

BASIX[®]Report

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

Project summary		
Project name	Genevieve Brock	
Street address	9 Serpentine Crescent North Balgowlah 2093	
Local Government Area	Northern Beaches Council	
Plan type and plan number	deposited 873950	
Lot no.	102	
Section no.	-	
Project type	attached dwelling house	
No. of bedrooms	4	
Project score		
Water	40	Target 40
Thermal Comfort	Pass	Target Pass
Energy	50	Target 50

Description of project

Project address

Project name	Genevieve Brock
Street address	9 Serpentine Crescent North Balgowlah 2093
Local Government Area	Northern Beaches Council
Plan type and plan number	Deposited Plan 873950
Lot no.	102
Section no.	-

Project type

Project type	attached dwelling house
No. of bedrooms	4

Site details

Site area (m²)	354
Roof area (m²)	150
Conditioned floor area (m2)	182.84
Unconditioned floor area (m2)	21.63
Total area of garden and lawn (m2)	130

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	40	Target 40
Thermal Comfort	Pass	Target Pass
Energy	50	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 18 square metres of the site.	✓	✓	
Fixtures			
The applicant must install showerheads with a minimum rating of 4 star (> 4.5 but ≤ 6 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 6 star in each toilet in the development.		✓	✓
The applicant must install taps with a minimum rating of 6 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			
Rainwater tank			
The applicant must install a rainwater tank of at least 2000 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 74 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"> 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.) 		✓	✓
Swimming pool			
The swimming pool must not have a volume greater than 20.25 kilolitres.	✓	✓	
The swimming pool must have a pool cover.		✓	

Water Commitments

Show on
DA plans

Show on CC/CDC
plans & specs

Certifier
check

The swimming pool must be outdoors.



This is not a valid Certificate

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.	✓	✓	✓
The dwelling must not contain open mezzanine area exceeding 25 square metres.	✓	✓	✓
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 - suspended floor above open subfloor, 29.95 square metres, framed	1.3 (or 2 including construction) (down)	
floor - above habitable rooms or mezzanine, 108.14 square metres, framed	nil	
external wall - framed (weatherboard, fibre cement, metal clad)	3.00 (or 3.40 including construction)	
ceiling and roof - flat ceiling / pitched roof	ceiling: 2.95 (up), roof: foil backed blanket (100 mm)	2 wind-driven ventilator(s) + eave vents; 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.

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.	✓	✓	✓
<p>The following requirements must also be satisfied in relation to each window and glazed door:</p> <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. 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. 	✓	✓	✓
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).	✓	✓	✓
<p>The following requirements must also be satisfied in relation to each skylight:</p> <ul style="list-style-type: none"> External awnings and louvres must fully shade the skylight above which they are situated when fully drawn or closed 		✓	✓

Skylight no.	Maximum area (square metres)	Type	Shading device
S01	1.02	timber, double clear/air fill	adjustable awning or blind
S02	1.02	timber, double clear/air fill	adjustable awning or blind

Window/glazed door no.	Maximum height (mm)	Maximum width (mm)	Type	Shading Device (Dimension within 10%)	Overshadowing
North facing					
W01	1664	1190	aluminium, single, clear	eave 600 mm, 180 mm above head of window or glazed door	not overshadowed
W02	845	658	aluminium, single, clear	eave 600 mm, 423 mm above head of window or glazed door	not overshadowed
W19	2400	2100	U-value: 3.1, SHGC: 0.243 - 0.297 (aluminium: thermally broken, double (air), Lo-Tsol Low-e/clear)	eave 1115 mm, 200 mm above head of window or glazed door	not overshadowed
North-East facing					
W03	1667	1190	U-value: 3.1, SHGC: 0.243 - 0.297 (aluminium: thermally broken, double (air), Lo-Tsol Low-e/clear)	eave 600 mm, 791 mm above head of window or glazed door	not overshadowed
W04	1670	1090	U-value: 3.1, SHGC: 0.243 - 0.297 (aluminium: thermally broken, double (air), Lo-Tsol Low-e/clear)	eave 600 mm, 3812 mm above head of window or glazed door	not overshadowed
East facing					
W05	1700	900	aluminium, single, clear	eave 600 mm, 480 mm above head of window or glazed door	>4 m high, 5-8 m away
W06	1593	1240	aluminium, single, clear	eave 600 mm, 130 mm above head of window or glazed door	>4 m high, 5-8 m away
W07	1500	1190	aluminium, single, clear	eave 600 mm, 3100 mm above head of window or glazed door	2-4 m high, 2-5 m away
W24	2893	600	aluminium, single, clear	eave 600 mm, 3700 mm above head of window or glazed door	>4 m high, 2-5 m away
South-East facing					
W09	600	935	aluminium, single, clear	eave 600 mm, 420 mm above head of window or glazed door	>4 m high, 5-8 m away
W10	2100	2941	aluminium, single, clear	solid overhang 4190 mm, 470 mm above head of window or glazed door	>4 m high, 8-12 m away
W19	1670	1190	aluminium, single, clear	eave 600 mm, 180 mm above head of window or glazed door	not overshadowed


Window/glazed door no.	Maximum height (mm)	Maximum width (mm)	Type	Shading Device (Dimension within 10%)	Overshadowing
South facing					
W11	1670	1170	aluminium, single, clear	eave 600 mm, 200 mm above head of window or glazed door	2-4 m high, 2-5 m away
W24	2100	2941	U-value: 3.1, SHGC: 0.243 - 0.297 (aluminium: thermally broken, double (air), Lo-Tsol Low-e/clear)	solid overhang 3200 mm, 470 mm above head of window or glazed door	2-4 m high, 8-12 m away
South-West facing					
W12	603	877	aluminium, single, clear	eave 600 mm, 230 mm above head of window or glazed door	not overshadowed
W13	900	935	aluminium, single, clear	eave 600 mm, 154 mm above head of window or glazed door	>4 m high, 2-5 m away
W14	1670	1090	aluminium, single, clear	eave 600 mm, 3700 mm above head of window or glazed door	>4 m high, 5-8 m away
West facing					
W16	820	2040	aluminium, single, clear	solid overhang 600 mm, 300 mm above head of window or glazed door	2-4 m high, 2-5 m away
W21	600	683	aluminium, single, clear	eave 600 mm, 327 mm above head of window or glazed door	>4 m high, 5-8 m away
W23	600	940	aluminium, single, clear	eave 600 mm, 3700 mm above head of window or glazed door	>4 m high, 5-8 m away
North-West facing					
W17	2100	2100	aluminium, single, clear	solid overhang 790 mm, 200 mm above head of window or glazed door	2-4 m high, 2 m away
W18	1500	2100	aluminium, single, clear	solid overhang 790 mm, 635 mm above head of window or glazed door	2-4 m high, 2 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 instantaneous.	✓	✓	✓
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 + 1-phase airconditioning; Energy rating: 5 Star		✓	✓
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		✓	✓
The cooling system must provide for day/night zoning between living areas and bedrooms.		✓	✓
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: 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: 5 Star		✓	✓
The heating system must provide for day/night zoning between living areas and bedrooms.		✓	✓
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		✓	✓
Kitchen: individual fan, ducted to façade or roof; Operation control: manual switch on/off		✓	✓
Laundry: individual fan, ducted to façade or roof; Operation control: manual switch on/off		✓	✓
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 4 of the bedrooms / study; dedicated		✓	✓


Energy Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
<ul style="list-style-type: none"> at least 3 of the living / dining rooms; dedicated the kitchen; dedicated all bathrooms/toilets; dedicated the laundry; dedicated all hallways; dedicated 		✓ ✓ ✓ ✓ ✓	✓ ✓ ✓ ✓ ✓
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.	✓	✓	✓
Swimming pool			
The development must not incorporate any heating system for the swimming pool.		✓	
The applicant must install a timer for the swimming pool pump in the development.		✓	
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 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.		✓	

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.

This is not a valid Certificate