

# BASIX<sup>®</sup>Certificate

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

## Single Dwelling

Certificate number: 992475S\_06

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 992475S lodged with the consent authority or certifier on 07 March 2019 with application DA2019/0235.

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, 01 September 2023

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



Planning,  
Industry &  
Environment

### Project summary

Project name	3454 McKinnon_06
Street address	9 Thyra Road Palm Beach 2108
Local Government Area	Northern Beaches Council
Plan type and plan number	deposited 18612
Lot no.	9
Section no.	-
Project type	separate dwelling house
No. of bedrooms	1

### Project score

Water	✓ 46	Target 40
Thermal Comfort	✓ Pass	Target Pass
Energy	✓ 50	Target 50

### Certificate Prepared by

Name / Company Name: Burley Katon Halliday

ABN (if applicable): 23003585733

# Description of project

## Project address

Project name	3454 McKinnon_06
Street address	9 Thyra Road Palm Beach 2108
Local Government Area	Northern Beaches Council
Plan type and plan number	Deposited Plan 18612
Lot no.	9
Section no.	-

## Project type

Project type	separate dwelling house
No. of bedrooms	1

## Site details

Site area (m <sup>2</sup> )	579
Roof area (m <sup>2</sup> )	36
Conditioned floor area (m2)	68.4
Unconditioned floor area (m2)	21.1
Total area of garden and lawn (m2)	205

## 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	✓ 46	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 180.2 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 4 star in each toilet in the development.		✓	✓
The applicant must install taps with a minimum rating of 4 star in the kitchen in the development.		✓	
The applicant must install basin taps with a minimum rating of 4 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 3000 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 40 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> <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>		✓ ✓ ✓	✓ ✓ ✓

Thermal Comfort Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
<b>General features</b>			
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.	✓	✓	✓
<b>Floor, walls and ceiling/roof</b>			
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, 30.3 square metres	nil	
floor - above habitable rooms or mezzanine, 56.1 square metres, concrete	nil	
external wall - concrete block/plasterboard	2.88 (or 3.40 including construction)	
ceiling and roof - raked ceiling / pitched or skillion roof, framed	ceiling: 4.5 (up), roof: foil/sarking	framed; light (solar absorptance < 0.475)
ceiling and roof - flat ceiling / flat roof, concrete/plasterboard internal	ceiling: 4.5 (up), roof: foil backed blanket (55 mm)	concrete/plasterboard internal; light (solar absorptance < 0.475)

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>



Window/glazed door no.	Maximum height (mm)	Maximum width (mm)	Type	Shading Device (Dimension within 10%)	Overshadowing
FF.W06	1450	2150	U-value: 3.6, SHGC: 0.423 - 0.517 (aluminium: thermally broken, double (air), clear)	external louvre/vertical blind (adjustable)	not overshadowed
FF.W02	1450	2150	U-value: 3.6, SHGC: 0.486 - 0.594 (aluminium: thermally broken, double (air), clear)	external louvre/vertical blind (adjustable)	not overshadowed
GF.W01	2300	1200	U-value: 3.6, SHGC: 0.486 - 0.594 (aluminium: thermally broken, double (air), clear)	none	2-4 m high, 2 m away
FF.W04	2400	3250	U-value: 3.6, SHGC: 0.423 - 0.517 (aluminium: thermally broken, double (air), clear)	eave 1100 mm, 0 mm above head of window or glazed door	not overshadowed
FF.W05	2400	200	U-value: 3.6, SHGC: 0.486 - 0.594 (aluminium: thermally broken, double (air), clear)	eave 1100 mm, 0 mm above head of window or glazed door	not overshadowed
GF.W03	2300	700	U-value: 3.6, SHGC: 0.486 - 0.594 (aluminium: thermally broken, double (air), clear)	none	not overshadowed

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: ceiling fans + 1-phase airconditioning; Energy rating: 5.5 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: 5.5 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: 5.5 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: 5.5 Star (old label)		✓	✓
The heating system must provide for day/night zoning between living areas and bedrooms.		✓	✓
<b>Ventilation</b>			
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: individual fan, ducted to façade or roof; Operation control: manual switch on/off		✓ ✓ ✓	✓ ✓ ✓
<b>Artificial lighting</b>			
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 1 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"> <li>• at least 1 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>		    	    
<b>Natural lighting</b>			
The applicant must install a window and/or skylight in 1 bathroom(s)/toilet(s) in the development for natural lighting.			
<b>Other</b>			
The applicant must install a gas cooktop & gas 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.