

BASIX[®]Certificate

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

Alterations and Additions

Certificate number: A112006_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 18/09/2014 published by Planning & Infrastructure. This document is available at www.basix.nsw.gov.au

This certificate is a revision of certificate number A112006 lodged with the consent authority or certifier on 03 Feb 2012 with application N0028/12.

It is the responsibility of the applicant to verify with the consent authority that the original, or any revised certificate, complies with the requirements of Sch 1 Cl 2A, 4A or 6A of the Environmental Planning and Assessment Regulation 2000

Director-General

Date of issue: Tuesday, 05, April 2016

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	1005_02
Street address	51 Tasman Avenue Avalon 2107
Local Government Area	Pittwater Council
Plan type and number	Deposited Plan 13811
Lot number	11
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: James de Soyres and Associates Pty Ltd

ABN (if applicable): 50084840648

Pool and Spa	Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
Outdoor swimming pool			
The swimming pool must be outdoors.	✓	✓	✓
The swimming pool must not have a capacity greater than 36 kilolitres.	✓	✓	✓
The swimming pool must have a pool cover.		✓	✓
The applicant must install a pool pump timer for the swimming pool.		✓	✓
The applicant must not incorporate any heating system for the swimming pool that is part of this development.		✓	✓

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.		✓	✓
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 2m ² , b) insulation specified is not required for parts of altered construction where insulation already exists.			✓	✓	✓
Construction	Additional insulation required (R-value)	Other specifications			
suspended floor with enclosed subfloor: framed (R0.7).	R0.60 (down) (or R1.30 including construction)				
floor above existing dwelling or building.	nil				
external wall: framed (weatherboard, fibro, metal clad)	R1.30 (or R1.70 including construction)				
flat ceiling, pitched roof	ceiling: R0.70 (up), roof: foil backed blanket (75 mm)	light (solar absorptance < 0.475)			

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 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. 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. Pergolas with adjustable shading may have adjustable blades or removable shade cloth (not less than 80% shading ratio). Adjustable blades must overlap in plan view.							✓	✓	✓
								✓	✓
								✓	✓
								✓	✓
							✓	✓	✓
								✓	✓
								✓	✓
								✓	✓
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)					
1J-04a	S	2	0	0	eave/verandah/pergola/balcony >=450 mm	timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66)			
1J-09	E	4.8	0	0	eave/verandah/pergola/balcony >=900 mm	timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66)			

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			
1J-08	E	12.5	0	0	eave/verandah/pergola/balcony >=900 mm	timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66)			
1J-06	S	1.1	0	0	eave/verandah/pergola/balcony >=600 mm	timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66)			
1J-05	W	1.8	0	0	eave/verandah/pergola/balcony >=900 mm	timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66)			
2J-08	E	0.5	0	0	eave/verandah/pergola/balcony >=750 mm	timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66)			
2J-07	N	1	0	0	eave/verandah/pergola/balcony >=600 mm	timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66)			
2J-06	N	0.8	0	0	eave/verandah/pergola/balcony >=600 mm	timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66)			
2J-05	E	1.5	0	0	eave/verandah/pergola/balcony >=750 mm	timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66)			
2J-04	E	5.8	0	0	eave/verandah/pergola/balcony >=750 mm	timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66)			
2J-03	E	2.3	0	0	eave/verandah/pergola/balcony >=750 mm	timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66)			
2J-02	S	0.5	0	0	eave/verandah/pergola/balcony >=600 mm	timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66)			
2J-01	W	0.5	0	0	awning (adjustable) >=900 mm	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
1J-02	W	7.4	0	0	eave/verandah/pergola/balcony >=900 mm	timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66)			
1J-04	W	7.3	0	0	pergola (adjustable shade) >=900 mm	timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66)			

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)					
1J-01	N	2.7	0	0	eave/verandah/ pergola/balcony >=450 mm	timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66)			
1J-07	S	1.3	0	0	eave/verandah/ pergola/balcony >=600 mm	timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66)			
Skylights									
The applicant must install the skylights in accordance with the specifications listed in the table below. The following requirements must also be satisfied 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.							✓	✓ ✓ ✓	✓ ✓ ✓
Skylights glazing requirements									
Skylight number	Area of glazing inc. frame (m2)	Shading device			Frame and glass type				
S1	0.5	no shading			timber, double clear/air fill, (or U-value: 4.3, SHGC: 0.5)				
S2	0.1	no shading			aluminium, moulded plastic single clear, (or U-value: 6.21, SHGC: 0.808)				
S3	0.1	no shading			aluminium, moulded plastic single clear, (or U-value: 6.21, SHGC: 0.808)				

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.