

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

Single Dwelling

Certificate number: 1310041S

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

Secretary

BASIX

Date of issue: Wednesday, 01 June 2022

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



Project summary				
Project name	Buckaroo Cabin			
Street address	17 Buckaroo Road Buckaroo 2850			
Local Government Area	Mid-Western Regional Council			
Plan type and plan number	deposited 755418			
Lot no.	123			
Section no.	-			
Project type	separate dwelling house - secondary dwelling			
No. of bedrooms	1			
Project score				
Water	✓ 71 Target 30			
Thermal Comfort	✓ Pass Target Pass			
Energy	✓ 86 Target 40			

Certificate Prepared by
Name / Company Name: MCK Architects
ABN (if applicable): 51955475865

Planning, Industry & Environment www.basix.nsw.gov.au Version: 3.0 / DARWINIA_3_20_0 Certificate No.: 1310041S Wednesday, 01 June 2022 page 1/10

Description of project

BASIX

Project address	
Project name	Buckaroo Cabin
Street address	17 Buckaroo Road Buckaroo 2850
Local Government Area	Mid-Western Regional Council
Plan type and plan number	Deposited Plan 755418
Lot no.	123
Section no.	-
Project type	
Project type	separate dwelling house - secondary dwelling
No. of bedrooms	1
Site details	
Site area (m²)	323700
Roof area (m²)	154
Conditioned floor area (m2)	47.69
Unconditioned floor area (m2)	0.0
Total area of garden and lawn (m2)	896
Roof area (m2) of the existing dwelling	616
No. of bedrooms in the existing dwelling	5

Assessor details and thermal lo	ads				
Assessor number	n/a				
Certificate number	n/a				
Climate zone	n/a				
Area adjusted cooling load (MJ/m².year)	n/a				
Area adjusted heating load (MJ/m².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	✓ 71	Target 30			
Thermal Comfort	✓ Pass	Target Pass			
Energy	₩ 86	Target 40			

Planning, Industry & Environment www.basix.nsw.gov.au Version: 3.0 / DARWINIA_3_20_0 Certificate No.: 1310041S Wednesday, 01 June 2022 page 2/10

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 800 square metres of the site.	V	~	
Fixtures			
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 6 star in each toilet in the development.		~	V
The applicant must install taps with a minimum rating of 6 star in the kitchen in the development.		V	
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 10000 litres on the site. This rainwater tank must meet, and be installed in accordance with, the requirements of all applicable regulatory authorities.	~	~	V
The applicant must configure the rainwater tank to collect rain runoff from at least 153.94 square metres of the roof area of the development (excluding the area of the roof which drains to any stormwater tank or private dam).		~	V
The applicant must connect the rainwater tank to:			
all hot water systems in the development		✓	V
all indoor cold water taps (not including taps that supply clothes washers) in the development		-	V
Greywater diversion system			
The applicant must install a greywater diversion system on the site. This system must meet, and be installed in accordance with, the requirements of all applicable regulatory authorities.		¥	~

BASIX Planning, Industry & Environment www.basix.nsw.gov.au Version: 3.0 / DARWINIA_3_20_0 Certificate No.: 1310041S Wednesday, 01 June 2022 page 3/10

Water Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
The applicant must configure the greywater diversion system so that greywater for diversion is collected from:			
• the laundry		•	V
each bathroom (but not the toilets)		✓	-
Private dam			
The applicant must connect the development to a private dam with a surface area no greater than 3906 square metres, and a volume of at least 7812 cubic metres. The connection must meet the requirements of all applicable regulatory authorities.	V	~	V
The applicant must configure the dam to collect runoff from:			
at least 1000 square metres of pervious catchment area		~	V
The applicant must connect the dam to:			
 at least one outdoor tap in the development (Note: NSWHealth does not recommend that private dam water be used to irrigate edible plants which are consumed raw.) 		~	V

Planning, Industry & Environment www.basix.nsw.gov.au Version: 3.0 / DARWINIA_3_20_0 Certificate No.: 1310041S Wednesday, 01 June 2022 page 4/10

Thermal Comfort Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
General features			
The dwelling must not have more than 2 storeys.	V	~	-
The conditioned floor area of the dwelling must not exceed 300 square metres.	V	V	V
The dwelling must not contain open mezzanine area exceeding 25 square metres.	V	V	V
The dwelling must not contain third level habitable attic room.	V	~	
Floor, walls and ceiling/roof		1	
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	1.8 (or 2.5 including construction) (down)	
external wall - framed (weatherboard, fibre cement, metal clad)	3.20 (or 3.60 including construction)	
ceiling and roof - raked ceiling / pitched or skillion roof, framed	ceiling: 5.5 (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.

Planning, Industry & Environment www.basix.nsw.gov.au Version: 3.0 / DARWINIA_3_20_0 Certificate No.: 1310041S Wednesday, 01 June 2022 page 5/10

Thermal Comfort Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check		
Windows, glazed doors and skylights					
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.	V	~	V		
The dwelling may have 1 skylight (<0.7 square metres) which is not listed in the table.	V	~	V		
The following requirements must also be satisfied in relation to each window and glazed door:	V	V	V		
• For the following glass and frame types, the certifier check can be performed by visual inspection.					
- Aluminium single clear					
- Aluminium double (air) clear					
- Timber/uPVC/fibreglass single clear					
- Timber/uPVC/fibreglass double (air) clear					
 For other glass or frame types, each window and glazed door must be accompanied with certification showing a U value no greater than that listed and a Solar Heat Gain Coefficient (SHGC) within the range of those listed. Total system U values and SHGC must be calculated in accordance with National Fenestration Rating Council (NFRC) conditions. Frame and glass types shown in the table below are for reference only. 			~		

Window/glazed door no.	Maximum height (mm)	Maximum width (mm)	Туре	Shading Device (Dimension within 10%)	Overshadowing
North facing					
W014	1200	2630	U-value: 5.4, SHGC: 0.441 - 0.539 (timber/UPVC/fibreglass, single, tint)	eave 350 mm, 0 mm above head of window or glazed door	not overshadowed
W15	1200	2630	U-value: 5.4, SHGC: 0.441 - 0.539 (timber/UPVC/fibreglass, single, tint)	eave 350 mm, 0 mm above head of window or glazed door	not overshadowed
East facing					
W16	2400	600	U-value: 5.4, SHGC: 0.441 - 0.539 (timber/UPVC/fibreglass, single, tint)	eave 350 mm, 1000 mm above head of window or glazed door	not overshadowed
South facing	'		1		

Planning, Industry & Environment www.basix.nsw.gov.au Version: 3.0 / DARWINIA_3_20_0 Certificate No.: 1310041S Wednesday, 01 June 2022 page 6/10

Window/glazed door no.	Maximum height (mm)	Maximum width (mm)	Туре	Shading Device (Dimension within 10%)	Overshadowing
W17	1200	900	timber/UPVC/fibreglass, single, clear	eave 4340 mm, 0 mm above head of window or glazed door	not overshadowed
West facing					
W13	2400	4220	U-value: 5.4, SHGC: 0.441 - 0.539 (timber/UPVC/fibreglass, single, tint)	verandah 3000 mm, 3196 mm above base of window or glazed door	not overshadowed

Planning, Industry & Environment www.basix.nsw.gov.au Version: 3.0 / DARWINIA_3_20_0 Certificate No.: 1310041S Wednesday, 01 June 2022 page 7/10

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: gas instantaneous with a performance of 5 stars.	•	✓	~
Cooling system			
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 bedrooms must not incorporate any cooling system, or any ducting which is designed to accommodate a cooling system.		~	~
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		→	V
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.			~
Ventilation			
The applicant must install the following exhaust systems in the development:			
At least 1 Bathroom: no mechanical ventilation (ie. natural); Operation control: n/a		~	•
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		V	V
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 1 of the bedrooms / study; dedicated		_	
at least 1 of the living / dining rooms; dedicated			

BASIX Planning, Industry & Environment www.basix.nsw.gov.au Version: 3.0 / DARWINIA_3_20_0 Certificate No.: 1310041S Wednesday, 01 June 2022 page 8/10

Energy Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
the kitchen; dedicated		V	V
all bathrooms/toilets; dedicated		•	V
Natural lighting			
The applicant must install a window and/or skylight in 1 bathroom(s)/toilet(s) in the development for natural lighting.	-	~	V
Alternative energy			
The applicant must install a photovoltaic system with the capacity to generate at least 5 peak kilowatts of electricity as part of the development. The applicant must connect this system to the development's electrical system.	-	~	V
Other			
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.		V	

Planning, Industry & Environment www.basix.nsw.gov.au Version: 3.0 / DARWINIA_3_20_0 Certificate No.: 1310041S Wednesday, 01 June 2022 page 9/10

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.

BASIX Planning, Industry & Environment www.basix.nsw.gov.au Version: 3.0 / DARWINIA_3_20_0 Certificate No.: 1310041S Wednesday, 01 June 2022 page 10/10