BASIX Certificate

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

Multi Dwelling

Certificate number: 1756422M

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

Secretary

Date of issue: Friday, 19 July 2024

To be valid, this certificate must be submitted with a development application or lodged with a complying development certificate application within 3 months of the date of issue.



Project summary		
Project name	20111	
Street address	1-5 RICKARD ROAD NORTH NARRABEEN 2101	
Local Government Area	NORTHERN BEACHES	
Plan type and plan number	Deposited Plan -	
Lot no.	7-9	
Section no.	16212	
No. of residential flat buildings	1	
Residential flat buildings: no. of dwellings	16	
Multi-dwelling housing: no. of dwellings	0	
No. of single dwelling houses	0	
Project score		
Water	V 40 Target 40	
Thermal Performance	Pass Target Pass	s
Energy	✓ 65 Target 61	
Materials	✓ -100 Target n/a	



BASIX Department of Planning, Housing and Infrastructure

www.basix.nsw.gov.au

Version: 4.03 / EUCALYPTUS 03 01 0

Description of project

Project address	
Project name	20111
Street address	1-5 RICKARD ROAD NORTH NARRABEEN 2101
Local Government Area	NORTHERN BEACHES
Plan type and plan number	Deposited Plan -
Lot no.	7-9
Section no.	16212
Project type	
No. of residential flat buildings	1
Residential flat buildings: no. of dwellings	16
Multi-dwelling housing: no. of dwellings	0
No. of single dwelling houses	0
Site details	
Site area (m²)	1426
Roof area (m²)	1000
Non-residential floor area (m ²)	409
Residential car spaces	34
Non-residential car spaces	8

Common area landscape						
Common area lawn (m²)	140					
Common area garden (m²)	160					
Area of indigenous or low water use species (m ²)	-					
Assessor details and therm	al loads					
Assessor number	DMN/24/2214					
Certificate number	HR-FNFB4C-01					
Climate zone	56					
Project score						
Water	40	Target 40				
Thermal Performance	V Pass	Target Pass				
Energy	65	Target 61				
Materials	-100	Target n/a				

Description of project

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

Residential flat buildings - Building1, 16 dwellings, 4 storeys above ground

Dwelling no.	No. of bedrooms		Unconditioned floor area (m²)	Area of garden & Iawn (m²)	Indigenous species (min area m²)	Dwelling no.		No. of bedrooms Conditioned floor	undie (m²)	Unconditioned floor area (m²)	Area of garden & Iawn (m²)	Indigenous species (min area m²)	Dwelling no.	No. of bedrooms		Unconditioned floor area (m²)	Area of garden & Iawn (m²)	Indigenous species (min area m²)	Dwelling no.	No. of bedrooms		Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
U01	2	74.1	5.0	0	-	U0:	2	3 93	3.4	0	0	-	U03	2	75.4	0	0	-	U04	3	96.7	0	0	-
U05	2	86.8	0	0	-	U0	6	3 10	01	0	7	-	U07	2	76	0	7	-	U08	2	77	0	7	-
U09	3	96.8	0	0	-	U1	0	3 93	3.4	0	0	-	U11	2	75.4	0	0	-	U12	3	96.7	0	0	-
U13	2	86.8	0	0	-	U1-	4	3 10	01.1	0	0	-	U15	2	76	0	0	-	U16	2	77	0	0	-

Description of project

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

Common areas of unit building - Building1

Common area	Floor area (m²)	Common area	Floor area (m²)	Common area	Floor area (m²)
Carpark (GF)	824	Carpark (L1	672	Residential Bins (GF)	18
Services (L1)	30	Residential Storage (GF)	36	Residential Storage (L1)	20
Bulky Goods (GF)	19	Ground floor residential lobby(GF)	18	Lobby (L1)	12
Lobby (L2)	67	Lobby (L3)	62	Lift bank (No. 1)	-

BASIX Department of Planning, Housing and www.basix.nsw.gov.au Version: 4.03 / EUCALYPTUS_03_01_0 Certificate No.: 1756422M Infrastructure

Schedule of BASIX commitments

1. Commitments for Residential flat buildings - Building1

(a) Buildings

(i) Materials

(b) Dwellings

(i) Water

(ii) Energy

(iii) Thermal Performance

(c) Common areas and central systems/facilities

(i) Water

(ii) Energy

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

(b) 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 carriedout. 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 - Building1

(a) Buildings

(i) Materials	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) 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 "Floor types", "External wall types", "Internal wall types", "Ceiling and roof types", "Frames" and "Glazing" tables below.			>
(b) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all specifications included in the tables below.		>	
(c) The applicant must construct the floors, walls, roof, ceiling and roof, windows, glazed doors and skylights of the development in accordance with the specifications listed in the tables below. In the case of glazing, a 5% variance from the area values listed in the "Frames" and "Glazing" tables is permitted.	>	>	>
(d) The applicant must show through receipts that the materials purchased for construction are consistent with the specifications listed in the below tables.			>

Floor types									
Floor type	Area (m2)	Insulation	Low emissions option						
suspended floor above open subfloor, frame: suspended concrete slab	365	-	-						
floors above habitable rooms, frame: suspended concrete slab	1023.7	-	-						

External wall types									
External wall type	Construction type	Area (m2)	Low emissions option	Insulation					
	framed (fibre cement sheet or boards),frame:light steel frame	990	-	-					

BASIX Department of Planning, Housing and Infrastructure

Internal wall types								
Internal wall type	Construction type	Area (m2)	Insulation					
Internal wall type 1	plasterboard, frame:light steel frame	1303	-					

Reinforcement concrete frames/columns								
Building has reinforced concrete frame/columns?	Volume (m³)	Low emissions option						
-	-	-						

Ceiling and roof types									
Ceiling and roof type	Area (m²)	Roof Insulation	Ceiling Insulation						
concrete - plasterboard internal, frame: light steel frame	970	-	-						
framed - metal roof, frame: light steel frame	30	-	-						

	Glazing types		Frame types						
Single glazing (m ²)	Double glazing (m²)	Triple glazing (m²)	Aluminium frames (m²)	Timber frames (m ²)	uPVC frames (m²)	Steel frames (m ²)	Composite frames (m²)		
454	-	-	454	-	-	-	-		

(b) 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.	~	~	~

			Fixture	es		Appli	ances		Indivi	idual pool		I	ndividual spa	a
Dwelling no.	All shower- heads	All toilet flushing systems	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	3 star	-	-	-	-	-	-	-

			Alte	rnative water sou	rce					
Owelling no.	Alternative water supply systems	Size	Configuration		Landscape connection	Toilet connec (s)		aundry onnection	Pool top- up	Spa top-up
ll dwellings	No alternative water supply	-	-		-	-	-		-	-
ii) Energy							Show o DA pla		w on CC/CDC s & specs	Certifier check
b) The applica supplied by	ant must install each hot wate	er system specifi ecifies a central h	below in carrying out the develop ed for the dwelling in the table be not water system for the dwelling, water is supplied by that central	ow, so that the dwe	elling's hot wate	er is	~		~	~
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.								~	~	
headings o cooling or l such areas	of the "Cooling" and "Heating" heating system is specified ir	" columns in the n the table for "Li	m/s specified for the dwelling und table below, in/for at least 1 living ving areas" or "Bedroom areas", t r conditioning system, then the sy	/bedroom area of th hen no systems ma	he dwelling. If n ay be installed i	o n any			~	~
the table be lighting" for specified for	elow (but only to the extent s r each such room in the dwel	pecified for that lling is fluorescer then the light fitti	velling which is referred to in a her room or area). The applicant mus nt lighting or light emitting diode (I ngs in that room or area must only	ensure that the "p ED) lighting. If the	rimary type of a term "dedicated	artificial d" is			~	~
the table be			elling which is referred to in a hea room or area). The applicant mus				~		×	~
g) This comm	itment applies if the applican	it installs a water	heating system for the dwelling's	pool or spa. The a	applicant must:					
			ndividual Pool" column of the table cant must install a timer, to contro			nstall			~	
			dividual Spa" column of the table ant must install a timer to control		vely must not in	stall			~	
h) The applica	ant must install in the dwelling	g:								
	e kitchen cook-top and oven						i	i		

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
 (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. 		v	~
 (i) If specified in the table, the applicant must carry out the development so that each refrigerator space in the dwelling is "well ventilated". 			

	Hot water	Bathroom ven	tilation system	Kitchen venti	lation 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	

	Coc	bling	Hea	ting	Natural lighting	
Dwelling no.	living areas	bedroom areas	living areas	bedroom areas	No. of bathrooms or toilets	Main kitchen
U01	1-phase airconditioning - ducted / EER 3.0 - 3.5	1-phase airconditioning - ducted / EER 3.0 - 3.5	1-phase airconditioning - ducted / EER 3.0 - 3.5	1-phase airconditioning - ducted / EER 3.0 - 3.5	1	no
All other dwellings	1-phase airconditioning - ducted / EER 3.0 - 3.5	1-phase airconditioning - ducted / EER 3.0 - 3.5	1-phase airconditioning - ducted / EER 3.0 - 3.5	1-phase airconditioning - ducted / EER 3.0 - 3.5	0	no

	Individual pool			Individual spa		Appliances other efficiency measures				
Dwelling no.	Pool heating system	Pool Pump	Timer	Spa heating system	Timer	Kitchen cooktop/oven	Dishwasher	Clothes dryer	Indoor or sheltered clothes drying line	Private outdoor or unsheltered clothes drying line
All dwellings	-	-	-	-	-	induction cooktop & electric oven	3 star	-	-	-

(iii) Thermal Performance	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.	~	~	~
(i) The applicant must show on The plans accompanying The development application for The proposed development, The locations of ceiling fans set out in The Assessor Certificate.	~		
(j) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), the locations of ceiling fans set out in the Assessor Certificate.		~	

	Thermal loads						
Dwelling no.	Area adjusted heating load (in MJ/m²/yr)	Area adjusted cooling load (in MJ/m²/yr)	Area adjusted total load (in MJ/m²/yr)				
U01	13.2	6.7	19.900				
U02	5.9	7.1	13.000				
U03	8.2	4.7	12.900				
U04	5.6	19.3	24.900				

		Thermal loads							
Dwelling no.	Area adjusted heating load (in MJ/m²/yr)	Area adjusted cooling load (in MJ/m²/yr)	Area adjusted total load (in MJ/m²/yr)						
U05	24.1	10.2	34.300						
U06	25.4	9.2	34.600						
U07	26.8	4.7	31.500						
U08	32.4	5.6	38.000						
U09	11.6	8.7	20.300						
U10	6.9	12.5	19.400						
U11	9.5	9.6	19.100						
U12	8.8	17.7	26.500						
U13	11.5	13.7	25.200						
U14	19.1	11.3	30.400						
J15	18.1	12.6	30.700						
All other dwellings	17.2	8	25.200						

(c) 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	no common facility	no common facility	3 star	no common laundry facility
areas				

(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.	>	>	>

www.basix.nsw.gov.au Version: 4.03 / EUCALYPTUS_03_01_0

	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
Carpark (GF)	no mechanical ventilation	-	light-emitting diode	daylight sensor and motion sensor	-
Carpark (L1	no mechanical ventilation	-	light-emitting diode	daylight sensor and motion sensor	-
Residential Bins (GF)	ventilation supply only	-	light-emitting diode	manual on / manual off	-
Services (L1)	ventilation supply only	interlocked to light	light-emitting diode	manual on / manual off	-
Residential Storage (GF)	ventilation supply only	time clock or BMS controlled	light-emitting diode	manual on / manual off	-
Residential Storage (L1)	ventilation supply only	time clock or BMS controlled	light-emitting diode	manual on / manual off	-
Bulky Goods (GF)	ventilation (supply + exhaust)	time clock or BMS controlled	light-emitting diode	manual on / manual off	-
Ground floor residential lobby(GF)	ventilation (supply + exhaust)	time clock or BMS controlled	light-emitting diode	motion sensors	-
Lobby (L1)	ventilation (supply + exhaust)	time clock or BMS controlled	light-emitting diode	motion sensors	-
Lobby (L2)	ventilation (supply + exhaust)	time clock or BMS controlled	light-emitting diode	motion sensors	-
Lobby (L3)	ventilation (supply + exhaust)	time clock or BMS controlled	light-emitting diode	motion sensors	-
Lift bank (No. 1)	-	-	light-emitting diode	connected to lift call button	-

Central energy systems	Туре	Specification
Lift bank (No. 1)	gearless traction with V V V F motor	Number of levels (including basement): 4 number of levels from the bottom of the lift shaft to the top of the lift shaft: 4 number of lifts: 1 lift load capacity: >= 1001 kg but <= 1500kg
Central hot water system (No. 1)	solar – electric boosted	Solar collector area (minimum, in square metres): 8 Piping insulation (ringmain & supply risers): (a) Piping external to building: no external pipework; (b) Piping internal to building: R1.0 (~38 mm)

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

(b) Common areas and central systems/facilities

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

Common area	Showerheads rating	Toilets rating	Taps rating	Clothes washers rating
All common areas	no common facility	no common facility	3 star	no common laundry facility

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

Central energy systems	Туре	Specification
Alternative energy supply	Photovoltaic system	Rated electrical output (min): 16 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 "V" in the "Show on CC/CDC plans and specs" column must be shown in the plans and specifications accompanying the application for a construction certificate / complying development certificate for the proposed development.
- 3. Commitments identified with a "" in the "Certifier check" column must be certified by a certifying authority as having been fulfilled. (Note: a certifying authority must not issue an occupation certificate (either interim or final) for a building listed in this certificate, or for any part of such a building, unless it is satisfied that each of the commitments whose fulfillment it is required to monitor in relation to the building or part, has been fulfilled).