## **BASIX**<sup>°</sup>Certificate

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

## Alterations and Additions

Certificate number: A324632 06

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 Alterations and Additions Definitions" dated 06/10/2017 published by the Department. This document is available at www.basix.nsw.gov.au

This certificate is a revision of certificate number A324632 05 lodged with the consent authority or certifier on 08 Oct 2019 with application DA2019/1108.

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 Sch 1 Cl 2A, 4A or 6A of the Environmental Planning and Assessment Regulation 2000

Secretary Date of issue: Thursday, 29, October 2020 To be valid, this certificate must be lodged within 3 months of the date of issue.



Planning, Industry & Environment

Project address	
Project name	21 Wattle Ave - DA_06
Street address	21 Wattle Avenue Fairlight 2094
Local Government Area	Manly Council
Plan type and number	Deposited Plan 11828
Lot number	40
Section number	
Project type	
	Separate dwelling house

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

Name / Company Name: Phil Brown Drafting

ABN (if applicable): 16164362569

Fixtures and systems	Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
Lighting			
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.		~	~
Fixtures			
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.		$\checkmark$	~
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.		$\checkmark$	$\checkmark$
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.		$\checkmark$	

Construction			Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check	
Insulation requirements						
the table below, except that a) additional insula	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 2m2, 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.	nil					
suspended floor with enclosed subfloor: framed (R0.7).	R0.60 (down) (or R1.30 including construction)					
floor above existing dwelling or building.	nil					
external wall: brick veneer	R1.16 (or R1.70 including construction)					
external wall: framed (weatherboard, fibro, metal clad)	R1.30 (or R1.70 including construction)					
flat ceiling, pitched roof	ceiling: R1.95 (up), roof: foil backed blanket (55 mm)	medium (solar absorptance 0.475 - 0.70)				

Glazing	requirements						Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
Windows	and glazed do	ors							
					nading devices, in accordance with each window and glazed door.	the specifications listed in the table below.	~	$\checkmark$	$\checkmark$
The follow	ving requirements	must also	be satisfi	ed in relatior	to each window and glazed door:			$\checkmark$	$\checkmark$
have a U-v must be ca	value and a Solar alculated in accord	Heat Gair dance with	n Coefficie n National	ent (SHGC) r	no greater than that listed in the tabl	ar glazing, or toned/air gap/clear glazing must le below. Total system U-values and SHGCs s. The description is provided for information		~	~
					each eave, pergola, verandah, bal han 2400 mm above the sill.	cony or awning must be no more than 500 mm	$\checkmark$	$\checkmark$	$\checkmark$
	ctions described as shown in the table		ne ratio of	f the projection	on from the wall to the height above	the window or glazed door sill must be at	$\checkmark$	~	~
Pergolas v	with polycarbonate	e roof or si	milar tran	slucent mate	erial must have a shading coefficien	t of less than 0.35.		$\checkmark$	$\checkmark$
					e window or glazed door above whice a window or glazed door above whice a wind be more than 50 mm.	ch they are situated, unless the pergola also		$\checkmark$	$\checkmark$
Window	s and glazed o	doors g	lazing r	equireme	nts		-		
Window / no.	door Orientation	Area of glass inc. frame (m2)	Oversha Height (m)	adowing Distance (m)	Shading device	Frame and glass type			
W2	E	1	0	0	projection/height above sill ratio >=0.23	improved aluminium, single pyrolytic low-e, (U-value: 4.48, SHGC: 0.46)			
W3	Ν	5.7	0	0	eave/verandah/pergola/balcony >=900 mm	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
W4	N	3.7	0	0	eave/verandah/pergola/balcony >=600 mm	improved aluminium, single pyrolytic low-e, (U-value: 4.48, SHGC: 0.46)			
W5	E	2.8	0	0	eave/verandah/pergola/balcony	improved aluminium, single pyrolytic low-e,			

Glazing requirements								Show on CC/CDC Plans & specs	Certifier Check
Window / door	Orientation		Oversha	dowing	Shading device	Frame and glass type			
no.		glass inc. frame (m2)	Height (m)	Distance (m)					
					>=600 mm	(U-value: 4.48, SHGC: 0.46)			
W6	N	7.8	0	0	eave/verandah/pergola/balcony >=900 mm	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
W7	Ν	7.8	0	0	eave/verandah/pergola/balcony >=900 mm	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
W8	E	4.2	0	0	eave/verandah/pergola/balcony >=600 mm	improved aluminium, single pyrolytic low-e, (U-value: 4.48, SHGC: 0.46)			
W9	E	7.5	0	0	eave/verandah/pergola/balcony >=600 mm	improved aluminium, single pyrolytic low-e, (U-value: 4.48, SHGC: 0.46)			
W10	E	4.2	0	0	projection/height above sill ratio >=0.23	improved aluminium, single pyrolytic low-e, (U-value: 4.48, SHGC: 0.46)			
W11	S	4.3	0	0	none	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
W12	S	4.3	0	0	none	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
W13	W	4.2	0	0	projection/height above sill ratio >=0.29	improved aluminium, single pyrolytic low-e, (U-value: 4.48, SHGC: 0.46)			
W14	S	1.1	0	0	eave/verandah/pergola/balcony >=600 mm	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
W15	W	1.9	0	0	eave/verandah/pergola/balcony >=600 mm	improved aluminium, single pyrolytic low-e, (U-value: 4.48, SHGC: 0.46)			
W16	W	1.2	0	0	eave/verandah/pergola/balcony >=600 mm	improved aluminium, single pyrolytic low-e, (U-value: 4.48, SHGC: 0.46)			
W17	Ν	1.1	0	0	eave/verandah/pergola/balcony >=600 mm	improved aluminium, single pyrolytic low-e, (U-value: 4.48, SHGC: 0.46)			

Glazing require	ements			Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
Skylights						
The applicant mus	st install the skylight	s in accordance with the specifications lis	ted in the table below.	$\checkmark$	$\checkmark$	$\checkmark$
The following requ	uirements must also	be satisfied in relation to each skylight:			$\checkmark$	$\checkmark$
Each skylight may the table below.		$\checkmark$	$\checkmark$			
External awnings		$\checkmark$	$\checkmark$			
Skylights glaz	ing requiremen	its				
Skylight number	Area of glazing inc. frame (m2)	Shading device	Frame and glass type			
S1	2.8	external adjustable awning or blind	aluminium, moulded plastic single clear, (or U-value: 6.21, SHGC: 0.808)			
S2	3.7	external adjustable awning or blind	aluminium, moulded plastic single clear, (or U-value: 6.21, SHGC: 0.808)			

## 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.

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