

Single Dwelling

Certificate number: 1264851S

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: Tuesday, 07 June 2022

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



Project summary

Project name	28 Watkins Road
Street address	28 Watkins Road Avalon Beach 2107
Local Government Area	Northern Beaches Council
Plan type and plan number	deposited 1 1096
Lot no.	14
Section no.	-
Project type	separate dwelling house - secondary dwelling
No. of bedrooms	2

Project score




Water	✓ 40	Target 40
Thermal Comfort	✓ Pass	Target Pass
Energy	✓ 57	Target 50

Certificate Prepared by

Name / Company Name: Anthony Lehman
ABN (if applicable): 55 750 092 369

Description of project

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Plan type and plan number	Deposited Plan 11096
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Section no.	-
Project type	
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No. of bedrooms	2
Site details	
Site area (m²)	1132
Roof area (m²)	100
Conditioned floor area (m2)	60.0
Unconditioned floor area (m2)	5.0
Total area of garden and lawn (m2)	150
Roof area (m2) of the existing dwelling	195
No. of bedrooms in the existing dwelling	5

Assessor details and thermal loads		
Assessor number	n/a	
Certificate number	n/a	
Climate zone	n/a	
Area adjusted cooling load (MJ/m ² .year)	n/a	
Area adjusted heating load (MJ/m ² .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	 57	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 120 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 3000 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 100 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: <ul style="list-style-type: none">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
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General features				
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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, 31 square metres	nil	
floor - suspended floor above open subfloor, 29 square metres, framed	1.3 (or 2 including construction) (down)	
external wall - framed (weatherboard, fibre cement, metal clad)	3.00 (or 3.40 including construction)	
ceiling and roof - flat ceiling / flat roof, framed	ceiling: 5 (up), roof: foil backed blanket (75 mm)	framed: medium (solar absorptance 0.475-0.70)

Note	<ul style="list-style-type: none"> Insulation specified in this Certificate must be installed in accordance with Part 3.12.1.1 of the Building Code of Australia.
Note	<ul style="list-style-type: none"> In some climate zones, insulation should be installed with due consideration of condensation and associated interaction with adjoining building materials.

Thermal Comfort Commitments

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
- Vertical external louvres and blinds must fully shade the window or glazed door beside which they are situated when fully drawn or closed.
- 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					
W01	2100	3000	aluminium, single, clear	eave 1500 mm, 1500 mm above head of window or glazed door	>4 m high, <2 m away
W02	1500	1500	aluminium, single, clear	eave 1500 mm, 1500 mm above head of window or glazed door	>4 m high, 8-12 m away
W09	1500	800	aluminium, single, clear	eave 5400 mm, 900 mm above head of window or glazed door	not overshadowed
W10	2100	800	aluminium, single, clear	eave 1500 mm, 900 mm above head of window or glazed door	not overshadowed
W11	300	3000	aluminium, single, clear	eave 1500 mm, 0 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
W12	300	3000	aluminium, single, clear	eave 1500 mm, 0 mm above head of window or glazed door	>4 m high, 2-5 m away
W13	300	3000	aluminium, single, clear	eave 1500 mm, 0 mm above head of window or glazed door	>4 m high, 2-5 m away
East facing					
W04	800	1500	aluminium, single, clear	eave 750 mm, 900 mm above head of window or glazed door	2-4 m high, 2-5 m away
W06	1390	800	aluminium, single, clear	eave 750 mm, 900 mm above head of window or glazed door	not overshadowed
W07	1390	800	aluminium, single, clear	eave 750 mm, 900 mm above head of window or glazed door	not overshadowed
West facing					
W03	1500	1500	aluminium, single, clear	external louvre/vertical blind (adjustable)	not overshadowed
W05	2100	800	aluminium, single, clear	eave 750 mm, 450 mm above head of window or glazed door	2-4 m high, 2-5 m away
W08	2100	800	aluminium, single, clear	eave 750 mm, 950 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: electric storage.		✓	✓	✓
Cooling system				
The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 living area: ceiling fans + 1-phase airconditioning; Energy rating: 7 star (average zone)			✓	✓
The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 bedroom: ceiling fans; Energy rating: n/a			✓	✓
Heating system				
The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 living area: 1-phase airconditioning; Energy rating: 7 star (average zone)			✓	✓
The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 bedroom: 1-phase airconditioning; Energy rating: 7 star (average zone)			✓	✓
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 switch on/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 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:				
<ul style="list-style-type: none"> at least 2 of the bedrooms / study; dedicated 			✓	✓
<ul style="list-style-type: none"> at least 1 of the living / dining rooms; dedicated 			✓	✓
<ul style="list-style-type: none"> the kitchen; dedicated 			✓	✓

Energy Commitments		Show on DA plans	Show on CC/CDC plans & specs	Certifier check
<ul style="list-style-type: none"> • 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 1 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 an induction 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.