BASIX® Certificate

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

Alterations and Additions

Certificate number: A145457_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 Alterations and Additions Definitions" dated 29/9/2006 published by Department of Planning. This document is available at www.basix.nsw.gov.au

This certificate is a revision of certificate number A145457 lodged with the consent authority or certifier on 06 Sep 2012 with application 2012/1038.

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.

Director-General
Date of issue: Friday, 29, November 2013
To be valid, this certificate must be lodged within 3 months of the date of issue.

NSW GOVERNMENT | Planning & Infrastructure

Description of project

Project address	
Project name	16 Stepehn St, Beacon Hill_02
Street address	16 Stephen Street Beacon Hill 2100
Local Government Area	Warringah Council
Plan type and number	Deposited Plan 19657
Lot number	22
Section number	0
Project type	
Dwelling type	Separate dwelling house
Type of alteration and addition	My renovation work is valued at $50,000 or more, and does not include a pool (and/or spa).

Certificate Prepared by (please complete before submitting to Council or PCA)
Name / Company Name: GRS Building Reports
ABN (if applicable): 33 077 900 497

Fixtures and systems	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: gas instantaneous.	✓	✓	✓
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.		✓	✓
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 2m2, b) insulation specified is not required for parts of altered construction where insulation already exists.	✓	✓	✓

Construction	Additional insulation required (R-value)	Other specifications
floor above existing dwelling or building.	nil	
external wall: framed (weatherboard, fibro, metal clad)	R1.30 (or R1.70 including construction)	
flat ceiling, flat roof: framed	ceiling: R1.58 (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 doors			
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.	✓	✓	✓
For projections described as a ratio, the ratio of the projection from the wall to the height above the window or glazed door sill must be at least that shown in the table below.	✓	✓	✓
Pergolas with polycarbonate roof or similar translucent material must have a shading coefficient of less than 0.35.		✓	✓
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.		✓	✓

Windows and glazed doors glazing requirements

Window / door no.	Orientation	Area of glass inc. frame (m2)	Overshadowing		Shading device	Frame and glass type
			Height (m)	Distance (m)		
W1	W	2.56	0	0	projection/height above sill ratio >=0.43	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)
W2	S	1.2	0	0	eave/verandah/pergola/balcony >=600 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)

Glazing requirements

Window / door no.	Orientation	Area of glass inc. frame (m2)	Overshadowing		Shading device	Frame and glass type	Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
			Height (m)	Distance (m)					
W3	W	1.2	0	0	projection/height above sill ratio >=0.36	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W4	W	0.6	0	0	projection/height above sill ratio >=0.36	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W5	W	0.6	0	0	projection/height above sill ratio >=0.36	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W6	N	0.9	0	0	projection/height above sill ratio >=0.36	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W7	E	4.41	0	0	eave/verandah/pergola/balcony >=600 mm	standard aluminium, single pyrolytic low-e, (U-value: 5.7, SHGC: 0.47)			
W8	E	4.41	0	0	eave/verandah/pergola/balcony >=600 mm	standard aluminium, single pyrolytic low-e, (U-value: 5.7, SHGC: 0.47)			
W9	S	2.52	0	0	eave/verandah/pergola/balcony >=600 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W11	W	2.44	0	0	projection/height above sill ratio >=0.43	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W13	E	2.44	0	0	projection/height above sill ratio >=0.43	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
D1	N	4.41	0	0	eave/verandah/pergola/balcony >=600 mm	standard aluminium, single pyrolytic low-e, (U-value: 5.7, SHGC: 0.47)			
D2	E	10.94	0	0	eave/verandah/pergola/balcony >=600 mm	standard aluminium, single pyrolytic low-e, (U-value: 5.7, SHGC: 0.47)			
D3	S	2.52	0	0	eave/verandah/pergola/balcony >=600 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			

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.