

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

## Single Dwelling

Certificate number: 1225973S\_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 1225973S lodged with the consent authority or certifier on 04 August 2021 with application DA2021/1306.

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

BASIX

Date of issue: Monday, 29 November 2021

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



Project summary			
Project name	Secondary Dwelling Ingleside_02		
Street address	13 Bungendore Street Ingleside 2101		
Local Government Area	Northern Beaches Council		
Plan type and plan number	deposited 752046		
Lot no.	166		
Section no.	-		
Project type	separate dwelling house - secondary dwelling		
No. of bedrooms	2		
Project score			
Water	√ 77 Target 40		
Thermal Comfort	✓ Pass Target Pass		
Energy	✓ 52 Target 50		

Certificate Prepared by
Name / Company Name: John Holman
ABN (if applicable): N/A

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## **Description of project**

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Project address	
Project name	Secondary Dwelling Ingleside_02
Street address	13 Bungendore Street Ingleside 2101
Local Government Area	Northern Beaches Council
Plan type and plan number	Deposited Plan 752046
Lot no.	166
Section no.	-
Project type	
Project type	separate dwelling house - secondary dwelling
No. of bedrooms	2
Site details	
Site area (m²)	1917
Roof area (m²)	256
Conditioned floor area (m2)	100.0
Unconditioned floor area (m2)	0.0
Total area of garden and lawn (m2)	1161
Roof area (m2) of the existing dwelling	608
No. of bedrooms in the existing dwelling	4

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						
Ceiling fan in at least one bedroom	n/a						
Ceiling fan in at least one living room or other conditioned area	n/a						
Project score							
Water	✓ 77 Target 40						
Thermal Comfort	✓ Pass Target Pass						
Energy	✓ 52 Target 50						

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## **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
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.		-	-
The applicant must install a toilet flushing system with a minimum rating of 3 star in each toilet in the development.		V	V
The applicant must install taps with a minimum rating of 3 star in the kitchen in the development.		~	
The applicant must install basin taps with a minimum rating of 3 star in each bathroom in the development.		~	
Alternative water			
Rainwater tank			
The applicant must install a rainwater tank of at least 50000 litres on the site. This rainwater tank must meet, and be installed in accordance with, the requirements of all applicable regulatory authorities.	V	<b>→</b>	~
The applicant must configure the rainwater tank to collect rain runoff from at least 312 square metres of the roof area of the development (excluding the area of the roof which drains to any stormwater tank or private dam).		~	V
The applicant must connect the rainwater tank to:			
all toilets in the development		<b>~</b>	V
the cold water tap that supplies each clothes washer in the development		<b>V</b>	
<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>		<b>V</b>	V
all hot water systems in the development			
all indoor cold water taps (not including taps that supply clothes washers) in the development			J

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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	<b>~</b>	-
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	V
The dwelling must not contain third level habitable attic room.	V	~	-
Floor, walls and ceiling/roof	1		<u>'</u>
The applicant must construct the floor(s), walls, and ceiling/roof of the dwelling in accordance with the specifications listed in the table below.	~	<u> </u>	V

Construction	Additional insulation required (R-Value)	Other specifications
floor - concrete slab on ground	nil	
external wall - brick veneer	2.86 (or 3.40 including construction)	
internal wall shared with garage - cavity brick wall	nil	
ceiling and roof - flat ceiling / pitched roof	ceiling: 4.5 (up), roof: foil/sarking	unventilated; dark (solar absorptance > 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.	~	<b>~</b>	V			
The dwelling may have 1 skylight (<0.7 square metres) which is not listed in the table.	V	<b>~</b>	V			
The following requirements must also be satisfied in relation to each window and glazed door:	~	V	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						
<ul> <li>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.</li> </ul>			•			

Window/glazed door no.	Maximum height (mm)	Maximum width (mm)	Туре	Shading Device (Dimension within 10%)	Overshadowing
North facing					
W07	2400	2700	U-value: 5.2, SHGC: 0.351 - 0.429 (aluminium, double (air), tint)	verandah 4810 mm, 3000 mm above base of window or glazed door	not overshadowed
W08	1200	1710	U-value: 5.2, SHGC: 0.351 - 0.429 (aluminium, double (air), tint)	verandah 4810 mm, 3000 mm above base of window or glazed door	not overshadowed
W09	2400	2088	U-value: 5.2, SHGC: 0.351 - 0.429 (aluminium, double (air), tint)	verandah 4810 mm, 3000 mm above base of window or glazed door	not overshadowed
East facing					
W10	600	2410	U-value: 5.2, SHGC: 0.351 - 0.429 (aluminium, double (air), tint)	eave 600 mm, 600 mm above head of window or glazed door	not overshadowed

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Window/glazed door no.	Maximum height (mm)	Maximum width (mm)	Туре	Shading Device (Dimension within 10%)	Overshadowing
W11	600	2410	U-value: 5.2, SHGC: 0.351 - 0.429 (aluminium, double (air), tint)	eave 600 mm, 600 mm above head of window or glazed door	not overshadowed
W12	2400	1500	U-value: 5.2, SHGC: 0.351 - 0.429 (aluminium, double (air), tint)	eave 600 mm, 600 mm above head of window or glazed door	not overshadowed
South facing					
W03	1200	2110	U-value: 5.2, SHGC: 0.351 - 0.429 (aluminium, double (air), tint)	eave 600 mm, 600 mm above head of window or glazed door	not overshadowed
W02	600	600	U-value: 5.2, SHGC: 0.351 - 0.429 (aluminium, double (air), tint)	eave 600 mm, 600 mm above head of window or glazed door	not overshadowed
W01	1200	2110	U-value: 5.2, SHGC: 0.351 - 0.429 (aluminium, double (air), tint)	eave 600 mm, 600 mm above head of window or glazed door	not overshadowed
West facing					
W04	2400	2110	U-value: 5.2, SHGC: 0.351 - 0.429 (aluminium, double (air), tint)	eave 600 mm, 600 mm above head of window or glazed door	not overshadowed
W05	1500	1510	U-value: 5.2, SHGC: 0.351 - 0.429 (aluminium, double (air), tint)	eave 600 mm, 600 mm above head of window or glazed door	not overshadowed
W06	2400	2700	U-value: 5.2, SHGC: 0.351 - 0.429 (aluminium, double (air), tint)	eave 600 mm, 600 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.	~	<b>✓</b>	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: 3-phase airconditioning; Energy rating: EER 3.5 - 4.0		<b>~</b>	V
The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 bedroom: 3-phase airconditioning; Energy rating: EER 3.5 - 4.0		~	V
The cooling system must provide for day/night zoning between living areas and bedrooms.		<b>~</b>	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: 3-phase airconditioning; Energy rating: EER 3.5 - 4.0		~	V
The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 bedroom: 3-phase airconditioning; Energy rating: EER 3.5 - 4.0		<b>~</b>	V
The heating system must provide for day/night zoning between living areas and bedrooms.		•	V
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 switch on/off		<b>✓</b>	V
Kitchen: individual fan, ducted to façade or roof; Operation control: manual switch on/off		<b>~</b>	V
Laundry: individual fan, ducted to façade or roof; Operation control: interlocked to light		<b>~</b>	V
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			

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Energy Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
at least 1 of the living / dining rooms; dedicated		<b>~</b>	~
• the kitchen; dedicated		•	-
all bathrooms/toilets; dedicated		<b>~</b>	-
the laundry; dedicated		•	-
all hallways; dedicated		•	V
Natural lighting			
The applicant must install a window and/or skylight in the kitchen of the dwelling for natural lighting.	~	<b>→</b>	~
The applicant must install a window and/or skylight in 2 bathroom(s)/toilet(s) in the development for natural lighting.	~	<b>~</b>	~
Other			
The applicant must install a gas cooktop & electric oven in the kitchen of the dwelling.		<b>→</b>	
The applicant must construct each refrigerator space in the development so that it is "well ventilated", as defined in the BASIX definitions.		<b>~</b>	
The applicant must install a fixed outdoor 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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