BASIX[°]Certificate

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

Single Dwelling

Certificate number: 1231896S

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 Date of issue: Monday, 30 August 2021 To be valid, this certificate must be lodged within 3 months of the date of issue.



Planning, Industry & Environment

Project summary			
Project name	3MJ & M P/L DWLNG 2		
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	V 40 Target 30		
Thermal Comfort	V Pass Target Pass		
Energy	V 47 Target 40		

С	Certificate Prepared by
Ν	ame / Company Name: Preferred Design & Drafting
А	BN (if applicable): 11803513562

Description of project

Project address

3MJ & M P/L DWLNG 2		
4 BURRUNDULLA Avenue Mudgee 2850		
Mid-Western Regional Council		
Deposited Plan 37470		
10		
-		
separate dwelling house		
5		
1049		
406		
208.2		
16.51		
240		

Assessor details and thermal loads							
Assessor number	n/a						
Certificate number	n/a						
Climate zone	n/a						
Area adjusted cooling load (MJ/m ² .year)	n/a						
Area adjusted heating load (MJ/m ² .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	V 40 Target 30						
Thermal Comfort	V Pass Target Pass						
Energy	V 47 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
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.		~	
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 406.97 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:			
all toilets in the development		 Image: A second s	~
 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.) 		 ✓ 	~

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.	~	~	~
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.	~	~	~
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	~

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: 4.75 (up), roof: foil/sarking	unventilated; light (solar absorptance < 0.475)
ceiling and roof - raked ceiling / pitched or skillion roof, framed	ceiling: 4.76 (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
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.	~	~	~
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:	~	~	~
• 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. 			~
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	0.16	aluminium, moulded plastic single clear	no shading
S02	0.16	aluminium, moulded plastic single clear	no shading

Window/glazed door no.	Maximum height (mm)	Maximum width (mm)	Туре	Shading Device (Dimension within 10%)	Overshadowing	
North facing						
W01	1800	600	U-value: 5.4, SHGC: 0.522 - 0.638 (aluminium, single, Hi-Tsol Low-e)	verandah 1900 mm, 1725 mm above base of window or glazed door	not overshadowed	

Window/glazed door no.	Maximum height (mm)	Maximum width (mm)	Туре	Shading Device (Dimension within 10%)	Overshadowing
W02	1800	900	U-value: 5.4, SHGC: 0.522 - 0.638 (aluminium, single, Hi-Tsol Low-e)	verandah 1900 mm, 1725 mm above base of window or glazed door	not overshadowed
W03	1800	1500	U-value: 5.4, SHGC: 0.522 - 0.638 (aluminium, single, Hi-Tsol Low-e)	awning (fixed) 750 mm, 1500 mm above base of window or glazed door	not overshadowed
W04	1800	1500	U-value: 5.4, SHGC: 0.522 - 0.638 (aluminium, single, Hi-Tsol Low-e)	awning (fixed) 750 mm, 1500 mm above base of window or glazed door	not overshadowed
W05	2100	2100	U-value: 5.4, SHGC: 0.522 - 0.638 (aluminium, single, Hi-Tsol Low-e)	eave 5000 mm, 530 mm above head of window or glazed door	not overshadowed
W06	2100	2100	U-value: 5.4, SHGC: 0.522 - 0.638 (aluminium, single, Hi-Tsol Low-e)	eave 7300 mm, 530 mm above head of window or glazed door	not overshadowed
W07	1200	1800	U-value: 5.4, SHGC: 0.522 - 0.638 (aluminium, single, Hi-Tsol Low-e)	eave 550 mm, 360 mm above head of window or glazed door	not overshadowed
East facing					
W08	1800	900	U-value: 5.4, SHGC: 0.522 - 0.638 (aluminium, single, Hi-Tsol Low-e)	verandah 1900 mm, 1725 mm above base of window or glazed door	not overshadowed
W09	1800	900	U-value: 5.4, SHGC: 0.522 - 0.638 (aluminium, single, Hi-Tsol Low-e)	verandah 1900 mm, 1725 mm above base of window or glazed door	not overshadowed
W10	2100	1500	timber/UPVC/fibreglass, single, clear	verandah 1900 mm, 2065 mm above base of window or glazed door	not overshadowed
W11	1800	2400	U-value: 5.4, SHGC: 0.522 - 0.638 (aluminium, single, Hi-Tsol Low-e)	verandah 1900 mm, 1725 mm above base of window or glazed door	not overshadowed
W12	1800	900	U-value: 5.4, SHGC: 0.522 - 0.638 (aluminium, single, Hi-Tsol Low-e)	verandah 1900 mm, 1725 mm above base of window or glazed door	not overshadowed
South facing					
W13	2100	820	aluminium, single, clear	eave 550 mm, 360 mm above head of window or glazed door	not overshadowed
W14	1200	2100	aluminium, single, clear	eave 550 mm, 360 mm above head of window or glazed door	not overshadowed
W15	600	1800	aluminium, single, clear	eave 550 mm, 360 mm above head of window or glazed door	not overshadowed

Window/glazed door no.	Maximum height (mm)	Maximum width (mm)	Туре	Shading Device (Dimension within 10%)	Overshadowing
W16	1200	1800	aluminium, single, clear	eave 550 mm, 360 mm above head of window or glazed door	not overshadowed
W17	900	900	aluminium, single, clear	eave 550 mm, 360 mm above head of window or glazed door	not overshadowed
W18	1200	1800	aluminium, single, clear	eave 550 mm, 360 mm above head of window or glazed door	not overshadowed
West facing					
W19	2100	3600	U-value: 5.4, SHGC: 0.522 - 0.638 (aluminium, single, Hi-Tsol Low-e)	eave 7700 mm, 365 mm above head of window or glazed door	not overshadowed
W20	600	1800	aluminium, single, clear	eave 3200 mm, 1200 mm above head of window or glazed door	not overshadowed
W21	1200	2100	aluminium, single, clear	eave 550 mm, 365 mm above head of window or glazed door	not overshadowed

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.	~	v	~
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)		v	~
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.		~	~
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)		~	~
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)		~	~
The heating system must provide for day/night zoning between living areas and bedrooms.		~	~
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		~	~
Kitchen: individual fan, ducted to façade or roof; Operation control: manual switch on/off		_	v
Laundry: individual fan, ducted to façade or roof; Operation control: manual switch on/off		~	~
Artificial lighting	1		
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; 		~	-

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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;		~	~
all bathrooms/toilets;		~	~
the laundry;		~	~
• all hallways;		~	~
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.	~	~	~
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.		~	

Legend

In these commitments, "applicant" means the person carrying out the development.

Commitments identified with a vi 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 vi 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 vi 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.