

BASIX[®]Certificate

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

Alterations and Additions

Certificate number: A421394

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, 28, June 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	3 Lido Avenue, North Narrabeen
Street address	3 Lido Avenue North Narrabeen 2101
Local Government Area	Northern Beaches Council
Plan type and number	Deposited Plan 16719
Lot number	280
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: AENEC - Office: 02 9994 8906

ABN (if applicable): 32612556377

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 19 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
Hot water			
The applicant must install the following hot water system in the development: gas instantaneous.	✓	✓	✓
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)				
suspended floor above garage: framed (R0.7).	nil				
floor above existing dwelling or building.	nil				
external wall: framed (weatherboard, fibro, metal clad)	R1.30 (or R1.70 including construction)				
flat ceiling, pitched roof	ceiling: R3.00 (up), roof: foil/sarking	dark (solar absorptance > 0.70)			
flat ceiling, flat roof: framed	ceiling: R3.00 (up), roof: foil/sarking	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 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.</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 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>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>							<div>✓</div>	<div>✓</div>	<div>✓</div>																																					
<div>Windows and glazed doors glazing requirements</div> <table><tr><th rowspan="2">Window / door no.</th><th rowspan="2">Orientation</th><th rowspan="2">Area of glass inc. frame (m2)</th><th colspan="2">Overshadowing</th><th rowspan="2">Shading device</th><th rowspan="2">Frame and glass type</th></tr><tr><th>Height (m)</th><th>Distance (m)</th></tr><tr><td>W01</td><td>SE</td><td>1.02</td><td>0</td><td>0</td><td>none</td><td>standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)</td></tr><tr><td>W02</td><td>SW</td><td>5.88</td><td>0</td><td>0</td><td>projection/height above sill ratio >=0.43</td><td>standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)</td></tr><tr><td>W03</td><td>NW</td><td>0.87</td><td>5.2</td><td>6.9</td><td>none</td><td>aluminium, double Lo-Tsol/air gap/clear, (U-value: 4.9, SHGC: 0.33)</td></tr><tr><td>W04</td><td>NE</td><td>3.6</td><td>0</td><td>0</td><td>projection/height above sill ratio >=0.43</td><td>standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)</td></tr></table>							Window / door no.	Orientation	Area of glass inc. frame (m2)	Overshadowing		Shading device	Frame and glass type	Height (m)	Distance (m)	W01	SE	1.02	0	0	none	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)	W02	SW	5.88	0	0	projection/height above sill ratio >=0.43	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)	W03	NW	0.87	5.2	6.9	none	aluminium, double Lo-Tsol/air gap/clear, (U-value: 4.9, SHGC: 0.33)	W04	NE	3.6	0	0	projection/height above sill ratio >=0.43	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)	<div>✓</div>	<div>✓</div>	<div>✓</div>
Window / door no.	Orientation	Area of glass inc. frame (m2)	Overshadowing		Shading device	Frame and glass type																																								
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W01	SE	1.02	0	0	none	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)																																								
W02	SW	5.88	0	0	projection/height above sill ratio >=0.43	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)																																								
W03	NW	0.87	5.2	6.9	none	aluminium, double Lo-Tsol/air gap/clear, (U-value: 4.9, SHGC: 0.33)																																								
W04	NE	3.6	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 no.	Orientation	Area of glass inc. frame (m2)	Overshadowing		Shading device	Frame and glass type			
			Height (m)	Distance (m)					
W05	SE	0.62	0	0	projection/height above sill ratio ≥0.36	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W06	SE	0.62	0	0	projection/height above sill ratio ≥0.36	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W07	SE	1.24	0	0	projection/height above sill ratio ≥0.36	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W08	SE	1.91	0	0	projection/height above sill ratio ≥0.36	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W09	SE	0.87	0	0	projection/height above sill ratio ≥0.36	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W10	SE	0.87	0	0	projection/height above sill ratio ≥0.36	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W11	SW	1.86	0	0	projection/height above sill ratio ≥0.36	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W12	SW	2.72	0	0	projection/height above sill ratio ≥0.36	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W13	NW	1.44	0	0	projection/height above sill ratio ≥0.43	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W14	NW	1.86	0	0	projection/height above sill ratio ≥0.36	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W15	NW	0.62	0	0	projection/height above sill ratio ≥0.36	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W16	NE	2.72	0	0	projection/height above sill ratio ≥0.36	improved aluminium, single pyrolytic low-e, (U-value: 4.48, SHGC: 0.46)			
W17	NE	3.6	0	0	projection/height above sill ratio ≥0.23	improved aluminium, single pyrolytic low-e, (U-value: 4.48, SHGC: 0.46)			

Glazing requirements				Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
Skylights						
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			
SK1	0.44	no shading	aluminium, moulded plastic single clear, (or U-value: 6.21, SHGC: 0.808)			
SK2	1.34	no shading	timber, low-E internal/argon fill/clear external, (or U-value: 2.5, SHGC: 0.456)			
SK3	1.34	no shading	timber, low-E internal/argon fill/clear external, (or U-value: 2.5, SHGC: 0.456)			
SK4	0.92	no shading	timber, low-E internal/argon fill/clear external, (or U-value: 2.5, SHGC: 0.456)			
SK5	1.34	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.