BASIX Certificate

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

Alterations and Additions

Certificate number: A364044

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, 19, November 2019

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



Project address Project name 20 Daisy Street North Balgowlah 20 Daisy Street North Balgowlah 2093 Street address Northern Beaches Council Local Government Area Deposited Plan 402710 Plan type and number Lot number Α Section number Project type Separate dwelling house Dwelling type Type of alteration and My renovation work is valued at \$50,000 or more, addition and does not include a pool (and/or spa).

escriptio

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

Name / Company Name: Efficient Living Pty Ltd

ABN (if applicable): 82116346082

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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.		>	

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Construction			Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
Insulation requirements					'
	construction (floor(s), walls, and ceilings/roofs) ion is not required where the area of new construction insulation already exists.		✓	✓	✓
Construction	Additional insulation required (R-value)	Other specifications			
concrete slab on ground floor.	nil				
suspended floor with open subfloor: concrete (R0.6).	R0.9 (down) (or R1.50 including construction)				
suspended floor with enclosed subfloor: concrete (R0.6).	R0.70 (down) (or R1.30 including construction)				
external wall: cavity brick	nil				
external wall: framed (weatherboard, fibro, metal clad)	R1.30 (or R1.70 including construction)				
internal wall shared with garage: single skin masonry (R0.18)	nil				
flat ceiling, pitched roof	ceiling: R3.00 (up), roof: foil/sarking	dark (solar absorptance > 0.70)			
raked ceiling, pitched/skillion roof: framed	ceiling: R3.00 (up), roof: foil/sarking	dark (solar absorptance > 0.70)			

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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.		✓	✓
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.	✓	✓	✓
Windows and glazed doors glazing requirements			
Window / door no. Orientation Area of glass inc. frame (m2) Overshadowing Shading device Frame and glass type Frame and glas			
W1 E 5.35 0 0 eave/verandah/pergola/balcony standard aluminium, single pyrolytic low-e, (U-value: 5.7, SHGC: 0.47)			

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							Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
Window / door no.	Orientation	Area of glass inc. frame (m2)	Oversha Height (m)	Distance (m)	Shading device	Frame and glass type			
W2	E	1.06	0	0	projection/height above sill ratio >=0.23	standard aluminium, single pyrolytic low-e, (U-value: 5.7, SHGC: 0.47)			
W3	E	1.53	0	0	projection/height above sill ratio >=0.23	standard aluminium, single pyrolytic low-e, (U-value: 5.7, SHGC: 0.47)			
W4	S	1.68	0	0	none	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W5	S	0.6	1.01	4.97	none	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W6	S	0.9	1.01	4.97	none	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W7	S	1.92	2.8	4.97	none	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W8 HL	W	2.19	0	0	eave/verandah/pergola/balcony >=750 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W9 HL	W	2.19	0	0	eave/verandah/pergola/balcony >=750 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W10	W	3.39	0	0	projection/height above sill ratio >=0.36	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W11	N	0.85	0	0	eave/verandah/pergola/balcony >=600 mm	standard aluminium, single pyrolytic low-e, (U-value: 5.7, SHGC: 0.47)			
W12	N	2.25	0	0	eave/verandah/pergola/balcony >=600 mm	standard aluminium, single pyrolytic low-e, (U-value: 5.7, SHGC: 0.47)			
D1	Е	3.66	0	0	eave/verandah/pergola/balcony >=900 mm	timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66)			
D2	Е	3.66	0	0	eave/verandah/pergola/balcony >=900 mm	timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66)			

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Glazing requirements					Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check		
Window / door	Orientation	Area of	Oversha	dowing	Shading device	Frame and glass type			
no.		glass inc. frame (m2)	Height (m)	Distance (m)					
D3	E	7.13	5.44	2.33	eave/verandah/pergola/balcony >=600 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
D4	W	4.03	0	0	eave/verandah/pergola/balcony >=750 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
D5	W	4.03	0	0	eave/verandah/pergola/balcony >=750 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
D6	N	15.68	2.45	9.18	eave/verandah/pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
D7	W	15.23	0	0	eave/verandah/pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
D8	S	5.82	2.45	9.18	eave/verandah/pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
D9	S	8.96	2.45	9.18	eave/verandah/pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
Skylights									
The applicant r	nust install th	e skylights	s in accor	dance with th	ne specifications listed in the table t	pelow.	✓	✓	✓
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	1.12		no shad	ing	timber, dou	uble clear/air fill, (or U-value: 4.3, SHGC: 0.5)			

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Glazing require	Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check			
Skylight number	Area of glazing inc. frame (m2)	Shading device	Frame and glass type			
S2	0.76	no shading	timber, double clear/air fill, (or U-value: 4.3, SHGC: 0.5)			

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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.