

BASIX[®]Certificate

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

Alterations and Additions

Certificate number: A386251

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: Friday, 14, August 2020

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



Planning,
Industry &
Environment

Description of project

Project address	
Project name	96 Palmgrove Rd
Street address	96 Palmgrove Road Avalon Beach 2107
Local Government Area	Northern Beaches Council
Plan type and number	Deposited Plan 16902
Lot number	432
Section number	
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: HOT HOUSE STUDIO

ABN (if applicable): 35505791074

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 33.2 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			
concrete slab on ground floor.	nil				
floor above existing dwelling or building.	nil				
external wall: concrete panel/plasterboard (concrete: 155 mm)	R1.38 (or R1.70 including construction)				
external wall: framed (weatherboard, fibro, metal clad)	R1.30 (or R1.70 including construction)				
external wall: structural panel system	R1.25 (including construction)				
raked ceiling, pitched/skillion roof: framed	ceiling: R1.24 (up), roof: foil backed blanket (75 mm)	dark (solar absorptance > 0.70)			
flat ceiling, flat roof: framed	ceiling: R1.08 (up), roof: foil backed blanket (75 mm)	dark (solar absorptance > 0.70)			

Glazing requirements							Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
Windows and glazed doors									
<p>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.</p> <p>The following requirements must also be satisfied in relation to each window and glazed door:</p> <p>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.</p> <p>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.</p> <p>For projections described as a ratio, the ratio of the projection from the wall to the height above the window or glazed door sill must be at least that shown in the table below.</p> <p>Pergolas with polycarbonate roof or similar translucent material must have a shading coefficient of less than 0.35.</p> <p>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.</p> <p>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.</p>							✓	✓	✓
								✓	✓
								✓	✓
							✓	✓	✓
							✓	✓	✓
								✓	✓
								✓	✓
							✓	✓	✓
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)					
d001	SE	4.51	0	0	eave/verandah/pergola/balcony >=900 mm	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
d002	NE	11.67	3.1	2.1	eave/verandah/pergola/balcony >=750 mm	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
d003	SE	1.3	6	1	eave/verandah/pergola/balcony	improved aluminium, single clear, (U-value:			

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)					
					>=900 mm	6.44, SHGC: 0.75)			
w001	SE	2.1	6	1	eave/verandah/pergola/balcony >=900 mm	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
w002	NE	2.8	0	0	projection/height above sill ratio >=0.43	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
w003	SE	3.96	1.5	7	none	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
w004	SW	0.56	2.6	3	none	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
w005	SW	0.56	2.6	3	eave/verandah/pergola/balcony >=900 mm	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
w101	NE	1.08	0	0	projection/height above sill ratio >=0.43	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
w102	NE	0.44	0	0	eave/verandah/pergola/balcony >=600 mm	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
w103	SE	0.44	0	0	eave/verandah/pergola/balcony >=600 mm	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
w104	NE	1.46	0	0	eave/verandah/pergola/balcony >=900 mm	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
w105	NE	3.06	0	0	eave/verandah/pergola/balcony >=900 mm	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
w106	NE	4.69	0	0	eave/verandah/pergola/balcony >=900 mm	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
w107	SE	4.69	0	0	eave/verandah/pergola/balcony >=450 mm	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
w108	SW	1.12	0	0	eave/verandah/pergola/balcony	improved aluminium, single clear, (U-value:			

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)					
					>=600 mm	6.44, SHGC: 0.75)			
w109	SW	1.08	0	0	eave/verandah/pergola/balcony >=600 mm	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
w110	SW	1.08	0	0	eave/verandah/pergola/balcony >=600 mm	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
Skylights									
<p>The applicant must install the skylights in accordance with the specifications listed in the table below.</p> <p>The following requirements must also be satisfied in relation to each skylight:</p> <p>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.</p>							✓	✓	✓
Skylights glazing requirements									
Skylight number	Area of glazing inc. frame (m2)	Shading device		Frame and glass type					
S1	0.54	no shading		timber, low-E internal/argon fill/clear external, (or U-value: 2.5, SHGC: 0.456)					
S2	1.09	no shading		timber, low-E internal/argon fill/clear external, (or U-value: 2.5, SHGC: 0.456)					

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.