

# BASIX<sup>®</sup>Certificate

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

## Single Dwelling

Certificate number: 1406463S\_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)

Secretary

Date of issue: Tuesday, 11 July 2023

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



Planning,  
Industry &  
Environment

### Project summary

Project name	PIGGOTT_02
Street address	1392 SPRING RIDGE Road TALLAWANG 2852
Local Government Area	Mid-Western Regional Council
Plan type and plan number	deposited 610052
Lot no.	2
Section no.	-
Project type	separate dwelling house
No. of bedrooms	4

### Project score

Water	✓ 78	Target 30
Thermal Comfort	✓ Pass	Target Pass
Energy	✓ 95	Target 45

### Certificate Prepared by

Name / Company Name: Habitat Designs & Drafting

ABN (if applicable): 61989364458

# Description of project

## Project address

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## Site details

Site area (m <sup>2</sup> )	650000
Roof area (m <sup>2</sup> )	424
Conditioned floor area (m2)	251.26
Unconditioned floor area (m2)	9.02
Total area of garden and lawn (m2)	150

## 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	✔ 78	Target 30
Thermal Comfort	✔ Pass	Target Pass
Energy	✔ 95	Target 45

## 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>Fixtures</b>			
The applicant must install showerheads with a minimum rating of 4 star (> 6 but <= 7.5 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 3 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 40000 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 424 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> <li>all hot water systems in the development</li> <li>all indoor cold water taps (not including taps that supply clothes washers) in the development</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	1 (slab edge)	in-slab heating system
external wall - framed (weatherboard, fibre cement, metal clad)	3.20 (or 3.60 including construction)	
internal wall shared with garage - plasterboard	nil	
ceiling and roof - flat ceiling / pitched roof	ceiling: 3.25 (up), roof: foil/sarking	unventilated; light (solar absorptance < 0.475)
ceiling and roof - raked ceiling / pitched or skillion roof, framed	ceiling: 3.26 (up), roof: foil/sarking	framed; light (solar absorptance < 0.475)
ceiling and roof - flat ceiling / flat roof, framed	ceiling: 3.32 (up), roof: foil/sarking	framed; light (solar absorptance < 0.475)

Note	• Insulation specified in this Certificate must be installed in accordance with Part 3.12.1.1 of the Building Code of Australia.
Note	• 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
<b>Windows, glazed doors and skylights</b>			
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> <li>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.</li> </ul>	✓	✓	✓ ✓
	✓	✓	✓



















Window/glazed door no.	Maximum height (mm)	Maximum width (mm)	Type	Shading Device (Dimension within 10%)	Overshadowing
<b>North facing</b>					
W03	1200	2400	aluminium, single, clear	eave 450 mm, 800 mm above head of window or glazed door	not overshadowed
W02	2100	900	aluminium, single, clear	eave 450 mm, 600 mm above head of window or glazed door	not overshadowed
D08	2340	3000	aluminium, single, clear	verandah 1800 mm, 2500 mm above base of window or glazed door	not overshadowed
W04	1200	2400	aluminium, single, clear	verandah 1800 mm, 2500 mm above base of window or glazed door	not overshadowed
W08	1800	900	aluminium, single, clear	eave 450 mm, 700 mm above head of window or glazed door	not overshadowed
D07	2340	3000	aluminium, single, clear	verandah 1800 mm, 2500 mm above base of window or glazed door	not overshadowed

Window/glazed door no.	Maximum height (mm)	Maximum width (mm)	Type	Shading Device (Dimension within 10%)	Overshadowing
W09	1800	900	aluminium, single, clear	eave 450 mm, 700 mm above head of window or glazed door	not overshadowed
D05	2340	3000	aluminium, single, clear	eave 450 mm, 600 mm above head of window or glazed door	>4 m high, 2-5 m away
<b>East facing</b>					
W06	2100	900	aluminium, single, clear	eave 450 mm, 300 mm above head of window or glazed door	not overshadowed
D06	2040	820	aluminium, single, clear	solid overhang 9000 mm, 600 mm above head of window or glazed door	not overshadowed
W07	1800	2400	aluminium, single, clear	eave 450 mm, 900 mm above head of window or glazed door	not overshadowed
W10	1800	900	aluminium, single, clear	eave 450 mm, 700 mm above head of window or glazed door	not overshadowed
W05	2100	900	aluminium, single, clear	eave 450 mm, 300 mm above head of window or glazed door	not overshadowed
<b>South facing</b>					
W14	600	1500	aluminium, single, clear	eave 450 mm, 600 mm above head of window or glazed door	not overshadowed
W13	1800	900	aluminium, single, clear	eave 450 mm, 600 mm above head of window or glazed door	not overshadowed
W11	1800	900	aluminium, single, clear	eave 450 mm, 600 mm above head of window or glazed door	not overshadowed
D09	2040	820	aluminium, single, clear	eave 450 mm, 600 mm above head of window or glazed door	not overshadowed
W15	1800	900	aluminium, single, clear	eave 450 mm, 600 mm above head of window or glazed door	not overshadowed
W12	1800	900	aluminium, single, clear	eave 450 mm, 600 mm above head of window or glazed door	not overshadowed
W16	2100	900	aluminium, single, clear	eave 450 mm, 600 mm above head of window or glazed door	not overshadowed
D04	2340	3000	aluminium, single, clear	eave 450 mm, 600 mm above head of window or glazed door	not overshadowed

Window/glazed door no.	Maximum height (mm)	Maximum width (mm)	Type	Shading Device (Dimension within 10%)	Overshadowing
<b>West facing</b>					
D01	2040	1200	aluminium, single, clear	eave 450 mm, 600 mm above head of window or glazed door	not overshadowed
W01	2400	2400	aluminium, single, clear	eave 450 mm, 600 mm above head of window or glazed door	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: electric storage.	✓	✓	✓
<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; 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: 1-phase airconditioning; Energy rating: 5 Star (old label)		✓	✓
<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: wood heater; Energy rating: n/a		✓	✓
The bedrooms must not incorporate any heating system, or any ducting which is designed to accommodate a heating system.		✓	✓
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.			✓
<b>Ventilation</b>			
The applicant must install the following exhaust systems in the development:			
At least 1 Bathroom: individual fan, not ducted; Operation control: manual switch on/off		✓	✓
Kitchen: no mechanical ventilation (ie. natural); Operation control: n/a		✓	✓
Laundry: natural ventilation only, or no laundry; Operation control: n/a		✓	✓
<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 3 of the bedrooms / study;		✓	✓
• at least 2 of the living / dining rooms;		✓	✓



Energy Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
<ul style="list-style-type: none"> <li>the kitchen;</li> <li>all bathrooms/toilets;</li> <li>the laundry;</li> <li>all hallways;</li> </ul>		   	   
<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 2 bathroom(s)/toilet(s) in the development for natural lighting.			
<b>Alternative energy</b>			
The applicant must install a photovoltaic system with the capacity to generate at least 11.2 peak kilowatts of electricity as part of the development. The applicant must connect this system to the development's electrical system.			
<b>Other</b>			
The applicant must construct each refrigerator space in the development so that it is "well ventilated", as defined in the BASIX definitions.			

## 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.