

BASIX[®]Certificate

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

Alterations and Additions

Certificate number: A324935_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 06/10/2017 published by Planning & Infrastructure. This document is available at www.basix.nsw.gov.au

Director-General

Date of issue: Monday, 13, August 2018

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



Planning &
Infrastructure

Description of project

Project address	
Project name	10 Linkemeade Avenue_02
Street address	10 Linkmeade Avenue Clontarf 2093
Local Government Area	Northern Beaches Council
Plan type and number	Deposited Plan 7532
Lot number	64
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 includes 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

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 1039 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 230 square metres of roof area.		✓	✓
The applicant must connect the rainwater tank to a tap located within 10 metres of the edge of the pool.		✓	✓
Outdoor swimming pool			
The swimming pool must be outdoors.	✓	✓	✓
The swimming pool must not have a capacity greater than 42 kilolitres.	✓	✓	✓
The swimming pool must have a pool cover.		✓	✓
The applicant must install a pool pump timer for the swimming pool.		✓	✓
The applicant must install the following heating system for the swimming pool that is part of this development: gas.		✓	✓

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			
external wall: cavity brick	nil				
external wall: framed (weatherboard, fibro, metal clad)	R1.30 (or R1.70 including construction)				
flat ceiling, pitched roof	ceiling: R1.95 (up), roof: foil backed blanket (55 mm)	medium (solar absorptance 0.475 - 0.70)			
raked ceiling, pitched/skillion roof: framed	ceiling: R2.24 (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									
<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>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)					
5GD	NW	1.89	0	0	projection/height above sill ratio >=0.43	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
6GD	NW	9.83	5.5	8.5	projection/height above sill ratio >=0.36	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
1GD 1 GW	NW	3.6	0	0	projection/height above sill ratio >=0.43	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
7GD 2GW	NW	5.04	4.5	8.5	projection/height above sill ratio >=0.36	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
1FD	NW	1.89	0	0	projection/height above sill ratio >=0.43	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
1FW 2FW	NW	4.935	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)					
5FW	NW	1.83	0	0	projection/height above sill ratio ≥0.43	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
2FD	NW	5.04	0	0	projection/height above sill ratio ≥0.43	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
3GW	SW	1.96	0	0	none	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
4GW	SW	0.72	0	0	none	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
5GW	SW	1.96	0	0	none	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
7GW	SW	4.05	0	0	none	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
6GW	SE	1.4	0	0	none	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
2GD	SE	12.15	0	0	projection/height above sill ratio ≥0.43	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
3GD	SE	8.64	0	0	projection/height above sill ratio ≥0.43	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
4GD	S	3.57	0	0	none	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
6FW	SE	1.5	0	0	projection/height above sill ratio ≥0.43	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
7FW	SE	5.4	0	0	none	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
8FW	SE	8	0	0	none	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)					
3FD	SE	7.35	0	0	none	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
10GW	NE	0.63	0	0	none	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
Glazed roofs									
The applicant must install the glazed roofs described in the table below, in accordance with the specifications listed in the table.							✓	✓	✓
The following requirements must also be satisfied in relation to each glazed roof:									
External awnings and louvres must fully shade the glazed roof above which they are situated when fully drawn or closed.									
Glazed roofs glazing requirements							✓	✓	✓
Glazed roof number	Area of glazing (m2)	Shading device			Glass type				
3FW 4FW	3.92	external adjustable louvre			standard aluminium, clear/air gap/clear, (U-value: 5.34, SHGC: 0.67)				
11121314FW	22.4	external adjustable louvre			standard aluminium, clear/air gap/clear, (U-value: 5.34, SHGC: 0.67)				
F15 F16	4.68	external adjustable louvre			standard aluminium, clear/air gap/clear, (U-value: 5.34, SHGC: 0.67)				
F17 F18	0.85	external adjustable louvre			standard aluminium, clear/air gap/clear, (U-value: 5.34, SHGC: 0.67)				

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.