

BASIX®Certificate

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

Alterations and Additions

Certificate number: A417877

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: Monday, 24, May 2021

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	Mr & Mrs Sippel (May 2021)
Street address	17 Ernest Street Balgowlah Heights 2093
Local Government Area	Northern Beaches Council
Plan type and number	Deposited Plan 758044
Lot number	32
Section number	21
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: Lifestyle Home Designs
ABN (if applicable): 36113128555

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 1968 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 20 square metres of roof area.			✓	✓
The applicant must connect the rainwater tank to a tap located within 10 metres of the edge of the pool.			✓	✓
Outdoor swimming pool				
The swimming pool must be outdoors.		✓	✓	✓
The swimming pool must not have a capacity greater than 37 kilolitres.		✓	✓	✓
The swimming pool must have a pool cover.			✓	✓
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: electric heat pump.			✓	✓

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 2m2, b) insulation specified is not required for parts of altered construction where insulation already exists.				
Construction	Additional insulation required (R-value)	Other specifications		
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)			
internal wall shared with garage: plasterboard (R0.36)	nil			
flat ceiling, pitched roof	ceiling: R0.95 (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						
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.						
Windows and glazed doors glazing requirements						
Window / door no.	Orientation	Area of glass inc. frame (m2)	Height (m)	Distance (m)	Shading device	Frame and glass type
W1	E	2.16	0	0	eave/verandah/pergola/balcony >=450 mm	standard aluminium, single pyrolytic low-e, (U-value: 5.7, SHGC: 0.47)
W2	E	0.63	0	0	eave/verandah/pergola/balcony >=750 mm	standard aluminium, single pyrolytic low-e, (U-value: 5.7, SHGC: 0.47)
W3	S	1.4	0	0	eave/verandah/pergola/balcony	standard aluminium, single toned, (or

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)					
W4	S	2.9	0	0	>=750 mm eave/verandah/pergola/balcony >=900 mm	U-value: 7.57, SHGC: 0.57 standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W5	W	1.26	0	0	eave/verandah/pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W6	W	2.7	0	0	eave/verandah/pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W7	W	0.9	0	0	eave/verandah/pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W8	W	3.6	0	0	external louvre/blind (adjustable)	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W9	N	2.7	0	0	eave/verandah/pergola/balcony >=450 mm	standard aluminium, single pyrolytic low-e, (U-value: 5.7, SHGC: 0.47)			
W10	N	2.7	0	0	eave/verandah/pergola/balcony >=450 mm	standard aluminium, single pyrolytic low-e, (U-value: 5.7, SHGC: 0.47)			
W11	E	1.44	0	0	eave/verandah/pergola/balcony >=600 mm	standard aluminium, single pyrolytic low-e, (U-value: 5.7, SHGC: 0.47)			
W13	E	1.35	0	0	eave/verandah/pergola/balcony >=600 mm	standard aluminium, single pyrolytic low-e, (U-value: 5.7, SHGC: 0.47)			
W14	E	1.44	0	0	eave/verandah/pergola/balcony >=600 mm	standard aluminium, single pyrolytic low-e, (U-value: 5.7, SHGC: 0.47)			
W15	S	2.9	0	0	eave/verandah/pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W16	S	4.05	0	0	eave/verandah/pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W17	W	2.1	0	0	external louvre/blind (adjustable)	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 no.	Orientation	Area of glass inc. frame (m2)	Overshadowing		Shading device	Frame and glass type			
			Height (m)	Distance (m)					
W18	N	2.7	0	0	eave/verandah/ pergola/balcony >=450 mm	U-value: 7.63, SHGC: 0.75) standard aluminium, single pyrolytic low-e, (U-value: 5.7, SHGC: 0.47)			
W19	N	2.7	0	0	external louvre/blind (adjustable)	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W20	N	2.7	0	0	eave/verandah/ pergola/balcony >=450 mm	standard aluminium, single pyrolytic low-e, (U-value: 5.7, SHGC: 0.47)			
W21	E	1.8	0	0	eave/verandah/ pergola/balcony >=600 mm	standard aluminium, single pyrolytic low-e, (U-value: 5.7, SHGC: 0.47)			
D1	N	4.5	0	0	eave/verandah/ pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
D2	S	1.7	0	0	eave/verandah/ pergola/balcony >=450 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
D3	S	10.8	0	0	eave/verandah/ pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
D4	N	8.64	0	0	eave/verandah/ pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
D5	S	4.32	0	0	eave/verandah/ pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
D6	E	4.32	0	0	eave/verandah/ pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W12	E	0.6	0	0	eave/verandah/ pergola/balcony >=600 mm	standard aluminium, single pyrolytic low-e, (U-value: 5.7, SHGC: 0.47)			
Skylights									

Glazing requirements		Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
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 x 3	2.3	no shading	timber, low-E internal/argon fill/clear external, (or U-value: 2.5, SHGC: 0.456)	
S2	0.76	no shading	timber, low-E internal/argon fill/clear external, (or U-value: 2.5, SHGC: 0.456)	
S3	0.4	no shading	timber, low-E internal/argon fill/clear external, (or U-value: 2.5, SHGC: 0.456)	
S4	0.76	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.