

# BASIX Certificate

Building Sustainability Index [www.basix.nsw.gov.au](http://www.basix.nsw.gov.au)

## Alterations and Additions

Certificate number A93095

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](http://www.basix.nsw.gov.au)

Director General  
Date of issue Friday 24 September 2010



## Description of project

Project address	
Project name	13a Ocean Road
Street address	13a Ocean Road Palm Beach 2108
Local Government Area	Pittwater Council
Plan type and number	Deposited Plan 121833
Lot number	1
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)

BASIX Certificate number A93095

page 2 / 8

Pool and Spa	Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
<b>Rainwater tank</b>			
The applicant must install a rainwater tank of at least 973 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 116 square metres of roof area.		✓	✓
The applicant must connect the rainwater tank to a tap located within 10 metres of the edge of the outdoor spa.		✓	✓
<b>Outdoor spa</b>			
The spa must not have a capacity greater than 2 kilolitres.	✓	✓	✓
The spa must have a spa cover.		✓	✓
The applicant must install a spa pump timer.		✓	✓
The applicant must install the following heating system for the outdoor spa that is part of this development: solar (gas boosted).		✓	✓

Fixtures and systems	Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
<b>Lighting</b>			
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>Fixtures</b>			
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
<b>INSULATION REQUIREMENTS</b>			
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			
<b>Construction</b>	<b>Additional insulation required (R-value)</b>	<b>Other specifications</b>	
concrete slab on ground floor	nil		
suspended floor with enclosed subfloor framed (R0.7)	R0.60 (down) (or R1.30 including construction)		
suspended floor above garage framed (R0.7)	nil		
floor above existing dwelling or building	nil		
external wall concrete block/plasterboard	R1.18 (or R1.70 including construction)		
external wall framed (weatherboard fibro metal clad)	R1.30 (or R1.70 including construction)		
internal wall shared with garage other/undecided	nil		
flat ceiling pitched roof	ceiling R1.20 (up) roof foil backed blanket (55 mm)	light (solar absorptance < 0.475)	
raked ceiling pitched/skillion roof framed	ceiling R1.50 (up) roof foil backed blanket (55 mm)	light (solar absorptance < 0.475)	
flat ceiling flat roof framed	ceiling R2.08 (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
<b>Windows and glazed doors</b>									
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							✓	✓	✓
Pergolas with polycarbonate roof or similar translucent material must have a shading coefficient of less than 0.35								✓	✓
External louvres and blinds must fully shade the window or glazed door beside which they are situated when fully drawn or closed								✓	✓
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							✓	✓	✓
<b>Windows and glazed doors glazing requirements</b>									
Window / door no.	Orientation	Area of glass inc. frame (m <sup>2</sup> )	Overshadowing Height (m) Distance (m)		Shading device	Frame and glass type			
W1	E	11.37	0	0	eave/verandah/pergola/balcony >=900 mm	standard aluminium single clear (or U value 7.63 SHGC 0.75)			
W2	E	9.03	0	0	eave/verandah/pergola/balcony	standard aluminium single clear (or			

Glazing requirements							Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
Window / door no.	Orientation	Area of glass inc. frame (m <sup>2</sup> )	Overshadowing Height (m) Distance (m)		Shading device	Frame and glass type			
					>=900 mm	U-value 7.63 SHGC 0.75)			
W3	W	0.86	11.64	4.6	none	standard aluminium single clear (or U-value 7.63 SHGC 0.75)			
W4	W	1.47	11.64	2.5	none	standard aluminium single clear (or U value 7.63 SHGC 0.75)			
W5	W	2.18	8.6	2.5	none	standard aluminium single clear (or U value 7.63 SHGC 0.75)			
W6	S	0.86	0	0	eave/verandah/pergola/balcony >=600 mm	standard aluminium single clear (or U value 7.63 SHGC 0.75)			
W7	E	0.95	0	0	eave/verandah/pergola/balcony >=600 mm	standard aluminium single pyrolytic low e (U-value 5.7 SHGC 0.47)			
W8	E	7.26	0	0	eave/verandah/pergola/balcony >=600 mm	standard aluminium single pyrolytic low e (U value 5.7 SHGC 0.47)			
W9	E	8.4	0	0	eave/verandah/pergola/balcony >=900 mm	standard aluminium single clear (or U value 7.63 SHGC 0.75)			
W10	E	8.37	0	0	eave/verandah/pergola/balcony >=900 mm	standard aluminium single clear (or U value 7.63 SHGC 0.75)			
W11	E	8.4	0	0	eave/verandah/pergola/balcony >=900 mm	standard aluminium single clear (or U value 7.63 SHGC 0.75)			
W12	E	4.21	0	0	eave/verandah/pergola/balcony >=900 mm	standard aluminium single clear (or U value 7.63 SHGC 0.75)			
W13	N	19.41	2.9	3.85	external louvre/blind (fixed)	standard aluminium single pyrolytic low e (U value 5.7 SHGC 0.47)			
W14	S	7.8	0	0	eave/verandah/pergola/balcony >=600 mm	standard aluminium single clear (or U value 7.63 SHGC 0.75)			
W15	E	8.76	0	0	eave/verandah/pergola/balcony	standard aluminium single pyrolytic low e			

Glazing requirements							Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
Window / door no.	Orientation	Area of glass inc. frame (m <sup>2</sup> )	Overshadowing Height (m) Distance (m)		Shading device	Frame and glass type			
					>=600 mm	(U value 5.7 SHGC 0.47)			
W16	E	5	0	0	eave/verandah/ pergola/balcony >=600 mm	standard aluminium single pyrolytic low e (U value 5.7 SHGC 0.47)			
W17	E	5	0	0	eave/verandah/ pergola/balcony >=600 mm	standard aluminium single pyrolytic low e (U value 5.7 SHGC 0.47)			
W18	N	17.7	0	0	eave/verandah/ pergola/balcony >=600 mm	standard aluminium single pyrolytic low e (U value 5.7 SHGC 0.47)			
W19	W	5	4.83	1.2	none	standard aluminium single pyrolytic low e (U-value 5.7 SHGC 0.47)			
W20	W	2.4	5.59	1.8	none	standard aluminium single pyrolytic low e (U-value 5.7 SHGC 0.47)			
W21	W	1.31	4.83	2.1	none	standard aluminium single pyrolytic low e (U value 5.7 SHGC 0.47)			
W22	E	0.89	0	0	eave/verandah/ pergola/balcony >=900 mm	standard aluminium single clear (or U value 7.63 SHGC 0.75)			

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