## **BASIX** Certificate

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

## Alterations and Additions

Certificate number: A409819 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 06/10/2017 published by the Department. This document is available at www.basix.nsw.gov.au

Secretarv Date of issue: Tuesday, 16, March 2021 To be valid, this certificate must be lodged within 3 months of the date of issue.



Planning, Industry & Environment

Project address	
Project name	Soper_02
Street address	76 Nandi Avenue Frenchs Forest 2086
Local Government Area	Northern Beaches Council
Plan type and number	Deposited Plan 221369
Lot number	22
Section number	
Project type	
Project type Dwelling type	Separate dwelling house

Certificate Prepared by (please complete before submitting to Council or PCA)

Name / Company Name: Rob Crump Design (NSW)

ABN (if applicable): 14 721 765 945

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 1055 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 80 square metres of roof area.		$\checkmark$	$\checkmark$
The applicant must connect the rainwater tank to a tap located within 10 metres of the edge of the pool.		$\checkmark$	$\checkmark$
Outdoor swimming pool			
The swimming pool must be outdoors.	$\checkmark$	$\checkmark$	$\checkmark$
The swimming pool must not have a capacity greater than 40 kilolitres.	$\checkmark$	$\checkmark$	$\checkmark$
The swimming pool must have a pool cover.		$\checkmark$	$\checkmark$
The applicant must install a pool pump timer for the swimming pool.		$\checkmark$	$\checkmark$
The applicant must not incorporate any heating system for the swimming pool that is part of this development.		$\checkmark$	$\checkmark$

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	1		
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.		$\checkmark$	$\checkmark$
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.		$\checkmark$	$\checkmark$
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.		$\checkmark$	

Construction	Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check			
Insulation requirements						
the table below, except that a) additional insul	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.					
Construction	Additional insulation required (R-value)	Other specifications				
concrete slab on ground floor.	nil					
floor above existing dwelling or building.	nil					
external wall: brick veneer	R1.16 (or R1.70 including construction)					
external wall: framed (weatherboard, fibro, metal clad)	R1.30 (or R1.70 including construction)					
flat ceiling, pitched roof	ceiling: R2.50 (up), roof: foil/sarking	dark (solar absorptance > 0.70)				

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Glazing I	requirement	S					Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
Windows	and glazed	doors					I	I	
					nading devices, in accordance with r each window and glazed door.	the specifications listed in the table below.	~	~	~
The follow	ving requiremer	nts must also	be satisf	ed in relatior	n to each window and glazed door:			$\checkmark$	$\checkmark$
have a U-v	value and a So	lar Heat Gai	n Coefficie	ent (SHGC) r	ber frames and single clear or tone no greater than that listed in the tab n Rating Council (NFRC) conditions	ed glass may either match the description, or, le below. Total system U-values and SHGCs s.		~	~
For project above the	tions described head of the wi	d in millimetr ndow or glaz	es, the lea zed door a	ading edge of Ind no more t	f each eave, pergola, verandah, bal than 2400 mm above the sill.	cony or awning must be no more than 500 mm	~	$\checkmark$	~
	tions described shown in the ta		the ratio o	f the projection	on from the wall to the height above	e the window or glazed door sill must be at	$\checkmark$	$\checkmark$	~
Pergolas v	with polycarbor	nate roof or s	similar trar	slucent mate	erial must have a shading coefficien	nt of less than 0.35.		$\checkmark$	~
					e window or glazed door above whi ens must not be more than 50 mm.	ch they are situated, unless the pergola also		$\checkmark$	~
Window	s and glaze	d doors g	lazing r	equireme	nts				
Window / no.	door Orientat	ion Area of glass inc. frame (m2)	Oversha Height (m)	adowing Distance (m)	Shading device	Frame and glass type			
W1	W	1.09	0	0	eave/verandah/pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
D2	W	3.8	0	0	eave/verandah/pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W3	W	1.74	0	0	eave/verandah/pergola/balcony >=750 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W4	S	0.92	0	0	none	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			

Glazing requirements						Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check	
Window / door	Orientation	Area of	Oversha	dowing	Shading device	Frame and glass type			
no.		glass inc. frame (m2)	Height (m)	Distance (m)					
D5	S	1.72	0	0	none	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W6	S	1.09	0	0	none	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
D7	N	8.11	0	0	eave/verandah/pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W8	N	1.09	0	0	projection/height above sill ratio >=0.43	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
D9	E	5.69	0	0	projection/height above sill ratio >=0.43	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W10	S	1.09	0	0	projection/height above sill ratio >=0.43	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W11	W	1.09	0	0	projection/height above sill ratio >=0.43	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W12	W	3.25	0	0	projection/height above sill ratio >=0.43	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W13	E	2.23	0	0	eave/verandah/pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
Skylights									
The applicant must install the skylights in accordance with the specifications listed in the table below.					$\checkmark$	<ul> <li></li> </ul>	~		
The following requirements must also be satisfied in relation to each skylight:						<ul> <li></li> </ul>	$\checkmark$		
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.							×	~	

Glazing require	ements			Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
Skylights glaz	ing requiremen	ts				
Skylight number	Area of glazing inc. frame (m2)	Shading device	Frame and glass type			
S1	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.