

BASIX[®]Certificate

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

Alterations and Additions

Certificate number: A293672_10

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

This certificate is a revision of certificate number A293672_03 lodged with the consent authority or certifier on 10 Oct 2017 with application N0451/17.

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

Secretary

Date of issue: Tuesday, 04, June 2019

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



Planning &
Environment

Description of project

Project address	
Project name	24 Delecta DA_10
Street address	24 Delecta Avenue Clareville 2107
Local Government Area	Pittwater Council
Plan type and number	Deposited Plan 13291
Lot number	12
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: Phil Brown Drafting

ABN (if applicable): 16164362569

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 2975 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 66 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.		✓	✓
Outdoor spa			
The spa must not have a capacity greater than 5.5 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: gas.		✓	✓



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				
suspended floor with open subfloor: framed (R0.7).	R0.8 (down) (or R1.50 including construction)				
external wall: framed (weatherboard, fibro, metal clad)	R1.30 (or R1.70 including construction)				
flat ceiling, pitched roof	ceiling: R1.95 (up), roof: foil backed blanket (55 mm)	medium (solar absorptance 0.475 - 0.70)			
raked ceiling, pitched/skillion roof: framed	ceiling: R2.24 (up), roof: foil backed blanket (55 mm)	medium (solar absorptance 0.475 - 0.70)			
flat ceiling, flat roof: framed	ceiling: R2.08 (up), roof: foil backed blanket (55 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>External louvres and blinds must fully shade the window or glazed door beside which they are situated when fully drawn or closed.</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>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.</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)				
W1	SE	7.8	0	0	pergola (adjustable shade) >=900 mm	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)		
W2	NE	5.3	0	0	projection/height above sill ratio >=0.43	improved aluminium, single clear, (U-value: 6.44, 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)					
W3	NE	2.2	0	0	projection/height above sill ratio ≥0.43	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
W4	NE	2.2	0	0	projection/height above sill ratio ≥0.43	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
W5	NW	5.3	0	0	eave/verandah/pergola/balcony ≥900 mm	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
W7	NW	17	0	0	eave/verandah/pergola/balcony ≥900 mm	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
W9	SW	2	0	0	projection/height above sill ratio ≥0.29	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
W10	SW	1	0	0	projection/height above sill ratio ≥0.29	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
W11	SW	1.9	0	0	projection/height above sill ratio ≥0.29	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
W14	SE	7.1	0	0	eave/verandah/pergola/balcony ≥900 mm	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
W15	SE	2.9	0	0	eave/verandah/pergola/balcony ≥900 mm	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
W18	NE	0.9	0	0	projection/height above sill ratio ≥0.43	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
W19	NE	0.7	0	0	projection/height above sill ratio ≥0.43	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
W20	NE	0.9	0	0	projection/height above sill ratio ≥0.43	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
W22	NW	10.4	0	0	projection/height above sill ratio ≥0.43	improved aluminium, single clear, (U-value: 6.44, 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)					
W23	SW	0.9	0	0	projection/height above sill ratio ≥0.29	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
W25	NW	1.5	0	0	projection/height above sill ratio ≥0.43	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
W26	SW	1.4	0	0	projection/height above sill ratio ≥0.29	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
W27	SW	1.4	0	0	projection/height above sill ratio ≥0.29	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
W28	SW	1.4	0	0	projection/height above sill ratio ≥0.29	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
W29	SW	0.5	0	0	none	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
W30	SE	0.5	0	0	projection/height above sill ratio ≥0.23	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
W31	SE	2.2	0	0	external louvre/blind (adjustable)	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
W32	SE	2.2	0	0	external louvre/blind (adjustable)	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
W33	SE	2.2	0	0	external louvre/blind (adjustable)	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
W1A	SE	2.3	0	0	pergola (adjustable shade) ≥900 mm	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
Glazed roofs									
The applicant must install the glazed roofs described in the table below, in accordance with the specifications listed in the table.							✓	✓	✓

Glazing requirements				Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
The following requirements must also be satisfied in relation to each glazed roof:						
Glazed roofs glazing requirements						
Glazed roof number	Area of glazing (m2)	Shading device	Glass type			
S1	4.9	no shading	improved aluminium, single pyrolytic low-e, (U-value: 4.48, SHGC: 0.46)			
S2	2.9	no shading	improved aluminium, single pyrolytic low-e, (U-value: 4.48, SHGC: 0.46)			

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.