

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

Single Dwelling

Certificate number: 469172S_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 29/06/2009 published by the Department of Planning. This document is available at www.basix.nsw.gov.au

Director-General

Date of issue: Wednesday, 15 May 2013

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



Project summary		
Project name	Connect Homes #0	016461_02
Street address	Illoura Way Jordan	Springs 2760
Local Government Area	Penrith City Counci	il
Plan type and plan number	deposited 1168991	
Lot no.	2139	
Section no.	E	
Project type	separate dwelling house	
No. of bedrooms	4	
Project score		
Water	√ 40	Target 40
Thermal Comfort	✓ Pass	Target Pass
Energy	√ 40	Target 40

Certificate Prepared by

Name / Company Name: Eden Brae Holdings Pty Ltd

ABN (if applicable): 42083807489

BASIX Department of Planning www.basix.nsw.gov.au Version: 6.23 / CASUARINA_2_13_8 Certificate No.: 469172S_02 Wednesday, 15 May 2013 page 1/7

Description of project

Project address		
Project name	Connect Homes #0016461_02	
Street address	n/a Illoura Way Jordan Springs 2760	
Local Government Area	Penrith City Council	
Plan type and plan number	Deposited Plan 1168991	
Lot no.	2139	
Section no.		
Project type		
Project type	separate dwelling house	
No. of bedrooms	4	
Site details		
Site area (m²)	375	
Roof area (m²)	252	
Conditioned floor area (m2)	151	
Unconditioned floor area (m2)	63	
Total area of garden and lawn (m2)	137	

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	
Other		
none	n/a	
Project score		
Water	√ 40	Target 40
Thermal Comfort	✓ Pass	Target Pass
Energy	√ 40	Target 40
	8	

BASIX Department of Planning www.basix.nsw.gov.au Version: 6.23 / CASUARINA_2_13_8 Certificate No.: 469172S_02 Wednesday, 15 May 2013 page 2/7

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.		1	1
The applicant must install a toilet flushing system with a minimum rating of 3 star in each toilet in the development.		/	1
The applicant must install taps with a minimum rating of 3 star in the kitchen in the development.	4	1	
The applicant must install basin taps with a minimum rating of 3 star in each bathroom in the development.		1	
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.	1	✓	1
The applicant must configure the rainwater tank to collect rain runoff from at least 165 square metres of the roof area of the development (excluding the area of the roof which drains to any stormwater tank or private dam).		1	1
The applicant must connect the rainwater tank to:			
all toilets in the development		1	1
the cold water tap that supplies each clothes washer in the development		1	1
 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.) 		✓	1

BASIX Department of Planning www.basix.nsw.gov.au Version: 6.23 / CASUARINA_2_13_8 Certificate No.: 469172S_02 Wednesday, 15 May 2013 page 3/7

Thermal Comfort Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Criteria			
The applicant must construct the dwelling in accordance with the following specifications:			(4)
the dwelling is a single storey dwelling;	1	/	1
• the dwelling has a slab on ground floor or, if the floor is suspended, the floor has insulation with an R-value of at least R1.5;	1	✓	1
walls are brick veneer, weatherboard or fibre cement;		✓	1
walls have insulation with an R-value of at least R2.0;		1	1
 all windows and glazed doors have eaves that project at least 600 millimetres (including gutter width); 	1	1	1
 eaves are no more than 500 millimetres above window or glazed door heads; 	1	1	1
 the total window and glazed door area is no more than 47.1 square metres; 	1	1	1
• ceilings have insulation with an R-value of at least R3.0;		1	1
the roof has sarking or two wind-driven ventilators with eave and/or roof vents.		1	1

Note Insulation specified in this Certificate must be installed in accordance with Part 3.12.1.1 of the Building Code of Australia.

BASIX Department of Planning www.basix.nsw.gov.au Version: 6.23 / CASUARINA_2_13_8 Certificate No.: 469172S_02 Wednesday, 15 May 2013 page 4/7

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.	1	1	1
Cooling system			
The living areas must not incorporate any cooling system, or any ducting which is designed to accommodate a cooling system.		1	1
The bedrooms must not incorporate any cooling system, or any ducting which is designed to accommodate a cooling system.	2	✓	1
Heating system			
The living areas must not incorporate any heating system, or any ducting which is designed to accommodate a heating system.		1	1
The bedrooms must not incorporate any heating system, or any ducting which is designed to accommodate a heating system.		1	1
Ventilation	31		
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		/	1
Kitchen: individual fan, ducted to façade or roof; Operation control: manual switch on/off		1	1
Laundry: natural ventilation only, or no laundry; Operation control: n/a		/	1
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; dedicated		/	1
at least 2 of the living / dining rooms; dedicated		/	1
Natural lighting	<u> </u>		
The applicant must install a window and/or skylight in 2 bathroom(s)/toilet(s) in the development for natural lighting.	1	1	1

BASIX Department of Planning www.basix.nsw.gov.au Version: 6.23 / CASUARINA_2_13_8 Certificate No.: 469172S_02 Wednesday, 15 May 2013 page 5/7

Energy Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
The applicant must install a gas cooktop & electric 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.		1	
The applicant must install a fixed outdoor clothes drying line as part of the development.		/	

BASIX Department of Planning www.basix.nsw.gov.au Version: 6.23 / CASUARINA_2_13_8 Certificate No.: 469172S_02 Wednesday, 15 May 2013 page 6/7

Legend

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

Commitments identified with a \checkmark 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 \checkmark 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 Department of Planning www.basix.nsw.gov.au Version: 6.23 / CASUARINA_2_13_8 Certificate No.: 469172S_02 Wednesday, 15 May 2013 page 7/7



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

Single Dwelling

Certificate number: 469172S

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 29/06/2009 published by the Department of Planning. This document is available at www.basix.nsw.gov.au

Director-General
Date of issue: Wednesday, 20 February 2013
To be valid, this certificate must be lodged within 3 months of the date of issue.



BASIX

Project summary		
Project name	Connect Homes #0	0016461
Street address	Illoura Way Jordan	Springs 2760
Local Government Area	Penrith City Counc	il
Plan type and plan number	deposited 0	
Lot no.	2139	
Section no.		
Project type	separate dwelling house	
No. of bedrooms	4	
Project score	A STATE OF THE STA	
Water	√ 40	Target 40
Thermal Comfort	√ Pass	Target Pass
Energy	√ 40	Target 40

Certificate	Prepared by	1
-------------	-------------	---

Name / Company Name: Eden Brae Holdings Pty Ltd

ABN (if applicable): 42083807489

Department of Planning www.basix.nsw.gov.au Version: 6.22 / CASUARINA_2_12_1 Certificate No.: 469172S Wednesday_20 February 2013 page 1/7

Description of project

Project address	
Project name	Connect Homes #0016461
Street address	n/a Illoura Way Jordan Springs 2760
Local Government Area	Penrith City Council
Plan type and plan number	Deposited Plan 0
Lot no.	2139
Section no.	-
Project type	
Project type	separate dwelling house
No. of bedrooms	4
Site details	
Site area (m²)	375
Roof area (m²)	252
Conditioned floor area (m2)	151
Unconditioned floor area (m2)	63
Total area of garden and lawn (m2)	137

Assessor details and thermal	oads	
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	
Other		
none	n/a	
Project score		
Water	√ 40	Target 40
Thermal Comfort	√ Pass	Target Pass
Energy	√ 40	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 3 star (> 7.5 but <= 9 L/min) in all showers in the development.		✓	1
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.		1	
Alternative water	Des les les		
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 165 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		✓	✓
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.) 		✓	✓

BASIX Department of Planning www basix nsw gov.au Version: 6.22 / CASUARINA 2_12_1 Certificate No.: 469172S Wednesday 20 February 2013 page 3/7

Thermal Comfort Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifie check		
Criteria					
The applicant must construct the dwelling in accordance with the following specifications:					
the dwelling is a single storey dwelling;	✓	✓	✓		
• the dwelling has a slab on ground floor or, if the floor is suspended, the floor has insulation with an R-value of at least R1.5;	✓	✓	✓		
walls are brick veneer, weatherboard or fibre cement;		✓	✓		
walls have insulation with an R-value of at least R2.0;		✓	✓		
 all windows and glazed doors have eaves that project at least 600 millimetres (including gutter width); 	✓	✓	✓		
eaves are no more than 500 millimetres above window or glazed door heads;	✓	✓	✓		
the total window and glazed door area is no more than 47.1 square metres;	✓	✓	✓		
ceilings have insulation with an R-value of at least R3.0;		✓	✓		
 the roof has sarking or two wind-driven ventilators with eave and/or roof vents. 		/	1		

Note Insulation specified in this Certificate must be installed in accordance with Part 3.12.1.1 of the Building Code of Australia.

BASIX

Certificate No 469172S

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.	✓	✓	1
Cooling system			A PYLES
The living areas must not incorporate any cooling system, or any ducting which is designed to accommodate a cooling system.		/	1
The bedrooms must not incorporate any cooling system, or any ducting which is designed to accommodate a cooling system.		✓	✓
Heating system			
The living areas must not incorporate any heating system, or any ducting which is designed to accommodate a heating system.		/	1
The bedrooms must not incorporate any heating system, or any ducting which is designed to accommodate a heating system.		/	
Ventilation			2 158
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		✓	1
Kitchen: individual fan, ducted to façade or roof; Operation control: manual switch on/off		/	1
Laundry: natural ventilation only, or no laundry; Operation control: n/a			· ✓
Artificial lighting		ill made a k	
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; dedicated		/	1
at least 2 of the living / dining rooms; dedicated		1	/
Natural lighting			
The applicant must install a window and/or skylight in 2 bathroom(s)/toilet(s) in the development for natural lighting.	1	/	1

BASIX Dep

Department of Planning

www.basix.nsw.gov.au

Version: 6.22 / CASUARINA_2_12_1

Certificate No.: 469172S

Wednesday, 20 February 2013

Energy Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
The applicant must install a gas cooktop & electric 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.		/	

Legend

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

Commitments identified with a $\sqrt{\ }$ 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 $\sqrt{\ }$ 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 $\sqrt{\ }$ 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

www.basix.nsw.gov.au

Version: 6.22 / CASUARINA 2 12 1

Certificate No.: 469172S

Wednesday 20 February 2013