

BASIX™ Certificate

Building Sustainability Index

www.planningportal.nsw.gov.au/development-and-assessment/basix

Alterations and Additions

Certificate number: A1799709_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 Definitions" dated 10/09/2020 published by the Department. This document is available at www.planningportal.nsw.gov.au/definitions

Secretary

Date of issue: Monday, 14 July 2025

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



Project address

Project name	1 James Wheeler PI MF65_02
Street address	1 JAMES WHEELER Place WHEELER HEIGHTS 2097
Local Government Area	Northern Beaches Council
Plan type and number	Deposited Plan DP262862
Lot number	28
Section number	-

Project type

Dwelling type	Dwelling house (detached)
Type of alteration and addition	The estimated development cost for my renovation work is \$50,000 or more, and includes a pool (and/or spa).
N/A	N/A

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

Name / Company Name: Gradwell Consulting

ABN (if applicable): 68872791784

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 9121.88 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 650 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 and outdoor spa.		✓	✓
Outdoor swimming pool			
The swimming pool must be outdoors.	✓	✓	✓
The swimming pool must not have a capacity greater than 85 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.		✓	✓
Outdoor spa			
The spa must not have a capacity greater than 12 kilolitres.	✓	✓	✓
The spa must have a spa cover.		✓	✓

Pool and Spa	Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
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: electric heat pump.		✓	✓

Fixtures and systems	Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
Hot water			
The applicant must install the following hot water system in the development: electric heat pump system that is eligible to create Renewable Energy Certificates under the (Commonwealth) Renewable Energy (Electricity) Regulations 2001 (incorporating Amendment Regulations 2005 (No. 2)).	✓	✓	✓
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.			✓	✓	✓												
<table><tr><th>Construction</th><th>Additional insulation required (R-value)</th><th>Other specifications</th></tr><tr><td>concrete slab on ground floor with in-slab heating system.</td><td>R1.00 (slab edge)</td><td>in-slab heating system</td></tr><tr><td>external wall: cavity brick</td><td>nil</td><td></td></tr><tr><td>flat ceiling, pitched roof</td><td>ceiling: R1.45 (up), roof: foil backed blanket (55 mm)</td><td>dark (solar absorptance > 0.70)</td></tr></table>			Construction	Additional insulation required (R-value)	Other specifications	concrete slab on ground floor with in-slab heating system.	R1.00 (slab edge)	in-slab heating system	external wall: cavity brick	nil		flat ceiling, pitched roof	ceiling: R1.45 (up), roof: foil backed blanket (55 mm)	dark (solar absorptance > 0.70)			
Construction	Additional insulation required (R-value)	Other specifications															
concrete slab on ground floor with in-slab heating system.	R1.00 (slab edge)	in-slab heating system															
external wall: cavity brick	nil																
flat ceiling, pitched roof	ceiling: R1.45 (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			
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.	✓	✓	✓
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.	✓	✓	✓
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.		✓	✓

Glazing requirements							Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
Windows and glazed doors glazing requirements									
Window/door number	Orientation	Area of glass including frame (m2)	Overshadowing height (m)	Overshadowing distance (m)	Shading device	Frame and glass type			
D55	N	9.8	0	0	projection/ height above sill ratio ≥0.43	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W6	W	6.5	0	0	projection/ height above sill ratio ≥0.43	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
D51	W	3.8	0	0	projection/ height above sill ratio ≥0.43	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
D52	W	3.8	0	0	projection/ height above sill ratio ≥0.43	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
D53	W	3.8	0	0	projection/ height above sill ratio ≥0.43	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 number	Orientation	Area of glass including frame (m2)	Overshadowing height (m)	Overshadowing distance (m)	Shading device	Frame and glass type			
D54	W	3.8	0	0	projection/ height above sill ratio ≥0.43	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
D56	W	13	0	0	projection/ height above sill ratio ≥0.43	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W8	S	6.5	0	0	projection/ height above sill ratio ≥0.43	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
D1	N	2.1	0	0	eave/ verandah/ pergola/balcony ≥750 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
D2	N	11.5	0	0	eave/ verandah/ pergola/balcony ≥750 mm	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
Windows and glazed doors glazing requirements									
Window/door number	Orientation	Area of glass including frame (m2)	Overshadowing height (m)	Overshadowing distance (m)	Shading device	Frame and glass type			
D6	S	11.5	0	0	eave/ verandah/ pergola/balcony >=750 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
D7	S	2.1	0	0	eave/ verandah/ pergola/balcony >=750 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
D8	E	6.4	0	0	eave/ verandah/ pergola/balcony >=750 mm	standard aluminium, clear/air gap/ clear, (U-value: 5.34, SHGC: 0.67)			
D9	E	2.2	0	0	eave/ verandah/ pergola/balcony >=750 mm	standard aluminium, clear/air gap/ clear, (U-value: 5.34, SHGC: 0.67)			
D10	E	2.2	0	0	eave/ verandah/ pergola/balcony >=900 mm	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 number	Orientation	Area of glass including frame (m2)	Overshadowing height (m)	Overshadowing distance (m)	Shading device	Frame and glass type			
W1	E	5.5	0	0	eave/ verandah/ pergola/balcony >=750 mm	standard aluminium, clear/air gap/ clear, (U-value: 5.34, SHGC: 0.67)			
W2	S	1.6	0	0	eave/ verandah/ pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W3	S	1.6	0	0	eave/ verandah/ pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W4	S	1.6	0	0	eave/ verandah/ pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
D11	W	8.7	0	0	eave/ verandah/ pergola/balcony >=900 mm	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
Windows and glazed doors glazing requirements									
Window/door number	Orientation	Area of glass including frame (m2)	Overshadowing height (m)	Overshadowing distance (m)	Shading device	Frame and glass type			
D12	W	6.4	0	0	eave/ verandah/ pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
D13	W	6.4	0	0	eave/ verandah/ pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
D14W	W	20.2	0	0	eave/ verandah/ pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
D14N	N	20.2	0	0	eave/ verandah/ pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
D14E	E	1.8	0	0	eave/ verandah/ pergola/balcony >=750 mm	standard aluminium, clear/air gap/ clear, (U-value: 5.34, SHGC: 0.67)			

Glazing requirements							Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
Window/door number	Orientation	Area of glass including frame (m2)	Overshadowing height (m)	Overshadowing distance (m)	Shading device	Frame and glass type			
W10	N	1.6	0	0	eave/ verandah/ pergola/balcony >=750 mm	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
Glazed roofs						
The applicant must install the glazed roofs described in the table below, in accordance with the specifications listed in the table.				✓	✓	✓
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			
SK01	2.5	no shading	improved aluminium, single pyrolytic low-e, (U-value: 4.48, SHGC: 0.46)			
SK02	8.5	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.