

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

## Single Dwelling

Certificate number: 1231896S\_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

This certificate is a revision of certificate number 1231896S lodged with the consent authority or certifier on 13 September 2021 with application DA 0097/2022.

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

BASIX

Date of issue: Tuesday, 07 June 2022

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



Project summary				
Project name	3MJ & M P/L DWLNG 2_02			
Street address	4 BURRUNDULLA Avenue Mudgee 2850			
Local Government Area	Mid-Western Regional Council			
Plan type and plan number	deposited 37470			
Lot no.	10			
Section no.	-			
Project type	separate dwelling house			
No. of bedrooms	5			
Project score				
Water	✓ 40 Target 30			
Thermal Comfort	✓ Pass Target Pass			
Energy	✓ 46 Target 40			

### **Certificate Prepared by**

Name / Company Name: Preferred Design & Drafting

ABN (if applicable): 11803513562

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# **Description of project**

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Project address	
Project name	3MJ & M P/L DWLNG 2_02
Street address	4 BURRUNDULLA Avenue Mudgee 2850
Local Government Area	Mid-Western Regional Council
Plan type and plan number	Deposited Plan 37470
Lot no.	10
Section no.	-
Project type	
Project type	separate dwelling house
No. of bedrooms	5
Site details	
Site area (m²)	1049
Roof area (m²)	408
Conditioned floor area (m2)	203.42
Unconditioned floor area (m2)	31.23
Total area of garden and lawn (m2)	240

Assessor details and thermal loads							
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	<b>✓</b> 40	Target 30					
Thermal Comfort	✓ Pass	Target Pass					
Energy	<b>√</b> 46	Target 40					

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### **Schedule of BASIX commitments**

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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
Fixtures			
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 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.		V	
Alternative water			
Rainwater tank			
The applicant must install a rainwater tank of at least 5000 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 400 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 toilets in the development		<b>~</b>	-
<ul> <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>		<b>~</b>	~

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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	~	V
The conditioned floor area of the dwelling must not exceed 300 square metres.	V	<b>~</b>	V
The dwelling must not contain open mezzanine area exceeding 25 square metres.	V	<b>~</b>	V
The dwelling must not contain third level habitable attic room.		<u> </u>	V
Floor, walls and ceiling/roof			
The applicant must construct the floor(s), walls, and ceiling/roof of the dwelling in accordance with the specifications listed in the table below.	V	<b>✓</b>	V

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)	
internal wall shared with garage - plasterboard	nil	
ceiling and roof - flat ceiling / pitched roof	ceiling: 3.75 (up), roof: foil/sarking	unventilated; 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.	

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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	<b>→</b>	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
For the following glass and frame types, the certifier check can be performed by visual inspection.			V
- 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.			~
The applicant must install the skylights described in the table below, in accordance with the specifications listed in the table. Total skylight area must not exceed 3 square metres (the 3 square metre limit does not include the optional additional skylight of less than 0.7 square metres that does not have to be listed in the table).	~	~	~

Skylight no.	Maximum area (square metres)	Туре	Shading device
S01	0.64	timber, low-E/double/argon fill	no shading
S02	0.64	timber, low-E/double/argon fill	no shading

Window/glazed door no.	Maximum height (mm)	Maximum width (mm)	Туре	Shading Device (Dimension within 10%)	Overshadowing
North facing					
W-2-01	1800	600	U-value: 5.4, SHGC: 0.522 - 0.638 (aluminium, single, Hi-Tsol Low-e)	verandah 2000 mm, 1810 mm above base of window or glazed door	not overshadowed

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Window/glazed door no.	Maximum height (mm)	Maximum width (mm)	Туре	Shading Device (Dimension within 10%)	Overshadowing
D-2-02	2100	1440	U-value: 5.4, SHGC: 0.441 - 0.539 (aluminium, single, Hi-Tsol Low-e)	verandah 2000 mm, 2000 mm above base of window or glazed door	not overshadowed
W-2-05	1800	600	U-value: 5.4, SHGC: 0.522 - 0.638 (aluminium, single, Hi-Tsol Low-e)	verandah 2000 mm, 1800 mm above base of window or glazed door	not overshadowed
W-2-07	1800	1400	U-value: 5.4, SHGC: 0.522 - 0.638 (aluminium, single, Hi-Tsol Low-e)	awning (fixed) 900 mm, 1600 mm above base of window or glazed door	not overshadowed
W-2-08	1800	1400	U-value: 5.4, SHGC: 0.522 - 0.638 (aluminium, single, Hi-Tsol Low-e)	awning (fixed) 900 mm, 1600 mm above base of window or glazed door	not overshadowed
D-2-04	2100	2400	U-value: 5.4, SHGC: 0.522 - 0.638 (aluminium, single, Hi-Tsol Low-e)	verandah 7850 mm, 2400 mm above base of window or glazed door	not overshadowed
D-2-05	2100	2100	U-value: 5.4, SHGC: 0.522 - 0.638 (aluminium, single, Hi-Tsol Low-e)	verandah 8800 mm, 2400 mm above base of window or glazed door	not overshadowed
East facing					
W-2-02	1800	600	U-value: 5.4, SHGC: 0.522 - 0.638 (aluminium, single, Hi-Tsol Low-e)	verandah 2000 mm, 1800 mm above base of window or glazed door	not overshadowed
W-2-03	1800	600	U-value: 5.4, SHGC: 0.522 - 0.638 (aluminium, single, Hi-Tsol Low-e)	verandah 2000 mm, 1800 mm above base of window or glazed door	not overshadowed
D-2-01	1800	2400	timber/UPVC/fibreglass, single, clear	verandah 2000 mm, 2100 mm above base of window or glazed door	not overshadowed
W-2-04	1800	2400	U-value: 5.4, SHGC: 0.522 - 0.638 (aluminium, single, Hi-Tsol Low-e)	awning (fixed) 900 mm, 1600 mm above base of window or glazed door	not overshadowed
W-2-06	1800	900	U-value: 5.4, SHGC: 0.522 - 0.638 (aluminium, single, Hi-Tsol Low-e)	verandah 2000 mm, 1800 mm above base of window or glazed door	not overshadowed
South facing					
D-2-06	2100	820	aluminium, single, clear	eave 550 mm, 400 mm above head of window or glazed door	not overshadowed
W-2-16	1200	900	aluminium, single, clear	eave 550 mm, 400 mm above head of window or glazed door	not overshadowed
W-2-15	1200	1800	aluminium, single, clear	eave 550 mm, 400 mm above head of window or glazed door	not overshadowed

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Window/glazed door no.	Maximum height (mm)	Maximum width (mm)	Туре	Shading Device (Dimension within 10%)	Overshadowing
W-2-14	600	3000	aluminium, single, clear	eave 550 mm, 360 mm above head of window or glazed door	not overshadowed
W-2-13	1200	1800	aluminium, single, clear	eave 550 mm, 400 mm above head of window or glazed door	not overshadowed
W-2-12	1200	1800	aluminium, single, clear	eave 550 mm, 400 mm above head of window or glazed door	not overshadowed
W-2-11	1200	1800	aluminium, single, clear	eave 550 mm, 400 mm above head of window or glazed door	not overshadowed
West facing		·			
D-2-03	2100	3600	U-value: 5.4, SHGC: 0.522 - 0.638 (aluminium, single, Hi-Tsol Low-e)	eave 7850 mm, 400 mm above head of window or glazed door	not overshadowed
W-2-09	600	1800	aluminium, single, clear	eave 4380 mm, 940 mm above head of window or glazed door	not overshadowed
W-2-10	600	2700	aluminium, single, clear	eave 550 mm, 400 mm above head of window or glazed door	not overshadowed

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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: 1-phase airconditioning; Energy rating: 5 star (cold zone)		~	~
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 (cold zone)		~	-
The cooling system must provide for day/night zoning between living areas and bedrooms.		V	V
Heating system			
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 star (cold zone)		~	V
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 star (cold zone)		~	V
The heating system must provide for day/night zoning between living areas and bedrooms.		<b>~</b>	-
Ventilation			
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		<b>✓</b>	V
Kitchen: individual fan, ducted to façade or roof; Operation control: manual switch on/off		<b>~</b>	-
Laundry: individual fan, ducted to façade or roof; Operation control: manual switch on/off		•	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 4 of the bedrooms / study;			J

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Energy Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
at least 2 of the living / dining rooms;		~	~
• the kitchen;		<b>~</b>	_
all bathrooms/toilets;		_	
• the laundry;			
• all hallways;		<b>V</b>	-
Natural lighting			
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 3 bathroom(s)/toilet(s) in the development for natural lighting.		~	V
Other			
The applicant must install a gas cooktop & electric oven in the kitchen of the dwelling.		~	
The applicant must install a fixed outdoor clothes drying line as part of the development.			

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#### Legend

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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.

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