## **BASIX** Certificate

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

## **Alterations and Additions**

Certificate number: A111554

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 29/9/2006 published by Department of Planning. This document is available at www.basix.nsw.gov.au

Director-General
Date of issue: Monday, 09, May 2011



## **Project address** Project name 17 tutus St 17 Tutus Street Balgowlah 2093 Street address Manly Council Local Government Area Deposited Plan 9561 Plan type and number 15 Lot number 0 Section number **Project type** Dwelling type Attached dwelling house rip Type of alteration and My renovation work is valued at \$50,000 or more, and includes a pool (and/or spa). addition

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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 1925 litres on the site. This rainwater tank must meet, and be installed in accordance with, the requirements of all applicable regulatory authorities.	<b>✓</b>	<b>✓</b>	<b>✓</b>
The applicant must configure the rainwater tank to collect rainwater runoff from at least 250 square metres of roof area.		<b>✓</b>	✓
The applicant must connect the rainwater tank to a tap located within 10 metres of the edge of the pool.		<b>✓</b>	✓
Outdoor swimming pool			
The swimming pool must be outdoors.	✓	<b>✓</b>	✓
The swimming pool must not have a capacity greater than 54 kilolitres.	✓	<b>✓</b>	✓
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: solar only.		<b>~</b>	<b>✓</b>

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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.	✓	✓	<b>✓</b>
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.		<b>✓</b>	✓
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.		✓	✓
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					
The applicant must construct the new or alterer the table below, except that a) additional insular is not required for parts of altered construction	<b>√</b>	<b>√</b>	<b>✓</b>		
Construction	Additional insulation required (R-value)	Other specifications			
concrete slab on ground floor.	nil				
suspended floor above garage: concrete (R0.6).	nil				
floor above existing dwelling or building.	nil				
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, flat roof: framed	ceiling: R1.58 (up), roof: foil backed blanket (55 mm)	medium (solar absorptance 0.475 - 0.70)			

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Glazing r	equirements						Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
Windows	s and glazed do	ors							
					nading devices, in accordance with each window and glazed door.	the specifications listed in the table below.	<b>✓</b>	<b>~</b>	<b>✓</b>
The follow	wing requirements	must also	be satisfie	ed in relation	to each window and glazed door:			✓	✓
have a U	-value and a Solar	Heat Gair	Coefficie	nt (SHGC) r		d glass may either match the description, or, le below. Total system U-values and SHGCs s.		<b>✓</b>	<b>✓</b>
					each eave, pergola, verandah, bal han 2400 mm above the sill.	cony or awning must be no more than 500 mm	✓	✓	✓
Pergolas	with polycarbonate	e roof or si	milar tran	slucent mate	erial must have a shading coefficien	t of less than 0.35.		<b>✓</b>	✓
External I	louvres and blinds	must fully	shade the	window or	glazed door beside which they are	situated when fully drawn or closed.		✓	✓
					e window or glazed door above which which will be more than 50 mm.	ch they are situated, unless the pergola also		✓	<b>✓</b>
	dowing buildings or in the 'overshadow				nt and distance from the centre and	the base of the window and glazed door, as	✓	<b>✓</b>	✓
Windov	vs and glazed	doors gl	lazing re	equireme	nts				
	Orientation	Area of	Oversha		Shading device	Frame and glass type			
/ door no.		glass inc. frame (m2)	Height (m)	Distance (m)					
W1	Е	6.16	0	0	eave/verandah/pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W2	Е	9.38	0	0	eave/verandah/pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W3	N	8.4	0	0	external louvre/blind (fixed)	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W4	N	12.88	3.8	3	eave/verandah/pergola/balcony	standard aluminium, single clear, (or			

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Glazing r	equirements						Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
Window	Orientation	Area of	Oversha	adowing	Shading device	Frame and glass type			
/ door no.		glass inc. frame (m2)	Height (m)	Distance (m)					
					>=600 mm	U-value: 7.63, SHGC: 0.75)			
W5	N	7.56	3.8	3	eave/verandah/pergola/balcony >=600 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W6	N	12.6	3.8	3	eave/verandah/pergola/balcony >=600 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W7	W	17.36	0	0	eave/verandah/pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W8	N	5.04	0	0	eave/verandah/pergola/balcony >=750 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W9	W	10.92	0	0	eave/verandah/pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W10	S	4.08	4	3	none	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W11	S	5.6	6.2	3	none	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W12	S	2.86	4	3	none	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W13	S	3.52	0	0	none	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W14	S	1.96	0	0	eave/verandah/pergola/balcony >=450 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W15	E	10.64	0	0	eave/verandah/pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W16	N	1.68	0	0	eave/verandah/pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W17	E	0.84	0	0	eave/verandah/pergola/balcony	standard aluminium, single clear, (or			

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Glazing r	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)	Distance (m)	Shading device	Frame and glass type			
					>=900 mm	U-value: 7.63, SHGC: 0.75)			
W18	W	6.16	0	0	eave/verandah/pergola/balcony >=750 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W19	W	10.64	0	0	eave/verandah/pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W20	N	6.48	0	0	eave/verandah/pergola/balcony >=750 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W21	E	15.96	0	0	eave/verandah/pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W22	N	8.4	0	0	eave/verandah/pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W23	E	14	0	0	eave/verandah/pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W24	S	3.78	0	0	eave/verandah/pergola/balcony >=750 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W25	S	1.84	0	0	eave/verandah/pergola/balcony >=750 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W26	SE	5.55	0	0	eave/verandah/pergola/balcony >=750 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W27	Е	1.8	0	0	eave/verandah/pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W28	W	9.2	0	0	external louvre/blind (fixed)	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W29	W	2.08	0	0	eave/verandah/pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W30	N	10.92	0	0	external louvre/blind (adjustable)	standard aluminium, single clear, (or			

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Glazing r	equirements						Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
Window	Orientation	Area of	Oversha	adowing	Shading device	Frame and glass type			
/ door no.		glass inc. frame (m2)	Height (m)	Distance (m)					
						U-value: 7.63, SHGC: 0.75)			
W31	W	3.8	0	0	eave/verandah/pergola/balcony >=750 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W32	N	3.8	0	0	eave/verandah/pergola/balcony >=750 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W33	E	3.5	0	0	eave/verandah/pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W34	S	3.8	0	0	eave/verandah/pergola/balcony >=750 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			

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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.