

# BASIX<sup>®</sup>Certificate

Building Sustainability Index [www.basix.nsw.gov.au](http://www.basix.nsw.gov.au)

## Alterations and Additions

Certificate number: A420521\_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](http://www.basix.nsw.gov.au)

This certificate is a revision of certificate number A420521 lodged with the consent authority or certifier on 27 July 2021 with application DA2021/1233.

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, 21 October 2024

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



### Project address

Project name	Yeates House_02_04
Street address	5 KOOLOORA AVENUE - FRESHWATER 2096
Local Government Area	Northern Beaches Council
Plan type and number	Deposited Plan 12377
Lot number	3
Section number	-

### Project type

Dwelling type	Dwelling house (detached)
Type of alteration and addition	The estimated development cost for my renovation work is \$50,000 or more, and does not include a pool (and/or spa).
N/A	N/A

### Certificate Prepared by (please complete before submitting to Council or PCA)

Name / Company Name: Rachel Hudson

ABN (if applicable):

Fixtures and systems	Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
<b>Hot water</b>			
The applicant must install the following hot water system in the development: electric heat pump system that is eligible to create Renewable Energy Certificates under the (Commonwealth) Renewable Energy (Electricity) Regulations 2001 (incorporating Amendment Regulations 2005 (No. 2)).	✓	✓	✓
<b>Lighting</b>			
The applicant must ensure a minimum of 40% of new or altered light fixtures are fitted with fluorescent, compact fluorescent, or light-emitting-diode (LED) lamps.		✓	✓
<b>Fixtures</b>			
The applicant must ensure new or altered showerheads have a flow rate no greater than 9 litres per minute or a 3 star water rating.		✓	✓
The applicant must ensure new or altered toilets have a flow rate no greater than 4 litres per average flush or a minimum 3 star water rating.		✓	✓
The applicant must ensure new or altered taps have a flow rate no greater than 9 litres per minute or minimum 3 star water rating.		✓	

Construction			Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
Insulation requirements					
The applicant must construct the new or altered construction (floor(s), walls, and ceilings/roofs) in accordance with the specifications listed in the table below, except that a) additional insulation is not required where the area of new construction is less than 2m <sup>2</sup> , b) insulation specified is not required for parts of altered construction where insulation already exists.			✓	✓	✓
Construction	Additional insulation required (R-value)	Other specifications			
concrete slab on ground floor with in-slab heating system.	R1.00 (slab edge)	in-slab heating system			
suspended floor above garage: concrete (R0.6).	nil	N/A			
floor above existing dwelling or building.	nil	N/A			
external wall: cavity brick	nil				
external wall: framed (weatherboard, fibro, metal clad)	R1.30 (or R1.70 including construction)				
external wall: brick veneer	R1.16 (or R1.70 including construction)				
internal wall shared with garage: single skin masonry (R0.18)	nil				
raked ceiling, pitched/skillion roof: framed	ceiling: nil (up), roof: foil backed blanket (100 mm)	light (solar absorptance < 0.475)			

Glazing requirements	Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
<b>Windows and glazed doors</b>			
The applicant must install the windows, glazed doors and shading devices, in accordance with the specifications listed in the table below. Relevant overshadowing specifications must be satisfied for each window and glazed door.	✓	✓	✓
The following requirements must also be satisfied in relation to each window and glazed door:		✓	✓
Each window or glazed door with standard aluminium or timber frames and single clear or toned glass may either match the description, or, have a U-value and a Solar Heat Gain Coefficient (SHGC) no greater than that listed in the table below. Total system U-values and SHGCs must be calculated in accordance with National Fenestration Rating Council (NFRC) conditions.		✓	✓
Each window or glazed door with improved frames, or pyrolytic low-e glass, or clear/air gap/clear glazing, or toned/air gap/clear glazing must have a U-value and a Solar Heat Gain Coefficient (SHGC) no greater than that listed in the table below. Total system U-values and SHGCs must be calculated in accordance with National Fenestration Rating Council (NFRC) conditions. The description is provided for information only. Alternative systems with complying U-value and SHGC may be substituted.		✓	✓
For projections described in millimetres, the leading edge of each eave, pergola, verandah, balcony or awning must be no more than 500 mm above the head of the window or glazed door and no more than 2400 mm above the sill.	✓	✓	✓
Pergolas with polycarbonate roof or similar translucent material must have a shading coefficient of less than 0.35.		✓	✓
External louvres and blinds must fully shade the window or glazed door beside which they are situated when fully drawn or closed.		✓	✓
Pergolas with fixed battens must have 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 be more than 50 mm.		✓	✓
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 or 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 in the table below.	✓	✓	✓

Glazing requirements							Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
<b>Windows and glazed doors glazing requirements</b>									
Window/door number	Orientation	Area of glass including frame (m2)	Overshadowing height (m)	Overshadowing distance (m)	Shading device	Frame and glass type			
W1	SE	1.9	0	0	none	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W2	NE	4.5	0	0	awning (adjustable) >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W3	NE	0.9	0	0	eave/ verandah/ pergola/balcony >=450 mm	timber or uPVC, single pyrolytic low-e, (U-value: 3.99, SHGC: 0.4)			
W4	NE	4	0	0	external louvre/blind (adjustable)	timber or uPVC, single clear, (or U- value: 5.71, SHGC: 0.66)			
W5	NE	4	0	0	pergola (adjustable shade) >=900 mm	timber or uPVC, single clear, (or U- value: 5.71, SHGC: 0.66)			

Glazing requirements							Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
Window/door number	Orientation	Area of glass including frame (m2)	Overshadowing height (m)	Overshadowing distance (m)	Shading device	Frame and glass type			
W7	NE	3	0	0	eave/ verandah/ pergola/balcony >=450 mm	timber or uPVC, single pyrolytic low-e, (U-value: 3.99, SHGC: 0.4)			
W8	NE	0.7	0	0	external louvre/blind (adjustable)	timber or uPVC, single clear, (or U- value: 5.71, SHGC: 0.66)			
W9	NE	1.4	0	0	eave/ verandah/ pergola/balcony >=450 mm	timber or uPVC, single pyrolytic low-e, (U-value: 3.99, SHGC: 0.4)			
W10	SW	4	0	0	eave/ verandah/ pergola/balcony >=450 mm	timber or uPVC, single clear, (or U- value: 5.71, SHGC: 0.66)			
W11	SW	11.5	0	0	pergola (adjustable shade) >=900 mm	timber or uPVC, single clear, (or U- value: 5.71, SHGC: 0.66)			

Glazing requirements							Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
<b>Windows and glazed doors glazing requirements</b>									
Window/door number	Orientation	Area of glass including frame (m2)	Overshadowing height (m)	Overshadowing distance (m)	Shading device	Frame and glass type			
W12	SW	2.2	0	0	external louvre/blind (adjustable)	timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66)			
W13	SW	0.7	0	0	external louvre/blind (adjustable)	timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66)			
W14	SE	1.7	0	0	eave/verandah/pergola/balcony >=450 mm	timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66)			
W15	SE	3.2	0	0	eave/verandah/pergola/balcony >=450 mm	timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66)			
W16	SE	1.6	0	0	eave/verandah/pergola/balcony >=450 mm	timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66)			

Glazing requirements							Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
Window/door number	Orientation	Area of glass including frame (m2)	Overshadowing height (m)	Overshadowing distance (m)	Shading device	Frame and glass type			
W17	SE	2.8	0	0	external louvre/blind (adjustable)	timber or uPVC, single clear, (or U- value: 5.71, SHGC: 0.66)			
W19	NW	5	2.4	2.4	pergola (adjustable shade) >=900 mm	timber or uPVC, single clear, (or U- value: 5.71, SHGC: 0.66)			
W20	NW	3.2	2.4	2.4	eave/ verandah/ pergola/balcony >=450 mm	timber or uPVC, single clear, (or U- value: 5.71, SHGC: 0.66)			
W21	NW	1.2	2.4	2.4	eave/ verandah/ pergola/balcony >=450 mm	timber or uPVC, single clear, (or U- value: 5.71, SHGC: 0.66)			
W22	NW	1.5	2.4	2.4	eave/ verandah/ pergola/balcony >=450 mm	timber or uPVC, single clear, (or U- value: 5.71, SHGC: 0.66)			




Glazing requirements							Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
<b>Windows and glazed doors glazing requirements</b>									
Window/door number	Orientation	Area of glass including frame (m2)	Overshadowing height (m)	Overshadowing distance (m)	Shading device	Frame and glass type			
W23	NW	2.8	0	0	external louvre/blind (adjustable)	timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66)			
W24	SW	1.5	0	0	eave/verandah/pergola/balcony >=450 mm	timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66)			
W26	SE	0.7	0	0	eave/verandah/pergola/balcony >=450 mm	timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66)			
W25	NW	0.7	2.4	2.4	eave/verandah/pergola/balcony >=450 mm	timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66)			
W27	NW	0.5	4.4	2.4	none	timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66)			


Glazing requirements				Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
<b>Skylights</b>						
The applicant must install the skylights in accordance with the specifications listed in the table below.				✓	✓	✓
The following requirements must also be satisfied in relation to each skylight:					✓	✓
Each skylight may either match the description, or, have a U-value and a Solar Heat Gain Coefficient (SHGC) no greater than that listed in the table below.					✓	✓
<b>Skylights glazing requirements</b>						
Skylight number	Area of glazing inc. frame (m2)	Shading device	Frame and glass type			
S1	0.5	no shading	timber, double clear/air fill, (or U-value: 4.3, SHGC: 0.5)			
S2	0.5	no shading	timber, double clear/air fill, (or U-value: 4.3, SHGC: 0.5)			
S3	0.5	no shading	timber, double clear/air fill, (or U-value: 4.3, SHGC: 0.5)			
S4	0.5	no shading	timber, double clear/air fill, (or U-value: 4.3, SHGC: 0.5)			

## 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 & 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 for the development may be issued.