

BASIX[®]Certificate

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

Single Dwelling

Certificate number: 1282914S

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

Date of issue: Wednesday, 23 February 2022

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



Planning,
Industry &
Environment

Project summary		
Project name	wentworth st croydon park house	
Street address	8 wentworth Street croydon park 2133	
Local Government Area	Canterbury-Bankstown Council	
Plan type and plan number	deposited 350873	
Lot no.	B	
Section no.	-	
Project type	separate dwelling house	
No. of bedrooms	5	
Project score		
Water	✓ 47	Target 40
Thermal Comfort	✓ Pass	Target Pass
Energy	✓ 51	Target 50

Certificate Prepared by
Name / Company Name: msconsult
ABN (if applicable): 31963963857

Description of project

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No. of bedrooms	5
Site details	
Site area (m ²)	448
Roof area (m ²)	240
Conditioned floor area (m2)	300.0
Unconditioned floor area (m2)	60.0
Total area of garden and lawn (m2)	138

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	
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	✔ 47	Target 40
Thermal Comfort	✔ Pass	Target 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
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 240 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 the cold water tap that supplies each clothes washer in the development 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 60 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 shaded.	✓	✓	
The swimming pool must be outdoors.	✓	✓	

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 - concrete slab on ground, 140 square metres	nil	
floor - above habitable rooms or mezzanine, 180 square metres, concrete	nil	
floor - suspended floor above garage, concrete	nil	
external wall - cavity brick	0.50 (or 1.17 including construction)	
ceiling and roof - flat ceiling / flat roof, framed	ceiling: 4.5 (up), roof: foil/sarking	framed; medium (solar absorptance 0.475-0.70)

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.	✓	✓	✓
<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. 	✓	✓	 ✓ ✓ ✓

Window/glazed door no.	Maximum height (mm)	Maximum width (mm)	Type	Shading Device (Dimension within 10%)	Overshadowing
North facing					
W08	600	1200	aluminium, single, clear	none	not overshadowed
W05	600	1500	aluminium, single, clear	none	not overshadowed
W09	600	600	aluminium, single, clear	none	not overshadowed
W04	600	1500	aluminium, single, clear	none	not overshadowed
W03	600	600	aluminium, single, clear	none	not overshadowed
W02	600	600	aluminium, single, clear	none	not overshadowed
W06	600	1500	aluminium, single, clear	none	not overshadowed
W10	600	1500	aluminium, single, clear	none	not overshadowed


Window/glazed door no.	Maximum height (mm)	Maximum width (mm)	Type	Shading Device (Dimension within 10%)	Overshadowing
W01	600	1500	aluminium, single, clear	none	not overshadowed
W07	600	1500	aluminium, single, clear	none	not overshadowed
East facing					
W15	2200	3000	U-value: 5.2, SHGC: 0.351 - 0.429 (aluminium, double (air), tint)	solid overhang 2500 mm, 3000 mm above head of window or glazed door	not overshadowed
W14	1500	700	aluminium, single, clear	none	not overshadowed
W13	1500	700	aluminium, single, clear	none	not overshadowed
W11	2200	2500	U-value: 5.2, SHGC: 0.351 - 0.429 (aluminium, double (air), tint)	solid overhang 2500 mm, 3000 mm above head of window or glazed door	not overshadowed
W12	1500	700	aluminium, single, clear	none	not overshadowed
South facing					
W16	600	1500	aluminium, single, clear	none	not overshadowed
W18	600	1500	aluminium, single, clear	none	not overshadowed
W17	600	1200	aluminium, single, clear	none	not overshadowed
W21	600	1500	aluminium, single, clear	none	not overshadowed
W19	600	1500	aluminium, single, clear	none	not overshadowed
W22	600	1500	aluminium, single, clear	none	not overshadowed
W20	600	1200	aluminium, single, clear	none	not overshadowed
West facing					
W23	2200	1600	U-value: 5.2, SHGC: 0.351 - 0.429 (aluminium, double (air), tint)	solid overhang 2000 mm, 3000 mm above head of window or glazed door	not overshadowed
W24	2200	1600	U-value: 5.2, SHGC: 0.351 - 0.429 (aluminium, double (air), tint)	solid overhang 2000 mm, 3000 mm above head of window or glazed door	not overshadowed
W25	2200	2220	U-value: 5.2, SHGC: 0.351 - 0.429 (aluminium, double (air), tint)	solid overhang 2000 mm, 3000 mm above head of window or glazed door	not overshadowed


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 with a performance of 6 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: airconditioning ducting only; 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: airconditioning ducting only; Energy rating: n/a		✓	✓
Heating system			
The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 living area: airconditioning ducting only; 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: airconditioning ducting only; Energy rating: n/a		✓	✓
Ventilation			
<p>The applicant must install the following exhaust systems in the development:</p> <p>At least 1 Bathroom: individual fan, ducted to façade or roof; Operation control: interlocked to light</p> <p>Kitchen: individual fan, ducted to façade or roof; Operation control: interlocked to light</p> <p>Laundry: individual fan, ducted to façade or roof; Operation control: interlocked to light</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 6 of the bedrooms / study; • at least 3 of the living / dining rooms; • the kitchen; 		<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"> all bathrooms/toilets; 		✓	✓
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 6 bathroom(s)/toilet(s) in the development for natural lighting.	✓	✓	✓
Swimming pool			
The applicant must install the following heating system for the swimming pool in the development (or alternatively must not install any heating system for the swimming pool): solar only		✓	
The applicant must install a timer for the swimming pool pump in the development.		✓	
Alternative energy			
The applicant must install a photovoltaic system with the capacity to generate at least 1.1 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.		✓	
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.