BASIX Certificate

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

Alterations and Additions

Certificate number: A324158

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

Secretarv

Date of issue: Tuesday, 18, December 2018 To be valid, this certificate must be lodged within 3 months of the date of issue.



Project name	1733 - Guinee - Beacon Hill
Street address	10 Talgarra Place Beacon Hill 2100
Local Government Area	Northern Beaches Council
Plan type and number	Deposited Plan 28206
Lot number	2
Section number	0
Project type	
Dwelling type	Separate dwelling house
Type of alteration and addition	My renovation work is valued at \$50,000 or mo and includes a pool (and/or spa).

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

Name / Company Name: zugai strudwick architects

ABN (if applicable): 53119139221

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Pool and Spa	Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
Rainwater tank			
The applicant must install a rainwater tank of at least 1159 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 rainwater runoff from at least 257 square metres of roof area.		\checkmark	\checkmark
The applicant must connect the rainwater tank to a tap located within 10 metres of the edge of the pool.		\checkmark	\checkmark
Outdoor swimming pool			
The swimming pool must be outdoors.	\checkmark	\checkmark	\checkmark
The swimming pool must not have a capacity greater than 72 kilolitres.	\checkmark	\checkmark	\checkmark
The swimming pool must have a pool cover.		\checkmark	\checkmark
The swimming pool must be shaded.	\checkmark	\checkmark	
The applicant must install a pool pump timer for the swimming pool.		\checkmark	\checkmark
The applicant must not incorporate any heating system for the swimming pool that is part of this development.		\checkmark	\checkmark

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	1		
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	~
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 applicant must construct the new or altered the table below, except that a) additional insulat is not required for parts of altered construction v	tion is not required where the area of new const		~	~	~
Construction	Additional insulation required (R-value)	Other specifications			
concrete slab on ground floor.	nil				
floor above existing dwelling or building.	nil				
external wall: cavity brick	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)				
internal wall shared with garage: cavity brick wall (R0.67)	nil				
flat ceiling, pitched roof	ceiling: R1.45 (up), roof: foil backed blanket (55 mm)	dark (solar absorptance > 0.70)			
flat ceiling, flat roof: framed	ceiling: R1.58 (up), roof: foil backed blanket (55 mm)	dark (solar absorptance > 0.70)			

Glazing ree	quirements						Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
Windows a	nd glazed do	ors							
					hading devices, in accordance with r each window and glazed door.	the specifications listed in the table below.	~	~	\checkmark
The following	g requirements		\checkmark	\checkmark					
have a U-val	v or glazed doo lue and a Solar culated in accore		~	~					
have a U-val must be calc	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 mus 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 nust 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.							~	\checkmark	\checkmark
Pergolas with	h polycarbonate	e roof or s	imilar tran	slucent mat	erial must have a shading coefficien	t of less than 0.35.		\checkmark	\checkmark
					e window or glazed door above whic ens must not be more than 50 mm.	ch they are situated, unless the pergola also		\checkmark	\checkmark
	ring buildings or he 'overshadow				ht and distance from the centre and	the base of the window and glazed door, as	\checkmark	~	\checkmark
Windows	and glazed	doors g	lazing r	equireme	nts				
Window / do no.	oor Orientation	Area of glass inc. frame (m2)	Oversha Height (m)	dowing Distance (m)	Shading device	Frame and glass type			
D01	S	7.56	0	0	eave/verandah/pergola/balcony >=750 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
D02	N	3.36	0	0	eave/verandah/pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			

Glazing requ	Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check						
Window / door	Orientation	Area of	Oversha	adowing	Shading device	Frame and glass type			
no.		glass inc. frame (m2)	Height (m)	Distance (m)					
D03	E	1.8	0	0	eave/verandah/pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
D04	S	7.2	0	0	eave/verandah/pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W01	S	1.05	0	0	eave/verandah/pergola/balcony >=750 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W02	S	2.69	0	0	none	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W03	S	2.69	0	0	none	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W04	S	2.69	0	0	none	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W05	W	1.29	0	0	eave/verandah/pergola/balcony >=450 mm	standard aluminium, single pyrolytic low-e, (U-value: 5.7, SHGC: 0.47)			
W06	Ν	1.68	0	0	eave/verandah/pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W07	W	1.44	0	0	eave/verandah/pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W08	E	1.08	2	2	none	standard aluminium, single pyrolytic low-e, (U-value: 5.7, SHGC: 0.47)			
W09	E	1.08	2	2	none	standard aluminium, single pyrolytic low-e, (U-value: 5.7, SHGC: 0.47)			
W10	E	1.08	2	2	none	standard aluminium, single pyrolytic low-e, (U-value: 5.7, SHGC: 0.47)			
W11	W	1.34	0	0	eave/verandah/pergola/balcony >=450 mm	standard aluminium, single pyrolytic low-e, (U-value: 5.7, SHGC: 0.47)			

Glazing requirements								Show on CC/CDC Plans & specs	Certifier Check
Window / door no.	Orientation	Area of glass inc. frame (m2)	Oversha Height (m)	adowing Distance (m)	Shading device	Frame and glass type			
W12	N	0.84	0	0	eave/verandah/pergola/balcony >=450 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W13	N	0.84	0	0	eave/verandah/pergola/balcony >=450 mm	standard aluminium, single pyrolytic low-e, (U-value: 5.7, SHGC: 0.47)			
W14	Ν	0.84	0	0	eave/verandah/pergola/balcony >=450 mm	standard aluminium, single pyrolytic low-e, (U-value: 5.7, SHGC: 0.47)			
W15	W	1.29	0	0	eave/verandah/pergola/balcony >=450 mm	standard aluminium, single pyrolytic low-e, (U-value: 5.7, SHGC: 0.47)			
W16	Ν	1.07	0	0	eave/verandah/pergola/balcony >=450 mm	standard aluminium, single pyrolytic low-e, (U-value: 5.7, SHGC: 0.47)			
W17	E	1.29	0	0	eave/verandah/pergola/balcony >=450 mm	standard aluminium, single pyrolytic low-e, (U-value: 5.7, SHGC: 0.47)			
W18	S	1.29	0	0	eave/verandah/pergola/balcony >=450 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W19	S	2.03	0	0	eave/verandah/pergola/balcony >=450 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W20	S	1.29	0	0	eave/verandah/pergola/balcony >=450 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W21	S	2.69	0	0	eave/verandah/pergola/balcony >=450 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W22	S	2.69	0	0	eave/verandah/pergola/balcony >=450 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
Skylights									
The applicant n	nust install the	e skylights	s in accor	dance with t	he specifications listed in the table t	pelow.	~	 	~

Glazing require	ments			Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
The following requ		\checkmark	\checkmark			
Each skylight may the table below.		 	~			
Skylights glaz	ing requiremen	ts				
Skylight number	Area of glazing inc. frame (m2)	Shading device	Frame and glass type			
SK1	0.46	no shading	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.