

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

Single Dwelling

Certificate number: 1115988S 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

Secretary

BASIX

Date of issue: Thursday, 24 September 2020

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



Project summary			
Project name	84 Barrenjoey Road, Monavale Sumner_02		
Street address	84 barrenjoey Road mona vale 2103		
Local Government Area	Northern Beaches Council		
Plan type and plan number	deposited 860080		
Lot no.	51		
Section no.	-		
Project type	separate dwelling house		
No. of bedrooms	0		
Project score			
Water	✓ 45 Target 40		
Thermal Comfort	✓ Pass Target Pass		
Energy	✓ 61 Target 50		

Certificate	Prepared	by
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Name / Company Name: ANTSIN PTY LTD

ABN (if applicable): N/A

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Description of project

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Project address			
Project name	84 Barrenjoey Road, Monavale Sumner_02		
Street address	84 barrenjoey Road mona vale 2103		
Local Government Area	Northern Beaches Council		
Plan type and plan number	Deposited Plan 860080		
Lot no.	51		
Section no.	-		
Project type			
Project type	separate dwelling house		
No. of bedrooms 0			
Site details			
Site area (m²)	100		
Roof area (m²)	88		
Conditioned floor area (m2)	68.57		
Unconditioned floor area (m2)	0.0		
Total area of garden and lawn (m2)	24		

Assessor details and thermal loads							
Assessor number	n/a						
Certificate number	n/a						
Climate zone	n/a						
Area adjusted cooling load (MJ/m².year)	n/a						
Area adjusted heating load (MJ/m².year)	n/a						
Project score							
Water	√ 45 Target 40						
Thermal Comfort	✓ Pass Target Pass						
Energy	✓ 61 Target 50						

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Schedule of BASIX commitments

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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
Fixtures			
The applicant must install showerheads with a minimum rating of 3 star (> 4.5 but <= 6 L/min) in all showers in the development.		~	V
The applicant must install a toilet flushing system with a minimum rating of 5 star in each toilet in the development.		~	V
The applicant must install taps with a minimum rating of 5 star in the kitchen in the development.		~	
The applicant must install basin taps with a minimum rating of 6 star in each bathroom in the development.		~	
Alternative water			
Stormwater tank			
The applicant must install a stormwater tank with a capacity of at least 4700 litres on the site. This stormwater tank must meet, and be installed in accordance with, the requirements of all applicable regulatory authorities.	V	~	V
The applicant must configure the stormwater tank to collect runoff from:			
 at least 87.6 square metres of roof area of the development (excluding the area of the roof which drains to any rainwater tank or private dam) 		~	V
at least 50 square metres of impervious areas		~	V
The applicant must connect the stormwater tank to:			
 a sub-surface or non-aerosol irrigation system, or if the stormwater has been appropriately treated in accordance with applicable regulatory requirements, to at least one outdoor tap in the development (Note: NSWHealth does not recommend that stormwater be used to irrigate edible plants which are consumed raw.) 		~	~

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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.	V	~	-
The conditioned floor area of the dwelling must not exceed 300 square metres.	V	~	V
The dwelling must not contain open mezzanine area exceeding 25 square metres.	V	~	V
The dwelling must not contain third level habitable attic room.	V	V	V
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.	V	V	~

Construction	Additional insulation required (R-Value)	Other specifications
floor - suspended floor above open subfloor, framed	1.3 (or 2 including construction) (down)	
external wall - framed (weatherboard, fibre cement, metal clad)	3.00 (or 3.40 including construction)	
ceiling and roof - flat ceiling / pitched roof	ceiling: 5 (up), roof: foil/sarking	1 wind-driven ventilator(s) + eave vents; medium (solar absorptance 0.475-0.70)

Note	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.

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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.	V	•	~		
The dwelling may have 1 skylight (<0.7 square metres) which is not listed in the table.	V	<u> </u>	V		
The following requirements must also be satisfied in relation to each window and glazed door:	~	V	~		
• 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					
 For other glass or frame types, each window and glazed door must be accompanied with certification showing a U value no greater than that listed and a Solar Heat Gain Coefficient (SHGC) within the range of those listed. Total system U values and SHGC must be calculated in accordance with National Fenestration Rating Council (NFRC) conditions. Frame and glass types shown in the table below are for reference only. 			•		

Window/glazed door no.	Maximum height (mm)	Maximum width (mm)	Туре	Shading Device (Dimension within 10%)	Overshadowing
North facing					
W04	500	1050	U-value: 5.6, SHGC: 0.369 - 0.451 (aluminium, single, Lo-Tsol Low-e)	eave 450 mm, 300 mm above head of window or glazed door	not overshadowed
W05	850	2450	U-value: 5.6, SHGC: 0.369 - 0.451 (aluminium, single, Lo-Tsol Low-e)	eave 450 mm, 300 mm above head of window or glazed door	not overshadowed
East facing					
W06	2100	3050	U-value: 5.6, SHGC: 0.369 - 0.451 (aluminium, single, Lo-Tsol Low-e)	eave 900 mm, 300 mm above head of window or glazed door	not overshadowed
W07	2100	3050	U-value: 5.6, SHGC: 0.369 - 0.451 (aluminium, single, Lo-Tsol Low-e)	eave 900 mm, 300 mm above head of window or glazed door	not overshadowed
South facing		ı	1	1	

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Window/glazed door no.	Maximum height (mm)	Maximum width (mm)	Туре	Shading Device (Dimension within 10%)	Overshadowing
W03	850	2050	U-value: 5.6, SHGC: 0.369 - 0.451 (aluminium, single, Lo-Tsol Low-e)	eave 450 mm, 300 mm above head of window or glazed door	not overshadowed
West facing					
W01	400	1050	U-value: 5.6, SHGC: 0.369 - 0.451 (aluminium, single, Lo-Tsol Low-e)	eave 450 mm, 300 mm above head of window or glazed door	not overshadowed
W02	400	1050	U-value: 5.6, SHGC: 0.369 - 0.451 (aluminium, single, Lo-Tsol Low-e)	eave 450 mm, 300 mm above head of window or glazed door	not overshadowed
D01	2040	820	U-value: 5.6, SHGC: 0.324 - 0.396 (aluminium, single, Lo-Tsol Low-e)	eave 450 mm, 300 mm above head of window or glazed door	not overshadowed

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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: electric heat pump with a performance of 36 to 40 STCs or better.	~	~	V
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: 4 Star (old label)		~	~
The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 bedroom: 1-phase airconditioning; Energy rating: 4 Star (old label)		V	V
Heating system			
The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 living area: 1-phase airconditioning; Energy rating: 4 Star (old label)		✓	V
The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 bedroom: 1-phase airconditioning; Energy rating: 4 Star (old label)		~	V
Ventilation			
The applicant must install the following exhaust systems in the development:			
At least 1 Bathroom: no mechanical ventilation (ie. natural); Operation control: n/a		~	V
Kitchen: no mechanical ventilation (ie. natural); Operation control: n/a		•	-
Laundry: natural ventilation only, or no laundry; Operation control: n/a		~	V
Artificial lighting	<u>'</u>		
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 1 of the bedrooms / study; dedicated			L U
at least 1 of the living / dining rooms; dedicated			J
Natural lighting		<u> </u>	

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Energy Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
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 1 bathroom(s)/toilet(s) in the development for natural lighting.	~	~	V
Alternative energy			
The applicant must install a photovoltaic system with the capacity to generate at least 0.2 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 & gas oven in the kitchen of the dwelling.		~	
The applicant must construct each refrigerator space in the development so that it is "well ventilated", as defined in the BASIX definitions.		~	
The applicant must install a fixed outdoor clothes drying line as part of the development.		•	
The applicant must install a fixed indoor or sheltered clothes drying line as part of the development.			

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Legend

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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 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 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.

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