## **BASIX**<sup>°</sup>Certificate

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

## Alterations and Additions

Certificate number: A353081 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 Alterations and Additions 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 A353081 lodged with the consent authority or certifier on 03 Oct 2019 with application DA2019/1092.

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 Sch 1 Cl 2A, 4A or 6A of the Environmental Planning and Assessment Regulation 2000

Secretary Date of issue: Thursday, 09, January 2020 To be valid, this certificate must be lodged within 3 months of the date of issue.



Planning, Industry & Environment

Ct	Project address						
0	Project name	64 Fairlight Street_02					
0	Street address	64 Fairlight Street Fairlight 2094					
Ľ	Local Government Area	Northern Beaches Council					
b	Plan type and number	Deposited Plan 104229					
4	Lot number	В					
0	Section number						
U	Project type						
ci o	Dwelling type	Separate dwelling house					
ripl	Type of alteration and addition	My renovation work is valued at \$50,000 or more, and includes a pool (and/or spa).					

Certificate Prepared by (please complete before submitting to Council or PCA)

Name / Company Name: MM+J Architects

ABN (if applicable): 79153579867

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Pool and Spa	Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
Rainwater tank			
The applicant must install a rainwater tank of at least 721 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 rainwater runoff from at least 41.59 square metres of roof area.		$\checkmark$	$\checkmark$
The applicant must connect the rainwater tank to a tap located within 10 metres of the edge of the pool.		$\checkmark$	$\checkmark$
Outdoor swimming pool			
The swimming pool must be outdoors.	$\checkmark$	$\checkmark$	$\checkmark$
The swimming pool must not have a capacity greater than 7.2 kilolitres.	$\checkmark$	$\checkmark$	$\checkmark$
The swimming pool must have a pool cover.		$\checkmark$	$\checkmark$
The applicant must install a pool pump timer for the swimming pool.		$\checkmark$	$\checkmark$
The applicant must install the following heating system for the swimming pool that is part of this development: solar (electric boosted).		$\checkmark$	$\checkmark$

Fixtures and systems	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: solar (electric-boosted) system that is eligible to create Renewable Energy Certificates under the (Commonwealth) Renewable Energy (Electricity) Regulations 2001 (incorporating Amendment Regulations 2005 (No. 2)).	~	~	~
Lighting			
The applicant must ensure a minimum of 40% of new or altered light fixtures are fitted with fluorescent, compact fluorescent, or light-emitting-diode (LED) lamps.		~	~
Fixtures			
The applicant must ensure new or altered showerheads have a flow rate no greater than 9 litres per minute or a 3 star water rating.		$\checkmark$	$\checkmark$
The applicant must ensure new or altered toilets have a flow rate no greater than 4 litres per average flush or a minimum 3 star water rating.		$\checkmark$	$\checkmark$
The applicant must ensure new or altered taps have a flow rate no greater than 9 litres per minute or minimum 3 star water rating.		$\checkmark$	

Construction			Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
Insulation requirements					1
The applicant must construct the new or altere the table below, except that a) additional insula is not required for parts of altered construction	~	~	~		
Construction	Additional insulation required (R-value)	Other specifications			
floor above existing dwelling or building.	nil				
external wall: framed (weatherboard, fibro, metal clad)	R1.30 (or R1.70 including construction)				
flat ceiling, pitched roof	ceiling: R1.45 (up), roof: foil backed blanket (55 mm)	medium (solar absorptance 0.475 - 0.70)			
raked ceiling, pitched/skillion roof: framed	ceiling: R1.74 (up), roof: foil backed blanket (55 mm)	medium (solar absorptance 0.475 - 0.70)			

Glazing re	equirements						Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
Windows a	and glazed do	oors						l	
					nading devices, in accordance with each window and glazed door.	the specifications listed in the table below.	$\checkmark$	<ul> <li></li> </ul>	$\checkmark$
The followin	ng requirements	must also	be satisf	ied in relation	to each window and glazed door:			$\checkmark$	$\checkmark$
have a U-va must be cal	alue and a Solar culated in accor	Heat Gai dance wit	n Coeffici h Nationa	ent (SHGC) r I Fenestratior	o greater than that listed in the tabl	ar glazing, or toned/air gap/clear glazing must le below. Total system U-values and SHGCs . The description is provided for information		~	×
	ons described a nown in the table		he ratio o	f the projectio	on from the wall to the height above	the window or glazed door sill must be at	$\checkmark$	<ul> <li></li> </ul>	$\checkmark$
Windows	and glazed	doors g	lazing r	equireme	nts				
	oor Orientation			adowing	Shading device	Frame and glass type			
no.		glass inc. frame (m2)	Height (m)	Distance (m)					
W01	W	2.4	0	0	projection/height above sill ratio >=0.23	timber or uPVC, single pyrolytic low-e, (U-value: 3.99, SHGC: 0.4)			
W02	S	1.7	0	0	none	timber or uPVC, single pyrolytic low-e, (U-value: 3.99, SHGC: 0.4)			
W03	W	1.3	0	0	projection/height above sill ratio >=0.23	timber or uPVC, single pyrolytic low-e, (U-value: 3.99, SHGC: 0.4)			
W04	W	1.3	0	0	projection/height above sill ratio >=0.23	timber or uPVC, single pyrolytic low-e, (U-value: 3.99, SHGC: 0.4)			
W05	N	1.7	0	0	none	timber or uPVC, single pyrolytic low-e, (U-value: 3.99, SHGC: 0.4)			
W06	W	1.3	0	0	projection/height above sill ratio >=0.23	timber or uPVC, single pyrolytic low-e, (U-value: 3.99, SHGC: 0.4)			
W07	E	2	0	0	projection/height above sill ratio >=0.23	timber or uPVC, single pyrolytic low-e, (U-value: 3.99, SHGC: 0.4)			

Glazing requ	irements							Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
Window / door no.	Orientation	Area of glass inc. frame (m2)	Oversha Height (m)	adowing Distance (m)	Shading device		Frame and glass type			
W08	E	3.7	0	0	projection/height abo >=0.23	ve sill ratio	timber or uPVC, single pyrolytic low-e, (U-value: 3.99, SHGC: 0.4)			
W09	S	3.9	0	0	projection/height abo	ve sill ratio	timber or uPVC, single pyrolytic low-e, (U-value: 3.99, SHGC: 0.4)			
W10	N	0.3	0	0	none		timber or uPVC, single pyrolytic low-e, (U-value: 3.99, SHGC: 0.4)			
W11	Ν	0.3	0	0	none		timber or uPVC, single pyrolytic low-e, (U-value: 3.99, SHGC: 0.4)			
Skylights										
The applicant r	nust install the	e skylight	s in accoi	dance with t	ne specifications listed	in the table t	pelow.	$\checkmark$	$\checkmark$	$\checkmark$
The following re	equirements r	nust also	be satisf	ed in relation	to each skylight:				$\checkmark$	$\checkmark$
Each skylight n the table below		tch the de	escription	, or, have a L	J-value and a Solar He	at Gain Coef	ficient (SHGC) no greater than that listed in		$\checkmark$	~
Skylights gl	azing requ	iiremen	ts							
Skylight numbe	er Area of g inc. fram		Shading	j device		Frame and	glass type			
SK1	0.54		no shad	ing			-E internal/argon fill/clear external, (or 5, SHGC: 0.456)			
SK2	0.54		no shad	ing		timber, low-E internal/argon fill/clear external, (or U-value: 2.5, SHGC: 0.456)				
SK3	0.54		no shad							
SK4	0.54		no shad	ing		timber, low	-E internal/argon fill/clear external, (or			

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Glazing requirements			Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
Skylight number Area of glazing inc. frame (m2)	Shading device	Frame and glass type U-value: 2.5, SHGC: 0.456)			
		U-value: 2.5, SHGC: 0.456)			

## 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 "
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in the "Show on CC/CDC plans & 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 for the development may be issued.