BASIX™ Certificate

Building Sustainability Index
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Single Dwelling

Certificate number: 1801662S

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

Secretary
Date of issue: Thursday, 26 June 2025
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.

NSW GOVERNMENT

Project summary	
Project name	Grech House- Secondary Dwelling
Street address	5 MARINE PARADE AVALON BEACH 2107
Local Government Area	Northern Beaches Council
Plan type and plan number	Deposited Plan D.P838584
Lot no.	8
Section no.	-
Project type	dwelling house (detached) - secondary dwelling
No. of bedrooms	1

Project score		
Water	✔ 40	Target 40
Thermal Performance	✔ Pass	Target Pass
Energy	✔ 72	Target 68
Materials	✔ -17	Target n/a

Certificate Prepared by
Name / Company Name: Renee Blyth
ABN (if applicable):

Description of project

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Site details	
Site area (m²)	1821
Roof area (m²)	117
Conditioned floor area (m²)	79.93
Unconditioned floor area (m²)	11.7
Total area of garden and lawn (m²)	986
Roof area of the existing dwelling (m²)	78
Number of bedrooms in the existing dwelling	0

Assessor details and thermal loads	
NatHERS assessor number	n/a
NatHERS 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

Project score			
Water	✔	40	Target 40
Thermal Performance	✔	Pass	Target Pass
Energy	✔	72	Target 68
Materials	✔	-17	Target n/a

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 450 square metres of the site.	✔	✔	
Fixtures			
The applicant must install showerheads with a minimum rating of 4 star (> 4.5 but <= 6 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 6 star in each toilet in the development.		✔	✔
The applicant must install taps with a minimum rating of 6 star in the kitchen in the development.		✔	
The applicant must install basin taps with a minimum rating of 6 star in each bathroom in the development.		✔	
Alternative water			
Rainwater tank			
The applicant must install a rainwater tank of at least 5000 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 62 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 configure the rainwater tank so that overflow is diverted to a stormwater tank.		✔	✔
The applicant must connect the rainwater tank to: • all toilets in the development		✔	✔

Water Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
• the cold water tap that supplies each clothes washer in the development		✔	✔
Stormwater tank			
The applicant must install a stormwater tank with a capacity of at least 3000 litres on the site. This stormwater tank must meet, and be installed in accordance with, the requirements of all applicable regulatory authorities.	✔	✔	✔
The applicant must configure the stormwater tank to collect overflow from the rainwater tank.		✔	✔
The applicant must configure the stormwater tank to collect runoff from:			
• at least 54 square metres of roof area of the development (excluding the area of the roof which drains to any rainwater tank or private dam)		✔	✔
• at least 70 square metres of impervious areas		✔	✔
• at least 150 square metres of garden and lawn		✔	✔
• at least 50 square metres of planter box area		✔	✔
The applicant must connect the stormwater tank to:			
• a sub-surface or non-aerosol irrigation system, or if the stormwater has been appropriately treated in accordance with applicable regulatory requirements, to at least one outdoor tap in the development (Note: NSWHealth does not recommend that stormwater be used to irrigate edible plants which are consumed raw.)		✔	✔

Thermal Performance and Materials commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Do-it-yourself Method			
General features			
The dwelling must be a Class 1 dwelling according to the National Construction Code, and 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.	✔	✔	✔
The applicant must adopt one of the options listed in the tables below to address thermal bridging in metal framed floor(s), walls and ceiling/roof of the dwelling.	✔	✔	✔
The applicant must show through receipts that the materials purchased for construction are consistent with the specifications listed in the tables below.			✔

Construction	Area - m²	Additional insulation required	Options to address thermal bridging	Other specifications
floor - concrete slab on ground, conventional slab.	53.7	nil;not specified	nil	
floor - suspended floor above garage, treated softwood; frame: light steel frame.	33.7	nil;fibreglass batts or roll	nil	
garage floor - concrete slab on ground.	26.5	not specified	nil	

Construction	Area - m²	Additional insulation required	Options to address thermal bridging	Other specifications
external wall: framed (solid or reconstituted timber weatherboard); frame: timber - untreated softwood.	13	2.50 (or 3.00 including construction);fibreglass batts or roll	nil	wall colour: Medium (solar absorptance 0.48-0.7)
external wall: brick veneer; frame: timber - untreated softwood.	67	2.44 (or 3.00 including construction);fibreglass batts or roll	nil	wall colour: Medium (solar absorptance 0.48-0.7)
external wall: framed (metal clad); frame: timber - untreated softwood.	12.5	2.50 (or 3.00 including construction);fibreglass batts or roll	nil	wall colour: Medium (solar absorptance 0.48-0.7)
external garage wall: brick veneer; frame: timber - untreated softwood.	35	none	nil	
internal wall shared with garage: plasterboard; frame: timber - untreated softwood.	11.7	nil;fibreglass batts or roll	nil	
internal wall: plasterboard; frame: timber - untreated softwood.	98.19	fibreglass batts or roll	nil	
ceiling and roof - raked ceiling / pitched or skillion roof, framed - metal roof, light steel frame.	62.5	ceiling: 4 (up), roof: foil/sarking with the measure to address thermal bridging;ceiling: fibreglass batts or roll; roof: foil/sarking.	• Install continuous insulation layer with at least R0.6 above or below the roof frame members	roof colour: medium (solar absorptance 0.48-0.59); ceiling area fully insulated
ceiling and roof - flat ceiling / flat roof, framed - metal roof, light steel frame.	54.4	ceiling: 4 (up), roof: foil/sarking with the measure to address thermal bridging;ceiling: fibreglass batts or roll; roof: foil/sarking.	• Install continuous insulation layer with at least R0.6 above or below the roof frame members	roof colour: medium (solar absorptance 0.48-0.59); ceiling area fully insulated

Note	• Insulation specified in this Certificate must be installed in accordance with the ABCB Housing Provisions (Part 13.2.2) of the National Construction Code.
Note	• If the additional ceiling insulation listed in the table above is greater than R3.0, refer to the ABCB Housing Provisions (Part 13.2.3 (6)) of the National Construction Code.
Note	• In some climate zones, insulation should be installed with due consideration of condensation and associated interaction with adjoining building materials.
Note	• Thermal breaks must be installed in metal framed walls and applicable roofs in accordance with the ABCB Housing Provisions of the National Construction Code.

Thermal Performance and Materials commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Ceiling fans			
The applicant must install at least one ceiling fan in at least one daytime habitable space, such as living room.	✔	✔	✔
• The minimum number and diameter of ceiling fans in a daytime habitable space must be installed in accordance with the ABCB Housing Provisions (Part 13.5.2) of the National Construction Code .	✔	✔	✔

Thermal Performance and Materials commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Glazed windows, 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 glazed window and 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:	✔	✔	✔
• The applicant must install windows and glazed doors in accordance with the height and width, frame and glazing types listed in the table.	✔	✔	✔
• Each window and glazed door must have a U- value no greater than that listed and a Solar Heat Gain Coefficient (SHGC) within the range listed. Total system U values and SHGC must be calculated in accordance with National Fenestration Rating Council (NFRC) conditions.		✔	✔
• Pergolas with polycarbonate roof or similar translucent material must have a shading coefficient of less than 0.35.	✔	✔	✔
• Pergolas with adjustable shading may have adjustable blades or removable shade cloth (not less than 80% shading ratio). Adjustable blades must overlap in plan view.	✔	✔	✔
• 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.	✔	✔	✔
The applicant must install the skylights described in the table below, in accordance with the specifications listed in the table. Total skylight area must not exceed 3 square metres (the 3 square metre limit does not include the optional additional skylight of less than 0.7 square metres that does not have to be listed in the table).	✔	✔	✔

Glazed window/door no.	Maximum height (mm)	Maximum width (mm)	Frame and glass specification	Shading device (Dimension within 10%)	Overshadowing
North facing					
W01	1765.00	1850.00	aluminium, single glazed (U-value: <=4.0, SHGC: 0.49 - 0.60)	none	not overshadowed

Glazed window/door no.	Maximum height (mm)	Maximum width (mm)	Frame and glass specification	Shading device (Dimension within 10%)	Overshadowing
W02	1800.00	2380.00	aluminium, single glazed (U-value: <=4.0, SHGC: 0.49 - 0.60)	none	not overshadowed
W03	1800.00	900.00	aluminium, single glazed (U-value: <=4.0, SHGC: 0.49 - 0.60)	none	not overshadowed
East facing					
W04	2400.00	260.00	aluminium, single glazed (U-value: <=4.0, SHGC: 0.49 - 0.60)	solid overhang 2240 mm, 0 mm above head of window or glazed door	not overshadowed
W05	2400.00	3960.00	aluminium, single glazed (U-value: <=4.0, SHGC: 0.49 - 0.60)	pergola (adjustable battens) 3200 mm, 0 mm above head of window or glazed door	>4 m high, 8-12 m away
W06	1190.00	2160.00	aluminium, single glazed (U-value: <=4.0, SHGC: 0.49 - 0.60)	eave 880 mm, 765 mm above head of window or glazed door	not overshadowed
South facing					
W07	1100.00	1000.00	aluminium, single glazed (U-value: <=6.0, SHGC: 0.49 - 0.60)	none	>4 m high, <2 m away
W08	1100.00	1000.00	aluminium, single glazed (U-value: <=6.0, SHGC: 0.49 - 0.60)	none	>4 m high, <2 m away
W09	1800.00	2045.00	aluminium, single glazed (U-value: <=4.5, SHGC: 0.49 - 0.60)	none	>4 m high, <2 m away
W10	1800.00	2280.00	aluminium, single glazed (U-value: <=4.5, SHGC: 0.49 - 0.60)	none	>4 m high, <2 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 boosted solar.	✔	✔	✔
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 2.5 - 3.0		✔	✔
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 2.5 - 3.0		✔	✔
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 2.5 - 3.0		✔	✔
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 2.5 - 3.0		✔	✔
Ventilation			
The applicant must install the following exhaust systems in the development:			
At least 1 Bathroom: no mechanical ventilation (ie. natural); Operation control: n/a		✔	✔
Kitchen: no mechanical ventilation (ie. natural); Operation control: n/a		✔	✔
Laundry: natural ventilation only, or no laundry; Operation control: n/a		✔	✔
Artificial lighting			
The applicant must ensure that a minimum of 80% of light fixtures are fitted with fluorescent, compact fluorescent, or light-emitting-diode (LED) lamps.		✔	✔
Natural lighting			
The applicant must install a window and/or skylight in the kitchen of the dwelling for natural lighting.	✔	✔	✔

Energy Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
The applicant must install a window and/or skylight in 2 bathroom(s)/toilet(s) in the development for natural lighting.	✔	✔	✔

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.