## page 1/14

## **BASIX**<sup>°</sup>Certificate

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

## Alterations and Additions

Certificate number: A509721\_03

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 Definitions" dated 10/09/2020 published by the Department. This document is available at www.basix.nsw.gov.au

Secretary

Date of issue: Tuesday, 22 October 2024 To be valid, this certificate must be lodged within 3 months of the date of issue.



Project name	McKenna_McCarrs Creek_03
Street address	323 MCCARRS CREEK ROAD - TERREYHILLS 2084
Local Government Area	Northern Beaches Council
Plan type and number	Deposited Plan 752017
Lot number	369
Section number	-
Project type	
Dwelling type	Dwelling house (attached)
Type of alteration and addition	The estimated development cost for my renovation work is \$50,000 or more, and includes a pool (and/or spa).
Number of bedrooms after alterations or additions	5
Certificate Prepared by (please	complete before submitting to Council or PCA)
Name / Company Name: Brent Gasson	
ABN (if applicable):	

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 1208.6 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 800.4 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 57.57 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: electric heat pump.		<b>v</b>	~

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: electric storage plus photovoltaic system.	~	~	~
The applicant must install a photovoltaic system with a capacity to generate at least 0.8 peak kilowatts of electricity as part of the development. The applicant must connect this system to the development's electrical system.	~	~	~
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					
	red construction (floor(s), walls, and ceilings/ ional insulation is not required where the area of altered construction where insulation alrea	a of new construction is less than 2m2, b)	~	~	~
Construction	Additional insulation required (R- value)	Other specifications			
concrete slab on ground floor.	nil	N/A			
suspended floor with enclosed subfloor: framed (R0.7).	R0.60 (down) (or R1.30 including construction)	N/A			
floor above existing dwelling or building.	nil	N/A			
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: plasterboard (R0.36)	nil				
flat ceiling, pitched roof	ceiling: R1.45 (up), roof: foil backed blanket (75 mm)	medium (solar absorptance 0.475 - 0.70)			
raked ceiling, pitched/skillion roof: framed	ceiling: R1.74 (up), roof: foil backed blanket (75 mm)	medium (solar absorptance 0.475 - 0.70)			
flat ceiling, flat roof: framed	ceiling: R1.58 (up), roof: foil backed blanket (75 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 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.	~	~	~
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.		~	~

Glazing requir	ements						Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
Windows and gla	zed doors glazing	g requirements							
Window/door number	Orientation	Area of glass including frame (m2)	Overshadowing height (m)	Overshadowing distance (m)	Shading device	Frame and glass type			
W1	W	4.98	0	0	eave/ verandah/ pergola/balcony >=600 mm	aluminium, double Lo- Tsol/air gap/ clear, (U-value: 4.9, SHGC: 0.33)			
W2	W	9.46	0	0	eave/ verandah/ pergola/balcony >=600 mm	improved aluminium, single pyrolytic low-e, (U- value: 4.48, SHGC: 0.46)			
W3	W	5.22	0	0	eave/ verandah/ pergola/balcony >=750 mm	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
W4	S	4.05	0	0	eave/ verandah/ pergola/balcony >=750 mm	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
W5	S	0.9	0	0	none	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			

BASIX Certificate number:A509721_03	

Glazing requir	lazing requirements								Certifier Check
Window/door number	Orientation	Area of glass including frame (m2)	Overshadowing height (m)	Overshadowing distance (m)	Shading device	Frame and glass type			
W6	S	0.9	0	0	none	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
W7	S	0.9	0	0	none	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
W8	W	0.9	0	0	eave/ verandah/ pergola/balcony >=600 mm	improved aluminium, single pyrolytic low-e, (U- value: 4.48, SHGC: 0.46)			
W9	S	2.1	0	0	none	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
W10	S	2.1	0	0	none	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			

Glazing requir	ements						Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
Windows and gla	zed doors glazing	y requirements							
Window/door number	Orientation	Area of glass including frame (m2)	Overshadowing height (m)	Overshadowing distance (m)	Shading device	Frame and glass type			
W11	S	2.1	0	0	none	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
W12	E	0.9	0	0	eave/ verandah/ pergola/balcony >=600 mm	improved aluminium, single pyrolytic low-e, (U- value: 4.48, SHGC: 0.46)			
W13	S	1.89	0	0	none	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
W14	S	2.44	0	0	none	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
W15	E	1.89	0	0	eave/ verandah/ pergola/balcony >=600 mm	improved aluminium, single pyrolytic low-e, (U- value: 4.48, SHGC: 0.46)			

Certificate number:					
Window/door number	Orientation	Area of glass including frame (m2)	Overshadowing height (m)	Overshadowing distance (m)	Shading device
W16	E	3.72	0	0	eave/ verandah/ pergola/ba >=600 mr
W17	E	3.3	0	0	eave/

		frame (m2)				
W16	E	3.72	0	0	eave/ verandah/ pergola/balcony >=600 mm	improved aluminium, single pyrolytic low-e, (U- value: 4.48, SHGC: 0.46)
W17	E	3.3	0	0	eave/ verandah/ pergola/balcony >=900 mm	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)
W18	E	3.2	0	0	eave/ verandah/ pergola/balcony >=450 mm	improved aluminium, single pyrolytic low-e, (U- value: 4.48, SHGC: 0.46)
W19	E	3.2	0	0	eave/ verandah/ pergola/balcony >=450 mm	improved aluminium, single pyrolytic low-e, (U- value: 4.48, SHGC: 0.46)
W20	E	3.2	0	0	eave/ verandah/ pergola/balcony >=450 mm	improved aluminium, single pyrolytic low-e, (U- value: 4.48, SHGC: 0.46)

Certifier

Check

Show on CC/CDC

Plans & specs

Show on

DA Plans

Frame and glass type

Glazing requir	nberincluding frame (m2)height (m)distance (m)deviceglass type1E7.4800eave/ verandah/ pergola/balconyimproved aluminium, single pyrolytic							Show on CC/CDC Plans & specs	Certifier Check
Windows and gla	zed doors glazing								
Window/door number	Orientation	including							
W21	E	7.48	0	0	verandah/	aluminium,			
D12	E	6.8	0	0	eave/ verandah/ pergola/balcony >=900 mm	improved aluminium, single pyrolytic low-e, (U- value: 4.48, SHGC: 0.46)			
W23	W	3.2	0	0	eave/ verandah/ pergola/balcony >=900 mm	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
W24	W	1.36	0	0	eave/ verandah/ pergola/balcony >=600 mm	improved aluminium, single pyrolytic low-e, (U- value: 4.48, SHGC: 0.46)			
W25	W	1.36	0	0	eave/ verandah/ pergola/balcony >=600 mm	improved aluminium, single pyrolytic low-e, (U- value: 4.48, SHGC: 0.46)			

BASIX Certificate number:A509721_03	
-------------------------------------	--

Glazing requirements							Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
Window/door number	Orientation	Area of glass including frame (m2)	Overshadowing height (m)	Overshadowing distance (m)	Shading device	Frame and glass type			
W26	S	1.36	0	0	eave/ verandah/ pergola/balcony >=450 mm	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
W27	S	0.97	0	0	eave/ verandah/ pergola/balcony >=450 mm	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
W28	S	0.97	0	0	eave/ verandah/ pergola/balcony >=450 mm	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
W29	S	0.97	0	0	eave/ verandah/ pergola/balcony >=450 mm	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
W30	W	0.97	0	0	eave/ verandah/ pergola/balcony >=600 mm	improved aluminium, single pyrolytic low-e, (U- value: 4.48, SHGC: 0.46)			

Glazing requir	ements						Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
Windows and gla	zed doors glazing	y requirements							
Window/door number	Orientation	Area of glass including frame (m2)	Overshadowing height (m)	Overshadowing distance (m)	Shading device	Frame and glass type			
W39	E	1.5	0	0	eave/ verandah/ pergola/balcony >=450 mm	improved aluminium, single pyrolytic low-e, (U- value: 4.48, SHGC: 0.46)			
W32	S	2.05	0	0	eave/ verandah/ pergola/balcony >=600 mm	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
W33	S	2.05	0	0	eave/ verandah/ pergola/balcony >=600 mm	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
W34	E	0.97	0	0	eave/ verandah/ pergola/balcony >=450 mm	improved aluminium, single pyrolytic low-e, (U- value: 4.48, SHGC: 0.46)			
W35	S	1.5	0	0	eave/ verandah/ pergola/balcony >=450 mm	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			

BASIX Certificate	number:A509721_03

Glazing requirements							Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
Window/door number	Orientation	Area of glass including frame (m2)	Overshadowing height (m)	Overshadowing distance (m)	Shading device	Frame and glass type			
W36	S	2	0	0	eave/ verandah/ pergola/balcony >=450 mm	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
W37	E	1.5	0	0	eave/ verandah/ pergola/balcony >=450 mm	improved aluminium, single pyrolytic low-e, (U- value: 4.48, SHGC: 0.46)			
W38	E	3.16	0	0	eave/ verandah/ pergola/balcony >=450 mm	improved aluminium, single pyrolytic low-e, (U- value: 4.48, SHGC: 0.46)			
W42	N	4.4	0	0	eave/ verandah/ pergola/balcony >=600 mm	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
W45	E	6.14	0	0	eave/ verandah/ pergola/balcony >=600 mm	improved aluminium, single pyrolytic low-e, (U- value: 4.48, SHGC: 0.46)			

## Legend

In these commitments, "applicant" means the person carrying out the development.

Commitments identified with a V 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 V 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 V 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.