

# BASIX<sup>®</sup>Certificate

Building Sustainability Index [www.basix.nsw.gov.au](http://www.basix.nsw.gov.au)

## Alterations and Additions

Certificate number: A1740830

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.basix.nsw.gov.au](http://www.basix.nsw.gov.au)

Secretary

Date of issue: Thursday, 21 March 2024

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



Project address	
Project name	Clareville, Hudson Parade 225 (01)
Street address	225 HUDSON - CLAREVILLE 2107
Local Government Area	Northern Beaches Council
Plan type and number	Deposited Plan DP519303
Lot number	3
Section number	N/A
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).
N/A	N/A
<b>Certificate Prepared by</b> (please complete before submitting to Council or PCA)	
Name / Company Name: Council Approval Group	
ABN (if applicable): 23512142969	

Pool and Spa	Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
<b>Rainwater tank</b>			
The applicant must install a rainwater tank of at least 1011.7199999999999 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 192 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.		✓	✓
<b>Outdoor swimming pool</b>			
The swimming pool must be outdoors.	✓	✓	✓
The swimming pool must not have a capacity greater than 39.37 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
<b>Lighting</b>			
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.		✓	✓
<b>Fixtures</b>			
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																					
<b>Insulation requirements</b>																										
<p>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<sup>2</sup>, b) insulation specified is not required for parts of altered construction where insulation already exists.</p>			✔	✔	✔																					
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="background-color: #808080; color: white;">Construction</th> <th style="background-color: #808080; color: white;">Additional insulation required (R-value)</th> <th style="background-color: #808080; color: white;">Other specifications</th> </tr> </thead> <tbody> <tr> <td>concrete slab on ground floor.</td> <td>nil</td> <td>N/A</td> </tr> <tr> <td>suspended floor with enclosed subfloor: framed (R0.7).</td> <td>R0.60 (down) (or R1.30 including construction)</td> <td>N/A</td> </tr> <tr> <td>external wall: framed (weatherboard, fibro, metal clad)</td> <td>R1.30 (or R1.70 including construction)</td> <td></td> </tr> <tr> <td>external wall: brick veneer</td> <td>R1.16 (or R1.70 including construction)</td> <td></td> </tr> <tr> <td>internal wall shared with garage: single skin masonry (R0.18)</td> <td>nil</td> <td></td> </tr> <tr> <td>flat ceiling, pitched roof</td> <td>ceiling: R2.25 (up), roof: foil/sarking</td> <td>light (solar absorptance &lt; 0.475)</td> </tr> </tbody> </table>			Construction	Additional insulation required (R-value)	Other specifications	concrete slab on ground floor.	nil	N/A	suspended floor with enclosed subfloor: framed (R0.7).	R0.60 (down) (or R1.30 including construction)	N/A	external wall: framed (weatherboard, fibro, metal clad)	R1.30 (or R1.70 including construction)		external wall: brick veneer	R1.16 (or R1.70 including construction)		internal wall shared with garage: single skin masonry (R0.18)	nil		flat ceiling, pitched roof	ceiling: R2.25 (up), roof: foil/sarking	light (solar absorptance < 0.475)			
Construction	Additional insulation required (R-value)	Other specifications																								
concrete slab on ground floor.	nil	N/A																								
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Glazing requirements	Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
<b>Windows and glazed doors</b>			
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.		✓	✓
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.		✓	✓
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.		✓	✓

Glazing requirements							Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
<b>Windows and glazed doors glazing requirements</b>									
Window/door number	Orientation	Area of glass including frame (m2)	Overshadowing height (m)	Overshadowing distance (m)	Shading device	Frame and glass type			
D1.1	SW	4.32	0	0	eave/ verandah/ pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
D1.2	SW	5.04	0	0	eave/ verandah/ pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
D1.3	NW	2.94	0	0	eave/ verandah/ pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
D1.4	NE	1.93	0	0	eave/ verandah/ pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
D2.1	SW	5.04	0	0	pergola (adjustable shade) >=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			
D2.2	SW	2.52	0	0	eave/ verandah/ pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
D2.3	SW	5.04	0	0	eave/ verandah/ pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
D2.4	SW	5.04	0	0	eave/ verandah/ pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W1.1	SW	1.3	0	0	eave/ verandah/ pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W1.2	SW	1.3	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
<b>Windows and glazed doors glazing requirements</b>									
Window/door number	Orientation	Area of glass including frame (m2)	Overshadowing height (m)	Overshadowing distance (m)	Shading device	Frame and glass type			
W1.3	NW	1.28	0	0	eave/ verandah/ pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W1.4	NW	0.8	0	0	none	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W1.5	NW	0.8	0	0	eave/ verandah/ pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W1.6	NW	2.92	0	0	eave/ verandah/ pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W2.1	SW	1.5	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			
W2.2	NW	1.2	0	0	eave/ verandah/ pergola/balcony >=450 mm	aluminium: thermally broken, double Lo-Tsol/air gap/clear , (U-value: 3.1, SHGC: 0.27)			
W2.3	NW	1.2	0	0	eave/ verandah/ pergola/balcony >=450 mm	aluminium: thermally broken, double Lo-Tsol/air gap/clear , (U-value: 3.1, SHGC: 0.27)			
W2.4	NE	0.96	0	0	eave/ verandah/ pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W2.5	NE	0.8	0	0	eave/ verandah/ pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W2.6	NE	0.8	0	0	eave/ verandah/ pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W2.7	NE	0.8	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
<b>Skylights</b>						
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.					✓	✓
External awnings and louvres must fully shade the skylight above which they are situated when fully drawn or closed.					✓	✓
<b>Skylights glazing requirements</b>						
Skylight number	Area of glazing inc. frame (m2)	Shading device	Frame and glass type			
S1	0.96	no shading	aluminium, moulded plastic single clear, (or U-value: 6.21, SHGC: 0.808)			
S2	0.96	external fixed awning or blind	aluminium, moulded plastic single clear, (or U-value: 6.21, SHGC: 0.808)			
S3	0.96	external fixed awning or blind	aluminium, moulded plastic single clear, (or U-value: 6.21, SHGC: 0.808)			

## 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.