

# BASIX<sup>®</sup>Certificate

Building Sustainability Index [www.basix.nsw.gov.au](http://www.basix.nsw.gov.au)

## Alterations and Additions

Certificate number: A336632

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 Alterations and Additions Definitions" dated 06/10/2017 published by the Department. This document is available at [www.basix.nsw.gov.au](http://www.basix.nsw.gov.au)

Secretary

Date of issue: Wednesday, 19, December 2018

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



## Description of project

Project address	
Project name	E18061 - Alts & Adds - Apt 4 & 7
Street address	307 Sydney Road Balgowlah 2093
Local Government Area	Northern Beaches Council
Plan type and number	Deposited Plan DP335027
Lot number	D
Section number	-
Project type	
Dwelling type	Unit
Type of alteration and addition	My renovation work is valued at \$50,000 or more.

**Certificate Prepared by** (please complete before submitting to Council or PCA)

Name / Company Name: Credwell Energy

ABN (if applicable): 625598352

Fixtures and systems	Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
<b>Lighting</b>			
The applicant must ensure a minimum of 40% of new or altered light fixtures are fitted with fluorescent, compact fluorescent, or light-emitting-diode (LED) lamps.		✓	✓
<b>Fixtures</b>			
The applicant must ensure new or altered showerheads have a flow rate no greater than 9 litres per minute or a 3 star water rating.		✓	✓
The applicant must ensure new or altered toilets have a flow rate no greater than 4 litres per average flush or a minimum 3 star water rating.		✓	✓
The applicant must ensure new or altered taps have a flow rate no greater than 9 litres per minute or minimum 3 star water rating.		✓	

Construction			Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
<b>Insulation requirements</b>					
The applicant must construct the new or altered construction (floor(s), walls, and ceilings/roofs) in accordance with the specifications listed in the table below, except that a) additional insulation is not required where the area of new construction is less than 2m <sup>2</sup> , b) insulation specified is not required for parts of altered construction where insulation already exists.			✓	✓	✓
Construction	Additional insulation required (R-value)	Other specifications			
external wall: brick veneer	R1.16 (or R1.70 including construction)				
external wall: framed (weatherboard, fibro, metal clad)	R1.30 (or R1.70 including construction)				
flat ceiling, flat roof: framed	ceiling: R0.90 (up), roof: foil backed blanket (55 mm)	light (solar absorptance < 0.475)			

Glazing requirements							Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
<b>Windows and glazed doors</b>									
<p>The applicant must install the windows, glazed doors and shading devices, in accordance with the specifications listed in the table below. Relevant overshadowing specifications must be satisfied for each window and glazed door.</p> <p>The following requirements must also be satisfied in relation to each window and glazed door:</p> <p>Each window or glazed door with improved frames, or pyrolytic low-e glass, or clear/air gap/clear glazing, or toned/air gap/clear glazing must have a U-value and a Solar Heat Gain Coefficient (SHGC) no greater than that listed in the table below. Total system U-values and SHGCs must be calculated in accordance with National Fenestration Rating Council (NFRC) conditions. The description is provided for information only. Alternative systems with complying U-value and SHGC may be substituted.</p> <p>For projections described in millimetres, the leading edge of each eave, pergola, verandah, balcony or awning must be no more than 500 mm above the head of the window or glazed door and no more than 2400 mm above the sill.</p> <p>For projections described as a ratio, the ratio of the projection from the wall to the height above the window or glazed door sill must be at least that shown in the table below.</p> <p>Pergolas with polycarbonate roof or similar translucent material must have a shading coefficient of less than 0.35.</p> <p>External louvres and blinds must fully shade the window or glazed door beside which they are situated when fully drawn or closed.</p> <p>Pergolas with fixed battens must have 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.</p> <p>Overshadowing buildings or vegetation must be of the height and distance from the centre and the base of the window and glazed door, as specified in the 'overshadowing' column in the table below.</p>							✓	✓	✓
<b>Windows and glazed doors glazing requirements</b>									
Window / door no.	Orientation	Area of glass inc. frame (m2)	Overshadowing		Shading device	Frame and glass type			
			Height (m)	Distance (m)					
Apt 4 - F	N	3	8	9.3	eave/verandah/pergola/balcony >=900 mm	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)	✓	✓	✓
Apt 4 - F	N	1.3	8	9.3	eave/verandah/pergola/balcony >=900 mm	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)	✓	✓	✓

Glazing requirements							Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
Window / door no.	Orientation	Area of glass inc. frame (m2)	Overshadowing		Shading device	Frame and glass type			
			Height (m)	Distance (m)					
Apt 4 - F	N	3	8	9.3	eave/verandah/ pergola/balcony >=900 mm	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
Apt 4 - LK	E	2.6	0	0	external louvre/blind (fixed)	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
Apt 4 - LK	S	13	0	0	none	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
Apt 4 - B3	S	9.3	0	0	none	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
Apt 4 - L	S	1.3	0	0	none	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
Apt 4 - B1	W	2.45	0	0	external louvre/blind (fixed)	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
Apt 4 - B1	W	1.48	0	0	external louvre/blind (fixed)	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
Apt 4 - B1	E	5.6	0	0	external louvre/blind (fixed)	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
Apt 4 - B2	E	4.2	0	0	external louvre/blind (fixed)	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
Apt 7 - B1	E	6.1	0	0	external louvre/blind (fixed)	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
Apt 7 - B2	E	4.6	0	0	external louvre/blind (fixed)	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
Apt 7 - L	N	11.6	4	9.3	eave/verandah/ pergola/balcony >=900 mm	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
Apt 7 - S	N	2.4	4	9.3	eave/verandah/ pergola/balcony >=750 mm	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			

Glazing requirements							Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
Window / door no.	Orientation	Area of glass inc. frame (m <sup>2</sup> )	Overshadowing		Shading device	Frame and glass type			
			Height (m)	Distance (m)					
Apt 7 - L	S	13.3	0	0	none	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
Apt 7 - B3	S	9.3	0	0	none	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
Apt 7 - L	S	1.3	0	0	none	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
Apt 4 - K	E	0.81	0	0	none	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
Apt 4 - K	E	1.2	5	6	projection/height above sill ratio $\geq 0.29$	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
Apt 4 - K	N	3	0	0	eave/verandah/pergola/balcony $\geq 750$ mm	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
Apt -7 B1	W	2.1	0	0	external louvre/blind (adjustable)	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
Apt -7 B1	W	4.5	0	0	external louvre/blind (fixed)	improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)			
Apt 7 - RL	N	3.5	5	13	eave/verandah/pergola/balcony $\geq 450$ mm	improved aluminium, single toned, (U-value: 6.39, SHGC: 0.56)			
Apt 7 - RL	N	3.5	5	13	eave/verandah/pergola/balcony $\geq 450$ mm	improved aluminium, single toned, (U-value: 6.39, SHGC: 0.56)			

## 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 & 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 for the development may be issued.

**BASIX Certificate Summary**

ASSESSOR DETAILS	
Name:	Padraig Healy
Direct Number:	0498 051 209
Office:	(02) 9281 8555
AAO:	ABSA
Assessor Number:	101026
Project Name:	E18061
Software:	BERS Pro v4.3.0.2d (3.13)
Date:	26/07/2019
BASIX Certificate Number:	981179M_02
Group Certificate Number:	0004058830
Sun Property Pty Ltd	Sun Property Pty Ltd
Client Phone:	-
Client Email:	-

NB – Refer to BASIX Alts & Adds Cert for commitments to Units 4 & 7.

NCC COMPLIANCE
<b>Building compliance is required to comply with the 'New South Wales Additions' in the NCC 2017- Volume 1.</b>
<ul style="list-style-type: none"> <li>• Building thermal construction in accordance with part J1.2</li> <li>• If metal, framed sarking of R0.2 is required between stud and cladding as a thermal break</li> <li>• Loss of ceiling insulation is compensated for by increased roof insulation in accordance with Part J1.3(c)</li> <li>• Any roof lights, windows, doors and exhaust fans are sealed in accordance with Part J3</li> <li>• Any new air-conditioning system is installed in accordance with Parts J5.2(a), J5.2(b), J5.2(c), J5.2(d), J5.2(f) &amp; J5.2(g)</li> <li>• Any new mechanical ventilation system is installed in accordance with Part J5.3.</li> <li>• Any new miscellaneous exhaust system is installed in accordance with Part J5.4.</li> <li>• Any new heated hot water system is installed in accordance with Part J7.2</li> <li>• Any new energy monitoring equipment is installed in accordance with Part J8.3.</li> </ul>



**BASIX TECHNICAL NOTES – Defaults if not determined**

- Medium coloured external walls
- Walls to common areas modelled as external with zero solar absorptance
- All ensuites are treated as conditioned
- Spaces without an openable window / door are included in the zone which they are accessed
- No mechanical heating or cooling appliances are modelled, including ceiling fans

**NatHERS TECHNICAL NOTES – Defaults if not determined**

- Models rated with no downlights
- Light coloured roof for temperate or cool climates
- Kitchens / wet areas tiled
- All other internal areas carpet
- Sealed vents to wet areas / laundry / kitchen
- Single story dwellings within 10m modelled as obstruction
- Double story dwellings within 20m modelled as obstruction
- Structures located at South are not modelled as obstruction

**BASIX Certificate Commitments:**

<b>Water</b>	<b>Pass - 41 %</b>
Rainwater Tank:	Nil
Landscape:	338m <sup>2</sup> common landscape
Water Taps:	6-star
Showerheads:	3-star (6-7.5 L/min)
Toilet Flusher:	4-star

<b>Thermal Comfort</b>	<b>Pass - 6.6 Star Overall Average</b>	
Glazing:	If Fixed/Sliding Glazing	If Awning/Bi-Fold
	Units: 1,2,3, 5, 6 & 8	Units: 1,2,3, 5, 6 & 8
	Thermal Specs: U-value 4.2 or lower & SHGC of 0.53 (+/- 5%)	Thermal Specs: U-value 4.2 or lower & SHGC of 0.53 (+/- 5%)
External Walls:	Type: AAC 75mm	Insulation: R2.50 reflective insulation
Inter-Tenancy:	Type: Double Stud	Insulation: Nil
Internal Walls:	Type: Stud	Insulation: Nil
Open Suspended Floors:	Type: Timber/Concrete	Insulation: R2.50 reflective insulation
Ceiling Cavity:	Type: Plasterboard	Insulation: R4.0 insulation
Exposed Roof:	Type:	Insulation: R1.30 reflective insulation

<b>Energy</b>	<b>Pass - 51%</b>	
Common Areas:	Lighting	LED's Daylight and motion sensors to car-parking
	Lifts	VVVF motor
	Ventilation	Nil to car-parking
Dwellings:	Hot Water	Individual 6-star gas instantaneous
	Heating/Cooling	4-star heating & 3.5-star cooling
	Lighting	LED's
	Ventilation	WC & Laundry interconnected to light and ducted to facade
	Appliances	Gas cooktop & electric oven
	Fridge Space	Well ventilated