BASIX Certificate

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

Alterations and Additions

Certificate number: A368660

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: Wednesday, 05, February 2020 To be valid, this certificate must be lodged within 3 months of the date of issue.



Planning, Industry & Environment

Project name	Balgowlah House
Street address	29 White Street Balgowlah 2093
Local Government Area	Manly Council
Plan type and number	Deposited Plan 8303
Lot number	4
Section number	
Project type	
Dwelling type	Unit

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

Name / Company Name: Hallum Jennings

ABN (if applicable): N/A

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	~
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 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).					
external wall: framed (weatherboard, fibro, metal clad)	R1.30 (or R1.70 including construction)				
external wall: framed (weatherboard, fibro, metal clad)	R1.30 (or R1.70 including construction)				
external wall: framed (weatherboard, fibro, metal clad)	R1.30 (or R1.70 including construction)				
flat ceiling, flat roof: framed	ceiling: R0.40 (up), roof: foil backed blanket (100 mm)	light (solar absorptance < 0.475)			

Glazing re	equirements						Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
Windows	and glazed do	ors							1
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:						\checkmark	\checkmark		
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.						~	~		
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.					\checkmark	 	~		
Windows	s and glazed	doors g	lazing r	equireme	nts				
Window / door Orientation Area of Overshadowing Shading device Frame and glass type									
no.		glass inc. frame (m2)	Height (m)	Distance (m)					
W1	W	1.2	6.5	1.5	none	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W2	S	2	12	3.5	none	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
D1	S	6.3	12	3.5	none	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
D2	S	1.6	4	1	none	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W3	S	0.6	4	1	none	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
Skylights									
, 0	ant must install th	ne skyliah	ts in accor	dance with t	he specifications listed in t	the table below		 ✓ 	\checkmark

Glazing require	ements			Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
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. Skylights glazing requirements					~	~
Skylight number	Area of glazing inc. frame (m2)	Shading device	Frame and glass type			
S1	1	no shading	timber, low-E internal/argon fill/clear external, (or U-value: 2.5, SHGC: 0.456)			
S2	0.5	no shading	timber, low-E internal/argon fill/clear external, (or U-value: 2.5, SHGC: 0.456)			
S3	0.5	no shading	timber, low-E internal/argon fill/clear external, (or U-value: 2.5, SHGC: 0.456)			

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.