

# BASIX<sup>®</sup>Certificate

Building Sustainability Index [www.basix.nsw.gov.au](http://www.basix.nsw.gov.au)

## Single Dwelling

Certificate number: 1250678S\_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](http://www.basix.nsw.gov.au)

This certificate is a revision of certificate number 1250678S lodged with the consent authority or certifier on 02 December 2021 with application PAN-166416.

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 Environment Planning and Assessment Regulation 2000

Secretary

Date of issue: Wednesday, 24 January 2024

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



Project summary		
Project name	28 Nicoll Street, Roselands_02	
Street address	28 NICOLL STREET ROSELANDS 2196	
Local Government Area	Canterbury-Bankstown Council	
Plan type and plan number	Deposited Plan 369666	
Lot no.	B	
Section no.	-	
Project type	separate dwelling house	
No. of bedrooms	5	
Project score		
Water	✔ 40	Target 40
Thermal Comfort	✔ Pass	Target Pass
Energy	✔ 50	Target 50

Certificate Prepared by
Name / Company Name: M Cubed
ABN (if applicable): 32443011401

# Description of project

## Project address

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## Site details

Site area (m <sup>2</sup> )	702
Roof area (m <sup>2</sup> )	240
Conditioned floor area (m <sup>2</sup> )	284.5
Unconditioned floor area (m <sup>2</sup> )	100.0
Total area of garden and lawn (m <sup>2</sup> )	300
Roof area of the existing dwelling (m <sup>2</sup> )	0

## Assessor details and thermal loads

Assessor number	n/a
Certificate number	n/a
Climate zone	n/a
Area adjusted cooling load (MJ/m <sup>2</sup> .year)	n/a
Area adjusted heating load (MJ/m <sup>2</sup> .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	 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
<b>Landscape</b>			
The applicant must plant indigenous or low water use species of vegetation throughout 50 square metres of the site.	✓	✓	
<b>Fixtures</b>			
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 5 star in each toilet in the development.		✓	✓
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 5 star in each bathroom in the development.		✓	
<b>Alternative water</b>			
<b>Rainwater tank</b>			
The applicant must install a rainwater tank of at least 1500 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 60 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"> <li>all toilets in the development</li> <li>the cold water tap that supplies each clothes washer in the development</li> </ul>		✓ ✓	✓ ✓

Water Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
<ul style="list-style-type: none"> <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>Swimming Pool</b>			
The swimming pool must not have a volume greater than 30 kilolitres.	✓	✓	
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
<b>Do-it-yourself Method</b>			
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, 162.5 square metres	nil	
floor - above habitable rooms or mezzanine, 122 square metres, concrete	nil	
floor - suspended floor above garage, concrete	nil	
external wall - cavity brick	0.50 (or 1.17 including construction)	
internal wall shared with garage - single skin masonry	nil	
ceiling and roof - flat ceiling / pitched roof	ceiling: 2.95 (up), roof: foil backed blanket (75 mm)	unventilated; dark (solar absorptance > 0.70)

Note	<ul style="list-style-type: none"> <li>Insulation specified in this Certificate must be installed in accordance with Part 3.12.1.1 of the Building Code of Australia.</li> </ul>
Note	<ul style="list-style-type: none"> <li>In some climate zones, insulation should be installed with due consideration of condensation and associated interaction with adjoining building materials.</li> </ul>

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"> <li>• For the following glass and frame types, the certifier check can be performed by visual inspection. <ul style="list-style-type: none"> <li>- Aluminium single clear</li> <li>- Aluminium double (air) clear</li> <li>- Timber/uPVC/fibreglass single clear</li> <li>- Timber/uPVC/fibreglass double (air) clear</li> </ul> </li> </ul>	✔	✔	✔ ✔
• 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.	✔	✔	✔

Window/glazed door no.	Maximum height (mm)	Maximum width (mm)	Type	Shading Device (Dimension within 10%)	Overshadowing
<b>North-East facing</b>					
W21	2200.00	2650.00	aluminium, single, clear	solid overhang 1950 mm, 300 mm above head of window or glazed door	2-4 m high, 8-12 m away
W22	1900.00	3400.00	aluminium, single, clear	eave 450 mm, 300 mm above head of window or glazed door	2-4 m high, 8-12 m away
W23	2400.00	3850.00	aluminium, single, clear	solid overhang 4500 mm, 200 mm above head of window or glazed door	>4 m high, 8-12 m away
W24	2100.00	3400.00	aluminium, single, clear	none	>4 m high, 8-12 m away

Window/glazed door no.	Maximum height (mm)	Maximum width (mm)	Type	Shading Device (Dimension within 10%)	Overshadowing
<b>South-East facing</b>					
W10	600.00	2410.00	aluminium, single, clear	eave 450 mm, 300 mm above head of window or glazed door	2-4 m high, 2 m away
W11	600.00	2410.00	aluminium, single, clear	eave 450 mm, 300 mm above head of window or glazed door	2-4 m high, 2 m away
W12	800.00	1810.00	aluminium, single, clear	eave 450 mm, 300 mm above head of window or glazed door	2-4 m high, 2 m away
W13	1400.00	730.00	aluminium, single, clear	eave 450 mm, 300 mm above head of window or glazed door	2-4 m high, 2 m away
W14	600.00	3010.00	aluminium, single, clear	eave 450 mm, 300 mm above head of window or glazed door	2-4 m high, 2 m away
W15	2100.00	850.00	aluminium, single, clear	none	>4 m high, <2 m away
W16	2100.00	850.00	aluminium, single, clear	none	>4 m high, <2 m away
W17	800.00	1450.00	aluminium, single, clear	none	>4 m high, <2 m away
W18	1200.00	1450.00	aluminium, single, clear	none	>4 m high, <2 m away
W19	1200.00	1130.00	aluminium, single, clear	none	>4 m high, <2 m away
W20	750.00	2410.00	aluminium, single, clear	none	>4 m high, <2 m away
W34	730.00	1200.00	aluminium, single, clear	none	>4 m high, <2 m away
W35	500.00	2200.00	aluminium, single, clear	none	>4 m high, <2 m away
<b>South-West facing</b>					
W01	1600.00	1090.00	aluminium, single, clear	eave 450 mm, 300 mm above head of window or glazed door	2-4 m high, 8-12 m away
W02	1600.00	1090.00	aluminium, single, clear	eave 450 mm, 300 mm above head of window or glazed door	2-4 m high, 8-12 m away

Window/glazed door no.	Maximum height (mm)	Maximum width (mm)	Type	Shading Device (Dimension within 10%)	Overshadowing
W03	2200.00	2120.00	aluminium, single, clear	solid overhang 1450 mm, 300 mm above head of window or glazed door	2-4 m high, 8-12 m away
W04	1600.00	1090.00	aluminium, single, clear	eave 450 mm, 300 mm above head of window or glazed door	2-4 m high, 8-12 m away
W05	1600.00	1090.00	aluminium, single, clear	eave 450 mm, 300 mm above head of window or glazed door	2-4 m high, 8-12 m away
W06	2100.00	1090.00	aluminium, single, clear	none	>4 m high, 8-12 m away
W07	2100.00	1090.00	aluminium, single, clear	none	>4 m high, 8-12 m away
W08	2100.00	1090.00	aluminium, single, clear	none	>4 m high, 8-12 m away
W09	2100.00	1090.00	aluminium, single, clear	none	>4 m high, 8-12 m away
<b>North-West facing</b>					
W25	1900.00	1910.00	aluminium, single, clear	eave 450 mm, 300 mm above head of window or glazed door	2-4 m high, 2 m away
W26	4850.00	970.00	aluminium, single, clear	eave 450 mm, 300 mm above head of window or glazed door	2-4 m high, 2 m away
W27	4850.00	970.00	aluminium, single, clear	eave 450 mm, 300 mm above head of window or glazed door	2-4 m high, 2 m away
W28	2950.00	1810.00	aluminium, single, clear	eave 450 mm, 300 mm above head of window or glazed door	2-4 m high, 2 m away
W29	1400.00	850.00	aluminium, single, clear	eave 450 mm, 300 mm above head of window or glazed door	2-4 m high, 2 m away
W30	600.00	2410.00	aluminium, single, clear	eave 450 mm, 300 mm above head of window or glazed door	2-4 m high, 2 m away
W31	2100.00	1910.00	aluminium, single, clear	none	>4 m high, <2 m away

Window/glazed door no.	Maximum height (mm)	Maximum width (mm)	Type	Shading Device (Dimension within 10%)	Overshadowing
W32	1200.00	730.00	aluminium, single, clear	none	>4 m high, <2 m away
W33	800.00	2410.00	aluminium, single, clear	none	>4 m high, <2 m away

Energy Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
<b>Hot water</b>			
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.	✓	✓	✓
<b>Cooling system</b>			
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: 5 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: 5 Star (old label)		✓	✓
The cooling system must provide for day/night zoning between living areas and bedrooms.		✓	✓
<b>Heating system</b>			
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 (old label)		✓	✓
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 (old label)		✓	✓
The heating system must provide for day/night zoning between living areas and bedrooms.		✓	✓
<b>Ventilation</b>			
<p>The applicant must install the following exhaust systems in the development:</p> <p>At least 1 Bathroom: no mechanical ventilation (ie. natural); Operation control: n/a</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>✓</p> <p>✓</p> <p>✓</p>	<p>✓</p> <p>✓</p> <p>✓</p>
<b>Artificial lighting</b>			

Energy Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
<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"> <li>• at least 5 of the bedrooms / study; dedicated</li> <li>• at least 4 of the living / dining rooms; dedicated</li> <li>• the kitchen; dedicated</li> <li>• all bathrooms/toilets; dedicated</li> <li>• the laundry; dedicated</li> <li>• all hallways; dedicated</li> </ul>		<p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p>	<p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p>
<b>Natural lighting</b>			
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 5 bathroom(s)/toilet(s) in the development for natural lighting.	✓	✓	✓
<b>Swimming pool</b>			
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.		✓	
<b>Other</b>			
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.		✓	

Energy Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
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.