# **BASIX**<sup>°</sup>Certificate

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

### Single Dwelling

Certificate number: 1204405S\_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.basix.nsw.gov.au

This certificate is a revision of certificate number 1204405S lodged with the consent authority or certifier on 12 July 2021 with application DA2021/1140.

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 Schedule 1 Clause 2A, 4A or 6A of the Environmental Planning and Assessment Regulation 2000

#### Secretary

Date of issue: Monday, 16 May 2022 To be valid, this certificate must be lodged within 3 months of the date of issue.



Planning, Industry & Environment

Project summary				
Project name	72 Carrington Pde - Amended DA_02			
Street address	72 Carrington Parade Curl Curl 2096			
Local Government Area	Northern Beaches Council			
Plan type and plan number	deposited 366860			
Lot no.	1			
Section no.	-			
Project type	separate dwelling house			
No. of bedrooms	3			
Project score				
Water	V 40 Target 40			
Thermal Comfort	V Pass Target Pass			
Energy	V 51 Target 50			

Certificate	Prepared by	
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Name / Company Name: Breakspear Architects Pty Ltd

ABN (if applicable): 81601670991

## **Description of project**

#### Project address

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Street address	72 Carrington Parade Curl Curl 2096
Local Government Area	Northern Beaches Council
Plan type and plan number	Deposited Plan 366860
Lot no.	1
Section no.	-
Project type	
Project type	separate dwelling house
No. of bedrooms	3
Site details	
Site area (m²)	281
Roof area (m <sup>2</sup> )	90
Conditioned floor area (m2)	284.0
Unconditioned floor area (m2)	6.7
Total area of garden and lawn (m2)	73

#### Assessor details and thermal loads Assessor number n/a Certificate number n/a n/a Climate zone Area adjusted cooling load (MJ/m<sup>2</sup>.year) n/a Area adjusted heating load (MJ/m<sup>2</sup>.year) n/a Ceiling fan in at least one bedroom n/a Ceiling fan in at least one living room or n/a other conditioned area **Project score** Water 40 Target 40 Thermal Comfort Target Pass V Pass Energy 51 Target 50

#### Schedule of BASIX commitments

The commitments set out below regulate how the proposed development is to be carried out. It is a condition of any development consent granted, or complying development certificate issued, for the proposed development, that BASIX commitments be complied with.

Water Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Landscape			
The applicant must plant indigenous or low water use species of vegetation throughout 73.21 square metres of the site.	~	<b>~</b>	
Fixtures			
The applicant must install showerheads with a minimum rating of 4 star (> 6 but <= 7.5 L/min plus spray force and/or coverage tests) in all showers in the development.		<ul> <li>Image: A set of the set of the</li></ul>	~
The applicant must install a toilet flushing system with a minimum rating of 4 star in each toilet in the development.		~	~
The applicant must install taps with a minimum rating of 4 star in the kitchen in the development.		~	
The applicant must install basin taps with a minimum rating of 4 star in each bathroom in the development.		~	
Alternative water			
Rainwater tank			
The applicant must install a rainwater tank of at least 3000 litres on the site. This rainwater tank must meet, and be installed in accordance with, the requirements of all applicable regulatory authorities.	~	<ul> <li></li> </ul>	~
The applicant must configure the rainwater tank to collect rain runoff from at least 40 square metres of the roof area of the development (excluding the area of the roof which drains to any stormwater tank or private dam).		~	~
The applicant must connect the rainwater tank to:			
<ul> <li>at least one outdoor tap in the development (Note: NSW Health does not recommend that rainwater be used for human consumption in areas with potable water supply.)</li> </ul>		<ul> <li>Image: A second s</li></ul>	~

Thermal Comfort Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
General features			
The dwelling must not have more than 2 storeys.	~	~	~
The conditioned floor area of the dwelling must not exceed 300 square metres.	~	<b>~</b>	~
The dwelling must not contain open mezzanine area exceeding 25 square metres.	~	<b>~</b>	~
The dwelling must not contain third level habitable attic room.	~	~	~
Floor, walls and ceiling/roof			
The applicant must construct the floor(s), walls, and ceiling/roof of the dwelling in accordance with the specifications listed in the table below.	~	~	~

Construction	Additional insulation required (R-Value)	Other specifications
floor - concrete slab on ground, 12.31 square metres	nil	
floor - suspended floor above enclosed subfloor, 100.42 square metres, concrete	0.70 (or 1.3 including construction) (down)	
floor - above habitable rooms or mezzanine, 104.24 square metres, concrete	nil	
floor - suspended floor above garage, concrete	nil	
external wall - cavity brick	0.50 (or 1.17 including construction)	
internal wall shared with garage - plasterboard	nil	
ceiling and roof - flat ceiling / flat roof, framed	ceiling: 4 (up), roof: foil/sarking	framed; light (solar absorptance < 0.475)

• Insulation specified in this Certificate must be installed in accordance with Part 3.12.1.1 of the Building Code of Australia.

Note • In some climate zones, insulation should be installed with due consideration of condensation and associated interaction with adjoining building materials.

Thermal Comfort Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Windows, glazed doors and skylights			
The applicant must install the windows, glazed doors and shading devices described in the table below, in accordance with the specifications listed in the table. Relevant overshadowing specifications must be satisfied for each window and glazed door.	~	~	~
The dwelling may have 1 skylight (<0.7 square metres) which is not listed in the table.	~	~	~
The following requirements must also be satisfied in relation to each window and glazed door:	~	~	~
• For the following glass and frame types, the certifier check can be performed by visual inspection.			~
- Aluminium single clear			
- Aluminium double (air) clear			
- Timber/uPVC/fibreglass single clear			
- Timber/uPVC/fibreglass double (air) clear			
<ul> <li>Vertical external louvres and blinds must fully shade the window or glazed door beside which they are situated when fully drawn or closed.</li> </ul>		<ul> <li>Image: A second s</li></ul>	~
<ul> <li>Overshadowing buildings/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.</li> </ul>	~	<ul> <li>Image: A set of the set of the</li></ul>	~
The applicant must install the skylights described in the table below, in accordance with the specifications listed in the table. Total skylight area must not exceed 3 square metres (the 3 square metre limit does not include the optional additional skylight of less than 0.7 square metres that does not have to be listed in the table).	~	~	~
The following requirements must also be satisfied in relation to each skylight:		~	~
• External awnings and louvres must fully shade the skylight above which they are situated when fully drawn or closed		<b>_</b>	<b>v</b>

Skylight no.	Maximum area (square metres)	Туре	Shading device
S01	2.85	timber, double clear/air fill	adjustable awning or blind

Window/glazed door no.	Maximum height (mm)	Maximum width (mm)	Туре	Shading Device (Dimension within 10%)	Overshadowing
North facing					
W04	600	90	aluminium, single, clear	none	not overshadowed
D04	2700	945	aluminium, single, clear	external louvre/vertical blind (adjustable)	not overshadowed
W19	600	600	aluminium, single, clear	none	not overshadowed
D05	2700	970	aluminium, single, clear	external louvre/vertical blind (adjustable)	not overshadowed
W24	1740	1770	aluminium, single, clear	external louvre/vertical blind (adjustable)	not overshadowed
W08	1100	780	aluminium, single, clear	eave 243 mm, 0 mm above head of window or glazed door	not overshadowed
W07	1300	2560	aluminium, single, clear	solid overhang 916 mm, 0 mm above head of window or glazed door	not overshadowed
W18	1700	3000	aluminium, single, clear	external louvre/vertical blind (adjustable)	not overshadowed
W06	1300	2560	aluminium, single, clear	solid overhang 1186 mm, 0 mm above head of window or glazed door	not overshadowed
W22	2250	4515	aluminium, single, clear	solid overhang 980 mm, 0 mm above head of window or glazed door	2-4 m high, 2 m away
W05	2100	2010	aluminium, single, clear	solid overhang 395 mm, 0 mm above head of window or glazed door	not overshadowed
East facing					1
W03	2700	390	aluminium, single, clear	none	not overshadowed
W21	2250	1910	aluminium, single, clear	solid overhang 2125 mm, 0 mm above head of window or glazed door	2-4 m high, 2-5 m away
W01	1500	9300	aluminium, single, clear	external louvre/vertical blind (adjustable)	not overshadowed

Window/glazed door no.	Maximum height (mm)	Maximum width (mm)	Туре	Shading Device (Dimension within 10%)	Overshadowing
W16	1650	9000	aluminium, single, clear	external louvre/vertical blind (adjustable)	not overshadowed
South facing					
W10	1600	900	aluminium, single, clear	none	>4 m high, <2 m away
W13	1600	900	aluminium, single, clear	none	>4 m high, <2 m away
W12	1600	900	aluminium, single, clear	none	>4 m high, <2 m away
D03	2600	900	aluminium, single, clear	none	>4 m high, <2 m away
W20	1800	2300	aluminium, single, clear	external louvre/vertical blind (adjustable)	2-4 m high, 2 m away
W11	1600	900	aluminium, single, clear	none	>4 m high, <2 m away
West facing					
D08	2700	2740	aluminium, single, clear	solid overhang 1235 mm, 0 mm above head of window or glazed door	2-4 m high, 2-5 m away
W23	2700	840	aluminium, single, clear	external louvre/vertical blind (adjustable)	2-4 m high, 2-5 m away
North-West facing			·		
W09	2600	840	aluminium, single, clear	none	2-4 m high, 2-5 m away

Energy Commitments	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, or a system with a higher energy rating: gas storage with a performance of 2 stars.	~	~	~
Cooling system			
The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 living area: 1-phase airconditioning; Energy rating: 5 star (average zone)		~	~
The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 bedroom: ceiling fans + 1-phase airconditioning; Energy rating: 5 star (average zone)		~	~
Heating system			
The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 living area: gas hydronic system; Energy rating: n/a		~	~
The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 bedroom: gas hydronic system; Energy rating: n/a		~	~
Ventilation			
The applicant must install the following exhaust systems in the development:			
At least 1 Bathroom: individual fan, ducted to façade or roof; Operation control: manual on / timer off		<b>v</b>	<b>~</b>
Kitchen: individual fan, ducted to façade or roof; Operation control: manual switch on/off		<b>v</b>	~
Laundry: individual fan, ducted to façade or roof; Operation control: manual on / timer off		<b>v</b>	~
Artificial lighting			
The applicant must ensure that the "primary type of artificial lighting" is fluorescent or light emitting diode (LED) lighting in each of the following rooms, and where the word "dedicated" appears, the fittings for those lights must only be capable of accepting fluorescent or light emitting diode (LED) lamps:			
at least 3 of the bedrooms / study; dedicated		<b>~</b>	~
at least 2 of the living / dining rooms; dedicated		✓	~
the kitchen;		<b>_</b>	<b>v</b>

Energy Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
all bathrooms/toilets;		<b>~</b>	~
the laundry;		✓	~
• all hallways;		<b>~</b>	~
Natural lighting			
The applicant must install a window and/or skylight in the kitchen of the dwelling for natural lighting.	~	~	~
The applicant must install a window and/or skylight in 3 bathroom(s)/toilet(s) in the development for natural lighting.	~	>	>
Alternative energy			
The applicant must install a photovoltaic system with the capacity to generate at least 0.7 peak kilowatts of electricity as part of the development. The applicant must connect this system to the development's electrical system.	~	~	~
Other			
The applicant must install a gas cooktop & electric oven in the kitchen of the dwelling.		<b>~</b>	
The applicant must install a fixed indoor or sheltered clothes drying line as part of the development.		~	

#### Legend

In these commitments, "applicant" means the person carrying out the development.

Commitments identified with a vi 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 vi in the "Show on CC/CDC plans and 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 vi in the "Certifier check" column must be certified by a certifying authority as having been fulfilled, before a final occupation certificate(either interim or final) for the development may be issued.