

BASIX[®]Certificate

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

Single Dwelling

Certificate number: 717171S

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 18/09/2014 published by the Department. This document is available at www.basix.nsw.gov.au

Secretary

Date of issue: Monday, 05 July 2017

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



Project summary		
Project name	BASIX 50 house	
Street address	25 Bangalee Street Stanmore 2048	
Local Government Area	Inner West Council	
Plan type and plan number	deposited 123123	
Lot no.	Z	
Section no.	-	
Project type	separate dwelling house	
No. of bedrooms	4	
Project score		
Water	✓ 45	Target 40
Thermal Comfort	✓ Pass	Target Pass
Energy	✓ 53	Target 50




Certificate Prepared by

Name / Company Name: ScottPlan

ABN (if applicable): N/A

Description of project

Project address	
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Street address	25 Bangalee Street Stanmore 2048
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Plan type and plan number	Deposited Plan 123123
Lot no.	Z
Section no.	-
Project type	
Project type	separate dwelling house
No. of bedrooms	4
Site details	
Site area (m ²)	250
Roof area (m ²)	130
Conditioned floor area (m ²)	190.0
Unconditioned floor area (m ²)	10.0
Total area of garden and lawn (m ²)	100

Assessor details and thermal loads		
Assessor number	n/a	
Certificate number	n/a	
Climate zone	n/a	
Area adjusted cooling load (MJ/m ² .year)	n/a	
Area adjusted heating load (MJ/m ² .year)	n/a	
Project score		
Water	 45	Target 40
Thermal Comfort	 Pass	Target Pass
Energy	 53	Target 50

This is not a valid certificate

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 50 square metres of the site.	✓	✓	
Fixtures			
The applicant must install showerheads with a minimum rating of 3 star (> 6 but <= 7.5 L/min) in all showers in the development.		✓	✓
The applicant must install a toilet flushing system with a minimum rating of 5 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 3500 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 rain runoff from at least 85 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 style="list-style-type: none"> all toilets in the development 		✓	✓
<ul style="list-style-type: none"> 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.) 		✓	✓

Thermal Comfort Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
General features			
The dwelling must be a Class 1 dwelling according to the Building Code of Australia, and must not have more than 2 storeys.	✓	✓	✓
The conditioned floor area of the dwelling must not exceed 300 square metres.	✓	✓	✓
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 - suspended floor above open subfloor, 100 square metres, framed	0.8 (or 1.5 including construction) (down)	
floor - above habitable rooms or mezzanine, 90 square metres, framed	nil	
external wall - cavity brick	0.50 (or 1.17 including construction)	
external wall - framed (weatherboard, fibre cement, metal clad)	2.00 (or 2.40 including construction)	
ceiling and roof - flat ceiling / pitched roof	ceiling: 2.2 (up), roof: foil backed blanket (55mm)	2 wind-driven ventilator(s) + eave vents; light (solar absorptance < 0.475)

Note	<ul style="list-style-type: none"> Insulation specified in this Certificate must be installed in accordance with Part 3.12.1.1 of the Building Code of Australia.
Note	<ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> For the following glass and frame types, the certifier check can be performed by visual inspection. <ul style="list-style-type: none"> - 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. Pergolas with polycarbonate roof or similar translucent material must have a shading coefficient of less than 0.35. Unless they have adjustable shading, pergolas must have fixed 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 exceed the height of the battens. 	✓	✓	✓

Window/glazed door no.	Maximum height (mm)	Maximum width (mm)	Type	Shading (Dimension within 10%)	Overshadowing
North facing					
W01	2000	4000	U-value: 3.6, SHGC: 0.486 - 0.594 (aluminium: thermally broken, double (air), clear)	eave 450 mm, 300 mm above head of window or glazed door	not overshadowed
W02	400	1000	U-value: 3.6, SHGC: 0.423 - 0.517 (aluminium: thermally broken, double (air), clear)	eave 450 mm, 300 mm above head of window or glazed door	not overshadowed

Window/glazed door no.	Maximum height (mm)	Maximum width (mm)	Type	Shading (Dimension within 10%)	Overshadowing
W03	2000	1800	U-value: 3.6, SHGC: 0.423 - 0.517 (aluminium: thermally broken, double (air), clear)	eave 450 mm, 300 mm above head of window or glazed door	not overshadowed
W04	400	1000	U-value: 3.6, SHGC: 0.423 - 0.517 (aluminium: thermally broken, double (air), clear)	eave 450 mm, 300 mm above head of window or glazed door	not overshadowed
East facing					
W05	1000	1000	U-value: 3.6, SHGC: 0.423 - 0.517 (aluminium: thermally broken, double (air), clear)	eave 450 mm, 300 mm above head of window or glazed door	not overshadowed
W06	1000	1000	U-value: 3.6, SHGC: 0.423 - 0.517 (aluminium: thermally broken, double (air), clear)	eave 450 mm, 300 mm above head of window or glazed door	not overshadowed
W07	1000	1000	U-value: 3.6, SHGC: 0.423 - 0.517 (aluminium: thermally broken, double (air), clear)	eave 450 mm, 300 mm above head of window or glazed door	not overshadowed
W08	1000	100	U-value: 3.6, SHGC: 0.423 - 0.517 (aluminium: thermally broken, double (air), clear)	eave 450 mm, 300 mm above head of window or glazed door	not overshadowed
South facing					
W09	2000	1500	U-value: 3.6, SHGC: 0.423 - 0.517 (aluminium: thermally broken, double (air), clear)	eave 450 mm, 300 mm above head of window or glazed door	not overshadowed
W10	1000	3000	U-value: 3.6, SHGC: 0.423 - 0.517 (aluminium: thermally broken, double (air), clear)	eave 450 mm, 300 mm above head of window or glazed door	not overshadowed
West facing					
W11	2000	1800	U-value: 3.6, SHGC: 0.423 - 0.517 (aluminium: thermally broken, double (air), clear)	pergola (fixed battens) 1200 mm, 300 mm above head of window or glazed door	not overshadowed
W12	1000	1000	U-value: 3.6, SHGC: 0.423 - 0.517 (aluminium: thermally broken, double (air), clear)	eave 450 mm, 300 mm above head of window or glazed door	not overshadowed

Window/glazed door no.	Maximum height (mm)	Maximum width (mm)	Type	Shading (Dimension within 10%)	Overshadowing
W13	1000	1000	U-value: 3.6, SHGC: 0.423 - 0.517 (aluminium: thermally broken, double (air), clear)	eave 450 mm, 300 mm above head of window or glazed door	not overshadowed
W14	1200	1200	U-value: 3.6, SHGC: 0.423 - 0.517 (aluminium: thermally broken, double (air), clear)	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: solar (gas boosted, flat plate) with a performance of 31 to 35 STCs or better.	✓	✓	✓
Cooling system			
The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 living area: ceiling fans; Energy rating: n/a		✓	✓
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: 4.5 Star		✓	✓
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: 4.5 Star		✓	✓
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: 4.5 Star		✓	✓
Ventilation			
<p>The applicant must install the following exhaust systems in the development:</p> <p>At least 1 Bathroom: individual fan, not ducted; Operation control: interlocked to light</p> <p>Kitchen: individual fan, ducted to façade or roof; Operation control: manual switch on/off</p> <p>Laundry: natural ventilation only, or no laundry; Operation control: n/a</p>		<p style="text-align: center;">✓</p> <p style="text-align: center;">✓</p> <p style="text-align: center;">✓</p>	<p style="text-align: center;">✓</p> <p style="text-align: center;">✓</p> <p style="text-align: center;">✓</p>
Artificial lighting			
<p>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:</p> <ul style="list-style-type: none"> • at least 4 of the bedrooms / study; • at least 1 of the living / dining rooms; • the kitchen; dedicated 		<p style="text-align: center;">✓</p> <p style="text-align: center;">✓</p> <p style="text-align: center;">✓</p>	<p style="text-align: center;">✓</p> <p style="text-align: center;">✓</p> <p style="text-align: center;">✓</p>

Energy Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
<ul style="list-style-type: none"> the laundry; all hallways; 		<p style="text-align: center;">✓</p> <p style="text-align: center;">✓</p>	<p style="text-align: center;">✓</p> <p style="text-align: center;">✓</p>
Natural lighting			
The applicant must install a window and/or skylight in 2 bathroom(s)/toilet(s) in the development for natural lighting.	✓	✓	✓
Other			
The applicant must install a gas cooktop & electric 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 indoor or sheltered clothes drying line as part of the development.		✓	

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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 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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