BASIX® Certificate

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

Single Dwelling

Certificate number: 1341060S_03

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

This certificate is a revision of certificate number 1341060S_02 lodged with the consent authority or certifier on 18 November 2022 with application 54ABBO/2022.

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 Environmental Planning and Assessment Regulation 2000

Secretary
Date of issue: Friday, 10 February 2023
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	Dodd Principle Dwelling_03
Street address	54 Abbott Road North Curl Curl 2099
Local Government Area	Northern Beaches Council
Plan type and plan number	deposited 18022
Lot no.	1
Section no.	-
Project type	separate dwelling house
No. of bedrooms	4

Project score		
Water	✔ 40	Target 40
Thermal Comfort	✔ Pass	Target Pass
Energy	✔ 53	Target 50

Certificate Prepared by
Name / Company Name: Roslyn Miller
ABN (if applicable): N/A

Description of project

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Project type	
Project type	separate dwelling house
No. of bedrooms	4
Site details	
Site area (m²)	1226
Roof area (m²)	269
Conditioned floor area (m2)	295.08
Unconditioned floor area (m2)	9.96
Total area of garden and lawn (m2)	743

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	✔ 40	Target 40
Thermal Comfort	✔ Pass	Target Pass
Energy	✔ 53	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
Landscape			
The applicant must plant indigenous or low water use species of vegetation throughout 35 square metres of the site.	✔	✔	
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 5 star in each toilet in the development.		✔	✔
The applicant must install taps with a minimum rating of 5 star in the kitchen in the development.		✔	
The applicant must install basin taps with a minimum rating of 5 star in each bathroom in the development.		✔	
Alternative water			
Rainwater tank			
The applicant must install a rainwater tank of at least 4800 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 118.1 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 - concrete slab on ground, 88.6 square metres	1 (slab edge)	in-slab heating system
floor - suspended floor above enclosed subfloor, 74.4 square metres, concrete	1.20 (under + slab edge) (or 1.8 including construction) (down)	in-slab heating system
floor - above habitable rooms or mezzanine, 142 square metres, framed	nil	
floor - suspended floor above garage, framed	nil	
external wall - brick veneer	2.86 (or 3.40 including construction)	
internal wall shared with garage - single skin masonry	nil	
ceiling and roof - flat ceiling / pitched roof	ceiling: 3.45 (up), roof: foil backed blanket (75 mm)	3 wind-driven ventilator(s) + eave vents; medium (solar absorptance 0.475-0.70)
ceiling and roof - raked ceiling / pitched or skillion roof, framed	ceiling: 3.74 (up), roof: foil backed blanket (75 mm)	framed; medium (solar absorptance 0.475-0.70)

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.			✔
• Pergolas with polycarbonate roof or similar translucent material must have a shading coefficient of less than 0.35.		✔	✔
• Vertical external louvres and blinds must fully shade the window or glazed door beside which they are situated when fully drawn or closed.		✔	✔
• Unless they have adjustable shading, pergolas must have fixed battens parallel to the window or glazed door above which they are situated, unless the pergola also shades a perpendicular window. The spacing between battens must not exceed the height of the battens.		✔	✔
• 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 facing					

Window/glazed door no.	Maximum height (mm)	Maximum width (mm)	Type	Shading Device (Dimension within 10%)	Overshadowing
W12	2400	1940	U-value: 3.6, SHGC: 0.486 - 0.594 (aluminium: thermally broken, double (air), clear)	eave 1195 mm, 310 mm above head of window or glazed door	not overshadowed
W23	1640	1600	U-value: 3.6, SHGC: 0.486 - 0.594 (aluminium: thermally broken, double (air), clear)	none	not overshadowed
W27	1640	1660	U-value: 3.6, SHGC: 0.486 - 0.594 (aluminium: thermally broken, double (air), clear)	eave 1195 mm, 630 mm above head of window or glazed door	not overshadowed
W34 (D08)	2400	3380	U-value: 3.6, SHGC: 0.486 - 0.594 (aluminium: thermally broken, double (air), clear)	eave 1195 mm, 630 mm above head of window or glazed door	not overshadowed
D04	2400	4960	U-value: 3.6, SHGC: 0.486 - 0.594 (aluminium: thermally broken, double (air), clear)	verandah 5650 mm, 2700 mm above base of window or glazed door	not overshadowed
W28	1800	1530	U-value: 3.6, SHGC: 0.486 - 0.594 (aluminium: thermally broken, double (air), clear)	eave 6660 mm, 510 mm above head of window or glazed door	not overshadowed
W09	1200	1800	U-value: 3.6, SHGC: 0.486 - 0.594 (aluminium: thermally broken, double (air), clear)	pergola (fixed battens) 1810 mm, 50 mm above head of window or glazed door	>4 m high, <2 m away
East facing					
W02	1640	730	U-value: 3.6, SHGC: 0.486 - 0.594 (aluminium: thermally broken, double (air), clear)	solid overhang 5900 mm, 345 mm above head of window or glazed door	1-2 m high, <1.5 m away
W30	600	1560	U-value: 3.6, SHGC: 0.486 - 0.594 (aluminium: thermally broken, double (air), clear)	eave 470 mm, 260 mm above head of window or glazed door	2-4 m high, 2-5 m away
W33	600	4730	U-value: 3.6, SHGC: 0.486 - 0.594 (aluminium: thermally broken, double (air), clear)	eave 465 mm, 260 mm above head of window or glazed door	2-4 m high, 2-5 m away
W13	1500	900	U-value: 3.6, SHGC: 0.486 - 0.594 (aluminium: thermally broken, double (air), clear)	none	1-2 m high, <1.5 m away

Window/glazed door no.	Maximum height (mm)	Maximum width (mm)	Type	Shading Device (Dimension within 10%)	Overshadowing
W16	900	1100	U-value: 3.6, SHGC: 0.270 - 0.330 (aluminium: thermally broken, double (air), tint)	external louvre/vertical blind (fixed)	>4 m high, <2 m away
W17	1500	3100	U-value: 3.6, SHGC: 0.486 - 0.594 (aluminium: thermally broken, double (air), clear)	none	>4 m high, <2 m away
W15	900	1760	U-value: 3.6, SHGC: 0.486 - 0.594 (aluminium: thermally broken, double (air), clear)	none	2-4 m high, 2 m away
W31	600	615	U-value: 3.6, SHGC: 0.486 - 0.594 (aluminium: thermally broken, double (air), clear)	eave 470 mm, 260 mm above head of window or glazed door	2-4 m high, 2-5 m away
W32	2000	2400	U-value: 3.6, SHGC: 0.270 - 0.330 (aluminium: thermally broken, double (air), tint)	external louvre/vertical blind (fixed)	2-4 m high, 5-8 m away
D05	2400	900	U-value: 3.6, SHGC: 0.423 - 0.517 (aluminium: thermally broken, double (air), clear)	none	>4 m high, <2 m away
W14	1500	900	U-value: 3.6, SHGC: 0.486 - 0.594 (aluminium: thermally broken, double (air), clear)	none	1-2 m high, <1.5 m away
W29	600	1500	U-value: 3.6, SHGC: 0.486 - 0.594 (aluminium: thermally broken, double (air), clear)	eave 470 mm, 260 mm above head of window or glazed door	2-4 m high, 2-5 m away
South facing					
W34 (D06)	2400	2560	U-value: 3.6, SHGC: 0.486 - 0.594 (aluminium: thermally broken, double (air), clear)	eave 600 mm, 1300 mm above head of window or glazed door	not overshadowed
D07	2400	3440	U-value: 3.6, SHGC: 0.486 - 0.594 (aluminium: thermally broken, double (air), clear)	eave 1705 mm, 895 mm above head of window or glazed door	not overshadowed
W11	2400	1800	U-value: 3.6, SHGC: 0.486 - 0.594 (aluminium: thermally broken, double (air), clear)	pergola (fixed battens) 1810 mm, 50 mm above head of window or glazed door	>4 m high, <2 m away

Window/glazed door no.	Maximum height (mm)	Maximum width (mm)	Type	Shading Device (Dimension within 10%)	Overshadowing
W21	1640	470	U-value: 3.6, SHGC: 0.486 - 0.594 (aluminium: thermally broken, double (air), clear)	none	2-4 m high, 2-5 m away
W03	1640	1940	U-value: 3.6, SHGC: 0.486 - 0.594 (aluminium: thermally broken, double (air), clear)	solid overhang 615 mm, 300 mm above head of window or glazed door	not overshadowed
West facing					
W24	600	1410	U-value: 3.6, SHGC: 0.423 - 0.517 (aluminium: thermally broken, double (air), clear)	none	not overshadowed
W18	600	1400	U-value: 3.6, SHGC: 0.486 - 0.594 (aluminium: thermally broken, double (air), clear)	eave 695 mm, 205 mm above head of window or glazed door	not overshadowed
W04	1640	730	U-value: 3.6, SHGC: 0.486 - 0.594 (aluminium: thermally broken, double (air), clear)	none	>4 m high, 8-12 m away
D03	2400	1600	U-value: 3.6, SHGC: 0.486 - 0.594 (aluminium: thermally broken, double (air), clear)	none	1-2 m high, <1.5 m away
W06	600	1400	U-value: 3.6, SHGC: 0.486 - 0.594 (aluminium: thermally broken, double (air), clear)	none	>4 m high, 8-12 m away
W26	1505	600	U-value: 3.6, SHGC: 0.486 - 0.594 (aluminium: thermally broken, double (air), clear)	eave 1270 mm, 205 mm above head of window or glazed door	not overshadowed
W25	1505	600	U-value: 3.6, SHGC: 0.486 - 0.594 (aluminium: thermally broken, double (air), clear)	eave 1270 mm, 205 mm above head of window or glazed door	not overshadowed
W22	600	3135	U-value: 3.6, SHGC: 0.486 - 0.594 (aluminium: thermally broken, double (air), clear)	none	not overshadowed
W20	2000	2565	U-value: 3.6, SHGC: 0.270 - 0.330 (aluminium: thermally broken, double (air), tint)	external louvre/vertical blind (fixed)	not overshadowed

Window/glazed door no.	Maximum height (mm)	Maximum width (mm)	Type	Shading Device (Dimension within 10%)	Overshadowing
W10	2400	1810	U-value: 3.6, SHGC: 0.486 - 0.594 (aluminium: thermally broken, double (air), clear)	pergola (fixed battens) 2550 mm, 50 mm above head of window or glazed door	not overshadowed
W19	600	1400	U-value: 3.6, SHGC: 0.486 - 0.594 (aluminium: thermally broken, double (air), clear)	eave 695 mm, 205 mm above head of window or glazed door	not overshadowed
D02	2400	900	U-value: 3.6, SHGC: 0.207 - 0.253 (aluminium: thermally broken, double (air), tint)	none	1-2 m high, <1.5 m away
W05	600	1400	U-value: 3.6, SHGC: 0.486 - 0.594 (aluminium: thermally broken, double (air), clear)	none	>4 m high, 8-12 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 6 stars.	✔	✔	✔
Cooling system			
The living areas must not incorporate any cooling system, or any ducting which is designed to accommodate a cooling system.		✔	✔
The bedrooms must not incorporate any cooling system, or any ducting which is designed to accommodate a cooling system.		✔	✔
Heating system			
The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 living area: heat pump hydronic system; Energy rating: n/a		✔	✔
The bedrooms must not incorporate any heating system, or any ducting which is designed to accommodate a heating system.		✔	✔
Ventilation			
The applicant must install the following exhaust systems in the development:			
At least 1 Bathroom: individual fan, ducted to façade or roof; Operation control: manual on / timer off		✔	✔
Kitchen: individual fan, ducted to façade or roof; Operation control: manual switch on/off		✔	✔
Laundry: individual fan, ducted to façade or roof; Operation control: manual on / timer 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:			
• at least 5 of the bedrooms / study; dedicated		✔	✔
• at least 3 of the living / dining rooms; dedicated		✔	✔
• the kitchen; dedicated		✔	✔

Energy Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
• all bathrooms/toilets; dedicated		✔	✔
• the laundry; dedicated		✔	✔
• all hallways; dedicated		✔	✔
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 4 bathroom(s)/toilet(s) in the development for natural lighting.	✔	✔	✔
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 indoor or sheltered 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.