii) Thermal Comfort	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must attach the certificate referred to under "Assessor details" on the front page of this BASIX certificate (the "Assessor Certificate") to the development application and construction certificate application for the proposed development (or, if the applicant is applying for a complying development certificate for the proposed development, to that application). The applicant must also attach the Assessor Certificate to the application for a final occupation certificate for the proposed development.			
(b) The Assessor Certificate must have been issued by an Accredited Assessor in accordance with the Thermal Comfort Protocol.			
(c) The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX Certificate, including the details shown in the "Thermal Loads" table below.			
(d) The applicant must show on the plans accompanying the development application for the proposed development, all matters which the Thermal Comfort Protocol requires to be shown on those plans. Those plans must bear a stamp of endorsement from the Accredited Assessor, to certify that this is the case.	✓		
(e) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all thermal performance specifications set out in the Assessor Certificate, and all aspects of the proposed development which were used to calculate those specifications.		✓	
(f) The applicant must construct the development in accordance with all thermal performance specifications set out in the Assessor Certificate, and in accordance with those aspects of the development application or application for a complying development certificate which were used to calculate those specifications.		✓	✓
(g) Where there is an in-slab heating or cooling system, the applicant must: (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/m ² /yr)	Area adjusted cooling load (in MJ/m ² /yr)
M101	12.8	32.1
M102	22.1	55.3
M103	20.6	49.2
M104	27.3	60
M105	31.2	62.1
M106	23.3	60.4
M201	58	59.2
M202	17.9	52.6
M203	19.6	48.6
M204	20.4	55.3
M205	24.7	27.2
M206	25	57.6
M301	56.4	46.9
M302	20.2	48.5
M303	24.1	45.2
M304	22	48.9
M305	27.7	38.5
M306	27.8	49.8
M401	40.4	58
M402	29.8	49.2
M403	26.5	54.8
M404	10.9	59.2
M405	47.8	43.3
M406	29.3	59.2
M501	24.3	51.1
M502	34.5	40.4
M503	58.3	40.5
MG01	14.9	33.9
MG02	46.6	55.8
MG03	36	50.6
MG04	41.3	40.4

	Thermal loads	
Dwelling no.	Area adjusted heating load (in MJ/m ² /yr)	Area adjusted cooling load (in MJ/m ² /yr)
MG05	22.6	54.2
MLG01	43.7	57.5
MLG02	28.7	51.8
MLG03	53.8	39.4
TH07	57.4	49.2
TH08	37.8	57.9
All other dwellings	56.2	57.2

(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	no common facility	no common facility	no common laundry facility

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

	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. 4)	-	-	light-emitting diode	connected to lift call button	no
Ground floor lobby type-- Building M	no mechanical ventilation	-	light-emitting diode	time clock and motion sensors	no
Hallways/lobbies - Building M	no mechanical ventilation	-	light-emitting diode	time clock and motion sensors	no

Central energy systems	Type	Specification
Lift (No. 4)	gearless traction with V V V F motor	Number of levels (including basement): 9

4. Commitments for Residential flat buildings - BuildingN

(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: <ul style="list-style-type: none"> (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.	✓	✓	✓

Dwelling no.	Fixtures					Appliances		Individual pool				Individual spa		
	All shower-heads	All toilet flushing systems	All kitchen taps	All bathroom taps	HW recirculation or diversion	All clothes washers	All dish-washers	Volume (max volume)	Pool cover	Pool location	Pool shaded	Volume (max volume)	Spa cover	Spa shaded
All dwellings	4 star (> 4.5 but <= 6 L/min)	3 star	4 star	4 star	-	not specified	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
All dwellings	No alternative water supply	-	-	-	-	-	-	-

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

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

	Hot water	Bathroom ventilation system		Kitchen ventilation system		Laundry ventilation system	
Dwelling no.	Hot water system	Each bathroom	Operation control	Each kitchen	Operation control	Each laundry	Operation control
All dwellings	Central hot water system (No. 5)	individual fan, ducted to façade or roof	manual switch on/off	individual fan, ducted to façade or roof	manual switch on/off	individual fan, ducted to façade or roof	manual switch on/off

	Cooling		Heating		Artificial lighting					Natural lighting		
Dwelling no.	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or diningroom	Each kitchen	All bathrooms/toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
All dwellings	1-phase airconditioning / 4 star (average zone)(zoned)	1-phase airconditioning / 4 star (average zone)(zoned)	1-phase airconditioning / 4 star (average zone)(zoned)	1-phase airconditioning / 4 star (average zone)(zoned)	2	1	yes	yes	yes	yes	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	not specified	yes	4 star	not specified	4 star	no	no

(iii) Thermal Comfort	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must attach the certificate referred to under "Assessor details" on the front page of this BASIX certificate (the "Assessor Certificate") to the development application and construction certificate application for the proposed development (or, if the applicant is applying for a complying development certificate for the proposed development, to that application). The applicant must also attach the Assessor Certificate to the application for a final occupation certificate for the proposed development.			
(b) The Assessor Certificate must have been issued by an Accredited Assessor in accordance with the Thermal Comfort Protocol.			
(c) The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX Certificate, including the details shown in the "Thermal Loads" table below.			
(d) The applicant must show on the plans accompanying the development application for the proposed development, all matters which the Thermal Comfort Protocol requires to be shown on those plans. Those plans must bear a stamp of endorsement from the Accredited Assessor, to certify that this is the case.	✓		
(e) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all thermal performance specifications set out in the Assessor Certificate, and all aspects of the proposed development which were used to calculate those specifications.		✓	
(f) The applicant must construct the development in accordance with all thermal performance specifications set out in the Assessor Certificate, and in accordance with those aspects of the development application or application for a complying development certificate which were used to calculate those specifications.		✓	✓
(g) Where there is an in-slab heating or cooling system, the applicant must: (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/m ² /yr)	Area adjusted cooling load (in MJ/m ² /yr)
N101	10.6	40.7
N102	16.4	62.1
N103	29.2	60.3
N104	36.3	42.3
N105	21.2	58.3
N201	11	39.9
N202	16.1	61.8
N203	28.6	50.7
N204	25.4	63.1
N205	21.5	57.7
N301	19.5	47.2
N302	16.1	57.3
N303	37	58.4
N304	31.6	35.5
N305	31.5	60.9
N401	19.9	37.4
N402	18.2	56.8
N403	38.8	56.3
N404	35.6	53.2
N405	16.9	59.2
N501	30.7	52.1
N502	52.4	42.2
N503	53.4	36.1
NG01	26	60
NG02	17.7	61.3
NG03	30.9	60.3
NG04	35.7	42.8
NG05	28.9	63.5
NLG01	18	56.6
NLG02	38.5	62.3
NLG03	51.5	52

	Thermal loads	
Dwelling no.	Area adjusted heating load (in MJ/m ² /yr)	Area adjusted cooling load (in MJ/m ² /yr)
TH10	49.2	57.4
TH11	37.8	57.9
All other dwellings	56.2	57.2

(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	no common facility	no common facility	no common laundry facility

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

	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. 5)	-	-	light-emitting diode	connected to lift call button	no
Ground floor lobby type- Building N	no mechanical ventilation	-	light-emitting diode	time clock and motion sensors	no
Hallways/lobbies - Building N	no mechanical ventilation	-	light-emitting diode	time clock and motion sensors	no

Central energy systems	Type	Specification
Lift (No. 5)	gearless traction with V V V F motor	Number of levels (including basement): 9

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

(a) 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	no common facility	no common facility	no common laundry facility

Central systems	Size	Configuration	Connection (to allow for...)
Fire sprinkler system (No. 1)	-	So that fire sprinkler test water is contained within the fire sprinkler system for re-use, rather than disposed.	-
Fire sprinkler system (No. 2)	-	So that fire sprinkler test water is contained within the fire sprinkler system for re-use, rather than disposed.	-

Central systems	Size	Configuration	Connection (to allow for...)
Central water tank - rainwater or stormwater (No. 1)	10000.00	To collect run-off from at least: - 2200 square metres of roof area of buildings in the development - 0.00 square metres of impervious area in the development - 0.00 square metres of garden/lawn area in the development - 0.00 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 1000 square metres of common landscaped area on the site - car washing in 4 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
Carpark Area 1	ventilation exhaust only	carbon monoxide monitor + VSD fan	light-emitting diode	time clock and motion sensors	no
Carpark Area 2	ventilation exhaust only	carbon monoxide monitor + VSD fan	light-emitting diode	time clock and motion sensors	no
Carpark Area 3	ventilation exhaust only	carbon monoxide monitor + VSD fan	light-emitting diode	time clock and motion sensors	no
Main Switch Room	no mechanical ventilation	-	light-emitting diode	manual on / manual off	no
Residential Collection & Holding Rooms	ventilation exhaust only	-	light-emitting diode	motion sensors	no
Bulk Waste Rooms	ventilation exhaust only	-	light-emitting diode	motion sensors	no
Plant Room	no mechanical ventilation	-	light-emitting diode	manual on / manual off	no
Fire Pump Rooms	ventilation exhaust only	thermostatically controlled	light-emitting diode	manual on / manual off	no

	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
Storages	no mechanical ventilation	-	light-emitting diode	manual on / manual off	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: R1.0 (~38 mm); (b) Piping internal to building: R1.0 (~38 mm)
Central hot water system (No. 3)	gas-fired boiler	Piping insulation (ringmain & supply risers): (a) Piping external to building: R1.0 (~38 mm); (b) Piping internal to building: R1.0 (~38 mm)
Central hot water system (No. 4)	gas-fired boiler	Piping insulation (ringmain & supply risers): (a) Piping external to building: R1.0 (~38 mm); (b) Piping internal to building: R1.0 (~38 mm)
Central hot water system (No. 5)	gas-fired boiler	Piping insulation (ringmain & supply risers): (a) Piping external to building: R1.0 (~38 mm); (b) Piping internal to building: R1.0 (~38 mm)
Alternative energy supply	Photovoltaic system	Rated electrical output (min): 10 peak kW
Other	-	-

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).

BASIX™ Certificate

Building Sustainability Index

www.planningportal.nsw.gov.au/development-and-assessment/basix

Multi Dwelling

Certificate number: 1369192M_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.planningportal.nsw.gov.au/definitions

This certificate is a revision of certificate number 1369192M lodged with the consent authority or certifier on 27 April 2023 with application PAN-322559.

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

Secretary

Date of issue: Thursday, 11 September 2025

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



When submitting this BASIX certificate with a development application or complying development certificate application, it must be accompanied by NatHERS certificate 0008489600.

Project summary		
Project name	O'Connell Street Caddens (PQRSTU)_03	
Street address	68-80 O'CONNELL ST CADDENS 2747	
Local Government Area	-	
Plan type and plan number	Deposited Plan -	
Lot no.	-	
Section no.	-	
No. of residential flat buildings	5	
No. of units in residential flat buildings	177	
No. of multi-dwelling houses	0	
No. of single dwelling houses	0	
Project score		
Water	✓ 41	Target 40
Thermal Comfort	✓ Pass	Target Pass
Energy	✓ 35	Target 35

Certificate Prepared by
Name / Company Name: SLR Consulting Pty Ltd
ABN (if applicable): 29001584612

Description of project

Project address

Project name	O'Connell Street Caddens (PQRSTU)_03
Street address	68-80 O'CONNELL ST CADDENS 2747
Local Government Area	-
Plan type and plan number	Deposited Plan -
Lot no.	-
Section no.	-

Project type

No. of residential flat buildings	5
No. of units in residential flat buildings	177
No. of multi-dwelling houses	0
No. of single dwelling houses	0

Site details

Site area (m ²)	17489.5
Roof area (m ²)	4020
Non-residential floor area (m ²)	962
Residential car spaces	236
Non-residential car spaces	812




Common area landscape

Common area lawn (m ²)	460.6
Common area garden (m ²)	1110
Area of indigenous or low water use species (m ²)	555

Assessor details and thermal loads

Assessor number	101556
Certificate number	0008489600
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	 41	Target 40
Thermal Comfort	 Pass	Target Pass
Energy	 35	Target 35

Description of project

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

Residential flat buildings - BuildingP, 32 dwellings, 5 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)
P101	2	80	0	0	0
P105	1	65	0	0	0
P203	2	80	0	0	0
P301	2	80	0	0	0
P305	2	81	0	0	0
P403	2	80	0	0	0
P501	2	80	0	0	0
P505	2	81	0	0	0
P102	1	61	0	0	0
P106	2	80	0	0	0
P204	2	86	0	0	0
P302	2	80	0	0	0
P306	2	80	0	0	0
P404	2	87	0	0	0
P502	2	80	0	0	0
P506	2	80	0	0	0
P103	2	80	0	0	0
P201	2	80	0	0	0
P205	1	65	0	0	0
P303	2	80	0	0	0
P401	2	80	0	0	0
P405	2	81	0	0	0
P503	2	80	0	0	0
TH13	3	146	0	0	0
P104	2	82	0	0	0
P202	2	80	0	0	0
P206	2	80	0	0	0
P304	2	87	0	0	0
P402	2	80	0	0	0
P406	2	80	0	0	0
P504	2	87	0	0	0
TH14	3	146	0	0	0

Residential flat buildings - BuildingR, 39 dwellings, 4 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)
R1101	2	80	0.00	0.00	0.00
R1105	1	58	0.00	0.00	0.00
R1204	2	80	0.00	0.00	0.00
R1303	2	86	0.00	0.00	0.00
R1402	2	80	0.00	0.00	0.00
R1102	2	80	0.00	0.00	0.00
R1201	2	80	0.00	0.00	0.00
R1205	1	58	0.00	0.00	0.00
R1304	2	88	0.00	0.00	0.00
R1403	2	86	0.00	0.00	0.00
R1103	1	62	0.00	0.00	0.00
R1202	2	80	0.00	0.00	0.00
R1301	2	80	0.00	0.00	0.00
R1305	1	58	0.00	0.00	0.00
R1404	2	88	0.00	0.00	0.00
R1104	2	80	0.00	0.00	0.00
R1203	1	62	0.00	0.00	0.00
R1302	2	80	0.00	0.00	0.00
R1401	2	80	0.00	0.00	0.00
R1405	1	58	0.00	0.00	0.00

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)
R2101	2	87	0	0	0
R2201	2	87	0	0	0
R2301	2	87	0	0	0
R2401	2	87	0	0	0
TH15	3	154	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)
R2102	2	86	0	0	0
R2202	2	86	0	0	0
R2302	2	86	0	0	0
R2402	2	86	0	0	0
TH16	2	140	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)
R2103	2	80	0	0	0
R2203	2	80	0	0	0
R2303	2	80	0	0	0
R2403	2	80	0	0	0
TH17	3	154	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)
R2104	2	80	0	0	0
R2204	2	80	0	0	0
R2304	2	80	0	0	0
R2404	2	80	0	0	0

Residential flat buildings - BuildingS, 34 dwellings, 6 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)
S101	2	93	0.00	0.00	0.00
S105	2	84	0.00	0.00	0.00
S202	2	96	0.00	0.00	0.00
S206	2	83	0.00	0.00	0.00
S303	1	65	0.00	0.00	0.00
S307	3	124	0.00	0.00	0.00
S404	2	83	0	0	0
S501	2	80	0	0	0
S602	2	86	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)
S102	2	96	0.00	0.00	0.00
S106	2	83	0.00	0.00	0.00
S203	1	65	0.00	0.00	0.00
S207	3	124	0.00	0.00	0.00
S304	2	83	0.00	0.00	0.00
S401	2	93	0.00	0.00	0.00
S405	2	83	0	0	0
S502	2	86	0	0	0
S603	2	107	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)
S103	1	65	0.00	0.00	0.00
S107	3	124	0.00	0.00	0.00
S204	2	83	0.00	0.00	0.00
S301	2	93	0.00	0.00	0.00
S305	2	83	0.00	0.00	0.00
S402	2	96	0.00	0.00	0.00
S406	2	83	0	0	0
S503	3	107	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)
S104	2	83	0.00	0.00	0.00
S201	2	93	0.00	0.00	0.00
S205	2	83	0.00	0.00	0.00
S302	2	96	0.00	0.00	0.00
S306	2	83	0.00	0.00	0.00
S403	1	65	0.00	0.00	0.00
S407	3	124	0	0	0
S601	2	800	0	0	0

Residential flat buildings - BuildingT, 48 dwellings, 6 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)
T101	2	88	0.00	0.00	0.00
T105	2	93	0.00	0.00	0.00
T109	1	63	0.00	0.00	0.00
T203	3	111	0.00	0.00	0.00
T207	1	59	0.00	0.00	0.00
T301	2	88	0.00	0.00	0.00
T305	2	93	0	0	0
T309	1	63	0	0	0
T403	3	111	0	0	0
T407	1	60	0	0	0
T501	2	80	0	0	0
T601	1	80	0	0	0
T102	2	84	0.00	0.00	0.00
T106	2	87	0.00	0.00	0.00
T110	2	83	0.00	0.00	0.00
T204	1	60	0.00	0.00	0.00
T208	3	118	0.00	0.00	0.00
T302	2	84	0.00	0.00	0.00
T306	2	87	0	0	0
T310	2	83	0	0	0
T404	1	60	0	0	0
T408	3	118	0	0	0
T502	1	59	0	0	0
T602	1	59	0	0	0
T103	3	111	0.00	0.00	0.00
T107	1	59	0.00	0.00	0.00
T201	2	88	0.00	0.00	0.00
T205	2	93	0.00	0.00	0.00
T209	1	63	0.00	0.00	0.00
T303	3	111	0.00	0.00	0.00
T307	1	60	0	0	0
T401	2	88	0	0	0
T405	2	93	0	0	0
T409	1	63	0	0	0
T503	2	83	0	0	0
T603	2	83	0	0	0
T104	1	60	0.00	0.00	0.00
T108	3	118	0.00	0.00	0.00
T202	2	84	0.00	0.00	0.00
T206	2	87	0.00	0.00	0.00
T210	2	83	0.00	0.00	0.00
T304	1	60	0	0	0
T308	3	118	0	0	0
T402	2	84	0	0	0
T406	2	87	0	0	0
T410	2	83	0	0	0
T504	3	101	0	0	0
T604	3	101	0	0	0

Residential flat buildings - BuildingU, 24 dwellings, 4 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)
U101	2	83	0.00	0.00	0.00
U105	2	89	0.00	0.00	0.00
U203	2	90	0.00	0.00	0.00
U301	2	83	0.00	0.00	0.00
U102	2	96	0.00	0.00	0.00
U106	2	83	0.00	0.00	0.00
U204	2	93	0.00	0.00	0.00
U302	2	96	0.00	0.00	0.00
U103	1	56	0.00	0.00	0.00
U201	2	83	0.00	0.00	0.00
U205	2	89	0.00	0.00	0.00
U303	2	90	0.00	0.00	0.00
U104	2	84	0.00	0.00	0.00
U202	2	96	0.00	0.00	0.00
U206	2	83	0.00	0.00	0.00
U304	2	93	0.00	0.00	0.00

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)
U305	2	89	0.00	0.00	0.00
U403	2	90	0.00	0.00	0.00

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)
U306	2	83	0.00	0.00	0.00
U404	2	93	0.00	0.00	0.00

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)
U401	2	83	0.00	0.00	0.00
U405	2	89	0.00	0.00	0.00

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)
U402	2	96	0.00	0.00	0.00
U406	2	83	0.00	0.00	0.00

Description of project

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

Common areas of the development (non-building specific)

Common area	Floor area (m ²)
Basement 1	12182
Basement 3	11750
Mechanical fan room	109
Fire Pump Rooms	77

Common area	Floor area (m ²)
Basement 2	11813
Main Switch Room	40
Cold Water Pump	53

Common area	Floor area (m ²)
Basement Retail	3855
Bulk Waste Rooms	450
Service room	541

Common areas of unit building - BuildingP

Common area	Floor area (m ²)
Lift car (No. 1)	0.00
Hallways/lobbies - Building P	309.86

Common area	Floor area (m ²)
Mech	329

Common area	Floor area (m ²)
Ground floor lobby-Building P	109.4

Common areas of unit building - BuildingR

Common area	Floor area (m ²)
Lift car (No. 3)	0.00
Hallways/lobbies - Building R	355.1

Common area	Floor area (m ²)
Lift car (No. 4)	0.00

Common area	Floor area (m ²)
Ground floor lobby-Building R	132

Common areas of unit building - BuildingS

Common area	Floor area (m ²)
Lift car (No. 5)	0.00
Hallways/lobbies - Building S	318

Common area	Floor area (m ²)
Lift car (No. 6)	0.00

Common area	Floor area (m ²)
Ground floor lobby-Building S	98.2

Common areas of unit building - BuildingT

Common area	Floor area (m ²)
Lift car (No. 7)	0.00
Hallways/lobbies - Building T	430.8

Common area	Floor area (m ²)
Lift car (No. 8)	0.00

Common area	Floor area (m ²)
Ground floor lobby-Building T	95.5

Common areas of unit building - BuildingU

Common area	Floor area (m ²)	Common area	Floor area (m ²)	Common area	Floor area (m ²)
Ground floor lobby-Building U	64.53	Hallways/lobbies - Building U	154.5	Lift car (No. 2)	-

Schedule of BASIX commitments

1. Commitments for Residential flat buildings - BuildingP

(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 - BuildingR

(a) Dwellings

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

(b) Common areas and central systems/facilities

- (i) Water
- (ii) Energy

3. Commitments for Residential flat buildings - BuildingS

(a) Dwellings

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

(b) Common areas and central systems/facilities

- (i) Water
- (ii) Energy

4. Commitments for Residential flat buildings - BuildingT

(a) Dwellings

(i) Water

(ii) Energy

(iii) Thermal Comfort

(b) Common areas and central systems/facilities

(i) Water

(ii) Energy

5. Commitments for Residential flat buildings - BuildingU

(a) Dwellings

(i) Water

(ii) Energy

(iii) Thermal Comfort

(b) Common areas and central systems/facilities

(i) Water

(ii) Energy

6. Commitments for single dwelling houses

7. Commitments for multi-dwelling houses

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

(a) Common areas and central systems/facilities

(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 - BuildingP








(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.	✓	✓	✓

Dwelling no.	Fixtures					Appliances		Individual pool				Individual spa		
	All shower-heads	All toilet flushing systems	All kitchen taps	All bathroom taps	HW recirculation or diversion	All clothes washers	All dish-washers	Volume (max volume)	Pool cover	Pool location	Pool shaded	Volume (max volume)	Spa cover	Spa shaded
All dwellings	4 star (> 4.5 but <= 6 L/min)	3 star	4 star	4 star	-	not specified	4 star	-	-	-	-	-	-	-

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

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

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(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 (No. 1)	individual fan, ducted to façade or roof	manual switch on/off	individual fan, ducted to façade or roof	manual switch on/off	individual fan, ducted to façade or roof	manual switch on/off

	Cooling		Heating		Artificial lighting					Natural lighting		
Dwelling no.	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or diningroom	Each kitchen	All bathrooms/toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
All dwellings	1-phase airconditioning / 4 star (average zone)(zoned)	1-phase airconditioning / 4 star (average zone)(zoned)	1-phase airconditioning / 4 star (average zone)(zoned)	1-phase airconditioning / 4 star (average zone)(zoned)	0	1	yes	yes	yes	yes	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	not specified	yes	4 star	not specified	4 star	no	no

(iii) Thermal Comfort	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must attach the certificate referred to under "Assessor details" on the front page of this BASIX certificate (the "Assessor Certificate") to the development application and construction certificate application for the proposed development (or, if the applicant is applying for a complying development certificate for the proposed development, to that application). The applicant must also attach the Assessor Certificate to the application for a final occupation certificate for the proposed development.			
(b) The Assessor Certificate must have been issued by an Accredited Assessor in accordance with the Thermal Comfort Protocol.			
(c) The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX Certificate, including the details shown in the "Thermal Loads" table below.			
(d) The applicant must show on the plans accompanying the development application for the proposed development, all matters which the Thermal Comfort Protocol requires to be shown on those plans. Those plans must bear a stamp of endorsement from the Accredited Assessor, to certify that this is the case.	✓		
(e) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all thermal performance specifications set out in the Assessor Certificate, and all aspects of the proposed development which were used to calculate those specifications.		✓	
(f) The applicant must construct the development in accordance with all thermal performance specifications set out in the Assessor Certificate, and in accordance with those aspects of the development application or application for a complying development certificate which were used to calculate those specifications.		✓	✓
(g) Where there is an in-slab heating or cooling system, the applicant must: (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/m ² /yr)	Area adjusted cooling load (in MJ/m ² /yr)
P101	34.9	51.7
P102	19.3	60.3
P103	33.1	55.6
P104	34.8	45.1
P105	41.1	63.6
P106	33.1	61.2
P201	26.4	51.6
P202	12	51.5
P203	23.6	56.6
P204	24.1	46.2
P205	23.9	56.9
P206	20.2	57.3
P301	26.2	50
P302	12.1	50.9
P303	24.1	55.8
P304	24.6	45.9
P305	21.7	57.2
P306	20.4	56.1
P401	26.6	48.4
P402	12.6	50.5
P403	24.8	54.9
P404	25.4	45.2
P405	22.3	55.4
P406	26.5	63.6
P501	38.9	39.7
P502	22.4	43.2
P503	40.6	47.8
P504	42.3	40.8
P505	30.7	56.5
P506	40.2	53
TH13	49.2	57.4

	Thermal loads	
Dwelling no.	Area adjusted heating load (in MJ/m ² /yr)	Area adjusted cooling load (in MJ/m ² /yr)
All other dwellings	56	57

(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	no common facility	no common facility	no common laundry facility

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

	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. 1)	-	-	light-emitting diode	connected to lift call button	no
Mech	ventilation exhaust only	thermostatically controlled	light-emitting diode	motion sensors	no
Ground floor lobby-Building P	no mechanical ventilation	-	light-emitting diode	motion sensors	no
Hallways/lobbies - Building P	no mechanical ventilation	-	light-emitting diode	motion sensors	no

Central energy systems	Type	Specification
Lift (No. 1)	gearless traction with V V V F motor	Number of levels (including basement): 9

2. Commitments for Residential flat buildings - BuildingR

(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: <ul style="list-style-type: none"> (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.	✓	✓	✓

Dwelling no.	Fixtures					Appliances		Individual pool				Individual spa		
	All shower-heads	All toilet flushing systems	All kitchen taps	All bathroom taps	HW recirculation or diversion	All clothes washers	All dish-washers	Volume (max volume)	Pool cover	Pool location	Pool shaded	Volume (max volume)	Spa cover	Spa shaded
All dwellings	4 star (> 4.5 but <= 6 L/min)	3 star	4 star	4 star	-	not specified	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
All dwellings	No alternative water supply	-	-	-	-	-	-	-

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

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

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

	Cooling		Heating		Artificial lighting					Natural lighting		
Dwelling no.	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or diningroom	Each kitchen	All bathrooms/toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
All dwellings	1-phase airconditioning / 4 star (average zone)(zoned)	1-phase airconditioning / 4 star (average zone)(zoned)	1-phase airconditioning / 4 star (average zone)(zoned)	1-phase airconditioning / 4 star (average zone)(zoned)	0	1	yes	yes	yes	yes	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	not specified	yes	4 star	not specified	4 star	no	no

(iii) Thermal Comfort	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must attach the certificate referred to under "Assessor details" on the front page of this BASIX certificate (the "Assessor Certificate") to the development application and construction certificate application for the proposed development (or, if the applicant is applying for a complying development certificate for the proposed development, to that application). The applicant must also attach the Assessor Certificate to the application for a final occupation certificate for the proposed development.			
(b) The Assessor Certificate must have been issued by an Accredited Assessor in accordance with the Thermal Comfort Protocol.			
(c) The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX Certificate, including the details shown in the "Thermal Loads" table below.			
(d) The applicant must show on the plans accompanying the development application for the proposed development, all matters which the Thermal Comfort Protocol requires to be shown on those plans. Those plans must bear a stamp of endorsement from the Accredited Assessor, to certify that this is the case.	✓		
(e) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all thermal performance specifications set out in the Assessor Certificate, and all aspects of the proposed development which were used to calculate those specifications.		✓	
(f) The applicant must construct the development in accordance with all thermal performance specifications set out in the Assessor Certificate, and in accordance with those aspects of the development application or application for a complying development certificate which were used to calculate those specifications.		✓	✓
(g) Where there is an in-slab heating or cooling system, the applicant must: (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/m ² /yr)	Area adjusted cooling load (in MJ/m ² /yr)
R1101	41.71	48.8
R1102	31.11	36.1
R1103	51.48	36.5
R1104	46.08	43.1
R1105	46.07	53.9
R1201	27.7	59.46
R1202	18.75	50.05
R1203	34.8	44.65
R1204	32.47	49.16
R1205	30.84	58.26
R1301	28.22	59.15
R1302	19.15	49.39
R1303	24.34	38.39
R1304	25.27	45.86
R1305	31.41	56.86
R1401	38.44	56.84
R1402	18.18	43.85
R1403	39.27	38.09
R1404	37.14	44.34
R1405	28.5	49.61
R2101	13.8	57.55
R2102	14.0	58.55
R2103	62.23	33.46
R2104	51.41	49.68
R2201	21.7	57.3
R2202	28.0	56.9
R2203	45.64	39.35
R2204	47.71	50.11
R2301	33.09	55.48
R2302	40.67	58.15
R2303	46.3	39.6

	Thermal loads	
Dwelling no.	Area adjusted heating load (in MJ/m ² /yr)	Area adjusted cooling load (in MJ/m ² /yr)
R2304	48.47	48.77
R2401	42.35	53.77
R2402	39.58	54.58
R2403	60.95	38.82
R2404	59.9	46.65
TH15	41.63	54.74
TH16	45.93	60.38
All other dwellings	43.26	58.9

(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	no common facility	no common facility	no common laundry facility

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

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. 3)	-	-	light-emitting diode	connected to lift call button	no
Lift car (No. 4)	-	-	light-emitting diode	connected to lift call button	no
Ground floor lobby-Building R	no mechanical ventilation	-	light-emitting diode	motion sensors	no
Hallways/lobbies - Building R	no mechanical ventilation	-	light-emitting diode	motion sensors	no

Central energy systems	Type	Specification
Lift (No. 3)	gearless traction with V V V F motor	Number of levels (including basement): 8
Lift (No. 4)	gearless traction with V V V F motor	Number of levels (including basement): 8

3. Commitments for Residential flat buildings - BuildingsS

(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: <ul style="list-style-type: none"> (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.	✓	✓	✓

Dwelling no.	Fixtures					Appliances		Individual pool				Individual spa		
	All shower-heads	All toilet flushing systems	All kitchen taps	All bathroom taps	HW recirculation or diversion	All clothes washers	All dish-washers	Volume (max volume)	Pool cover	Pool location	Pool shaded	Volume (max volume)	Spa cover	Spa shaded
All dwellings	4 star (> 4.5 but <= 6 L/min)	3 star	4 star	4 star	-	not specified	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
All dwellings	No alternative water supply	-	-	-	-	-	-	-

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

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

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

	Cooling		Heating		Artificial lighting					Natural lighting		
Dwelling no.	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or diningroom	Each kitchen	All bathrooms/toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
All dwellings	1-phase airconditioning / 4 star (average zone)(zoned)	1-phase airconditioning / 4 star (average zone)(zoned)	1-phase airconditioning / 4 star (average zone)(zoned)	1-phase airconditioning / 4 star (average zone)(zoned)	0	1	yes	yes	yes	yes	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	not specified	yes	4 star	not specified	4 star	no	no

(iii) Thermal Comfort	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must attach the certificate referred to under "Assessor details" on the front page of this BASIX certificate (the "Assessor Certificate") to the development application and construction certificate application for the proposed development (or, if the applicant is applying for a complying development certificate for the proposed development, to that application). The applicant must also attach the Assessor Certificate to the application for a final occupation certificate for the proposed development.			
(b) The Assessor Certificate must have been issued by an Accredited Assessor in accordance with the Thermal Comfort Protocol.			
(c) The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX Certificate, including the details shown in the "Thermal Loads" table below.			
(d) The applicant must show on the plans accompanying the development application for the proposed development, all matters which the Thermal Comfort Protocol requires to be shown on those plans. Those plans must bear a stamp of endorsement from the Accredited Assessor, to certify that this is the case.	✓		
(e) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all thermal performance specifications set out in the Assessor Certificate, and all aspects of the proposed development which were used to calculate those specifications.		✓	
(f) The applicant must construct the development in accordance with all thermal performance specifications set out in the Assessor Certificate, and in accordance with those aspects of the development application or application for a complying development certificate which were used to calculate those specifications.		✓	✓
(g) Where there is an in-slab heating or cooling system, the applicant must: (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/m ² /yr)	Area adjusted cooling load (in MJ/m ² /yr)
S101	30.14	43.48
S102	51.5	42.8
S103	19.79	39.66
S104	53.4	38.48
S105	58.55	43.29
S106	33.05	46.27
S107	36.51	40.02
S201	28.28	50.35
S202	54.5	55.2
S203	15.17	43.72
S204	35.72	46.63
S205	51.58	44.47
S206	33.28	52.07
S207	36.46	44.09
S301	31.89	45.17
S302	58.48	52.19
S303	17.56	39.61
S304	39.11	42.35
S305	55.15	39.84
S306	36.26	46.96
S307	39.71	40.71
S401	40.8	46.5
S402	49.4	43.5
S403	30.17	38.32
S404	52.32	41.01
S405	57.39	33.85
S406	43.69	47.82
S407	31.68	54.56
S501	21.5	53.9
S502	42.47	51.87
S503	44.4	58.6

	Thermal loads	
Dwelling no.	Area adjusted heating load (in MJ/m ² /yr)	Area adjusted cooling load (in MJ/m ² /yr)
S601	40.47	63.54
S602	50.57	49.97
All other dwellings	55.8	54.7

(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	no common facility	no common facility	no common laundry facility

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

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
Ground floor lobby-Building S	no mechanical ventilation	-	light-emitting diode	motion sensors	no
Hallways/lobbies - Building S	no mechanical ventilation	-	light-emitting diode	motion sensors	no

Central energy systems	Type	Specification
Lift (No. 5)	gearless traction with V V V F motor	Number of levels (including basement): 10
Lift (No. 6)	gearless traction with V V V F motor	Number of levels (including basement): 10

4. Commitments for Residential flat buildings - BuildingT

(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: <ul style="list-style-type: none"> (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.	✓	✓	✓

Dwelling no.	Fixtures					Appliances		Individual pool				Individual spa		
	All shower-heads	All toilet flushing systems	All kitchen taps	All bathroom taps	HW recirculation or diversion	All clothes washers	All dish-washers	Volume (max volume)	Pool cover	Pool location	Pool shaded	Volume (max volume)	Spa cover	Spa shaded
All dwellings	4 star (> 4.5 but <= 6 L/min)	3 star	4 star	4 star	-	not specified	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
All dwellings	No alternative water supply	-	-	-	-	-	-	-

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

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

	Hot water	Bathroom ventilation system		Kitchen ventilation system		Laundry ventilation system	
Dwelling no.	Hot water system	Each bathroom	Operation control	Each kitchen	Operation control	Each laundry	Operation control
All dwellings	Central hot water system (No. 3)	individual fan, ducted to façade or roof	manual switch on/off	individual fan, ducted to façade or roof	manual switch on/off	individual fan, ducted to façade or roof	manual switch on/off

	Cooling		Heating		Artificial lighting					Natural lighting		
Dwelling no.	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or diningroom	Each kitchen	All bathrooms/toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
All dwellings	1-phase airconditioning / 4 star (average zone)(zoned)	1-phase airconditioning / 4 star (average zone)(zoned)	1-phase airconditioning / 4 star (average zone)(zoned)	1-phase airconditioning / 4 star (average zone)(zoned)	0	1	yes	yes	yes	yes	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	not specified	yes	4 star	not specified	4 star	no	no

(iii) Thermal Comfort	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must attach the certificate referred to under "Assessor details" on the front page of this BASIX certificate (the "Assessor Certificate") to the development application and construction certificate application for the proposed development (or, if the applicant is applying for a complying development certificate for the proposed development, to that application). The applicant must also attach the Assessor Certificate to the application for a final occupation certificate for the proposed development.			
(b) The Assessor Certificate must have been issued by an Accredited Assessor in accordance with the Thermal Comfort Protocol.			
(c) The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX Certificate, including the details shown in the "Thermal Loads" table below.			
(d) The applicant must show on the plans accompanying the development application for the proposed development, all matters which the Thermal Comfort Protocol requires to be shown on those plans. Those plans must bear a stamp of endorsement from the Accredited Assessor, to certify that this is the case.	✓		
(e) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all thermal performance specifications set out in the Assessor Certificate, and all aspects of the proposed development which were used to calculate those specifications.		✓	
(f) The applicant must construct the development in accordance with all thermal performance specifications set out in the Assessor Certificate, and in accordance with those aspects of the development application or application for a complying development certificate which were used to calculate those specifications.		✓	✓
(g) Where there is an in-slab heating or cooling system, the applicant must: (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/m ² /yr)	Area adjusted cooling load (in MJ/m ² /yr)
T101	19.09	33.05
T102	44.53	45.47
T103	47.74	24.38
T104	35.17	38.14
T105	47.96	34.01
T106	43.67	47.49
T107	47.13	48.87
T108	56.55	60.58
T109	26.34	56.75
T110	28.49	41.83
T201	17.53	53.23
T202	43.44	60.46
T203	47.18	31.95
T204	18.12	51.08
T205	35.45	39.04
T206	43.66	49.94
T207	47.33	49.9
T208	44.35	60.27
T209	25.34	58.42
T210	26.83	48.81
T301	20.3	45.5
T302	47.36	54.12
T303	50.33	28.94
T304	21.07	46.58
T305	38.56	34.57
T306	47.0	44.45
T307	51.28	45.64
T308	60.0	58.35
T309	28.97	50.98
T310	30.31	42.45
T401	28.32	44.39

Dwelling no.	Thermal loads	
	Area adjusted heating load (in MJ/m ² /yr)	Area adjusted cooling load (in MJ/m ² /yr)
T402	59.2	52.03
T403	59.15	25.82
T404	38.44	55.06
T405	46.05	38.29
T406	53.32	51.54
T407	55.7	57.53
T408	54.61	56.81
T409	36.93	61.04
T410	39.65	42.17
T501	43.32	42.47
T502	27.0	63.0
T503	50.61	44.2
T504	36.8	61.8
T601	50.54	40.87
T602	39.3	61.0
T603	61.95	41.91
All other dwellings	48.5	56.7

(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	no common facility	no common facility	no common laundry facility

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

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. 7)	-	-	light-emitting diode	connected to lift call button	no
Lift car (No. 8)	-	-	light-emitting diode	connected to lift call button	no
Ground floor lobby-Building T	no mechanical ventilation	-	light-emitting diode	motion sensors	no
Hallways/lobbies - Building T	no mechanical ventilation	-	light-emitting diode	motion sensors	no

Central energy systems	Type	Specification
Lift (No. 7)	gearless traction with V V V F motor	Number of levels (including basement): 10
Lift (No. 8)	gearless traction with V V V F motor	Number of levels (including basement): 10

5. Commitments for Residential flat buildings - BuildingU

(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: <ul style="list-style-type: none"> (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.	✓	✓	✓

Dwelling no.	Fixtures					Appliances		Individual pool				Individual spa		
	All shower-heads	All toilet flushing systems	All kitchen taps	All bathroom taps	HW recirculation or diversion	All clothes washers	All dish-washers	Volume (max volume)	Pool cover	Pool location	Pool shaded	Volume (max volume)	Spa cover	Spa shaded
All dwellings	4 star (> 4.5 but <= 6 L/min)	3 star	4 star	4 star	-	not specified	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
All dwellings	No alternative water supply	-	-	-	-	-	-	-

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

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

	Hot water	Bathroom ventilation system		Kitchen ventilation system		Laundry ventilation system	
Dwelling no.	Hot water system	Each bathroom	Operation control	Each kitchen	Operation control	Each laundry	Operation control
All dwellings	Central hot water system (No. 3)	individual fan, ducted to façade or roof	manual switch on/off	individual fan, ducted to façade or roof	manual switch on/off	individual fan, ducted to façade or roof	manual switch on/off

	Cooling		Heating		Artificial lighting					Natural lighting		
Dwelling no.	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or diningroom	Each kitchen	All bathrooms/toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
All dwellings	1-phase airconditioning / 4 star (average zone)(zoned)	1-phase airconditioning / 4 star (average zone)(zoned)	1-phase airconditioning / 4 star (average zone)(zoned)	1-phase airconditioning / 4 star (average zone)(zoned)	0	1	yes	yes	yes	yes	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	not specified	yes	4 star	not specified	4 star	no	no

(iii) Thermal Comfort	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must attach the certificate referred to under "Assessor details" on the front page of this BASIX certificate (the "Assessor Certificate") to the development application and construction certificate application for the proposed development (or, if the applicant is applying for a complying development certificate for the proposed development, to that application). The applicant must also attach the Assessor Certificate to the application for a final occupation certificate for the proposed development.			
(b) The Assessor Certificate must have been issued by an Accredited Assessor in accordance with the Thermal Comfort Protocol.			
(c) The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX Certificate, including the details shown in the "Thermal Loads" table below.			
(d) The applicant must show on the plans accompanying the development application for the proposed development, all matters which the Thermal Comfort Protocol requires to be shown on those plans. Those plans must bear a stamp of endorsement from the Accredited Assessor, to certify that this is the case.	✓		
(e) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all thermal performance specifications set out in the Assessor Certificate, and all aspects of the proposed development which were used to calculate those specifications.		✓	
(f) The applicant must construct the development in accordance with all thermal performance specifications set out in the Assessor Certificate, and in accordance with those aspects of the development application or application for a complying development certificate which were used to calculate those specifications.		✓	✓
(g) Where there is an in-slab heating or cooling system, the applicant must: (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)
All dwellings	45	52

(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	no common facility	no common facility	no common laundry facility

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

	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
Ground floor lobby-Building U	no mechanical ventilation	-	light-emitting diode	motion sensors	no
Hallways/lobbies - Building U	no mechanical ventilation	-	light-emitting diode	motion sensors	no
Lift car (No. 2)	-	-	light-emitting diode	connected to lift call button	no

Central energy systems	Type	Specification
Lift (No. 2)	gearless traction with V V V F motor	Number of levels (including basement): 7

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

(a) 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	no common facility	no common facility	no common laundry facility

Central systems	Size	Configuration	Connection (to allow for...)
Central water tank - rainwater or stormwater (No. 1)	10000.00	To collect run-off from at least: - 4020 square metres of roof area of buildings in the development - 0.00 square metres of impervious area in the development - 0.00 square metres of garden/lawn area in the development - 0.00 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 1000 square metres of common landscaped area on the site - car washing in 4 car washing bays on the site
Fire sprinkler system (No. 1)	-	So that fire sprinkler test water is contained within the fire sprinkler system for re-use, rather than disposed.	-

Central systems	Size	Configuration	Connection (to allow for...)
Fire sprinkler system (No. 2)	-	So that fire sprinkler test water is contained within the fire sprinkler system for re-use, rather than disposed.	-
Fire sprinkler system (No. 3)	-	So that fire sprinkler test water is contained within the fire sprinkler system for re-use, rather than disposed.	-
Fire sprinkler system (No. 4)	-	So that fire sprinkler test water is contained within the fire sprinkler system for re-use, rather than disposed.	-

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) If, in carrying out the development, the applicant installs a ventilation system to service a common area specified in the table below, then that ventilation system must be of the type specified for that common area, and must meet the efficiency measure specified.		✓	✓
(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
Basement 1	ventilation exhaust only	carbon monoxide monitor + VSD fan	light-emitting diode	zoned switching with motion sensor	no
Basement 2	ventilation exhaust only	carbon monoxide monitor + VSD fan	light-emitting diode	zoned switching with motion sensor	no
Basement Retail	ventilation exhaust only	carbon monoxide monitor + VSD fan	light-emitting diode	zoned switching with motion sensor	no
Basement 3	ventilation exhaust only	carbon monoxide monitor + VSD fan	light-emitting diode	zoned switching with motion sensor	no
Main Switch Room	no mechanical ventilation	-	light-emitting diode	manual on / manual off	no
Bulk Waste Rooms	ventilation exhaust only	-	light-emitting diode	motion sensors	no
Mechanical fan room	ventilation exhaust only	thermostatically controlled	light-emitting diode	motion sensors	no
Cold Water Pump	no mechanical ventilation	-	light-emitting diode	motion sensors	no
Service room	ventilation exhaust only	thermostatically controlled	light-emitting diode	motion sensors	no
Fire Pump Rooms	ventilation exhaust only	thermostatically controlled	light-emitting diode	manual on / manual off	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: R1.0 (~38 mm); (b) Piping internal to building: R1.0 (~38 mm)
Central hot water system (No. 2)	gas-fired boiler	Piping insulation (ringmain & supply risers): (a) Piping external to building: R1.0 (~38 mm); (b) Piping internal to building: R1.0 (~38 mm)
Central hot water system (No. 3)	gas-fired boiler	Piping insulation (ringmain & supply risers): (a) Piping external to building: R1.0 (~38 mm); (b) Piping internal to building: R1.0 (~38 mm)
Alternative energy supply	Photovoltaic system	Rated electrical output (min): 10 peak kW
Other	-	-

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).

BASIX™ Certificate

Building Sustainability Index

www.planningportal.nsw.gov.au/development-and-assessment/basix

Multi Dwelling

Certificate number: 1379299M_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.planningportal.nsw.gov.au/definitions

This certificate is a revision of certificate number 1379299M lodged with the consent authority or certifier on 27 April 2023 with application PAN-322559.

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

Secretary

Date of issue: Thursday, 11 September 2025

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



When submitting this BASIX certificate with a development application or complying development certificate application, it must be accompanied by NatHERS certificate 0008489600.

Project summary		
Project name	O'Connell Street Caddens (BCDEFGHJ) (copy of)_03	
Street address	68-80 O'CONNELL ST CADDENS 2747	
Local Government Area	-	
Plan type and plan number	Deposited Plan -	
Lot no.	-	
Section no.	-	
No. of residential flat buildings	7	
No. of units in residential flat buildings	178	
No. of multi-dwelling houses	0	
No. of single dwelling houses	0	
Project score		
Water	✔ 42	Target 40
Thermal Comfort	✔ Pass	Target Pass
Energy	✔ 37	Target 35

Certificate Prepared by

Name / Company Name: SLR Consulting Pty Ltd

ABN (if applicable): 29001584612

Description of project

Project address

Project name	O'Connell Street Caddens (BCDEFGHJ) (copy of)_03
Street address	68-80 O'CONNELL ST CADDENS 2747
Local Government Area	-
Plan type and plan number	Deposited Plan -
Lot no.	-
Section no.	-

Project type

No. of residential flat buildings	7
No. of units in residential flat buildings	178
No. of multi-dwelling houses	0
No. of single dwelling houses	0

Site details

Site area (m ²)	17966.4
Roof area (m ²)	3696.9
Non-residential floor area (m ²)	0.00
Residential car spaces	254
Non-residential car spaces	0




Common area landscape

Common area lawn (m ²)	460.6
Common area garden (m ²)	1110
Area of indigenous or low water use species (m ²)	555.00

Assessor details and thermal loads

Assessor number	101556
Certificate number	0008489600
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	 37	Target 35

Description of project

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

Residential flat buildings - BuildingJ, 35 dwellings, 5 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)
J101	2	84	0	0	0
J105	2	116	0	0	0
J202	2	87	0	0	0
J206	2	83	0	0	0
J303	1	65	0	0	0
J307	1	61	0	0	0
J404	1	55	0	0	0
JG04	2	83	0	0	0
JLG01	2	95	0	0	0
J102	2	87	0	0	0
J106	2	83	0	0	0
J203	1	65	0	0	0
J207	1	61	0	0	0
J304	2	82	0	0	0
J401	1	65	0	0	0
JG01	2	84	0	0	0
JG05	2	116	0	0	0
JLG02	2	83	0	0	0
J103	1	65	0	0	0
J107	1	61	0	0	0
J204	2	82	0	0	0
J301	2	84	0	0	0
J305	2	116	0	0	0
J402	2	95	0	0	0
JG02	2	87	0	0	0
JG06	2	83	0	0	0
JLG03	2	96	0	0	0
J104	2	82	0	0	0
J201	2	84	0	0	0
J205	2	116	0	0	0
J302	2	87	0	0	0
J306	2	83	0	0	0
J403	3	115	0	0	0
JG03	1	65	0	0	0
JG07	1	61	0	0	0

Residential flat buildings - BuildingB, 31 dwellings, 6 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)
B101	2	92	0	0	0
B105	2	80	0	0	0
B203	1	58	0	0	0
B301	2	92	0.00	0.00	0.00
B102	2	78	0	0	0
B106	2	80	0	0	0
B204	3	104	0	0	0
B302	2	78	0.00	0.00	0.00
B103	1	58	0	0	0
B201	2	92	0	0	0
B205	2	80	0	0	0
B303	1	58	0.00	0.00	0.00
B104	3	104	0	0	0
B202	2	78	0	0	0
B206	2	80	0	0	0
B304	3	104	0.00	0.00	0.00

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)
B305	2	80	0.00	0.00	0.00
B403	1	57	0.00	0.00	0.00
BG03	1	58	0.00	0.00	0.00
BLG01	3	123	0.00	0.00	0.00

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)
B306	2	80	0.00	0.00	0.00
B404	1	63	0.00	0.00	0.00
BG04	1	57	0.00	0.00	0.00
BLG02	2	80	0.00	0.00	0.00

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)
B401	2	95	0.00	0.00	0.00
BG01	2	92	0.00	0.00	0.00
BG05	2	80	0.00	0.00	0.00
BLG03	1	81.20	0.00	0.00	0.00

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)
B402	2	95	0	0	0
BG02	2	78	0.00	0.00	0.00
BG06	2	80	0.00	0.00	0.00

Residential flat buildings - BuildingC, 22 dwellings, 6 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)
C101	3	116	0.00	0.00	0.00
C201	2	90	0.00	0.00	0.00
C205	2	89	0.00	0.00	0.00
C304	3	108	0.00	0.00	0.00
C403	2	81	0.00	0.00	0.00
CG03	1	69	0.00	0.00	0.00

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)
C102	3	104	0.00	0.00	0.00
C202	3	123	0.00	0.00	0.00
C301	2	92.50	0.00	0.00	0.00
C305	2	89	0.00	0.00	0.00
C404	2	89	0	0	0
CLG01	2	121	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)
C103	3	106	0.00	0.00	0.00
C203	1	61	0.00	0.00	0.00
C302	3	123	0.00	0.00	0.00
C401	1	64	0.00	0.00	0.00
CG01	2	81	0.00	0.00	0.00

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)
C104	2	89	0.00	0.00	0.00
C204	3	108	0.00	0.00	0.00
C303	1	61	0.00	0.00	0.00
C402	3	110	0.00	0.00	0.00
CG02	2	89	0.00	0.00	0.00

Residential flat buildings - BuildingE, 23 dwellings, 5 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)
E101	3	117	0	0	0
E105	2	94	0	0	0
E204	2	81	0	0	0
E303	2	109	0	0	0
E402	2	95	0	0	0
EG03	2	90	0	0	0
E102	2	89	0	0	0
E201	3	117	0	0	0
E205	2	94	0	0	0
E304	2	81	0	0	0
E403	3	116	0	0	0
EG04	2	81	0	0	0
E103	2	109	0	0	0
E202	2	89	0	0	0
E301	3	117	0	0	0
E305	2	94	0	0	0
EG01	3	117	0	0	0
EG05	1	71	0	0	0
E104	2	81	0	0	0
E203	2	109	0	0	0
E302	2	89	0	0	0
E401	3	131	0	0	0
EG02	2	89	0	0	0

Residential flat buildings - BuildingF, 28 dwellings, 5 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)
F101	2	85	0	0	0
F105	3	114	0	0	0
F203	2	76	0	0	0
F301	2	85	0	0	0
F305	3	114	0	0	0
F403	1	51	0	0	0
FG03	1	61	0	0	0
F102	2	83	0	0	0
F106	2	80	0	0	0
F204	2	75	0	0	0
F302	2	83	0	0	0
F306	2	80	0	0	0
F404	2	85	0	0	0
FG04	1	60	0	0	0
F103	2	76	0	0	0
F201	2	85	0	0	0
F205	3	114	0	0	0
F303	2	76	0	0	0
F401	2	99	0	0	0
FG01	2	85	0	0	0
FG05	2	95	0	0	0
F104	2	75	0	0	0
F202	2	83	0	0	0
F206	2	80	0	0	0
F304	2	75	0	0	0
F402	1	58	0	0	0
FG02	2	83	0	0	0
FG06	1	64	0	0	0

Residential flat buildings - BuildingG, 20 dwellings, 5 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)
G101	2	96	0.00	0.00	0.00
G201	2	96	0.00	0.00	0.00
G301	2	96	0.00	0.00	0.00
G401	1	63	0.00	0.00	0.00
GG01	1	69	0.00	0.00	0.00
G102	2	93	0.00	0.00	0.00
G202	2	93	0.00	0.00	0.00
G302	2	93	0.00	0.00	0.00
G402	2	93	0.00	0.00	0.00
GG02	1	62	0.00	0.00	0.00
G103	2	99	0.00	0.00	0.00
G203	2	99	0.00	0.00	0.00
G303	2	99	0.00	0.00	0.00
G403	2	82	0.00	0.00	0.00
GG03	2	79	0.00	0.00	0.00
G104	2	93	0.00	0.00	0.00
G204	2	93	0.00	0.00	0.00
G304	2	93	0.00	0.00	0.00
G404	1	52	0.00	0.00	0.00
GG04	1	62	0.00	0.00	0.00

Residential flat buildings - BuildingH, 19 dwellings, 5 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)
H101	3	110	0.00	0.00	0.00
H201	3	110	0.00	0.00	0.00
H301	2	110	0.00	0.00	0.00
H401	2	83	0.00	0.00	0.00
HG02	2	103	0.00	0.00	0.00
H102	3	123	0.00	0.00	0.00
H202	2	123	0.00	0.00	0.00
H302	2	123	0.00	0.00	0.00
H402	2	60	0.00	0.00	0.00
HG03	2	89	0.00	0.00	0.00
H103	2	94	0.00	0.00	0.00
H203	2	94	0.00	0.00	0.00
H303	2	94	0.00	0.00	0.00
H403	2	104	0.00	0.00	0.00
HG04	2	68	0.00	0.00	0.00
H104	2	90	0.00	0.00	0.00
H204	2	90	0.00	0.00	0.00
H304	2	90	0.00	0.00	0.00
HG01	2	110	0.00	0.00	0.00

Description of project

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

Common areas of the development (non-building specific)

Common area	Floor area (m ²)
Carpark Area 1	4242
Bulk Waste Rooms	56
Services	14

Common area	Floor area (m ²)
Carpark Area 2	5691
Fire pump room	86
Mech	67

Common area	Floor area (m ²)
Residential Collection & Holding Rooms	295
Plants	85

Common areas of unit building - BuildingJ

Common area	Floor area (m ²)
Lift car (No. 10)	0.00

Common area	Floor area (m ²)
Ground floor lobby type-Building J	62.75

Common area	Floor area (m ²)
Hallways/lobbies - Building J	200

Common areas of unit building - BuildingB

Common area	Floor area (m ²)
Lift car (No. 1)	0.00

Common area	Floor area (m ²)
Ground floor lobby type-Building B	53.8

Common area	Floor area (m ²)
Storages	2259.80

Common areas of unit building - BuildingC

Common area	Floor area (m ²)
Lift car (No. 2)	0.00

Common area	Floor area (m ²)
Ground floor lobby type-Building C	16.8

Common area	Floor area (m ²)
Hallways/lobbies - Building B	252.6

Common areas of unit building - BuildingE

Common area	Floor area (m ²)
Lift car (No. 4)	0.00

Common area	Floor area (m ²)
Ground floor lobby type-Building E	100.75

Common areas of unit building - BuildingF

Common area	Floor area (m ²)
Lift car (No. 5)	0.00

Common area	Floor area (m ²)
Ground floor lobby type-Building F	81

Common area	Floor area (m ²)
Hallways/lobbies - Building E	152.3

Common areas of unit building - BuildingG

Common area	Floor area (m ²)
Carpark Area 3	3085

Common area	Floor area (m ²)
Ground floor lobby type-Building G	77.6

Common area	Floor area (m ²)
Hallways/lobbies - Building F	152.9

Common areas of unit building - BuildingH

Common area	Floor area (m ²)
Lift car (No. 8)	0.00
Hallways/lobbies - Building G	108.36

Common area	Floor area (m ²)
Ground floor lobby type-Building H	54.3

Common area	Floor area (m ²)
Hallway/lobby - Building H	83.9

Schedule of BASIX commitments

1. Commitments for Residential flat buildings - BuildingJ

(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 Residential flat buildings - BuildingC

(a) Dwellings

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

(b) Common areas and central systems/facilities

- (i) Water
- (ii) Energy

4. Commitments for Residential flat buildings - BuildingE

(a) Dwellings

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

(b) Common areas and central systems/facilities

- (i) Water
- (ii) Energy

5. Commitments for Residential flat buildings - BuildingF

(a) Dwellings

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

(b) Common areas and central systems/facilities

- (i) Water
- (ii) Energy

6. Commitments for Residential flat buildings - BuildingG

(a) Dwellings

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

(b) Common areas and central systems/facilities

- (i) Water
- (ii) Energy

7. Commitments for Residential flat buildings - BuildingH

(a) Dwellings

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

(b) Common areas and central systems/facilities

- (i) Water
- (ii) Energy

8. Commitments for single dwelling houses

9. Commitments for multi-dwelling houses

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

(a) Common areas and central systems/facilities

- (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 J








(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.	✓	✓	✓

Dwelling no.	Fixtures					Appliances		Individual pool				Individual spa		
	All shower-heads	All toilet flushing systems	All kitchen taps	All bathroom taps	HW recirculation or diversion	All clothes washers	All dish-washers	Volume (max volume)	Pool cover	Pool location	Pool shaded	Volume (max volume)	Spa cover	Spa shaded
All dwellings	4 star (> 4.5 but <= 6 L/min)	4 star	4 star	4 star	-	not specified	4 star	-	-	-	-	-	-	-

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

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

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(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 (No. 4)	individual fan, ducted to façade or roof	manual switch on/off	individual fan, ducted to façade or roof	manual switch on/off	individual fan, ducted to façade or roof	manual switch on/off

	Cooling		Heating		Artificial lighting					Natural lighting		
Dwelling no.	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or diningroom	Each kitchen	All bathrooms/toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
All dwellings	1-phase airconditioning / 4 star (average zone)(zoned)	1-phase airconditioning / 4 star (average zone)(zoned)	1-phase airconditioning / 4 star (average zone)(zoned)	1-phase airconditioning / 4 star (average zone)(zoned)	3	1	yes	yes	yes	yes	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	not specified	yes	4 star	not specified	4 star	no	no

(iii) Thermal Comfort	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must attach the certificate referred to under "Assessor details" on the front page of this BASIX certificate (the "Assessor Certificate") to the development application and construction certificate application for the proposed development (or, if the applicant is applying for a complying development certificate for the proposed development, to that application). The applicant must also attach the Assessor Certificate to the application for a final occupation certificate for the proposed development.			
(b) The Assessor Certificate must have been issued by an Accredited Assessor in accordance with the Thermal Comfort Protocol.			
(c) The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX Certificate, including the details shown in the "Thermal Loads" table below.			
(d) The applicant must show on the plans accompanying the development application for the proposed development, all matters which the Thermal Comfort Protocol requires to be shown on those plans. Those plans must bear a stamp of endorsement from the Accredited Assessor, to certify that this is the case.	✓		
(e) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all thermal performance specifications set out in the Assessor Certificate, and all aspects of the proposed development which were used to calculate those specifications.		✓	
(f) The applicant must construct the development in accordance with all thermal performance specifications set out in the Assessor Certificate, and in accordance with those aspects of the development application or application for a complying development certificate which were used to calculate those specifications.		✓	✓
(g) Where there is an in-slab heating or cooling system, the applicant must: (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)
All dwellings	55	55

(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	no common facility	no common facility	no common laundry facility

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

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. 10)	-	-	light-emitting diode	connected to lift call button	no
Ground floor lobby type- Building J	no mechanical ventilation	-	light-emitting diode	time clock and motion sensors	no
Hallways/lobbies - Building J	no mechanical ventilation	-	light-emitting diode	time clock and motion sensors	no

Central energy systems	Type	Specification
Lift (No. 10)	gearless traction with V V V F motor	Number of levels (including basement): 8

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: <ul style="list-style-type: none"> (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.	✓	✓	✓

Dwelling no.	Fixtures					Appliances		Individual pool				Individual spa		
	All shower-heads	All toilet flushing systems	All kitchen taps	All bathroom taps	HW recirculation or diversion	All clothes washers	All dish-washers	Volume (max volume)	Pool cover	Pool location	Pool shaded	Volume (max volume)	Spa cover	Spa shaded
All dwellings	4 star (> 4.5 but <= 6 L/min)	4 star	4 star	4 star	-	not specified	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
All dwellings	No alternative water supply	-	-	-	-	-	-	-

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

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

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

	Cooling		Heating		Artificial lighting					Natural lighting		
Dwelling no.	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or diningroom	Each kitchen	All bathrooms/ toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
All dwellings	1-phase airconditioning / 4 star (average zone)(zoned)	1-phase airconditioning / 4 star (average zone)(zoned)	1-phase airconditioning / 4 star (average zone)(zoned)	1-phase airconditioning / 4 star (average zone)(zoned)	3	1	yes	yes	yes	yes	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	not specified	yes	4 star	not specified	4 star	no	no

(iii) Thermal Comfort	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must attach the certificate referred to under "Assessor details" on the front page of this BASIX certificate (the "Assessor Certificate") to the development application and construction certificate application for the proposed development (or, if the applicant is applying for a complying development certificate for the proposed development, to that application). The applicant must also attach the Assessor Certificate to the application for a final occupation certificate for the proposed development.			
(b) The Assessor Certificate must have been issued by an Accredited Assessor in accordance with the Thermal Comfort Protocol.			
(c) The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX Certificate, including the details shown in the "Thermal Loads" table below.			
(d) The applicant must show on the plans accompanying the development application for the proposed development, all matters which the Thermal Comfort Protocol requires to be shown on those plans. Those plans must bear a stamp of endorsement from the Accredited Assessor, to certify that this is the case.	✓		
(e) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all thermal performance specifications set out in the Assessor Certificate, and all aspects of the proposed development which were used to calculate those specifications.		✓	
(f) The applicant must construct the development in accordance with all thermal performance specifications set out in the Assessor Certificate, and in accordance with those aspects of the development application or application for a complying development certificate which were used to calculate those specifications.		✓	✓
(g) Where there is an in-slab heating or cooling system, the applicant must: (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/m ² /yr)	Area adjusted cooling load (in MJ/m ² /yr)
B101	26.19	58.17
B102	12.84	48.94
B103	22.75	39.35
B104	33.47	35.37
B105	45.77	48.36
B106	35.53	60.12
B201	26.97	57.99
B202	13.34	47.79
B203	23.47	38.55
B204	27.23	33.88
B205	37.19	46.28
B206	36.35	58.18
B301	35.22	46.12
B302	22.54	51.43
B303	32.02	43.6
B304	36.97	37.26
B305	54.8	50.9
B306	50.55	52.21
B401	46.95	57.94
B402	53.36	53.43
B403	55.9	28.65
B404	46.18	55.46
BG01	35.12	60.65
BG02	45.96	40.96
BG03	19.9	38.96
BG04	40.3	32.2
BG05	32.1	58.7
BG06	30.2	49.6
BLG01	22.02	61.46
BLG02	34.62	62.17
All other dwellings	26.7	62.9

(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	no common facility	no common facility	no common laundry facility

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

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
Ground floor lobby type- Building B	no mechanical ventilation	-	light-emitting diode	time clock and motion sensors	no
Hallways/lobbies - Building B	no mechanical ventilation	-	light-emitting diode	time clock and motion sensors	no

Central energy systems	Type	Specification
Lift (No. 1)	gearless traction with V V V F motor	Number of levels (including basement): 8

3. Commitments for Residential flat buildings - BuildingC

(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: <ul style="list-style-type: none"> (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.	✓	✓	✓

Dwelling no.	Fixtures					Appliances		Individual pool				Individual spa		
	All shower-heads	All toilet flushing systems	All kitchen taps	All bathroom taps	HW recirculation or diversion	All clothes washers	All dish-washers	Volume (max volume)	Pool cover	Pool location	Pool shaded	Volume (max volume)	Spa cover	Spa shaded
All dwellings	4 star (> 4.5 but <= 6 L/min)	4 star	4 star	4 star	-	not specified	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
All dwellings	No alternative water supply	-	-	-	-	-	-	-

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

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

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

	Cooling		Heating		Artificial lighting					Natural lighting		
Dwelling no.	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or diningroom	Each kitchen	All bathrooms/toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
All dwellings	1-phase airconditioning / 4 star (average zone)(zoned)	1-phase airconditioning / 4 star (average zone)(zoned)	1-phase airconditioning / 4 star (average zone)(zoned)	1-phase airconditioning / 4 star (average zone)(zoned)	3	1	yes	yes	yes	yes	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	not specified	yes	4 star	not specified	4 star	no	no

(iii) Thermal Comfort	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must attach the certificate referred to under "Assessor details" on the front page of this BASIX certificate (the "Assessor Certificate") to the development application and construction certificate application for the proposed development (or, if the applicant is applying for a complying development certificate for the proposed development, to that application). The applicant must also attach the Assessor Certificate to the application for a final occupation certificate for the proposed development.			
(b) The Assessor Certificate must have been issued by an Accredited Assessor in accordance with the Thermal Comfort Protocol.			
(c) The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX Certificate, including the details shown in the "Thermal Loads" table below.			
(d) The applicant must show on the plans accompanying the development application for the proposed development, all matters which the Thermal Comfort Protocol requires to be shown on those plans. Those plans must bear a stamp of endorsement from the Accredited Assessor, to certify that this is the case.	✓		
(e) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all thermal performance specifications set out in the Assessor Certificate, and all aspects of the proposed development which were used to calculate those specifications.		✓	
(f) The applicant must construct the development in accordance with all thermal performance specifications set out in the Assessor Certificate, and in accordance with those aspects of the development application or application for a complying development certificate which were used to calculate those specifications.		✓	✓
(g) Where there is an in-slab heating or cooling system, the applicant must: (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/m ² /yr)	Area adjusted cooling load (in MJ/m ² /yr)
C101	16.4	40.1
C103	22	63.4
C201	20	59.5
C202	19.2	46.6
C203	15.3	59.1
C204	17.3	63.7
C205	24.9	60.5
C302	27.5	46.8
C303	26	56.3
C304	15.9	49.3
C305	20.5	53.2
C401	54.1	56.6
C402	49.2	60.9
C403	60.5	46.4
C404	43.1	61.9
CG01	13.4	59.8
CG02	62.4	56.1
CLG01	21.7	58.7
C102, C301	39.4	60.3
All other dwellings	24.6	61.4

(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	no common facility	no common facility	no common laundry facility

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

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. 2)	-	-	light-emitting diode	connected to lift call button	no
Ground floor lobby type- Building C	no mechanical ventilation	-	light-emitting diode	time clock and motion sensors	no
Hallways/lobbies - Building C	no mechanical ventilation	-	light-emitting diode	time clock and motion sensors	no

Central energy systems	Type	Specification
Lift (No. 2)	gearless traction with V V V F motor	Number of levels (including basement): 7

4. Commitments for Residential flat buildings - BuildingE

(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.	✓	✓	✓

Dwelling no.	Fixtures					Appliances		Individual pool				Individual spa		
	All shower-heads	All toilet flushing systems	All kitchen taps	All bathroom taps	HW recirculation or diversion	All clothes washers	All dish-washers	Volume (max volume)	Pool cover	Pool location	Pool shaded	Volume (max volume)	Spa cover	Spa shaded
All dwellings	4 star (> 4.5 but <= 6 L/min)	4 star	4 star	4 star	-	not specified	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
All dwellings	No alternative water supply	-	-	-	-	-	-	-

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

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

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

	Cooling		Heating		Artificial lighting					Natural lighting		
Dwelling no.	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or diningroom	Each kitchen	All bathrooms/ toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
All dwellings	1-phase airconditioning / 4 star (average zone)(zoned)	1-phase airconditioning / 4 star (average zone)(zoned)	1-phase airconditioning / 4 star (average zone)(zoned)	1-phase airconditioning / 4 star (average zone)(zoned)	3	1	yes	yes	yes	yes	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	not specified	yes	4 star	not specified	4 star	no	no

(iii) Thermal Comfort	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must attach the certificate referred to under "Assessor details" on the front page of this BASIX certificate (the "Assessor Certificate") to the development application and construction certificate application for the proposed development (or, if the applicant is applying for a complying development certificate for the proposed development, to that application). The applicant must also attach the Assessor Certificate to the application for a final occupation certificate for the proposed development.			
(b) The Assessor Certificate must have been issued by an Accredited Assessor in accordance with the Thermal Comfort Protocol.			
(c) The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX Certificate, including the details shown in the "Thermal Loads" table below.			
(d) The applicant must show on the plans accompanying the development application for the proposed development, all matters which the Thermal Comfort Protocol requires to be shown on those plans. Those plans must bear a stamp of endorsement from the Accredited Assessor, to certify that this is the case.	✓		
(e) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all thermal performance specifications set out in the Assessor Certificate, and all aspects of the proposed development which were used to calculate those specifications.		✓	
(f) The applicant must construct the development in accordance with all thermal performance specifications set out in the Assessor Certificate, and in accordance with those aspects of the development application or application for a complying development certificate which were used to calculate those specifications.		✓	✓
(g) Where there is an in-slab heating or cooling system, the applicant must: (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/m ² /yr)	Area adjusted cooling load (in MJ/m ² /yr)
E101	16.5	61.2
E102	16.7	53.4
E103	22.3	59.5
E104	27.6	63.5
E105	50.2	58.7
E201	19	61.6
E202	13.7	54.2
E203	22.1	57.7
E204	20.6	59.5
E205	41	60.8
E301	30.6	63.1
E302	16.5	45.3
E303	26.1	54.2
E304	25.2	63.7
E305	53.7	59.2
E401	24.7	63.6
E402	38.2	57.1
E403	62	43.5
EG01	25.8	61.7
EG02	21.4	58.1
EG03	25.7	57.3
EG04	40.8	61.7
All other dwellings	56.2	32.2

(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	no common facility	no common facility	no common laundry facility

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

	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. 4)	-	-	light-emitting diode	connected to lift call button	no
Ground floor lobby type- Building E	no mechanical ventilation	-	light-emitting diode	time clock and motion sensors	no
Hallways/lobbies - Building E	no mechanical ventilation	-	light-emitting diode	time clock and motion sensors	no

Central energy systems	Type	Specification
Lift (No. 4)	gearless traction with V V V F motor	Number of levels (including basement): 6

5. Commitments for Residential flat buildings - BuildingF

(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: <ul style="list-style-type: none"> (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.	✓	✓	✓

Dwelling no.	Fixtures					Appliances		Individual pool				Individual spa		
	All shower-heads	All toilet flushing systems	All kitchen taps	All bathroom taps	HW recirculation or diversion	All clothes washers	All dish-washers	Volume (max volume)	Pool cover	Pool location	Pool shaded	Volume (max volume)	Spa cover	Spa shaded
All dwellings	4 star (> 4.5 but <= 6 L/min)	4 star	4 star	4 star	-	not specified	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
All dwellings	No alternative water supply	-	-	-	-	-	-	-

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

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

	Hot water	Bathroom ventilation system		Kitchen ventilation system		Laundry ventilation system	
Dwelling no.	Hot water system	Each bathroom	Operation control	Each kitchen	Operation control	Each laundry	Operation control
All dwellings	Central hot water system (No. 3)	individual fan, ducted to façade or roof	manual switch on/off	individual fan, ducted to façade or roof	manual switch on/off	individual fan, ducted to façade or roof	manual switch on/off

	Cooling		Heating		Artificial lighting					Natural lighting		
Dwelling no.	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or diningroom	Each kitchen	All bathrooms/toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
All dwellings	1-phase airconditioning / 4 star (average zone)(zoned)	1-phase airconditioning / 4 star (average zone)(zoned)	1-phase airconditioning / 4 star (average zone)(zoned)	1-phase airconditioning / 4 star (average zone)(zoned)	3	1	yes	yes	yes	yes	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	not specified	yes	4 star	not specified	4 star	no	no

(iii) Thermal Comfort	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must attach the certificate referred to under "Assessor details" on the front page of this BASIX certificate (the "Assessor Certificate") to the development application and construction certificate application for the proposed development (or, if the applicant is applying for a complying development certificate for the proposed development, to that application). The applicant must also attach the Assessor Certificate to the application for a final occupation certificate for the proposed development.			
(b) The Assessor Certificate must have been issued by an Accredited Assessor in accordance with the Thermal Comfort Protocol.			
(c) The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX Certificate, including the details shown in the "Thermal Loads" table below.			
(d) The applicant must show on the plans accompanying the development application for the proposed development, all matters which the Thermal Comfort Protocol requires to be shown on those plans. Those plans must bear a stamp of endorsement from the Accredited Assessor, to certify that this is the case.	✓		
(e) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all thermal performance specifications set out in the Assessor Certificate, and all aspects of the proposed development which were used to calculate those specifications.		✓	
(f) The applicant must construct the development in accordance with all thermal performance specifications set out in the Assessor Certificate, and in accordance with those aspects of the development application or application for a complying development certificate which were used to calculate those specifications.		✓	✓
(g) Where there is an in-slab heating or cooling system, the applicant must: (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/m ² /yr)	Area adjusted cooling load (in MJ/m ² /yr)
F101	21.3	55.6
F102	23.3	58.9
F103	35.4	59.8
F104	32.1	60.5
F105	31.4	63
F106	13.5	60.9
F201	24.4	57.4
F202	18.7	60
F203	36.1	58.9
F204	32.6	60
F205	34	55.5
F206	13.8	60.6
F301	28.8	61.6
F302	28.9	58.5
F303	39.6	56.4
F304	42.6	60.5
F305	35.2	53.5
F306	15.5	62.3
F401	28.5	59.4
F402	50.7	57.8
F403	33.4	61.4
F404	60	27.5
FG01	27.5	59
FG02	17.5	49.2
FG03	25.2	55.6
FG04	60.2	61.8
FG05	42.7	46.3
All other dwellings	24	29.7

(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	no common facility	no common facility	no common laundry facility

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

	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. 5)	-	-	light-emitting diode	connected to lift call button	no
Ground floor lobby type- Building F	no mechanical ventilation	-	light-emitting diode	time clock and motion sensors	no
Hallways/lobbies - Building F	no mechanical ventilation	-	light-emitting diode	time clock and motion sensors	no

Central energy systems	Type	Specification
Lift (No. 5)	gearless traction with V V V F motor	Number of levels (including basement): 7

6. Commitments for Residential flat buildings - BuildingG

(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: <ul style="list-style-type: none"> (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.	✓	✓	✓

Dwelling no.	Fixtures					Appliances		Individual pool				Individual spa		
	All shower-heads	All toilet flushing systems	All kitchen taps	All bathroom taps	HW recirculation or diversion	All clothes washers	All dish-washers	Volume (max volume)	Pool cover	Pool location	Pool shaded	Volume (max volume)	Spa cover	Spa shaded
All dwellings	4 star (> 4.5 but <= 6 L/min)	4 star	4 star	4 star	-	not specified	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
All dwellings	No alternative water supply	-	-	-	-	-	-	-

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

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

	Hot water	Bathroom ventilation system		Kitchen ventilation system		Laundry ventilation system	
Dwelling no.	Hot water system	Each bathroom	Operation control	Each kitchen	Operation control	Each laundry	Operation control
All dwellings	Central hot water system (No. 3)	individual fan, ducted to façade or roof	manual switch on/off	individual fan, ducted to façade or roof	manual switch on/off	individual fan, ducted to façade or roof	manual switch on/off

	Cooling		Heating		Artificial lighting					Natural lighting		
Dwelling no.	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or diningroom	Each kitchen	All bathrooms/toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
All dwellings	1-phase airconditioning / 4 star (average zone)(zoned)	1-phase airconditioning / 4 star (average zone)(zoned)	1-phase airconditioning / 4 star (average zone)(zoned)	1-phase airconditioning / 4 star (average zone)(zoned)	3	1	yes	yes	yes	yes	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	not specified	yes	4 star	not specified	4 star	no	no

(iii) Thermal Comfort	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must attach the certificate referred to under "Assessor details" on the front page of this BASIX certificate (the "Assessor Certificate") to the development application and construction certificate application for the proposed development (or, if the applicant is applying for a complying development certificate for the proposed development, to that application). The applicant must also attach the Assessor Certificate to the application for a final occupation certificate for the proposed development.			
(b) The Assessor Certificate must have been issued by an Accredited Assessor in accordance with the Thermal Comfort Protocol.			
(c) The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX Certificate, including the details shown in the "Thermal Loads" table below.			
(d) The applicant must show on the plans accompanying the development application for the proposed development, all matters which the Thermal Comfort Protocol requires to be shown on those plans. Those plans must bear a stamp of endorsement from the Accredited Assessor, to certify that this is the case.	✓		
(e) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all thermal performance specifications set out in the Assessor Certificate, and all aspects of the proposed development which were used to calculate those specifications.		✓	
(f) The applicant must construct the development in accordance with all thermal performance specifications set out in the Assessor Certificate, and in accordance with those aspects of the development application or application for a complying development certificate which were used to calculate those specifications.		✓	✓
(g) Where there is an in-slab heating or cooling system, the applicant must: (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/m ² /yr)	Area adjusted cooling load (in MJ/m ² /yr)
G101	17.2	49.1
G102	27.1	62
G103	31.7	49.4
G104	20.2	61.3
G201	4.9	54.4
G202	18.9	60.8
G203	32.7	49.2
G204	31.9	61.2
G301	10.4	58.1
G302	19.7	57
G303	34.4	47.5
G304	34.8	63.2
G401	34.6	61.1
G402	38.8	59.1
G403	56.6	59.5
G404	52.1	56.2
GG01	37.6	61.1
GG02	34.4	45.8
GG03	46.7	56.1
All other dwellings	55.2	61.8

(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	no common facility	no common facility	no common laundry facility

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

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
Carpark Area 3	-	-	light-emitting diode	connected to lift call button	no
Ground floor lobby type- Building G	no mechanical ventilation	-	light-emitting diode	time clock and motion sensors	no
Hallways/lobbies - Building G	no mechanical ventilation	-	light-emitting diode	time clock and motion sensors	no

Central energy systems	Type	Specification
Lift (No. 6)	gearless traction with V V V F motor	Number of levels (including basement): 7

7. Commitments for Residential flat buildings - BuildingH

(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: <ul style="list-style-type: none"> (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.	✓	✓	✓

Dwelling no.	Fixtures					Appliances		Individual pool				Individual spa		
	All shower-heads	All toilet flushing systems	All kitchen taps	All bathroom taps	HW recirculation or diversion	All clothes washers	All dish-washers	Volume (max volume)	Pool cover	Pool location	Pool shaded	Volume (max volume)	Spa cover	Spa shaded
All dwellings	4 star (> 4.5 but <= 6 L/min)	4 star	4 star	4 star	-	not specified	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
All dwellings	No alternative water supply	-	-	-	-	-	-	-

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

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

	Hot water	Bathroom ventilation system		Kitchen ventilation system		Laundry ventilation system	
Dwelling no.	Hot water system	Each bathroom	Operation control	Each kitchen	Operation control	Each laundry	Operation control
All dwellings	Central hot water system (No. 4)	individual fan, ducted to façade or roof	manual switch on/off	individual fan, ducted to façade or roof	manual switch on/off	individual fan, ducted to façade or roof	manual switch on/off

	Cooling		Heating		Artificial lighting					Natural lighting		
Dwelling no.	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or diningroom	Each kitchen	All bathrooms/toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
All dwellings	1-phase airconditioning / 4 star (average zone)(zoned)	1-phase airconditioning / 4 star (average zone)(zoned)	1-phase airconditioning / 4 star (average zone)(zoned)	1-phase airconditioning / 4 star (average zone)(zoned)	3	1	yes	yes	yes	yes	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	not specified	yes	4 star	not specified	4 star	no	no

(iii) Thermal Comfort	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must attach the certificate referred to under "Assessor details" on the front page of this BASIX certificate (the "Assessor Certificate") to the development application and construction certificate application for the proposed development (or, if the applicant is applying for a complying development certificate for the proposed development, to that application). The applicant must also attach the Assessor Certificate to the application for a final occupation certificate for the proposed development.			
(b) The Assessor Certificate must have been issued by an Accredited Assessor in accordance with the Thermal Comfort Protocol.			
(c) The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX Certificate, including the details shown in the "Thermal Loads" table below.			
(d) The applicant must show on the plans accompanying the development application for the proposed development, all matters which the Thermal Comfort Protocol requires to be shown on those plans. Those plans must bear a stamp of endorsement from the Accredited Assessor, to certify that this is the case.	✓		
(e) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all thermal performance specifications set out in the Assessor Certificate, and all aspects of the proposed development which were used to calculate those specifications.		✓	
(f) The applicant must construct the development in accordance with all thermal performance specifications set out in the Assessor Certificate, and in accordance with those aspects of the development application or application for a complying development certificate which were used to calculate those specifications.		✓	✓
(g) Where there is an in-slab heating or cooling system, the applicant must: (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/m ² /yr)	Area adjusted cooling load (in MJ/m ² /yr)
H101	12.03	57.15
H102	18.3	57.8
H103	37.16	44.72
H104	34.81	57.74
H201	12.33	55.72
H202	19.1	56.1
H203	37.7	44.09
H204	35.4	55.99
H301	12.71	54.65
H302	15.4	58.7
H303	42.31	55.84
H304	35.69	61.72
H401	25.58	36.93
H402	46.58	62.46
H403	59.92	44.03
HG01	27.74	50.55
HG02	37.24	50.47
HG03	49.23	44.39
All other dwellings	63.0	49.5

(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	no common facility	no common facility	no common laundry facility

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

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. 8)	-	-	light-emitting diode	connected to lift call button	no
Ground floor lobby type- Building H	no mechanical ventilation	-	light-emitting diode	time clock and motion sensors	no
Hallway/lobby - Building H	no mechanical ventilation	-	light-emitting diode	time clock and motion sensors	no

Central energy systems	Type	Specification
Lift (No. 8)	gearless traction with V V V F motor	Number of levels (including basement): 7

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

(a) 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	no common facility	no common facility	no common laundry facility

Central systems	Size	Configuration	Connection (to allow for...)
Fire sprinkler system (No. 1)	-	So that fire sprinkler test water is contained within the fire sprinkler system for re-use, rather than disposed.	-
Fire sprinkler system (No. 2)	-	So that fire sprinkler test water is contained within the fire sprinkler system for re-use, rather than disposed.	-

Central systems	Size	Configuration	Connection (to allow for...)
Central water tank - rainwater or stormwater (No. 1)	10000.00	To collect run-off from at least: - 3600 square metres of roof area of buildings in the development - 0.00 square metres of impervious area in the development - 0.00 square metres of garden/lawn area in the development - 0.00 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 1000 square metres of common landscaped area on the site - car washing in 6 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
Carpark Area 1	ventilation exhaust only	carbon monoxide monitor + VSD fan	light-emitting diode	time clock and motion sensors	no
Carpark Area 2	ventilation exhaust only	carbon monoxide monitor + VSD fan	light-emitting diode	time clock and motion sensors	no
Residential Collection & Holding Rooms	ventilation exhaust only	-	light-emitting diode	motion sensors	no
Bulk Waste Rooms	no mechanical ventilation	-	light-emitting diode	manual on / manual off	no
Fire pump room	no mechanical ventilation	-	light-emitting diode	manual on / manual off	no
Plants	ventilation exhaust only	thermostatically controlled	light-emitting diode	manual on / manual off	no
Services	no mechanical ventilation	-	light-emitting diode	manual on / manual off	no
Mech	no mechanical ventilation	-	light-emitting diode	manual on / manual off	no

	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
Storages	no mechanical ventilation	-	light-emitting diode	time clock and 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: R1.0 (~38 mm); (b) Piping internal to building: R1.0 (~38 mm)
Central hot water system (No. 2)	gas-fired boiler	Piping insulation (ringmain & supply risers): (a) Piping external to building: R1.0 (~38 mm); (b) Piping internal to building: R1.0 (~38 mm)
Central hot water system (No. 3)	gas-fired boiler	Piping insulation (ringmain & supply risers): (a) Piping external to building: R1.0 (~38 mm); (b) Piping internal to building: R1.0 (~38 mm)
Central hot water system (No. 4)	gas-fired boiler	Piping insulation (ringmain & supply risers): (a) Piping external to building: R1.0 (~38 mm); (b) Piping internal to building: R1.0 (~38 mm)
Alternative energy supply	Photovoltaic system	Rated electrical output (min): 10 peak kW
Other	-	-

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).

Basix Building Fabric Requirements 80 O'Connell Street, Caddens (BCDEFGHJ)

Element	Material Type	Detail
External walls	Brick Veneer + R2.0 Insulation	Refer to drawings
	Light Weight Cladding + R2.0 Insulation	
Internal walls	Plasterboard on studs + No insulation	
	Hebel PowerPanel + PB	Intra-tenancy walls
Windows	<u>Standard</u>	
	Single Glazed	NFRC Glazing System values:
	ALM-001-01 A	⇒ U ≤ 6.7 and SHGC = 0.57 (± 5%)
	ALM-002-01 A	⇒ U ≤ 6.7 and SHGC = 0.70 (± 5%)
	<u>Treatment 1:</u>	
	Low – E Glass	NFRC Glazing System values:
	ALM-001-03 A	⇒ U ≤ 5.4 and SHGC = 0.49 (± 5%)
	ALM-002-03 A	⇒ U ≤ 5.4 and SHGC = 0.58 (± 5%)
	<i>Building B:</i>	
	<i>BG05, B305, B403</i>	
	<i>Building C:</i>	
	<i>C103, C204, C301, C403</i>	
	<i>Building E:</i>	
	<i>E104, E403, EG03, EG04</i>	
<i>Building F:</i>		
<i>F104, F202, F204, F302, F304</i>		
<i>Building G:</i>		
<i>G202, G204, G302, GG01</i>		
<i>Building H:</i>		
<i>H304, H402</i>		
<i>Building J:</i>		
<i>J103, J203, J306, JG03, JG04</i>		
<u>Treatment 2:</u>		
DG low-E – High Solar Gain		
ALM-003-03 A		
ALM-004-03 A		
<i>Building B:</i>		
<i>BLG03, BG04, B404</i>		
<i>Building C:</i>		
<i>C203, C303, C304, C305, CG01, CLG01</i>	NFRC Glazing System values:	
<i>Building E:</i>		
<i>E204, E304</i>	⇒ U ≤ 4.30 and SHGC ≤ 0.47 (± 5%) ⇒ U ≤ 4.30 and SHGC ≤ 0.53 (± 5%)	

Element	Material Type	Detail
	<p>Building F: F106, F206, F306, F401, FG02, FG03</p> <p>Building G: G104</p> <p>Building H: HG04, H302, H403</p> <p>Building J: J105, J106, J107, J205, J206, J207, J305, J307, J401, J403, JG05, JG06, JG07</p> <p><u>Treatment 3:</u> DG low-E – Low Solar Gain ALM-003-04 A ALM-004-04 A</p> <p>Building C: C104, C205, C401, CG03</p> <p>Building E: E103, E105, E203, E205, E305</p> <p>Building F: F102, F301, F402, FG04</p> <p>Building G: G101, G201, G301, G304, G401, G404, GG04</p> <p><u>Treatment 4:</u> Thermally Broken DG low-E ATB-005-04 A ATB-006-04 A</p> <p>Building D: CG02,</p> <p>Building E: E303</p> <p>Building F: F101, F201, F404, FG01</p>	<p>NFRC Glazing System values:</p> <p>⇒ U ≤ 4.90 and SHGC ≤ 0.33 (± 5%) ⇒ U ≤ 4.90 and SHGC ≤ 0.33 (± 5%)</p> <p>NFRC Glazing System values:</p> <p>⇒ U ≤ 3.00 and SHGC ≤ 0.27 (± 5%) ⇒ U ≤ 3.00 and SHGC ≤ 0.26 (± 5%)</p>
Downlights	As specified	Sealed
Floor	Concrete slab	Tile (Bathroom & wet areas and Kitchen) Carpet (Living Areas and bedrooms)

Element	Material Type	Detail
	Concrete Slab + R1.5 Floor Insulation	Above carpark, unconditioned areas and outside air areas
Ceiling	Concrete above plasterboard + R2 Insulation	(Balconies above and Roof top above)
Ceiling Penetrations	Downlights, Exhaust Fans	All ceiling penetrations to be sealed
Roof	Waterproofing Membrane	Medium colour

BASIX Commitments Summary – Refer to the BASIX Certificate for more details(BCDEFGHJ)

Water		
Element	Details	
Rainwater Tank	10000 L	
Showerheads	4 star (> 6 but ≤ 7.5 L/min) (WELS scheme)	
Toilets	4 star (WELS scheme)	
kitchen taps and bathroom taps	4 star (WELS scheme)	
Clothes Washer	Not Specified	
Dishwasher	Not Specified	
Energy		
Element	Details	
Central Hot Water System	Gas-fired boiler	
Heating/Cooling to Dwelling	1 phase AC (4 star)	
Cooktop/oven	Gas cooktop and electric oven	
Refrigerator	Not Specified	
Dishwasher	4.0 star (Energy Rating)	
Clothes Washer	4.0 star (Energy Rating)	
Clothes Dryer	4.0 star (Energy Rating)	
Common Areas Ventilation and Lighting		
	Ventilation Type	Lighting Type
Carpark	Exhaust Only	LED
Ground floor Lobby	Natural/No Mechanical	LED
Lobby/Hallways	Natural/No Mechanical	LED

Basix Building Fabric Requirements 80 O'Connell Street, Caddens (PQRSTU)

Element	Material Type	Detail
External walls	Brick Veneer + R2.0 Insulation Light Weight Cladding + R2.0 Insulation	Refer to drawings
Internal walls	Plasterboard on studs + No insulation	
	Hebel PowerPanel + PB	Intra-tenancy walls
Windows	<p><u>Standard</u></p> <p>Single Glazed</p> <p>ALM-001-01 A</p> <p>ALM-002-01 A</p> <p><u>Treatment 1:</u></p> <p>Low – E Glass</p> <p>ALM-001-03 A</p> <p>ALM-002-03 A</p> <p><i>Building P:</i></p> <p><i>P102, P205, P206, P305, P306, P405, TH13, TH14</i></p> <p><i>Building R:</i></p> <p><i>R2.102, R2.202</i></p> <p><i>Building S:</i></p> <p><i>S202, S302, S405, S601</i></p> <p><i>Building T:</i></p> <p><i>T208, T403, T408, T503, T603</i></p> <p><i>Building U:</i></p> <p><i>U204, U206, U304, U306, U404</i></p> <p><u>Treatment 2:</u></p> <p>DG low-E – High Solar Gain</p> <p>ALM-003-03 A</p> <p>ALM-004-03 A</p> <p><i>Building R:</i></p> <p><i>R2.101, R2.201</i></p> <p><i>Building S:</i></p> <p><i>S102, S402, S501, S503, S603</i></p> <p><i>Building T:</i></p> <p><i>T502, T504, T602, T604</i></p> <p><i>Building U:</i></p>	<p>NFRC Glazing System values:</p> <p>⇒ U ≤ 6.7 and SHGC = 0.57 (± 5%)</p> <p>⇒ U ≤ 6.7 and SHGC = 0.70 (± 5%)</p> <p>NFRC Glazing System values:</p> <p>⇒ U ≤ 5.4 and SHGC = 0.49 (± 5%)</p> <p>⇒ U ≤ 5.4 and SHGC = 0.58 (± 5%)</p> <p>NFRC Glazing System values:</p> <p>⇒ U ≤ 4.30 and SHGC ≤ 0.47 (± 5%)</p> <p>⇒ U ≤ 4.30 and SHGC ≤ 0.53 (± 5%)</p>

Element	Material Type	Detail
	U105, U205, U305, U405	

Treatment 3:

DG low-E – Low Solar Gain

ALM-003-04 A

ALM-004-04 A

Building R:

R2.101, R2.201

Building S:

S102, S402, S501, S503, S603

Building T:

T502, T504, T602, T604

NFRC Glazing System values:

⇒ $U \leq 4.90$ and $SHGC \leq 0.33$ ($\pm 5\%$)

⇒ $U \leq 4.90$ and $SHGC \leq 0.33$ ($\pm 5\%$)

Downlights	As specified	Sealed
Floor	Concrete slab	Tile (Bathroom & wet areas and Kitchen) Carpet (Living Areas and bedrooms)
	Concrete Slab + R1.5 Floor Insulation	Above carpark, unconditioned areas and outside air areas
<u>Treatment 1:</u>		
<i>R1.5 to floor insulation</i>		
<i>BG04</i>		
Ceiling	Concrete above plasterboard + R2 Insulation	(Balconies above and Roof top above)
Ceiling Penetrations	Downlights, Exhaust Fans	All ceiling penetrations to be sealed
Roof	Waterproofing Membrane	Medium colour

BASIX Commitments Summary – Refer to the BASIX Certificate for more details (PQRSTU)

Water		
Element	Details	
Rainwater Tank	10000 L	
Showerheads	4 star (> 4.5 but ≤ 6.0 L/min) (WELS scheme)	
Toilets	3 star (WELS scheme)	
kitchen taps and bathroom taps	4 star (WELS scheme)	
Clothes Washer	Not Specified	
Dishwasher	Not Specified	
Energy		
Element	Details	
PV Panels	30 peak kW	
Central Hot Water System	Gas-fired boiler	
Heating/Cooling to Dwelling	1 phase AC (4 star)	
Cooktop/oven	Gas cooktop and electric oven	
Refrigerator	Not Specified	
Dishwasher	4.0 star (Energy Rating)	
Clothes Washer	4.0 star (Energy Rating)	
Clothes Dryer	4.0 star (Energy Rating)	
Common Areas Ventilation and Lighting		
	Ventilation Type	Lighting Type
Carpark	Exhaust Only	LED
Ground floor Lobby	Natural/No Mechanical	LED
Lobby/Hallways	Natural/No Mechanical	LED

Basix Building Fabric Requirements 80 O'Connell Street, Caddens (KLMN)

Element	Material Type	Detail
External walls	Brick Veneer + R2.0 Insulation Light Weight Cladding + R2.0 Insulation	Refer to drawings
Internal walls	Plasterboard on studs + No insulation	
	Hebel PowerPanel + PB	Intra-tenancy walls
Windows	<p><u>Standard</u></p> <p>Single Glazed</p> <p>ALM-001-01 A</p> <p>ALM-002-01 A</p> <p><u>Treatment 1:</u></p> <p>Low – E Glass</p> <p>ALM-001-03 A</p> <p>ALM-002-03 A</p> <p><i>Building K:</i></p> <p><i>K301, K401, TH01, TH03</i></p> <p><i>Building L:</i></p> <p><i>L401, LG05, TH04, TH06</i></p> <p><i>Building M:</i></p> <p><i>TH07, TH08</i></p> <p><i>Building N:</i></p> <p><i>N102, N103, N105, N202, N205, N405, NG02, NG03, TH10, TH12</i></p> <p><u>Treatment 2:</u></p> <p>DG low-E – High Solar Gain</p> <p>ALM-003-03 A</p> <p>ALM-004-03 A</p> <p><i>Building K:</i></p> <p><i>K404</i></p> <p><i>Building L:</i></p> <p><i>LLG03</i></p> <p><i>Building M:</i></p> <p><i>M404, M406, M501</i></p> <p><i>Building N:</i></p> <p><i>N204, N302, N402, N503</i></p> <p><u>Treatment 3:</u></p> <p>DG low-E – Low Solar Gain</p> <p>ALM-003-04 A</p> <p>ALM-004-04 A</p>	<p>NFRC Glazing System values:</p> <p>⇒ U ≤ 6.7 and SHGC = 0.57 (± 5%)</p> <p>⇒ U ≤ 6.7 and SHGC = 0.70 (± 5%)</p> <p>NFRC Glazing System values:</p> <p>⇒ U ≤ 5.4 and SHGC = 0.49 (± 5%)</p> <p>⇒ U ≤ 5.4 and SHGC = 0.58 (± 5%)</p> <p>NFRC Glazing System values:</p> <p>⇒ U ≤ 4.30 and SHGC ≤ 0.47 (± 5%)</p> <p>⇒ U ≤ 4.30 and SHGC ≤ 0.53 (± 5%)</p> <p>NFRC Glazing System values:</p> <p>⇒ U ≤ 4.90 and SHGC ≤ 0.33 (± 5%)</p> <p>⇒ U ≤ 4.90 and SHGC ≤ 0.33 (± 5%)</p>

Element	Material Type	Detail
	Building K: K402 Building L: L201,L209,L301,L305,L403,L405 Building M: M202,M301,M302,M402 Building N: NG01	
Downlights	As specified	Sealed
Floor	Concrete slab	Tile (Bathroom & wet areas and Kitchen) Carpet (Living Areas and bedrooms)
	Concrete Slab + R1.5 Floor Insulation	Above carpark, unconditioned areas and outside air areas
Ceiling	Concrete above plasterboard + R2 Insulation	(Balconies above and Roof top above)
Ceiling Penetrations	Downlights, Exhaust Fans	All ceiling penetrations to be sealed
Roof	Waterproofing Membrane	Medium colour

BASIX Commitments Summary – Refer to the BASIX Certificate for more details(AKLMN)

Water		
Element	Details	
Rainwater Tank	10000 L	
Showerheads	4 star (> 4.5 but ≤ 6.0 L/min) (WELS scheme)	
Toilets	3 star (WELS scheme)	
kitchen taps and bathroom taps	4 star (WELS scheme)	
Clothes Washer	Not Specified	
Dishwasher	Not Specified	
Energy		
Element	Details	
Central Hot Water System	Gas-fired boiler	
Heating/Cooling to Dwelling	1 phase AC (4 star)	
Cooktop/oven	Gas cooktop and electric oven	
Refrigerator	Not Specified	
Dishwasher	4.0 star (Energy Rating)	
Clothes Washer	4.0 star (Energy Rating)	
Clothes Dryer	4.0 star (Energy Rating)	
Common Areas Ventilation and Lighting		
	Ventilation Type	Lighting Type
Carpark	Exhaust Only	LED
Ground floor Lobby	Natural/No Mechanical	LED
Lobby/Hallways	Natural/No Mechanical	LED

Nationwide House Energy Rating Scheme — Class 2 summary

NatHERS Certificate No. 0008489600

Generated on 11 Sep 2025 using BERS Pro v4.4.1.5 (3.21)

Property

Address 80 OConnell Street ,
Kingswood , NSW , 2747

Lot/DP 2/DP1268507

NatHERS climate zone 28

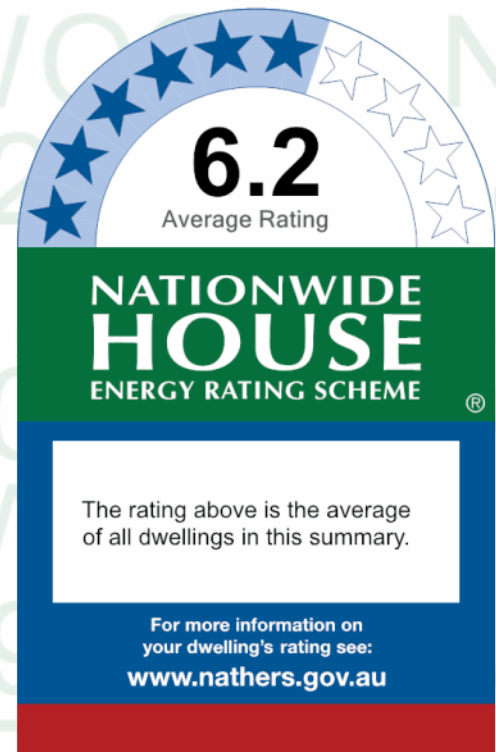
Accredited assessor



Xiaoran Sun
SLR Consulting
ssun@slrconsulting.com
+61 2 9427 8100

Accreditation No. 101556

Assessor Accrediting Organisation ABSA



The rating above is the average of all dwellings in this summary.

For more information on your dwelling's rating see:
www.nathers.gov.au



Verification

To verify this certificate, scan the QR code or visit hstar.com.au/QR/Generate?p=knkepWtnr. When using either link, ensure you are visiting hstar.com.au

Summary of all dwellings

Certificate number and link	Unit Number	Heating load (MJ/m ² /p.a.)	Cooling load (MJ/m ² /p.a.)	Total load (MJ/m ² /p.a.)	Star rating
0012189171-01	B101	26.2	58.2	84.4	6.1
0012189692	B102	12.8	48.9	61.8	7.2
0012189726	B103	22.7	39.3	62.1	7.2
0012189759	B104	33.5	35.4	68.8	6.9
0012189783	B105	45.8	48.4	94.1	5.7

National Construction Code (NCC) requirements

Continued Over

The NCC's requirements for NatHERS-rated houses are detailed in 3.12.0(a)(i) and 3.12.5 of the NCC Volume Two. For apartments the requirements are detailed in J0.2 and J5 to J8 of the NCC Volume One.

In NCC 2019, these requirements include minimum star ratings and separate heating and cooling load limits that need to be met by buildings and apartments through the NatHERS assessment. Requirements additional to the NatHERS assessment that must also be satisfied include, but are not limited to: insulation installation methods, thermal breaks, building sealing, water heating and pumping, and artificial lighting requirements. The NCC and NatHERS Heating and Cooling Load Limits (Australian Building Codes Board Standard) are available at www.abcb.gov.au.

State and territory variations and additions to the NCC may also apply.

Summary of all dwellings (continued)

Certificate number and link	Unit Number	Heating load (MJ/m ² /p.a.)	Cooling load (MJ/m ² /p.a.)	Total load (MJ/m ² /p.a.)	Star rating
0012189817	B106	35.5	60.1	95.6	5.6
0012189858	B201	27	58	85	6.1
0012189874	B202	13.3	47.8	61.1	7.2
0012189908	B203	23.5	38.6	62	7.2
0012189932	B204	27.2	33.9	61.1	7.2
0012189965	B205	37.2	46.3	83.5	6.2
0012190005	B206	36.3	58.2	94.5	5.7
0012190021	B301	35.2	46.1	81.3	6.3
0012190054	B302	22.5	51.4	74	6.6
0012190088	B303	32	43.6	75.6	6.6
0012190104	B304	37	37.3	74.2	6.6
0012190138	B305	54.8	50.9	105.7	5.2
0012190153	B306	50.6	52.2	102.8	5.4
0012190187	B401	46.9	57.9	104.9	5.3
0012190211	B402	53.4	53.4	106.8	5.2
0012190237	B403	55.9	28.7	84.6	6.1
0012190278	B404	46.2	55.5	101.6	5.4
0012190294	BG01	35.1	60.7	95.8	5.6
0012190328	BG02	46	41	86.9	6
0012190351	BG03	19.9	39	58.9	7.3
0012190385	BG04	40.3	32.2	72.5	6.7
0012190419	BG05	32.1	58.7	90.9	5.8
0012190443	BG06	30.2	49.6	79.8	6.4
0012190476	BLG01	22	61.5	83.5	6.2
0012190500	BLG02	34.6	62.2	96.8	5.6
0012190534	BLG03	26.7	62.9	89.6	5.9
0012189205-01	C101	16.4	40.1	56.5	7.4
0012190567	C102	39.4	60.3	99.7	5.4
0012190591	C103	22	63.4	85.4	6.1



<u>0012190609</u>	C104	24.6	61.4	86	6
<u>0012190633</u>	C201	20	59.5	79.5	6.4
<u>0012190666</u>	C202	19.2	46.6	65.7	7
<u>0012190690</u>	C203	15.3	59.1	74.5	6.6
<u>0012190724</u>	C204	17.3	63.7	81	6.3
<u>0012190757</u>	C205	24.9	60.5	85.5	6.1
<u>0012190781</u>	C301	30	57.6	87.6	5.9
<u>0012190815</u>	C302	27.5	46.8	74.3	6.6
<u>0012190849</u>	C303	26	56.3	82.3	6.2
<u>0012190872</u>	C304	15.9	49.3	65.2	7
<u>0012190898</u>	C305	20.5	53.2	73.6	6.7
<u>0012190922</u>	C401	54.1	56.7	110.8	5
<u>0012190955</u>	C402	49.2	60.9	110.1	5.1
<u>0012190989</u>	C403	60.5	46.4	107	5.2
<u>0012191011</u>	C404	43.1	61.9	105	5.3
<u>0012191052</u>	CG01	13.4	59.8	73.3	6.7
<u>0012191078</u>	CG02	62.4	56.1	118.6	4.8
<u>0012191094</u>	CG03	24.6	61.4	86	6
<u>0012191128</u>	CLG01	21.7	58.7	80.4	6.3
<u>0012189239-01</u>	E101	16.5	61.2	77.7	6.4
<u>0012191151</u>	E102	16.7	53.4	70	6.8
<u>0012191185</u>	E103	22.3	59.5	81.8	6.3
<u>0012191219</u>	E104	27.6	63.5	91.1	5.8
<u>0012191243</u>	E105	50.2	58.7	108.9	5.1
<u>0012191276</u>	E201	19	61.6	80.6	6.3
<u>0012191300</u>	E202	13.7	54.2	68	6.9
<u>0012191334</u>	E203	22.1	57.7	79.8	6.4
<u>0012191367</u>	E204	20.6	59.5	80.2	6.3
<u>0012191391</u>	E205	41	60.8	101.8	5.4
<u>0012191425</u>	E301	30.6	63.1	93.7	5.7
<u>0012191458</u>	E302	16.5	45.3	61.8	7.2
<u>0012191482</u>	E303	26.1	54.2	80.3	6.3



<u>0012191516</u>	E304	25.2	63.7	88.9	5.9
<u>0012191557</u>	E305	53.7	59.2	112.9	4.9
<u>0012191581</u>	E401	24.7	63.6	88.3	5.9
<u>0012191607</u>	E402	38.2	57.1	95.3	5.7
<u>0012191631</u>	E403	62	43.5	105.6	5.2
<u>0012191664</u>	EG01	25.8	61.7	87.6	5.9
<u>0012191698</u>	EG02	21.4	58.1	79.5	6.4
<u>0012191722</u>	EG03	25.7	57.3	83	6.2
<u>0012191755</u>	EG04	40.8	61.7	102.4	5.4
<u>0012191789</u>	EG05	56.2	32.2	88.5	5.9
<u>0012189262-01</u>	F101	21.3	55.6	76.9	6.5
<u>0012191813</u>	F102	23.3	58.9	82.2	6.2
<u>0012191847</u>	F103	35.4	59.8	95.3	5.7
<u>0012191862</u>	F104	32.1	60.5	92.6	5.8
<u>0012191896</u>	F105	31.4	63	94.4	5.7
<u>0012191920</u>	F106	13.5	60.9	74.4	6.6
<u>0012191953</u>	F201	24.4	57.4	81.8	6.3
<u>0012191987</u>	F202	18.7	60	78.8	6.4
<u>0012192019</u>	F203	36.1	58.9	95	5.7
<u>0012192043</u>	F204	32.6	60	92.6	5.8
<u>0012192092</u>	F205	34	55.5	89.5	5.9
<u>0012192126</u>	F206	13.8	60.6	74.4	6.6
<u>0012192142</u>	F301	22.3	61.6	84	6.2
<u>0012192175</u>	F302	28.9	58.5	87.4	5.9
<u>0012192217</u>	F303	39.6	56.4	96	5.6
<u>0012192233</u>	F304	42.6	60.5	103.1	5.3
<u>0012192266</u>	F305	35.2	53.5	88.7	5.9
<u>0012192290</u>	F306	15.5	62.3	77.8	6.4
<u>0012192324</u>	F401	28.5	59.4	88	5.9
<u>0012192357</u>	F402	50.7	57.8	108.5	5.1
<u>0012192381</u>	F403	33.4	61.4	94.8	5.7
<u>0012192415-01</u>	F404	60	27.5	87.4	5.9



<u>0012192449</u>	FG01	27.5	59	86.5	6
<u>0012192472</u>	FG02	17.5	49.2	66.7	6.9
<u>0012192506</u>	FG03	25.2	55.6	80.8	6.3
<u>0012192530</u>	FG04	60.2	61.8	122	4.7
<u>0012192563</u>	FG05	43	46.4	89.3	5.9
<u>0012192597</u>	FG06	24	29.7	53.7	7.6
<u>0012189296-01</u>	G101	4.7	55.4	60.1	7.3
<u>0012192621</u>	G102	27.1	62	89.1	5.9
<u>0012192654</u>	G103	31.7	49.4	81.1	6.3
<u>0012192696</u>	G104	20.2	61.3	81.5	6.3
<u>0012192738</u>	G201	4.9	54.4	59.3	7.3
<u>0012192753</u>	G202	18.9	60.8	79.7	6.4
<u>0012192787</u>	G203	32.7	49.2	81.9	6.3
<u>0012192811</u>	G204	31.9	61.2	93.2	5.7
<u>0012192837</u>	G301	10.4	58.1	68.5	6.9
<u>0012192878</u>	G302	19.7	57	76.7	6.5
<u>0012192894</u>	G303	34.3	47.6	81.9	6.3
<u>0012192936</u>	G304	34.8	63.2	98	5.5
<u>0012192951</u>	G401	34.6	61.1	95.7	5.6
<u>0012192977</u>	G402	38.8	59.1	98	5.5
<u>0012192993</u>	G403	56.6	59.5	116	4.9
<u>0012193017</u>	G404	52.1	56.2	108.4	5.1
<u>0012193033</u>	GG01	37.6	61.1	98.7	5.5
<u>0012189403</u>	GG02	34.4	45.8	80.2	6.3
<u>0012189429</u>	GG03	46.7	56.1	102.8	5.4
<u>0012189445</u>	GG04	55.2	61.8	117	4.8
<u>0012189320-01</u>	H101	12	57.2	69.2	6.9
<u>0012189460</u>	H102	18.3	57.8	76.1	6.5
<u>0012189486</u>	H103	37.2	44.7	81.9	6.3
<u>0012189502</u>	H104	34.8	57.7	92.5	5.8
<u>0012189536</u>	H201	12.3	55.7	68	6.9
<u>0012189551</u>	H202	19.1	56.1	75.1	6.6



<u>0012189577</u>	H203	37.7	44.1	81.8	6.3
<u>0012189593</u>	H204	35.4	56	91.4	5.8
<u>0012189619</u>	H301	12.7	54.6	67.4	6.9
<u>0012189635</u>	H302	15.4	58.7	74.1	6.6
<u>0012189650</u>	H303	42.3	55.8	98.1	5.5
<u>0012189676</u>	H304	35.7	61.7	97.4	5.6
<u>0012189700</u>	H401	25.6	36.9	62.5	7.2
<u>0012189734</u>	H402	46.6	62.5	109	5.1
<u>0012189767</u>	H403	59.9	44	104	5.3
<u>0012189791</u>	HG01	27.7	50.5	78.3	6.4
<u>0012189833</u>	HG02	37.2	50.5	87.7	5.9
<u>0012189866</u>	HG03	49.2	44.4	93.6	5.7
<u>0012189890</u>	HG04	63	49.5	112.6	4.9
<u>0012189197-01</u>	J101	23.3	49	72.3	6.7
<u>0012189924</u>	J102	21.1	47.7	68.8	6.9
<u>0012189957</u>	J103	20.9	58.1	79	6.4
<u>0012189981</u>	J104	46.8	40.1	86.9	6
<u>0012190039</u>	J105	14.4	56.2	70.6	6.8
<u>0012190062</u>	J106	13.5	56.5	70.1	6.8
<u>0012190112</u>	J107	13.9	58	72	6.7
<u>0012190161</u>	J201	24	47.7	71.7	6.7
<u>0012190203</u>	J202	21.6	47.8	69.4	6.8
<u>0012190245</u>	J203	21.6	57.4	79	6.4
<u>0012190260</u>	J204	47.7	39.7	87.4	5.9
<u>0012190302</u>	J205	14.9	54.7	69.5	6.8
<u>0012190336</u>	J206	13	62.3	75.3	6.6
<u>0012190377</u>	J207	15.2	49.5	64.7	7.1
<u>0012190401</u>	J301	30.1	42.7	72.7	6.7
<u>0012190435</u>	J302	30.1	41.7	71.8	6.7
<u>0012190468</u>	J303	38.5	61.4	99.9	5.4
<u>0012190518</u>	J304	53.6	35.7	89.3	5.9
<u>0012190542</u>	J305	23.3	56.9	80.2	6.3



<u>0012190575</u>	J306	35.2	60.1	95.2	5.7
<u>0012190625</u>	J307	21.3	58.6	79.9	6.4
<u>0012190658</u>	J401	22.2	62.1	84.4	6.1
<u>0012190682</u>	J402	33.3	60.2	93.5	5.7
<u>0012190716</u>	J403	49.7	57.6	107.3	5.2
<u>0012190740</u>	J404	63.9	49.3	113.2	4.9
<u>0012190773</u>	JG01	29.8	48.7	78.5	6.4
<u>0012190823</u>	JG02	33.5	44.8	78.3	6.4
<u>0012190864</u>	JG03	34.7	55.2	89.9	5.9
<u>0012190906</u>	JG04	59.9	30.7	90.6	5.8
<u>0012190948</u>	JG05	13.8	58.3	72.1	6.7
<u>0012190971</u>	JG06	13.1	58.9	71.9	6.7
<u>0012191003</u>	JG07	13.4	60.7	74.1	6.6
<u>0012191037</u>	JLG01	33.1	58.2	91.3	5.8
<u>0012191060</u>	JLG02	33.7	56.1	89.8	5.9
<u>0012191110</u>	JLG03	48	44.1	92.1	5.8
<u>0012189213-01</u>	K101	16.5	58.7	75.1	6.6
<u>0012191144</u>	K102	18.3	36.9	55.2	7.4
<u>0012191177</u>	K103	27.1	50.8	77.9	6.4
<u>0012191201</u>	K104	40.7	62.6	103.2	5.3
<u>0012191235</u>	K201	16.9	58	74.9	6.6
<u>0012191268</u>	K202	18.7	36.5	55.2	7.4
<u>0012191284</u>	K203	38.1	53.1	91.2	5.8
<u>0012191318</u>	K204	29	56.2	85.2	6.1
<u>0012191342</u>	K301	22.3	57.4	79.7	6.4
<u>0012191375</u>	K302	17.2	34.5	51.7	7.6
<u>0012191409</u>	K303	30.2	55.4	85.6	6.1
<u>0012191433</u>	K304	36.4	63	99.4	5.4
<u>0012191466</u>	K401	18.6	56.9	75.5	6.6
<u>0012191490</u>	K402	29.8	53.5	83.4	6.2
<u>0012191524</u>	K403	45.8	32.2	78	6.4
<u>0012191540</u>	K404	16.5	62.9	79.4	6.4



<u>0012191573</u>	KG01	22.4	49.6	72	6.7
<u>0012191615</u>	KG02	17.1	36.6	53.7	7.6
<u>0012191649</u>	KG03	40.9	49.2	90.1	5.9
<u>0012191680-01</u>	KG04	49.4	62.6	112.1	4.9
<u>0012189247-01</u>	L101	9.7	46.9	56.6	7.4
<u>0012191714</u>	L102	15.5	45.8	61.4	7.2
<u>0012191748</u>	L103	20.4	49.9	70.2	6.8
<u>0012191763</u>	L104	18.5	41.2	59.7	7.3
<u>0012191797</u>	L105	22.9	61.4	84.3	6.1
<u>0012191821</u>	L201	10	46.2	56.2	7.4
<u>0012191854</u>	L202	12.5	42.2	54.7	7.5
<u>0012191888</u>	L203	21.1	49.1	70.2	6.8
<u>0012191912</u>	L204	19	40.1	59.1	7.3
<u>0012191946</u>	L205	23.3	59.5	82.7	6.2
<u>0012191979</u>	L301	40.9	63.1	104	5.3
<u>0012192001</u>	L302	25.9	46.6	72.5	6.7
<u>0012192035</u>	L303	23	45	68	6.9
<u>0012192068</u>	L304	21	36.7	57.7	7.4
<u>0012192084</u>	L305	26	48.5	74.5	6.6
<u>0012192118</u>	L401	12.6	56.9	69.5	6.8
<u>0012192159</u>	L402	37	58	95.1	5.7
<u>0012192183</u>	L403	38.7	42.7	81.4	6.3
<u>0012192209</u>	L404	28.5	34.2	62.7	7.2
<u>0012192241</u>	L405	37.3	45.7	83	6.2
<u>0012192274</u>	LG01	7	21.6	28.7	8.7
<u>0012192308</u>	LG02	14.4	45	59.4	7.3
<u>0012192332</u>	LG03	23	56.6	79.5	6.4
<u>0012192365</u>	LG04	30.1	44	74.1	6.6
<u>0012192399</u>	LG05	20.6	62.7	83.3	6.2
<u>0012192423</u>	LG06	25.1	59.8	84.8	6.1
<u>0012192456</u>	LLG01	34.6	54	88.6	5.9
<u>0012192480</u>	LLG02	19.2	62	81.2	6.3



<u>0012192514</u>	LLG03	29	57.6	86.6	6
<u>0012189270-01</u>	M101	12.8	32.1	45	7.9
<u>0012192548</u>	M102	22.3	55.4	77.7	6.4
<u>0012192571</u>	M103	20.6	49.2	69.9	6.8
<u>0012192605</u>	M104	28.2	56.8	84.9	6.1
<u>0012192639</u>	M105	31.2	62.1	93.3	5.7
<u>0012192662</u>	M106	23.3	60.4	83.8	6.2
<u>0012192688</u>	M201	58	59.2	117.2	4.8
<u>0012192712</u>	M202	18	52.5	70.5	6.8
<u>0012192746</u>	M203	19.6	48.6	68.3	6.9
<u>0012192779</u>	M204	20.4	55.3	75.7	6.6
<u>0012192803</u>	M205	24.7	37.2	62	7.2
<u>0012192845</u>	M206	25	57.6	82.6	6.2
<u>0012192860</u>	M301	56.4	46.9	103.2	5.3
<u>0012192902</u>	M302	20.2	48.5	68.7	6.9
<u>0012192928</u>	M303	24.1	45.2	69.3	6.8
<u>0012192969</u>	M304	22	48.9	70.9	6.8
<u>0012192985</u>	M305	27.7	38.5	66.2	6.9
<u>0012193009</u>	M306	27.8	49.8	77.6	6.4
<u>0012193025</u>	M401	40.4	58.2	98.6	5.5
<u>0012193041</u>	M402	29.8	49.2	79	6.4
<u>0012193058</u>	M403	26.5	54.8	81.4	6.3
<u>0012193066</u>	M404	10.9	59.2	70	6.8
<u>0012193074</u>	M405	47.8	43.3	91.1	5.8
<u>0012193082</u>	M406	29.3	59.2	88.5	5.9
<u>0012193090</u>	M501	24.3	51.1	75.4	6.6
<u>0012193108</u>	M502	34.5	40.4	74.8	6.6
<u>0012193116</u>	M503	58.3	40.5	98.9	5.5
<u>0012193124</u>	MG01	14.9	33.9	48.9	7.8
<u>0012193132</u>	MG02	46.6	55.8	102.4	5.4
<u>0012193140</u>	MG03	36.4	50.6	86.9	6
<u>0012193157</u>	MG04	27	37.6	64.6	7.1



<u>0012193165</u>	MG05	22.6	54.2	76.8	6.5
<u>0012193173</u>	MLG01	43.7	57.5	101.2	5.4
<u>0012189379</u>	MLG02	28.7	51.8	80.5	6.3
<u>0012189387</u>	MLG03	40.4	36.2	76.6	6.5
<u>0012189304-01</u>	N101	10.3	41.6	51.9	7.6
<u>0012189395</u>	N102	16.4	62.1	78.5	6.4
<u>0012189411</u>	N103	29.2	60.3	89.5	5.9
<u>0012189437</u>	N104	36.3	42.3	78.6	6.4
<u>0012189452</u>	N105	20.7	58.4	79.1	6.4
<u>0012189478</u>	N201	11	39.9	50.9	7.7
<u>0012189494</u>	N202	16.1	61.8	77.8	6.4
<u>0012189510</u>	N203	28.6	50.7	79.4	6.4
<u>0012189528</u>	N204	25.4	63.1	88.5	5.9
<u>0012189544</u>	N205	21.5	57.7	79.3	6.4
<u>0012189569</u>	N301	19.5	47.2	66.7	6.9
<u>0012189585</u>	N302	16.1	57.3	73.4	6.7
<u>0012189601</u>	N303	37	58.4	95.4	5.6
<u>0012189627</u>	N304	31.6	35.5	67.1	6.9
<u>0012189643</u>	N305	31.5	60.9	92.4	5.8
<u>0012189668</u>	N401	19.9	37.4	57.3	7.4
<u>0012189684</u>	N402	18.2	56.8	75	6.6
<u>0012189718</u>	N403	38.8	56.2	95	5.7
<u>0012189742</u>	N404	35.6	53.2	88.8	5.9
<u>0012189775</u>	N405	16.9	59.2	76.1	6.5
<u>0012189809</u>	N501	42.2	52.1	94.3	5.7
<u>0012189825</u>	N502	52.4	39.1	91.6	5.8
<u>0012189841</u>	N503	53.4	36.1	89.5	5.9
<u>0012189882</u>	NG01	26	60	86	6.1
<u>0012189916</u>	NG02	17.7	61.3	78.9	6.4
<u>0012189940</u>	NG03	30.9	60.3	91.1	5.8
<u>0012189973</u>	NG04	35.7	42.8	78.5	6.4
<u>0012189999</u>	NG05	28.9	63.5	92.4	5.8



<u>0012190013</u>	NLG01	18	56.6	74.7	6.6
<u>0012190047</u>	NLG02	38.5	62.3	100.7	5.4
<u>0012190070</u>	NLG03	51.5	52	103.5	5.3
<u>0012189338-01</u>	P101	34.9	51.7	86.6	6
<u>0012190096</u>	P102	23	65.7	88.7	5.9
<u>0012190120</u>	P103	33.1	55.6	88.7	5.9
<u>0012190146</u>	P104	34.8	45.1	79.9	6.4
<u>0012190179</u>	P105	41.1	63.6	104.7	5.3
<u>0012190195</u>	P106	33.1	61.2	94.3	5.7
<u>0012190229</u>	P201	26.4	51.6	78	6.4
<u>0012190252</u>	P202	12	51.5	63.4	7.1
<u>0012190286</u>	P203	23.6	56.6	80.1	6.3
<u>0012190310-02</u>	P204	24.1	46.2	70.3	6.8
<u>0012190344</u>	P205	23.9	56.9	80.8	6.3
<u>0012190369</u>	P206	20.2	57.3	77.5	6.4
<u>0012190393</u>	P301	26.2	50	76.2	6.5
<u>0012190427</u>	P302	12.1	50.9	63	7.1
<u>0012190450</u>	P303	24.1	55.8	79.9	6.4
<u>0012194940</u>	P304	24.6	45.9	70.5	6.8
<u>0012190484</u>	P305	21.7	57.2	78.8	6.4
<u>0012190492</u>	P306	20.4	56.1	76.5	6.5
<u>0012190526</u>	P401	26.6	48.4	75	6.6
<u>0012190559</u>	P402	12.6	50.5	63.1	7.1
<u>0012190583</u>	P403	24.8	54.9	79.8	6.4
<u>0012190617</u>	P404	25.4	45.2	70.6	6.8
<u>0012190641</u>	P405	22.3	55.4	77.8	6.4
<u>0012190674</u>	P406	26.5	63.6	90.1	5.9
<u>0012190708</u>	P501	38.9	39.7	78.6	6.4
<u>0012190732</u>	P502	22.4	43.2	65.7	7
<u>0012190765</u>	P503	40.6	47.8	88.4	5.9
<u>0012190799</u>	P504	42.3	40.8	83.2	6.2
<u>0012190807</u>	P505	30.7	56.5	87.2	5.9



<u>0012190831</u>	P506	40.2	53	93.2	5.7
<u>0012189189-01</u>	R1.101	41.7	48.8	90.5	5.9
<u>0012190856</u>	R1.102	31.1	36.1	67.2	6.9
<u>0012190880</u>	R1.103	51.5	36.5	88	5.9
<u>0012190914</u>	R1.104	46.1	43.1	89.2	5.9
<u>0012190930</u>	R1.105	46.1	53.9	100	5.4
<u>0012190963</u>	R1.201	27.7	59.5	87.2	5.9
<u>0012190997</u>	R1.202	18.7	50	68.8	6.9
<u>0012191029</u>	R1.203	34.8	44.6	79.4	6.4
<u>0012191045</u>	R1.204	32.5	49.2	81.6	6.3
<u>0012191086</u>	R1.205	30.8	58.3	89.1	5.9
<u>0012191102</u>	R1.301	28.2	59.1	87.3	5.9
<u>0012191136</u>	R1.302	19.1	49.4	68.5	6.9
<u>0012191169</u>	R1.303	24.3	38.4	62.7	7.1
<u>0012191193</u>	R1.304	25.3	45.9	71.1	6.8
<u>0012191227</u>	R1.305	31.4	56.9	88.3	5.9
<u>0012191250</u>	R1.401	38.4	56.8	95.3	5.7
<u>0012191292</u>	R1.402	18.2	43.8	62	7.2
<u>0012191326</u>	R1.403	39.3	38.1	77.4	6.4
<u>0012191359</u>	R1.404	37.1	44.3	81.5	6.3
<u>0012191383</u>	R1.405	28.5	49.6	78.1	6.4
<u>0012189221-01</u>	R2.101	13.8	57.5	71.3	6.8
<u>0012191417</u>	R2.102	14	58.5	72.5	6.7
<u>0012191441</u>	R2.103	62.2	33.5	95.7	5.6
<u>0012191474</u>	R2.104	51.4	49.7	101.1	5.4
<u>0012191508</u>	R2.201	21.7	57.3	79	6.4
<u>0012191532</u>	R2.202	28	56.9	84.9	6.1
<u>0012191565</u>	R2.203	45.6	39.3	85	6.1
<u>0012191599</u>	R2.204	47.7	50.1	97.8	5.5
<u>0012191623</u>	R2.301	33.1	55.5	88.6	5.9
<u>0012191656</u>	R2.302	40.7	58.2	98.8	5.5
<u>0012191672</u>	R2.303	46.3	39.6	85.9	6.1



<u>0012191706</u>	R2.304	48.5	48.8	97.2	5.6
<u>0012191730</u>	R2.401	42.3	53.8	96.1	5.6
<u>0012191771</u>	R2.402	39.6	54.6	94.2	5.7
<u>0012191805</u>	R2.403	60.9	38.8	99.8	5.4
<u>0012191839</u>	R2.404	59.9	46.7	106.6	5.2
<u>0012189254-01</u>	S101	30.1	43.5	73.6	6.7
<u>0012191870</u>	S102	51.5	42.8	94.4	5.7
<u>0012191904</u>	S103	19.8	39.7	59.5	7.3
<u>0012191938</u>	S104	53.4	38.5	91.9	5.8
<u>0012191961</u>	S105	58.5	43.3	101.8	5.4
<u>0012191995</u>	S106	33.1	46.3	79.3	6.4
<u>0012192027</u>	S107	36.5	40	76.5	6.5
<u>0012192050</u>	S201	28.3	50.4	78.6	6.4
<u>0012192076</u>	S202	54.5	55.2	109.7	5.1
<u>0012192100</u>	S203	15.2	43.7	58.9	7.3
<u>0012192134</u>	S204	35.7	46.6	82.3	6.2
<u>0012192167</u>	S205	51.6	44.5	96	5.6
<u>0012192191</u>	S206	33.3	52.1	85.3	6.1
<u>0012192225</u>	S207	36.5	44.1	80.6	6.3
<u>0012192258</u>	S301	31.9	45.2	77.1	6.4
<u>0012192282</u>	S302	58.5	52.2	110.7	5.1
<u>0012192316</u>	S303	17.6	39.6	57.2	7.4
<u>0012192340</u>	S304	39.1	42.3	81.5	6.3
<u>0012192373</u>	S305	55.2	39.8	95	5.7
<u>0012192407</u>	S306	36.3	47	83.2	6.2
<u>0012192431</u>	S307	39.7	40.7	80.4	6.3
<u>0012192464</u>	S401	40.8	46.5	87.3	5.9
<u>0012192498</u>	S402	49.4	43.5	92.9	5.8
<u>0012192522</u>	S403	30.2	38.3	68.5	6.9
<u>0012192555</u>	S404	52.3	41	93.3	5.7
<u>0012192589</u>	S405	57.4	33.9	91.2	5.8
<u>0012192613</u>	S406	43.7	47.8	91.5	5.8



<u>0012192647</u>	S407	31.7	54.6	86.2	6
<u>0012192670</u>	S501	21.5	53.9	75.4	6.6
<u>0012192704</u>	S502	42.5	51.9	94.3	5.7
<u>0012192720</u>	S503	44.4	58.6	103	5.3
<u>0012192761</u>	S601	40.5	63.5	104	5.3
<u>0012192795</u>	S602	50.6	50	100.5	5.4
<u>0012192829</u>	S603	55.8	54.7	110.5	5.1
<u>0012189288-01</u>	T101	19.1	33.1	52.1	7.6
<u>0012192852</u>	T102	44.5	45.5	90	5.9
<u>0012192886</u>	T103	47.7	24.4	72.1	6.7
<u>0012192910</u>	T104	35.2	38.1	73.3	6.7
<u>0012192944</u>	T105	48	34	82	6.3
<u>0012193181</u>	T106	43.7	47.5	91.2	5.8
<u>0012193231</u>	T107	47.1	48.9	96	5.6
<u>0012193256</u>	T108	56.5	60.6	117.1	4.8
<u>0012193280</u>	T109	26.3	48.8	75.1	6.6
<u>0012193314</u>	T110	28.5	41.8	70.3	6.8
<u>0012193330</u>	T201	17.5	53.2	70.8	6.8
<u>0012193363</u>	T202	43.4	60.5	103.9	5.3
<u>0012193405</u>	T203	47.2	32	79.1	6.4
<u>0012193421</u>	T204	18.1	51.1	69.2	6.9
<u>0012193454</u>	T205	35.5	39	74.5	6.6
<u>0012193496</u>	T206	43.7	49.9	93.6	5.7
<u>0012193520</u>	T207	47.3	49.9	97.2	5.6
<u>0012193553</u>	T208	44.4	60.3	104.6	5.3
<u>0012193587</u>	T209	25.3	58.4	83.8	6.2
<u>0012193611</u>	T210	26.8	48.8	75.6	6.6
<u>0012193645</u>	T301	20.3	45.5	65.8	7
<u>0012193660</u>	T302	47.4	54.1	101.5	5.4
<u>0012193694</u>	T303	50.3	28.9	79.3	6.4
<u>0012193728</u>	T304	21.1	46.6	67.7	6.9
<u>0012193751</u>	T305	38.6	34.6	73.1	6.7



<u>0012193769</u>	T306	47	44.5	91.4	5.8
<u>0012193793</u>	T307	51.3	45.6	96.9	5.6
<u>0012193827</u>	T308	60	58.3	118.3	4.8
<u>0012193850</u>	T309	29	51	79.9	6.4
<u>0012193876</u>	T310	30.3	42.4	72.8	6.7
<u>0012193900</u>	T401	28.3	44.4	72.7	6.7
<u>0012193934</u>	T402	59.2	52	111.2	5
<u>0012193967</u>	T403	59.1	25.8	85	6.1
<u>0012193199</u>	T404	38.4	55.1	93.5	5.7
<u>0012193223</u>	T405	46	38.3	84.3	6.1
<u>0012193249</u>	T406	53.3	51.5	104.9	5.3
<u>0012193272</u>	T407	55.7	57.5	113.2	4.9
<u>0012193306</u>	T408	54.6	56.8	111.4	5
<u>0012193348</u>	T409	36.9	61	98	5.5
<u>0012193371</u>	T410	39.7	42.2	81.8	6.3
<u>0012193397</u>	T501	43.3	42.5	85.8	6.1
<u>0012193439</u>	T502	27	63	89.9	5.9
<u>0012193462</u>	T503	50.6	44.2	94.8	5.7
<u>0012193488</u>	T504	36.8	61.8	98.6	5.5
<u>0012193512</u>	T601	50.5	40.9	91.4	5.8
<u>0012193546</u>	T602	39.3	61	100.3	5.4
<u>0012193579</u>	T603	62	41.9	103.9	5.3
<u>0012193603</u>	T604	48.5	56.7	105.2	5.3
<u>0012189312-01</u>	TH01	48.6	59.2	107.8	5.2
<u>0012193744</u>	TH02	37.8	57.9	95.8	5.6
<u>0012193785</u>	TH03	56.2	57.2	113.4	4.9
<u>0012193819</u>	TH04	49.2	57.4	106.6	5.2
<u>0012193843</u>	TH05	37.8	57.9	95.8	5.6
<u>0012193884</u>	TH06	56.1	56.8	112.9	4.9
<u>0012193918</u>	TH07	49.2	57.4	106.6	5.2
<u>0012193942</u>	TH08	37.8	57.9	95.8	5.6
<u>0012193975</u>	TH09	56.2	57.2	113.4	4.9



<u>0012194932</u>	TH10	49.2	57.4	106.6	5.2
<u>0012193983</u>	TH11	37.8	57.9	95.8	5.6
<u>0012194981</u>	TH12	56.2	57.2	113.4	4.9
<u>0012193215-01</u>	TH13	44	59.5	103.5	5.3
<u>0012193207-02</u>	TH14	49.3	54.4	103.8	5.3
<u>0012193637</u>	TH.15	41.6	54.7	96.4	5.6
<u>0012193678</u>	TH.16	45.9	60.4	106.3	5.2
<u>0012193702</u>	TH.17	43.3	58.9	102.2	5.4
<u>0012189346-01</u>	U101	26.8	39.3	66.1	6.9
<u>0012193264</u>	U102	35.4	39.6	75	6.6
<u>0012193298</u>	U103	41.8	31.2	73	6.7
<u>0012193322</u>	U104	62.2	51	113.2	4.9
<u>0012193355</u>	U105	42.5	60	102.5	5.4
<u>0012193389</u>	U106	46	57.1	103.1	5.3
<u>0012193413</u>	U201	19.4	42.2	61.6	7.2
<u>0012193447</u>	U202	27.3	41.9	69.2	6.9
<u>0012193470</u>	U203	36.9	32.6	69.6	6.8
<u>0012193504</u>	U204	34.6	55.3	89.9	5.9
<u>0012193538</u>	U205	28.3	61.5	89.8	5.9
<u>0012193561</u>	U206	24.9	52.5	77.4	6.4
<u>0012193595</u>	U301	20.7	39.4	60.1	7.3
<u>0012193629</u>	U302	27.8	41.4	69.1	6.9
<u>0012193652</u>	U303	36.8	31.5	68.3	6.9
<u>0012193686</u>	U304	35.7	53.3	89	5.9
<u>0012193710</u>	U305	28.5	62.2	90.7	5.8
<u>0012193736</u>	U306	25.4	51.5	76.9	6.5
<u>0012193777</u>	U401	25	36.6	61.6	7.2
<u>0012193801</u>	U402	33.4	39.5	72.8	6.7
<u>0012193835</u>	U403	50.1	30.8	81	6.3
<u>0012193868</u>	U404	48.5	51.6	100.1	5.4
<u>0012193892</u>	U405	38.3	57.2	95.5	5.6
<u>0012193926</u>	U406	41.3	53.5	94.7	5.7



Average	32.76	51.29	84.05	6.17
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Explanatory notes

About this ratings

This summary rating is the average rating of all NCC Class 2 dwellings in a development. The individual dwellings'™ ratings are a comprehensive, dynamic computer modelling evaluation of a home, using the floorplans, elevations and specifications to estimate the energy load. It addresses the building layout, orientation and fabric (i.e. walls, windows, floors, roofs and ceilings), but does not cover the water or energy use of appliances, or energy production of solar panels. For more details about an individual dwelling'™s assessment, refer to the individual dwelling'™s NatHERS Certificate (accessible via link).

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Any questions or concerns about this report should be directed to the assessor in the first instance. If the assessor is unable to address these questions or concerns, the AAO specified on the front of this certificate should be contacted.

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