

BASIX[®]Certificate

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

Single Dwelling

Certificate number: 801237S

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 18/09/2014 published by the Department. This document is available at www.basix.nsw.gov.au

Secretary

Date of issue: Thursday, 02 March 2017

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






Project summary		
Project name	17022_1_L80 Winter St	
Street address	1/Lot 80 Winter Street Orange 2800	
Local Government Area	Orange City Council	
Plan type and plan number	deposited 1200262	
Lot no.	80	
Section no.	-	
Project type	separate dwelling house	
No. of bedrooms	3	
Project score		
Water	✓ 43	Target 40
Thermal Comfort	✓ Pass	Target Pass
Energy	✓ 42	Target 25

Certificate Prepared by
Name / Company Name: KBC
ABN (if applicable): 99309889330

Description of project

Project address	
Project name	17022_1_L80 Winter St
Street address	1/Lot 80 Winter Street Orange 2800
Local Government Area	Orange City Council
Plan type and plan number	Deposited Plan 1200262
Lot no.	80
Section no.	-
Project type	
Project type	separate dwelling house
No. of bedrooms	3
Site details	
Site area (m ²)	375
Roof area (m ²)	150
Conditioned floor area (m2)	107.0
Unconditioned floor area (m2)	9.0
Total area of garden and lawn (m2)	109

Assessor details and thermal loads		
Assessor number	20094	
Certificate number	1010823837	
Climate zone	65	
Area adjusted cooling load (MJ/m ² .year)	2	
Area adjusted heating load (MJ/m ² .year)	193	
Other		
none	n/a	
Project score		
Water	 43	Target 40
Thermal Comfort	 Pass	Target Pass
Energy	 42	Target 25

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 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 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 3000 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 100 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"> all toilets in the development the cold water tap that supplies each clothes washer in the development 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
Simulation Method			
The applicant must attach the certificate referred to under "Assessor Details" on the front page of this BASIX certificate (the "Assessor Certificate") to the development application and construction certificate application for the proposed development (or, if the applicant is applying for a complying development certificate for the proposed development, to that application). The applicant must also attach the Assessor Certificate to the application for an occupation certificate for the proposed development.			
The Assessor Certificate must have been issued by an Accredited Assessor in accordance with the Thermal Comfort Protocol.			
The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX certificate, including the Cooling and Heating loads shown on the front page of this certificate.			
The applicant must show on the plans accompanying the development application for the proposed development, all matters which the Assessor Certificate requires to be shown on those plans. Those plans must bear a stamp of endorsement from the Accredited Assessor to certify that this is the case. The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all thermal performance specifications set out in the Assessor Certificate, and all aspects of the proposed development which were used to calculate those specifications.			
The applicant must construct the development in accordance with all thermal performance specifications set out in the Assessor Certificate, and in accordance with those aspects of the development application or application for a complying development certificate which were used to calculate those specifications.		✓	✓
The applicant must construct the floors and walls of the dwelling in accordance with the specifications listed in the table below.	✓	✓	✓

Floor and wall construction	Area
floor - concrete slab on ground	All or part of floor area square metres

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 living areas must not incorporate any cooling system, or any ducting which is designed to accommodate a cooling system.		✓	✓
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: gas fixed flued heater; Energy rating: 3.5 Star		✓	✓
The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 bedroom: gas fixed flued heater; Energy rating: 3.5 Star		✓	✓
Ventilation			
<p>The applicant must install the following exhaust systems in the development:</p> <p>At least 1 Bathroom: individual fan, not ducted; 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: natural ventilation only, or no laundry; Operation control: n/a</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>
Artificial lighting			
<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"> • at least 2 of the bedrooms / study; • at least 2 of the living / dining rooms; • the kitchen; 		<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>


Energy Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
<ul style="list-style-type: none"> • 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 2 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  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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Single Dwelling

Certificate number: 801239S

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Secretary

Date of issue: Thursday, 02 March 2017

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Project summary		
Project name	17023_2_L80 Winter St	
Street address	2/Lot 80 Winter Street Orange 2800	
Local Government Area	Orange City Council	
Plan type and plan number	deposited 1200262	
Lot no.	80	
Section no.	-	
Project type	separate dwelling house	
No. of bedrooms	3	
Project score		
Water	✓ 44	Target 40
Thermal Comfort	✓ Pass	Target Pass
Energy	✓ 40	Target 25

Certificate Prepared by

Name / Company Name: KBC

ABN (if applicable): 99309889330

Description of project

Project address

Project name	17023_2_L80 Winter St
Street address	2/Lot 80 Winter Street Orange 2800
Local Government Area	Orange City Council
Plan type and plan number	Deposited Plan 1200262
Lot no.	80
Section no.	-

Project type

Project type	separate dwelling house
No. of bedrooms	3

Site details

Site area (m ²)	325
Roof area (m ²)	150
Conditioned floor area (m2)	107.0
Unconditioned floor area (m2)	9.0
Total area of garden and lawn (m2)	90




Assessor details and thermal loads

Assessor number	20094
Certificate number	1010823837
Climate zone	65
Area adjusted cooling load (MJ/m ² .year)	1
Area adjusted heating load (MJ/m ² .year)	233

Other

none	n/a
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Project score

Water	 44	Target 40
Thermal Comfort	 Pass	Target Pass
Energy	 40	Target 25

Schedule of BASIX commitments















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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 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 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 3000 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 100 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"> all toilets in the development the cold water tap that supplies each clothes washer in the development 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
Simulation Method			
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The applicant must construct the development in accordance with all thermal performance specifications set out in the Assessor Certificate, and in accordance with those aspects of the development application or application for a complying development certificate which were used to calculate those specifications.		✔	✔
The applicant must construct the floors and walls of the dwelling in accordance with the specifications listed in the table below.	✔	✔	✔


Floor and wall construction	Area
floor - concrete slab on ground	All or part of floor area square metres


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Cooling system			
The living areas must not incorporate any cooling system, or any ducting which is designed to accommodate a cooling system.		✓	✓
The bedrooms must not incorporate any cooling system, or any ducting which is designed to accommodate a cooling system.		✓	✓
Heating system			
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Ventilation			
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