

BASIX[®]Certificate

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

Single Dwelling

Certificate number: 918894S_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 06/10/2017 published by the Department. This document is available at www.basix.nsw.gov.au

This certificate is a revision of certificate number 918894S lodged with the consent authority or certifier on 15 May 2018 with application 2018/0787.

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

Date of issue: Friday, 14 September 2018

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



Project summary

Project name	9 MINKARA RD_02
Street address	9 Minkara Road BAYVIEW 2104
Local Government Area	Northern Beaches Council
Plan type and plan number	deposited 28908
Lot no.	40
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: Stephen Crosby & Associates

ABN (if applicable): 39002145155

Description of project

Project address

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Site details

Site area (m ²)	21630
Roof area (m ²)	532
Conditioned floor area (m2)	986.3
Unconditioned floor area (m2)	82.1
Total area of garden and lawn (m2)	600

Assessor details and thermal loads

Assessor number	20042
Certificate number	0002651370
Climate zone	56
Area adjusted cooling load (MJ/m ² .year)	16
Area adjusted heating load (MJ/m ² .year)	41

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 300 square metres of the site.	✓	✓	
Fixtures			
The applicant must install showerheads with a minimum rating of 3 star (> 4.5 but ≤ 6 L/min) in all showers in the development.		✓	✓
The applicant must install a toilet flushing system with a minimum rating of 4 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 45000 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 325 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.) a tap that is located within 10 metres of the swimming pool in the development a tap that is located within 10 metres of the outdoor spa in the development 		✓ ✓ ✓	✓ ✓ ✓
Greywater treatment system			

Water Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
The applicant must install a greywater treatment system on the site. This system must meet, and be installed in accordance with, the requirements of all applicable regulatory authorities.		✓	✓
The applicant must configure the greywater treatment system so that greywater for recycling is collected from: <ul style="list-style-type: none"> the laundry each bathroom (but not the toilets) the entire household 		✓ ✓ ✓	✓ ✓ ✓
The applicant must connect the greywater treatment system to: <ul style="list-style-type: none"> a sub-surface or non-aerosol irrigation system, or if the greywater has been appropriately treated in accordance with applicable regulatory requirements, to at least one outdoor tap in the development (Note: NSWHealth does not recommend that greywater be used to irrigate edible plants which are consumed raw.) 		✓	✓
Swimming pool			
The swimming pool must not have a volume greater than 91.8 kilolitres.	✓	✓	
The swimming pool must have a pool cover.		✓	
The swimming pool must be outdoors.	✓	✓	
Outdoor Spa			
The spa must not have a volume greater than 21.7 kilolitres.	✓	✓	
The spa must have a spa cover.		✓	
Hot water recirculation or diversion system			
The applicant must install an on demand hot water recirculation system which regulates all hot water use throughout the development.		✓	✓

Thermal Comfort Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Simulation Method			
The applicant must attach the certificate referred to under "Assessor Details" on the front page of this BASIX certificate (the "Assessor Certificate") to the development application and construction certificate application for the proposed development (or, if the applicant is applying for a complying development certificate for the proposed development, to that application). The applicant must also attach the Assessor Certificate to the application for an occupation certificate for the proposed development.			
The Assessor Certificate must have been issued by an Accredited Assessor in accordance with the Thermal Comfort Protocol.			
The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX certificate, including the Cooling and Heating loads shown on the front page of this certificate.			
The applicant must show on the plans accompanying the development application for the proposed development, all matters which the Assessor Certificate requires to be shown on those plans. Those plans must bear a stamp of endorsement from the Accredited Assessor to certify that this is the case. The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all thermal performance specifications set out in the Assessor Certificate, and all aspects of the proposed development which were used to calculate those specifications.	✓	✓	✓
The applicant must construct the development in accordance with all thermal performance specifications set out in the Assessor Certificate, and in accordance with those aspects of the development application or application for a complying development certificate which were used to calculate those specifications.		✓	✓
Where there is an in-slab heating or cooling system, the applicant must install insulation with an R-value of not less than 1.0 around the vertical edges of the perimeter of the slab, and underneath the slab if it is a suspended floor.	✓	✓	✓
The applicant must construct the floors and walls of the dwelling in accordance with the specifications listed in the table below.	✓	✓	✓

Floor and wall construction	Area
floor - concrete slab on ground	388.0 square metres
floor - suspended floor/enclosed subfloor	133.0 square metres

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 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: 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: wood heater; 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		✓	✓
The wood heater must have a compliance plate confirming that it complies with the relevant Australian standards, and must be installed in accordance with the requirements of all applicable regulatory authorities.			✓
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		✓	✓
Kitchen: individual fan, ducted to façade or roof; Operation control: manual switch on/off		✓	✓
Laundry: natural ventilation only, or no laundry; Operation control: n/a		✓	✓
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 6 of the bedrooms / study; dedicated		✓	✓
• at least 3 of the living / dining rooms; dedicated		✓	✓

Energy Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
<ul style="list-style-type: none"> the kitchen; dedicated 		✓	✓
<ul style="list-style-type: none"> all bathrooms/toilets; dedicated 		✓	✓
<ul style="list-style-type: none"> the laundry; dedicated 		✓	✓
<ul style="list-style-type: none"> 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 4 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 (electric boosted)		✓	
The applicant must install a timer for the swimming pool pump in the development.		✓	
Outdoor spa			
The applicant must install the following heating system for the spa in the development (or alternatively must not install any heating system for the spa): solar (electric boosted)		✓	
The applicant must install a timer for the spa pump in the development.		✓	
Alternative energy			
The applicant must install a photovoltaic system with the capacity to generate at least 12 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 an induction 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.



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.