# **BASIX** Certificate

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

# **Alterations and Additions**

Certificate number: A363032

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: Wednesday, 04, December 2019

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



## **Project address** Project name Messenger Residence 1130 Barrenjooey Road Palm Beach 2108 Street address Northern Beaches Council Local Government Area Deposited Plan 13374 Plan type and number 4B Lot number Section number Project type Separate dwelling house Dwelling type Type of alteration and My renovation work is valued at \$50,000 or more, and does not include a pool (and/or spa). addition

Certificate Prepared by (please c	omplete before submitting to Council or PCA)
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Name / Company Name: benfitzgerald

ABN (if applicable): 79228174523

escriptio

BASIX Certificate number: A363032 page 2 / 7

Fixtures and systems	Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
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.		<b>✓</b>	✓
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.		<b>✓</b>	✓
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.		<b>✓</b>	

BASIX Certificate number: A363032 page 3 / 7

Construction	Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check		
Insulation requirements					
The applicant must construct the new or altere the table below, except that a) additional insula is not required for parts of altered construction	<b>V</b>	<b>V</b>	<b>V</b>		
Construction	Additional insulation required (R-value)	Other specifications			
concrete slab on ground floor.	nil				
suspended floor with open subfloor: framed (R0.7).	R0.8 (down) (or R1.50 including construction)				
suspended floor above garage: framed (R0.7).	nil				
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: R1.40 (up), roof: foil backed blanket (55 mm)	light (solar absorptance < 0.475)			

BASIX Certificate number: A363032 page 4 / 7

	uirements						Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
Windows an	d glazed do	ors							
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.							<b>✓</b>	~	<b>~</b>
The following	requirements i	must also	be satisfi	ed in relatior	n 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.								<b>~</b>	<b>✓</b>
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.								<b>✓</b>	<b>✓</b>
Pergolas with polycarbonate roof or similar translucent material must have a shading coefficient of less than 0.35.									
Pergolas with	polycarbonate	roof or si	imilar tran	slucent mate	erial must have a shading coefficien	t of less than 0.35.		✓	✓
Pergolas with shades a perp	fixed battens re endicular wind	must have	e battens spacing b	parallel to the etween batte	e window or glazed door above whi ens must not be more than 50 mm.	t of less than 0.35.		✓ ✓	✓ ✓
Pergolas with shades a perp	fixed battens rependicular wind	must have dow. The	battens spacing b	parallel to the etween batte	e window or glazed door above whi ens must not be more than 50 mm.	ch they are situated, unless the pergola also			<b>✓</b>
Pergolas with shades a perp	fixed battens re endicular wind	must have dow. The	battens spacing b	parallel to the etween batte	e window or glazed door above whi ens must not be more than 50 mm.				<b>✓</b>
Pergolas with shades a perp Windows a Window / doc	fixed battens rependicular wind	must have dow. The doors g Area of glass inc. frame	e battens spacing b lazing r Oversha Height	parallel to the etween batte equiremendowing  Distance	e window or glazed door above whi ens must not be more than 50 mm.	ch they are situated, unless the pergola also			<b>✓</b>
Pergolas with shades a perp <b>Windows a</b> Window / doo no.	fixed battens rendicular wind glazed or Orientation	dow. The dow. The dow. The dow. The down down down down down down down down	e battens spacing b lazing r Oversha Height (m)	parallel to the etween batte equirement adowing Distance (m)	e window or glazed door above whitens must not be more than 50 mm.   nts  Shading device  eave/verandah/pergola/balcony	Frame and glass type  improved aluminium, single pyrolytic low-e,			✓
Pergolas with shades a perp Windows a Window / doo no.	fixed battens rendicular wind glazed of Orientation	dow. The dow. The dow. The dow. The dow. The down of glass inc. frame (m2)	e battens spacing b lazing r Oversha Height (m)	equirement downing Distance (m)	e window or glazed door above whitens must not be more than 50 mm.   This  Shading device  eave/verandah/pergola/balcony >=750 mm  eave/verandah/pergola/balcony	Frame and glass type  improved aluminium, single pyrolytic low-e, (U-value: 4.48, SHGC: 0.46) improved aluminium, single pyrolytic low-e,			<b>*</b>
Pergolas with shades a perp Windows a Window / doo no. W1	fixed battens rendicular wind glazed or Orientation  W	dow. The dow. The dow. The dow. The dow. The dow. The down the dow	e battens spacing be lazing r Overshall Height (m)  0	parallel to the etween batter equirement dowing Distance (m)	e window or glazed door above whitens must not be more than 50 mm.   This  Shading device  eave/verandah/pergola/balcony >=750 mm  eave/verandah/pergola/balcony >=900 mm  eave/verandah/pergola/balcony	Frame and glass type  improved aluminium, single pyrolytic low-e, (U-value: 4.48, SHGC: 0.46) improved aluminium, single pyrolytic low-e, (U-value: 4.48, SHGC: 0.46) improved aluminium, single pyrolytic low-e, (U-value: 4.48, SHGC: 0.46) improved aluminium, single pyrolytic low-e,			<b>*</b>

BASIX Certificate number: A363032 page 5 / 7

Glazing requirements							Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
Window / doo no.	r Orientation	Area of glass inc. frame (m2)	Oversha Height (m)	Distance (m)	Shading device	Frame and glass type			
W6	N	1	0	0	eave/verandah/pergola/balcony >=900 mm	improved aluminium, single pyrolytic low-e, (U-value: 4.48, SHGC: 0.46)			
W7	E	1.4	0	0	eave/verandah/pergola/balcony >=450 mm	improved aluminium, single pyrolytic low-e, (U-value: 4.48, SHGC: 0.46)			
W8	E	2.2	0	0	eave/verandah/pergola/balcony >=450 mm	improved aluminium, single pyrolytic low-e, (U-value: 4.48, SHGC: 0.46)			
W9	N	3.2	0	0	eave/verandah/pergola/balcony >=450 mm	improved aluminium, single pyrolytic low-e, (U-value: 4.48, SHGC: 0.46)			
W10	E	7.5	0	0	eave/verandah/pergola/balcony >=450 mm	improved aluminium, single pyrolytic low-e, (U-value: 4.48, SHGC: 0.46)			
W11	E	2.2	0	0	eave/verandah/pergola/balcony >=450 mm	improved aluminium, single pyrolytic low-e, (U-value: 4.48, SHGC: 0.46)			
W12	E	1.1	0	0	eave/verandah/pergola/balcony >=450 mm	improved aluminium, single pyrolytic low-e, (U-value: 4.48, SHGC: 0.46)			
W13	W	2.5	0	0	eave/verandah/pergola/balcony >=900 mm	improved aluminium, single pyrolytic low-e, (U-value: 4.48, SHGC: 0.46)			
W14	W	6.4	0	0	eave/verandah/pergola/balcony >=900 mm	improved aluminium, single pyrolytic low-e, (U-value: 4.48, SHGC: 0.46)			
W15	W	7.4	0	0	eave/verandah/pergola/balcony >=900 mm	improved aluminium, single pyrolytic low-e, (U-value: 4.48, SHGC: 0.46)			
W16	Е	1.1	0	0	eave/verandah/pergola/balcony >=450 mm	improved aluminium, single pyrolytic low-e, (U-value: 4.48, SHGC: 0.46)			
W17	N	3	0	0	eave/verandah/pergola/balcony >=450 mm	improved aluminium, single pyrolytic low-e, (U-value: 4.48, SHGC: 0.46)			
W18	Е	4.4	0	0	eave/verandah/pergola/balcony >=450 mm	improved aluminium, single pyrolytic low-e, (U-value: 4.48, SHGC: 0.46)			

BASIX Certificate number: A363032 page 6 / 7

Glazing requirements							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)	dowing Distance (m)	Shading device	Frame and glass type			
W19	E	1.1	0	0	eave/verandah/pergola/balcony >=450 mm	improved aluminium, single pyrolytic low-e, (U-value: 4.48, SHGC: 0.46)			
Skylights									<u> </u>
The applicant r	must install th	e skylight	s in accor	dance with th	e specifications listed in the table	below.	V	<b>✓</b>	✓
The following re	equirements	must also	be satisfic	ed 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.							✓	<b>✓</b>	
Skylights gl	Skylights glazing requirements								
Skylight number	kylight number Area of glazing inc. frame (m2)  Area of glazing Shading device Frame and glass type								
S1	0.6 no shading aluminium, moulded plastic single clear, (or U-value: 6.21, SHGC: 0.808)								

BASIX Certificate number: A363032 page 7 / 7

## 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.