

# BASIX<sup>®</sup>Certificate

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

## Single Dwelling

Certificate number: 1412628S

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: Friday, 11 August 2023

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



Planning,  
Industry &  
Environment

Project summary		
Project name	41616 Hargraves	
Street address	772 BLACK WILLOW ROAD Road HARGRAVES 2850	
Local Government Area	Mid-Western Regional Council	
Plan type and plan number	deposited 756887	
Lot no.	27	
Section no.	-	
Project type	separate dwelling house	
No. of bedrooms	2	
Project score		
Water	✔ 50	Target 30
Thermal Comfort	✔ Pass	Target Pass
Energy	✔ 83	Target 40

### Certificate Prepared by

Name / Company Name: Barnson Pty Ltd

ABN (if applicable): 43088342625

# Description of project

## Project address

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## Site details

Site area (m <sup>2</sup> )	17850000
Roof area (m <sup>2</sup> )	150
Conditioned floor area (m <sup>2</sup> )	66.0
Unconditioned floor area (m <sup>2</sup> )	14.0
Total area of garden and lawn (m <sup>2</sup> )	100

## 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	 50	Target 30
Thermal Comfort	 Pass	Target Pass
Energy	 83	Target 40

## 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 3 star (> 7.5 but <= 9 L/min) 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 3 star in the kitchen in the development.		✓	
The applicant must install basin taps with a minimum rating of 3 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 10000 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 150 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 - suspended floor above open subfloor, framed	1.3 (or 2 including construction) (down)	
external wall - framed (weatherboard, fibre cement, metal clad)	2.20 (or 2.60 including construction)	
ceiling and roof - flat ceiling / pitched roof	ceiling: 3.45 (up), roof: foil backed blanket (55 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
<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.	✓	✓	✓
The following requirements must also be satisfied in relation to each window and glazed door: <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>	✓	✓	✓ ✓

Window/glazed door no.	Maximum height (mm)	Maximum width (mm)	Type	Shading Device (Dimension within 10%)	Overshadowing
<b>North-East facing</b>					
W05	1500	1000	aluminium, single, clear	verandah 2660 mm, 2500 mm above base of window or glazed door	not overshadowed
W06	1500	1500	aluminium, single, clear	verandah 2660 mm, 2500 mm above base of window or glazed door	not overshadowed
W07	1500	1000	aluminium, single, clear	verandah 2660 mm, 2500 mm above base of window or glazed door	not overshadowed
<b>South-East facing</b>					
W04	1450	1000	aluminium, single, clear	awning (fixed) 900 mm, 1100 mm above base of window or glazed door	not overshadowed
<b>South-West facing</b>					
W01	400	1250	aluminium, single, clear	verandah 2660 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
W02	400	1250	aluminium, single, clear	verandah 2660 mm, 2500 mm above base of window or glazed door	not overshadowed
W03	1650	1500	aluminium, single, clear	verandah 2660 mm, 2500 mm above base of window or glazed door	not overshadowed
W09	1650	1500	aluminium, single, clear	verandah 2660 mm, 2500 mm above base of window or glazed door	not overshadowed
d01	2040	600	aluminium, single, clear	verandah 2660 mm, 2500 mm above base of window or glazed door	not overshadowed
d02	2040	600	aluminium, single, clear	verandah 2660 mm, 2500 mm above base of window or glazed door	not overshadowed
<b>North-West facing</b>					
W08	1450	1000	aluminium, single, clear	awning (fixed) 900 mm, 1100 mm above base 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: gas instantaneous with a performance of 4 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; 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: ceiling fans; Energy rating: n/a		✓	✓
<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>			
<p>The applicant must install the following exhaust systems in the development:</p> <p>At least 1 Bathroom: individual fan, ducted to façade or roof; Operation control: manual switch on/off</p> <p>Kitchen: individual fan, ducted to façade or roof; Operation control: manual switch on/off</p> <p>Laundry: individual fan, ducted to façade or roof; Operation control: manual switch on/off</p>		<p style="text-align: center;">✓</p> <p style="text-align: center;">✓</p> <p style="text-align: center;">✓</p>	<p style="text-align: center;">✓</p> <p style="text-align: center;">✓</p> <p style="text-align: center;">✓</p>
<b>Artificial lighting</b>			
<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 3 of the bedrooms / study; dedicated</li> <li>• at least 1 of the living / dining rooms; dedicated</li> </ul>		<p style="text-align: center;">✓</p> <p style="text-align: center;">✓</p>	<p style="text-align: center;">✓</p> <p style="text-align: center;">✓</p>


Energy Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
<ul style="list-style-type: none"> <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 the kitchen of the dwelling for natural lighting.			
The applicant must install a window and/or skylight in 1 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 6.6 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 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.			




## 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.