







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

Single Dwelling

Certificate number: 488802S

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, 19 June 2013

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



Project summary				
Project name	Lot 4 Pettina Park, Coffs Harbour			
Street address	4 Pettina Park Coffs Harbour 2450			
Local Government Area	Coffs Harbour City Council			
Plan type and plan number	deposited 1044292			
Lot no.	4			
Section no.	-			
Project type	separate dwelling house			
No. of bedrooms	4			
Project score				
Water	✓ 40 Target 40			
Thermal Comfort	✓ Pass Target Pass			
Energy	✓ 43 Target 40			

Certificate Prepared by
Name / Company Name: Paul Treseder
ABN (if applicable): 56388046140

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Description of project

Project address	
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Section no.	-
Project type	
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No. of bedrooms	4
Site details	
Site area (m²)	591
Roof area (m²)	220
Conditioned floor area (m2)	112
Unconditioned floor area (m2)	11
Total area of garden and lawn (m2)	250

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	√ 43	Target 40
Energy	√ 43	Target 40

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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 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.		/	
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	/	/
The applicant must configure the rainwater tank to collect rain runoff from at least 200 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
The applicant must connect the rainwater tank to:			
all toilets in the development		1	/
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.) 		✓	✓

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Thermal Comfort Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
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.	/	/	/

Construction	Additional insulation required (R-Value)	Other specifications
floor - concrete slab on ground	nil	
external wall - brick veneer	1.36 (or 1.90 including construction)	
external wall - brick veneer	1.36 (or 1.90 including construction)	
external wall - brick veneer	1.36 (or 1.90 including construction)	
external wall - brick veneer	1.36 (or 1.90 including construction)	
internal wall shared with garage - plasterboard	nil	
ceiling and roof - flat ceiling / pitched roof	ceiling: 2.5 (down), roof: foil/sarking	unventilated; dark (solar absorptance > 0.70)

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

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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.	/	1	/
The dwelling may have 1 skylight (<0.7 square metres) and up to 2 windows/glazed doors (<0.7 square metres) which are not listed in the table.	/	/	/
The following requirements must also be satisfied in relation to each window and glazed door:	/	/	/
 Except where the glass is 'single clear' or 'single toned', each window and glazed door must have a U-value no greater than that listed and a Solar Heat Gain Coefficient (SHGC) +/-10% of that listed. Total system U-values and SHGC must be calculated in accordance with National Fenestration Rating Council (NFRC) conditions. 			1
• The leading edge of each eave, pergola, verandah, balcony or awning must be no more than 500 millimetres above the head of the window or glazed door, except that a projection greater than 500 mm and up to 1500 mm above the head must be twice the value in the table.	/	1	1
• Pergolas with polycarbonate roof or similar translucent material must have a shading coefficient of less than 0.35.		/	/
• Unless they have adjustable shading, pergolas must have fixed battens parallel to the window or glazed door above which they are situated, unless the pergola also shades a perpendicular window. The spacing between battens must not be more than 50 mm.		1	/

Window/glazed door no.	Orientation	Maximum area (square metres)	Туре	Shading	Overshadowing
1875sw	NW	1.35	standard aluminium, single pyrolytic low-e (U-value:5.7, SHGC:0.47)	eave/verandah/pergola/balcony 451-600 mm	not overshadowed
1875sw	NW	1.35	improved aluminium, single clear (U-value:6.44, SHGC:0.75)	eave/verandah/pergola/balcony 451-600 mm	not overshadowed
0909sw	NE	0.81	improved aluminium, single clear (U-value:6.44, SHGC:0.75)	eave/verandah/pergola/balcony 451-600 mm	not overshadowed
1224sw	SE	2.43	improved aluminium, single clear (U-value:6.44, SHGC:0.75)	eave/verandah/pergola/balcony 451-600 mm	not overshadowed
2124sd	SE	5.04	improved aluminium, single clear (U-value:6.44, SHGC:0.75)	eave/verandah/pergola/balcony >2,000 mm	not overshadowed
1218sw	SE	2.16	improved aluminium, single clear (U-value:6.44, SHGC:0.75)	eave/verandah/pergola/balcony 451-600 mm	not overshadowed

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Window/glazed door no.	Orientation	Maximum area (square metres)	Туре	Shading	Overshadowing
1218sw	SE	2.16	improved aluminium, single clear (U-value:6.44, SHGC:0.75)	eave/verandah/pergola/balcony 451-600 mm	not overshadowed
0906sw	SW	0.54	improved aluminium, single clear (U-value:6.44, SHGC:0.75)	none	not overshadowed
0912sw	SW	1.08	improved aluminium, single clear (U-value:6.44, SHGC:0.75)	none	not overshadowed
2115sd	SW	3.15	improved aluminium, single clear (U-value:6.44, SHGC:0.75)	none	not overshadowed
0915sw	SW	1.35	improved aluminium, single clear (U-value:6.44, SHGC:0.75)	eave/verandah/pergola/balcony 451-600 mm	not overshadowed
1875sw	NW	1.35	improved aluminium, single clear (U-value:6.44, SHGC:0.75)	eave/verandah/pergola/balcony 451-600 mm	not overshadowed
1875sw	NW	1.35	improved aluminium, single clear (U-value:6.44, SHGC:0.75)	eave/verandah/pergola/balcony 451-600 mm	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 storage with a performance of 5 stars.	1	/	✓
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 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			·
The applicant must install the following exhaust systems in the development:			
At least 1 Bathroom: no mechanical ventilation (ie. natural); Operation control: n/a		1	/
Kitchen: individual fan, not ducted; Operation control: manual switch on/off		/	/
Laundry: natural ventilation only, or no laundry; Operation control: n/a		/	/
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 fixed outdoor clothes drying line as part of the development.		1	

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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 \checkmark 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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HIBBARDS

* PROPOSED DWELLING

Sheet 1 Cover page + Drawing Schedule + Basix

Sheet 2 Site Plan

Sheet 3 Slab + Drainage Plan

Sheet 4 Floor Plan Sheet 5 Roof Plan Sheet 6 Elevations Sheet 7 Section

BASIX

Water Details

Area garden/lawn: 250 Area native species: O

3 Star Taps to all plumber fixture's.

3 Star rated shower heads.

3 Star rated flushing W.C \times two.

Roof runoff area 220 Sqm.

200 Sqm runoff to rainwater tank

Down pipe's are to discharge

into rain water tank.

Rain water tank size 3000 ltr. Rain water connected to: Garden & Lawn, all WC's, laundry, Rain water tank overflow is to discharge to interalotment drain.

BASIX

Energy

Solar Absorptance >0.70 Dark Hot water: 5 Star Gas LPG

Cooling: N/A

Heating: N/A

No active heating to Bedrooms Natural ventilation to Bathrooms Kitchen exhaust: individual fan, not ducted. Manual on/off switch.

Natural ventilation to laundry Electric oven & Cooktop

Outdoor clothes line to be installed

BASIX

Thermal Comfort

R3.0 Insulation to ceiling.

RI.5 insulation to outside walls.

R1.5 Insulation to internal garage walls

Sisalation to outside walls

Concrete roof tiles with Sarking.

Eave \$ gutter width 600mm

Window Type	Material	Notes	Qty
1875ew	U-Yalue: 5.7 SHGC:0.47	Bedroom 2	1
1875ew	U-Value: 6,44 SHGC:0,75	Theatre	4
<i>0909sw</i>	U-Yalue: 6,44 SHGC:0,75	Ensuite	1
122 4 sw	U-Value: 6,44 SHGC:0,75	Bedroom 1	1
2124sd	U-Value: 6,44 SHGC:0,75	Family Room	1
1218ew	U-Value: 6,44 SHGC:0,75	Bedroom 3 4 4	2
0906ew	U-Value: 6,44 SHGC:0,75	W/C	1
O912sw	U-Value: 6,44 SHGC:0,75	Bathroom	1
2115ed	U-Value: 6,44 SHGC:0,75	Laundry	1
O915ew	U-Value: 6.44 SHGC:0.75	Garage	1

FRONT PAGE

Scale N.A

HIBBARDS

BUILDERS OF QUALITY HOMES 32 Moonee St, Coffs Harbour, NSW 2450

> PAUL TRESEDER DRAFTING SERVICES

16 Cowell Street, Gladesville. NSW, 2111 Mobile: 0432128545

CLIENT:

PROPOSED DWELLING FOR HIBBARDS

LOCATED AT LOT 4 PETTINA PARK COFFS HARBOUR, NSW DOOR SIZES SHOWN REFER TO DOOR SIZES NOT THE OPENING WIDTH. DO NOT SCALE OFF DRAWING READ ALL DIMENSIONS. CHECK ALL DIMENSIONS ON SITE BEFORE FABRICATING ANYTHING. DRAWINGS TO BE CHECKED BY A

PRACTICING STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION. THESE DRAWINGS ARE SUBJECT TO COPYRIGHT.

DATE: 19/06/2013	SHEET No:
REF: HIB-13/018 JOB CODE	BLN : 41122C