BASIX® Certificate

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

Single Dwelling

Certificate number: 1194929S_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.basix.nsw.gov.au

Secretary
Date of issue: Monday, 20 June 2022
To be valid, this certificate must be lodged within 3 months of the date of issue.

NSW GOVERNMENT | Planning, Industry & Environment

Project summary	
Project name	Richard Lot 2_04
Street address	126 Elimatta Road Mona Vale 2103
Local Government Area	Northern Beaches Council
Plan type and plan number	deposited 550494
Lot no.	2
Section no.	-
Project type	separate dwelling house
No. of bedrooms	4

Project score		
Water	✔ 46	Target 40
Thermal Comfort	✔ Pass	Target Pass
Energy	✔ 63	Target 50

Certificate Prepared by
Name / Company Name: Justin Croft
ABN (if applicable): N/A

Description of project

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Site details	
Site area (m²)	646
Roof area (m²)	216
Conditioned floor area (m2)	237.0
Unconditioned floor area (m2)	50.0
Total area of garden and lawn (m2)	390

Assessor details and thermal loads		
Assessor number	n/a	
Certificate number	n/a	
Climate zone	n/a	
Area adjusted cooling load (MJ/m².year)	n/a	
Area adjusted heating load (MJ/m².year)	n/a	
Ceiling fan in at least one bedroom	n/a	
Ceiling fan in at least one living room or other conditioned area	n/a	
Project score		
Water	✔ 46	Target 40
Thermal Comfort	✔ Pass	Target Pass
Energy	✔ 63	Target 50

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.

Water Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Fixtures			
The applicant must install showerheads with a minimum rating of 4 star (> 6 but <= 7.5 L/min plus spray force and/or coverage tests) in all showers in the development.		✔	✔
The applicant must install a toilet flushing system with a minimum rating of 3 star in each toilet in the development.		✔	✔
The applicant must install taps with a minimum rating of 4 star in the kitchen in the development.		✔	
The applicant must install basin taps with a minimum rating of 4 star in each bathroom in the development.		✔	
Alternative water			
Rainwater tank			
The applicant must install a rainwater tank of at least 4000 litres on the site. This rainwater tank must meet, and be installed in accordance with, the requirements of all applicable regulatory authorities.	✔	✔	✔
The applicant must configure the rainwater tank to collect rain runoff from at least 215.6 square metres of the roof area of the development (excluding the area of the roof which drains to any stormwater tank or private dam).		✔	✔
The applicant must connect the rainwater tank to: • all toilets in the development • the cold water tap that supplies each clothes washer in the development • at least one outdoor tap in the development (Note: NSW Health does not recommend that rainwater be used for human consumption in areas with potable water supply.)		✔ ✔ ✔	✔ ✔ ✔

Thermal Comfort Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
General features			
The dwelling must not have more than 2 storeys.	✔	✔	✔
The conditioned floor area of the dwelling must not exceed 300 square metres.	✔	✔	✔
The dwelling must not contain open mezzanine area exceeding 25 square metres.	✔	✔	✔
The dwelling must not contain third level habitable attic room.	✔	✔	✔
Floor, walls and ceiling/roof			
The applicant must construct the floor(s), walls, and ceiling/roof of the dwelling in accordance with the specifications listed in the table below.	✔	✔	✔

Construction	Additional insulation required (R-Value)	Other specifications
floor - suspended floor above enclosed subfloor, 129 square metres, framed	1.10 (or 1.8 including construction) (down)	
floor - above habitable rooms or mezzanine, 108 square metres, framed	nil	
floor - suspended floor above garage, framed	nil	
external wall - AAC veneer (AAC: 75 mm)	2.59 (or 3.40 including construction)	
ceiling and roof - flat ceiling / pitched roof	ceiling: 5 (up), roof: foil/sarking	unventilated; dark (solar absorptance > 0.70)

Note	• Insulation specified in this Certificate must be installed in accordance with Part 3.12.1.1 of the Building Code of Australia.
Note	• In some climate zones, insulation should be installed with due consideration of condensation and associated interaction with adjoining building materials.

Thermal Comfort Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Windows, glazed doors and skylights			
The applicant must install the windows, glazed doors and shading devices described in the table below, in accordance with the specifications listed in the table. Relevant overshadowing specifications must be satisfied for each window and glazed door.	✔	✔	✔
The dwelling may have 1 skylight (<0.7 square metres) which is not listed in the table.	✔	✔	✔
The following requirements must also be satisfied in relation to each window and glazed door:	✔	✔	✔
• For the following glass and frame types, the certifier check can be performed by visual inspection.			✔
- Aluminium single clear			
- Aluminium double (air) clear			
- Timber/uPVC/fibreglass single clear			
- Timber/uPVC/fibreglass double (air) clear			
• For other glass or frame types, each window and glazed door must be accompanied with certification showing a U value no greater than that listed and a Solar Heat Gain Coefficient (SHGC) within the range of those listed. Total system U values and SHGC must be calculated in accordance with National Fenestration Rating Council (NFRC) conditions. Frame and glass types shown in the table below are for reference only.			✔
• Overshadowing buildings/vegetation must be of the height and distance from the centre and the base of the window and glazed door, as specified in the 'overshadowing' column.	✔	✔	✔

Window/glazed door no.	Maximum height (mm)	Maximum width (mm)	Type	Shading Device (Dimension within 10%)	Overshadowing
North-East facing					
W4	1800	900	U-value: 6.6, SHGC: 0.441 - 0.539 (aluminium, single, tint)	verandah 3500 mm, 2100 mm above base of window or glazed door	>4 m high, 8-12 m away
W05	1800	900	U-value: 6.6, SHGC: 0.441 - 0.539 (aluminium, single, tint)	verandah 3500 mm, 2100 mm above base of window or glazed door	>4 m high, 8-12 m away
W16	1800	900	U-value: 6.6, SHGC: 0.441 - 0.539 (aluminium, single, tint)	verandah 1500 mm, 2100 mm above base of window or glazed door	>4 m high, 8-12 m away
D-01	2100	2700	U-value: 6.6, SHGC: 0.441 - 0.539 (aluminium, single, tint)	verandah 3450 mm, 2100 mm above base of window or glazed door	>4 m high, 8-12 m away

Window/glazed door no.	Maximum height (mm)	Maximum width (mm)	Type	Shading Device (Dimension within 10%)	Overshadowing
W17	1800	900	U-value: 6.6, SHGC: 0.369 - 0.451 (aluminium, single, tint)	verandah 1500 mm, 2100 mm above base of window or glazed door	not overshadowed
W18	1200	1500	U-value: 6.6, SHGC: 0.369 - 0.451 (aluminium, single, tint)	eave 600 mm, 200 mm above head of window or glazed door	not overshadowed
South-East facing					
W6	1500	900	U-value: 6.6, SHGC: 0.441 - 0.539 (aluminium, single, tint)	none	not overshadowed
W09	1500	900	U-value: 6.6, SHGC: 0.441 - 0.539 (aluminium, single, tint)	none	not overshadowed
W7	1500	900	U-value: 6.6, SHGC: 0.441 - 0.539 (aluminium, single, tint)	none	not overshadowed
W10	1500	900	U-value: 6.6, SHGC: 0.441 - 0.539 (aluminium, single, tint)	none	not overshadowed
W08	1500	900	U-value: 6.6, SHGC: 0.441 - 0.539 (aluminium, single, tint)	none	not overshadowed
W19	1000	900	U-value: 6.6, SHGC: 0.441 - 0.539 (aluminium, single, tint)	verandah 2700 mm, 2100 mm above base of window or glazed door	not overshadowed
W21a	1500	900	U-value: 6.6, SHGC: 0.441 - 0.539 (aluminium, single, tint)	eave 600 mm, 200 mm above head of window or glazed door	not overshadowed
W21b	1500	900	U-value: 6.6, SHGC: 0.441 - 0.539 (aluminium, single, tint)	eave 600 mm, 200 mm above head of window or glazed door	not overshadowed
D-06	2100	2700	U-value: 6.6, SHGC: 0.369 - 0.451 (aluminium, single, tint)	eave 600 mm, 200 mm above head of window or glazed door	not overshadowed
South-West facing					
W11	1000	900	U-value: 6.6, SHGC: 0.441 - 0.539 (aluminium, single, tint)	none	not overshadowed
W12	1200	1500	U-value: 6.6, SHGC: 0.441 - 0.539 (aluminium, single, tint)	none	not overshadowed
W13	1200	1500	U-value: 6.6, SHGC: 0.441 - 0.539 (aluminium, single, tint)	none	not overshadowed
W22	1200	1500	U-value: 6.6, SHGC: 0.441 - 0.539 (aluminium, single, tint)	eave 600 mm, 200 mm above head of window or glazed door	not overshadowed

Window/glazed door no.	Maximum height (mm)	Maximum width (mm)	Type	Shading Device (Dimension within 10%)	Overshadowing
W23	1200	1800	U-value: 6.6, SHGC: 0.441 - 0.539 (aluminium, single, tint)	eave 600 mm, 200 mm above head of window or glazed door	not overshadowed
W1c	450	1800	U-value: 6.6, SHGC: 0.441 - 0.539 (aluminium, single, tint)	eave 600 mm, 200 mm above head of window or glazed door	not overshadowed
North-West facing					
W1	1200	1500	U-value: 6.6, SHGC: 0.441 - 0.539 (aluminium, single, tint)	none	>4 m high, 2-5 m away
W3	1200	1500	U-value: 6.6, SHGC: 0.441 - 0.539 (aluminium, single, tint)	none	>4 m high, 2-5 m away
W2	1200	1500	U-value: 6.6, SHGC: 0.441 - 0.539 (aluminium, single, tint)	none	>4 m high, 2-5 m away
W14	1000	900	U-value: 6.6, SHGC: 0.441 - 0.539 (aluminium, single, tint)	eave 600 mm, 200 mm above head of window or glazed door	>4 m high, 2-5 m away
W15	1200	1500	U-value: 6.6, SHGC: 0.441 - 0.539 (aluminium, single, tint)	eave 600 mm, 200 mm above head of window or glazed door	>4 m high, 2-5 m away
W15a	450	1800	U-value: 6.6, SHGC: 0.369 - 0.451 (aluminium, single, tint)	eave 600 mm, 200 mm above head of window or glazed door	>4 m high, 2-5 m away
W24	450	1800	U-value: 6.6, SHGC: 0.369 - 0.451 (aluminium, single, tint)	eave 600 mm, 200 mm above head of window or glazed door	>4 m high, 2-5 m away

Energy Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Hot water			
The applicant must install the following hot water system in the development, or a system with a higher energy rating: gas instantaneous with a performance of 5 stars.	✔	✔	✔
Cooling system			
The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 living area: 3-phase airconditioning; Energy rating: EER 3.5 - 4.0		✔	✔
The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 bedroom: 3-phase airconditioning; Energy rating: EER 3.5 - 4.0		✔	✔
Heating system			
The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 living area: 3-phase airconditioning; Energy rating: EER 3.5 - 4.0		✔	✔
The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 bedroom: 3-phase airconditioning; Energy rating: EER 3.5 - 4.0		✔	✔
Ventilation			
The applicant must install the following exhaust systems in the development:			
At least 1 Bathroom: individual fan, not ducted; Operation control: manual switch on/off		✔	✔
Kitchen: individual fan, not ducted; Operation control: manual switch on/off		✔	✔
Laundry: individual fan, not ducted; Operation control: manual switch on/off		✔	✔
Artificial lighting			
The applicant must ensure that the "primary type of artificial lighting" is fluorescent or light emitting diode (LED) lighting in each of the following rooms, and where the word "dedicated" appears, the fittings for those lights must only be capable of accepting fluorescent or light emitting diode (LED) lamps:			
• the kitchen;		✔	✔
• all bathrooms/toilets;		✔	✔
• the laundry;		✔	✔

Energy Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
• all hallways;		✔	✔
Natural lighting			
The applicant must install a window and/or skylight in the kitchen of the dwelling for natural lighting.	✔	✔	✔
The applicant must install a window and/or skylight in 6 bathroom(s)/toilet(s) in the development for natural lighting.	✔	✔	✔
Alternative energy			
The applicant must install a photovoltaic system with the capacity to generate at least 1.5 peak kilowatts of electricity as part of the development. The applicant must connect this system to the development's electrical system.	✔	✔	✔
Other			
The applicant must install a gas cooktop & electric oven in the kitchen of the dwelling.		✔	
The applicant must construct each refrigerator space in the development so that it is "well ventilated", as defined in the BASIX definitions.		✔	
The applicant must install a fixed outdoor clothes drying line as part of the development.		✔	

Legend
In these commitments, "applicant" means the person carrying out the development.
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).
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.
Commitments identified with a ✔ in the "Certifier check" column must be certified by a certifying authority as having been fulfilled, before a final occupation certificate(either interim or final) for the development may be issued.