

BASIX[®]Certificate

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

Alterations and Additions

Certificate number: A439999_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 Alterations and Additions Definitions" dated 06/10/2017 published by the Department. This document is available at www.basix.nsw.gov.au

Secretary

Date of issue: Tuesday, 24, May 2022

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



Planning,
Industry &
Environment

Description of project

Project address	
Project name	20 Ethie Road, Beacon Hill_04
Street address	20 Ethie Road Beacon Hill 2100
Local Government Area	Northern Beaches Council
Plan type and number	Deposited Plan 758069
Lot number	10
Section number	63
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: Efficient Living Pty Ltd

ABN (if applicable): 82116346082

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: solar (electric-boosted) system that is eligible to create Renewable Energy Certificates under the (Commonwealth) Renewable Energy (Electricity) Regulations 2001 (incorporating Amendment Regulations 2005 (No. 2)).	✓	✓	✓
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 2m ² , b) insulation specified is not required for parts of altered construction where insulation already exists.			✓	✓	✓
Construction	Additional insulation required (R-value)	Other specifications			
suspended floor with enclosed subfloor: concrete (R0.6).	R0.70 (down) (or R1.30 including construction)				
suspended floor above garage: framed (R0.7).	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				
raked ceiling, pitched/skillion roof: framed	ceiling: R1.50 (up), roof: foil backed blanket (55 mm)	light (solar absorptance < 0.475)			

Glazing requirements							Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
Windows and glazed doors									
<p>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.</p> <p>The following requirements must also be satisfied in relation to each window and glazed door:</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p>							✓	✓	✓
								✓	✓
								✓	✓
							✓	✓	✓
							✓	✓	✓
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	SE	4.2	5.2	8.7	none	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W2	SE	3.85	0	0	none	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W3	SE	10.57	0	0	none	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W4	NE	10.57	0	0	projection/height above sill ratio >=0.43	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			

Glazing requirements							Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
Window / door no.	Orientation	Area of glass inc. frame (m2)	Overshadowing		Shading device	Frame and glass type			
			Height (m)	Distance (m)					
W5	NE	4.48	0	0	projection/height above sill ratio ≥0.29	standard aluminium, toned/air gap/clear, (U-value: 5.31, SHGC: 0.48)			
W6	NW	1.4	0	0	projection/height above sill ratio ≥0.29	standard aluminium, toned/air gap/clear, (U-value: 5.31, SHGC: 0.48)			
W7	NW	0.66	2.2	2.5	projection/height above sill ratio ≥0.29	standard aluminium, toned/air gap/clear, (U-value: 5.31, SHGC: 0.48)			
W8	SW	11.5	0	0	none	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W10	SE	2.283	5.2	9.7	projection/height above sill ratio ≥0.43	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W11	SE	1.54	2.2	8.7	projection/height above sill ratio ≥0.43	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W12	SE	1.54	0	0	projection/height above sill ratio ≥0.43	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W13	SE	2.24	0	0	projection/height above sill ratio ≥0.36	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W14	SE	2.24	0	0	projection/height above sill ratio ≥0.36	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W15	NE	9.251	0	0	projection/height above sill ratio ≥0.29	standard aluminium, toned/air gap/clear, (U-value: 5.31, SHGC: 0.48)			
W16	NE	3.32	0	0	projection/height above sill ratio ≥0.29	standard aluminium, toned/air gap/clear, (U-value: 5.31, SHGC: 0.48)			
W17	NW	0.84	0	0	projection/height above sill ratio ≥0.43	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W18	NW	0.84	0	0	projection/height above sill ratio ≥0.43	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			

Glazing requirements							Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
Window / door no.	Orientation	Area of glass inc. frame (m2)	Overshadowing		Shading device	Frame and glass type			
			Height (m)	Distance (m)					
W19	NW	0.84	0	0	projection/height above sill ratio ≥0.43	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W20	NW	0.84	0	0	projection/height above sill ratio ≥0.43	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W21	SW	1.12	0	0	projection/height above sill ratio ≥0.29	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W22	SW	1.12	0	0	projection/height above sill ratio ≥0.29	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W23	SW	1.12	0	0	projection/height above sill ratio ≥0.36	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W24	SE	0.54	1.8	11.7	projection/height above sill ratio ≥0.43	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W25	SE	0.54	1.8	11.7	projection/height above sill ratio ≥0.43	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W26	SE	0.54	1.8	11.7	projection/height above sill ratio ≥0.43	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W27	SE	0.54	0	0	projection/height above sill ratio ≥0.43	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W28	SE	0.54	0	0	projection/height above sill ratio ≥0.43	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W29	SE	0.54	0	0	projection/height above sill ratio ≥0.43	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W30	SE	0.54	0	0	projection/height above sill ratio ≥0.43	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.