BASIX® Certificate

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

Single Dwelling

Certificate number: 1747354S_02

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 1747354S submitted to the consent authority or certifier on 28 May 2024 with application DA2024/0384.

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 Environment Planning and Assessment Regulation 2000

Secretary
Date of issue: Monday, 09 December 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.

NSW GOVERNMENT

Project summary	
Project name	20724, Dwelling 1, 50 Marra Drive_02
Street address	50 MARRA Drive OLD BAR 2430
Local Government Area	Mid-Coast Council
Plan type and plan number	Deposited Plan DP1279023
Lot no.	186
Section no.	-
Project type	dwelling house (attached)
No. of bedrooms	3

Project score		
Water	✔ 41	Target 40
Thermal Performance	✔ Pass	Target Pass
Energy	✔ 73	Target 70
Materials	✔ -25	Target n/a

Certificate Prepared by
Name / Company Name: Max Brightwell
ABN (if applicable): 95897024384

Description of project

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Site details	
Site area (m²)	447
Roof area (m²)	164
Conditioned floor area (m²)	194.81
Unconditioned floor area (m²)	6.2
Total area of garden and lawn (m²)	148
Roof area of the existing dwelling (m²)	0

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

Project score			
Water	✔	41	Target 40
Thermal Performance	✔	Pass	Target Pass
Energy	✔	73	Target 70
Materials	✔	-25	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
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 3 star in each toilet in the development.		✔	✔
The applicant must install taps with a minimum rating of 3 star in the kitchen in the development.		✔	
The applicant must install basin taps with a minimum rating of 3 star in each bathroom in the development.		✔	
Alternative water			
Rainwater tank			
The applicant must install a rainwater tank of at least 2500 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 80 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 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.	164.24	nil;not specified	nil	
floor - above habitable rooms or mezzanine, hard wood; frame: timber - H2 treated softwood..	36.77	nil;none	nil	
floor - suspended floor above garage, hard wood; frame: timber - H2 treated softwood.	12.35	nil;none	nil	

Construction	Area - m²	Additional insulation required	Options to address thermal bridging	Other specifications
garage floor - concrete slab on ground.	50.83	none	nil	
external wall: brick veneer; frame: timber - H2 treated softwood.	105	2.94 (or 3.50 including construction);fibreglass batts or roll	nil	wall colour: Light (solar absorptance < 0.48)
external wall: framed (solid or reconstituted timber weatherboard); frame: timber - H2 treated softwood.	16	3.00 (or 3.50 including construction);fibreglass batts or roll	nil	wall colour: Light (solar absorptance < 0.48)
external garage wall: brick veneer; frame: timber - H2 treated softwood.	27	fibreglass batts or roll	nil	
internal wall shared with garage: plasterboard; frame: timber - H2 treated softwood.	25	nil;fibreglass batts or roll	nil	
internal wall: plasterboard; frame: timber - H2 treated softwood.	185	none	nil	
ceiling and roof - flat ceiling / pitched roof, framed - metal roof, timber - H2 treated softwood.	109.24	ceiling: 5 (up), roof: foil/ sarking ;ceiling: fibreglass batts or roll; roof: foil/sarking.	nil	roof space ventilation: unventilated; roof colour: light (solar absorptance 0.38-0.47); ceiling area fully insulated
ceiling and roof - raked ceiling / pitched or skillion roof, framed - metal roof, timber - H2 treated softwood.	55	ceiling: 5 (up), roof: foil/ sarking ;ceiling: fibreglass batts or roll; roof: foil/sarking.	nil	roof colour: light (solar absorptance 0.38-0.47); 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.		✔	✔
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					
Kit Dr	2100.00	820.00	aluminium, double glazed (U-value: <=5.0, SHGC: 0.49 - 0.60)	eave 1510 mm, 0 mm above head of window or glazed door	not overshadowed
Dining	2100.00	3000.00	aluminium, double glazed (U-value: <=4.5, SHGC: 0.49 - 0.60)	eave 450 mm, 0 mm above head of window or glazed door	not overshadowed
Living	2100.00	3000.00	aluminium, double glazed (U-value: <=4.5, SHGC: 0.49 - 0.60)	eave 450 mm, 0 mm above head of window or glazed door	not overshadowed
Bath	900.00	900.00	aluminium, double glazed (U-value: <=5.0, SHGC: 0.49 - 0.60)	eave 5720 mm, 0 mm above head of window or glazed door	not overshadowed

Glazed window/door no.	Maximum height (mm)	Maximum width (mm)	Frame and glass specification	Shading device (Dimension within 10%)	Overshadowing
Bed 2	900.00	2100.00	aluminium, double glazed (U-value: <=4.5, SHGC: 0.49 - 0.60)	solid overhang 5720 mm, 0 mm above head of window or glazed door	not overshadowed
South facing					
Bed 3	2100.00	1500.00	aluminium, double glazed (U-value: <=4.5, SHGC: 0.49 - 0.60)	eave 2270 mm, 0 mm above head of window or glazed door	not overshadowed
Bed 4	2100.00	1500.00	aluminium, double glazed (U-value: <=4.5, SHGC: 0.49 - 0.60)	eave 2270 mm, 0 mm above head of window or glazed door	not overshadowed
Ens	600.00	2100.00	aluminium, double glazed (U-value: <=5.0, SHGC: 0.49 - 0.60)	eave 450 mm, 0 mm above head of window or glazed door	not overshadowed
Bed 1	600.00	2100.00	aluminium, double glazed (U-value: <=5.0, SHGC: 0.49 - 0.60)	eave 450 mm, 0 mm above head of window or glazed door	not overshadowed
West facing					
Bed 2	1500.00	2100.00	aluminium, double glazed (U-value: <=5.0, SHGC: 0.49 - 0.60)	none	not overshadowed
Living	2100.00	3600.00	aluminium, double glazed (U-value: <=4.5, SHGC: 0.49 - 0.60)	solid overhang 4000 mm, 4500 mm above head of window or glazed door	not overshadowed
HL	700.00	3600.00	aluminium, double glazed (U-value: <=5.0, SHGC: 0.49 - 0.60)	solid overhang 4000 mm, 1500 mm above head of window or glazed door	not overshadowed

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 with a performance of 26 to 30 STCs or better.	✔	✔	✔
Cooling system			
The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 living area: 1-phase airconditioning - ducted; Energy rating: 2.5 star (average zone)		✔	✔
The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 bedroom: 1-phase airconditioning - ducted; Energy rating: 2.5 star (average zone)		✔	✔
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 - ducted; Energy rating: 2.5 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 - ducted; Energy rating: 2.5 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: 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 2 bathroom(s)/toilet(s) in the development for natural lighting.	✔	✔	✔

Energy Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Other			
The applicant must install a gas cooktop & electric oven in the kitchen of the dwelling.		✔	
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.