

# BASIX<sup>®</sup>Certificate

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

## Alterations and Additions

Certificate number: A444663

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: Monday, 20, December 2021

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



Planning,  
Industry &  
Environment

## Description of project

Project address	
Project name	Altmann
Street address	65 Hillside Road Newport 2106
Local Government Area	Northern Beaches Council
Plan type and number	Deposited Plan 9224
Lot number	46
Section number	
Project type	
Dwelling type	Separate dwelling house
Type of alteration and addition	My renovation work is valued at \$50,000 or more, and includes a pool (and/or spa).

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

Name / Company Name: Rapid Plans

ABN (if applicable): 43150064592

Pool and Spa	Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
<b>Rainwater tank</b>			
The applicant must install a rainwater tank of at least 989 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 rainwater runoff from at least 159.59 square metres of roof area.		✓	✓
The applicant must connect the rainwater tank to a tap located within 10 metres of the edge of the pool.		✓	✓
<b>Outdoor swimming pool</b>			
The swimming pool must be outdoors.	✓	✓	✓
The swimming pool must not have a capacity greater than 37 kilolitres.	✓	✓	✓
The swimming pool must have a pool cover.		✓	✓
The applicant must install a pool pump timer for the swimming pool.		✓	✓
The applicant must install the following heating system for the swimming pool that is part of this development: solar (electric boosted).		✓	✓

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
Insulation requirements					
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 2m2, b) insulation specified is not required for parts of altered construction where insulation already exists.			✓	✓	✓
Construction	Additional insulation required (R-value)	Other specifications			
suspended floor with open subfloor: framed (R0.7).	R0.8 (down) (or R1.50 including construction)				
external wall: framed (weatherboard, fibro, metal clad)	R1.30 (or R1.70 including construction)				
raked ceiling, pitched/skillion roof: framed	ceiling: R1.74 (up), roof: foil backed blanket (75 mm)	medium (solar absorptance 0.475 - 0.70)			

Glazing requirements						Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
Windows and glazed doors								
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.						✓	✓	✓
The following requirements must also be satisfied in relation to each window and glazed door:							✓	✓
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.							✓	✓
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.						✓	✓	✓
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.						✓	✓	✓
Pergolas with polycarbonate roof or similar translucent material must have a shading coefficient of less than 0.35.							✓	✓
External louvres and blinds must fully shade the window or glazed door beside which they are situated when fully drawn or closed.							✓	✓
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.							✓	✓
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.						✓	✓	✓
Windows and glazed doors glazing requirements								
Window / door no.	Orientation	Area of glass inc. frame (m2)	Overshadowing		Shading device	Frame and glass type		
			Height (m)	Distance (m)				
W4	E	1	0	0	external louvre/blind (adjustable)	improved aluminium, clear/air gap/clear, (U-value: 4.12, SHGC: 0.66)		
W5	S	2.6	0	0	none	improved aluminium, clear/air gap/clear, (U-value: 4.12, SHGC: 0.66)		

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)					
W6	N	12.8	0	0	eave/verandah/pergola/balcony ≥450 mm	aluminium: thermally broken, double Lo-Tsol/air gap/clear , (U-value: 3.1, SHGC: 0.27)			
W7	E	2.9	0	0	eave/verandah/pergola/balcony ≥600 mm	improved aluminium, toned/air gap/clear, (U-value: 4.09, SHGC: 0.47)			
W8	S	3.4	0	0	none	improved aluminium, clear/air gap/clear, (U-value: 4.12, SHGC: 0.66)			
W9	W	1.2	1.07	10.1	eave/verandah/pergola/balcony ≥450 mm	aluminium: thermally broken, double Lo-Tsol/air gap/clear , (U-value: 3.1, SHGC: 0.27)			
W10	S	1.9	0	0	none	improved aluminium, clear/air gap/clear, (U-value: 4.12, SHGC: 0.66)			
W11	W	2.1	2.02	3.5	projection/height above sill ratio ≥0.23	improved aluminium, toned/air gap/clear, (U-value: 4.09, SHGC: 0.47)			
W12	N	12.8	0	0	eave/verandah/pergola/balcony ≥600 mm	aluminium: thermally broken, double Lo-Tsol/air gap/clear , (U-value: 3.1, SHGC: 0.27)			
W13	W	2.2	0	0	eave/verandah/pergola/balcony ≥600 mm	aluminium, double Lo-Tsol/air gap/clear, (U-value: 4.9, SHGC: 0.33)			
W14	W	2.2	0	0	eave/verandah/pergola/balcony ≥600 mm	aluminium, double Lo-Tsol/air gap/clear, (U-value: 4.9, SHGC: 0.33)			
W15	N	5.8	0	0	eave/verandah/pergola/balcony ≥900 mm	improved aluminium, clear/air gap/clear, (U-value: 4.12, SHGC: 0.66)			
W16	E	2.2	0	0	eave/verandah/pergola/balcony ≥600 mm	improved aluminium, toned/air gap/clear, (U-value: 4.09, SHGC: 0.47)			
W17	E	8.4	0	0	eave/verandah/pergola/balcony ≥600 mm	improved aluminium, toned/air gap/clear, (U-value: 4.09, SHGC: 0.47)			

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)					
W18	S	1.1	0	0	eave/verandah/pergola/balcony ≥600 mm	improved aluminium, clear/air gap/clear, (U-value: 4.12, SHGC: 0.66)			
W19	S	5.4	0	0	eave/verandah/pergola/balcony ≥600 mm	improved aluminium, clear/air gap/clear, (U-value: 4.12, SHGC: 0.66)			
W20	S	2.7	0	0	eave/verandah/pergola/balcony ≥600 mm	improved aluminium, clear/air gap/clear, (U-value: 4.12, SHGC: 0.66)			
W21	E	1.7	0	0	eave/verandah/pergola/balcony ≥450 mm	improved aluminium, toned/air gap/clear, (U-value: 4.09, SHGC: 0.47)			
W22	S	3.2	0	0	none	improved aluminium, toned/air gap/clear, (U-value: 4.09, SHGC: 0.47)			
W23	W	1.4	0	0	eave/verandah/pergola/balcony ≥900 mm	improved aluminium, clear/air gap/clear, (U-value: 4.12, SHGC: 0.66)			
W24	N	4	0	0	eave/verandah/pergola/balcony ≥450 mm	improved aluminium, toned/air gap/clear, (U-value: 4.09, SHGC: 0.47)			
D7	E	4.4	0	0	eave/verandah/pergola/balcony ≥900 mm	improved aluminium, clear/air gap/clear, (U-value: 4.12, SHGC: 0.66)			
D8	E	4.4	0	0	eave/verandah/pergola/balcony ≥900 mm	improved aluminium, clear/air gap/clear, (U-value: 4.12, SHGC: 0.66)			
D15	E	19.2	0	0	eave/verandah/pergola/balcony ≥900 mm	improved aluminium, clear/air gap/clear, (U-value: 4.12, SHGC: 0.66)			
D16	S	4.3	0	0	eave/verandah/pergola/balcony ≥900 mm	improved aluminium, clear/air gap/clear, (U-value: 4.12, SHGC: 0.66)			
Skylights									
The applicant must install the skylights in accordance with the specifications listed in the table below.							✓	✓	✓

Glazing requirements				Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
The following requirements must also be satisfied in relation to each skylight:						
Each skylight may either match the description, or, have a U-value and a Solar Heat Gain Coefficient (SHGC) no greater than that listed in the table below.						
<b>Skylights glazing requirements</b>						
Skylight number	Area of glazing inc. frame (m2)	Shading device	Frame and glass type			
S1	1.23	no shading	timber, low-E internal/argon fill/clear external, (or U-value: 2.5, SHGC: 0.456)			
S2	0.85	no shading	timber, low-E internal/argon fill/clear external, (or U-value: 2.5, SHGC: 0.456)			



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<sup>®</sup>Certificate

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

## Single Dwelling

Certificate number: 1270061S

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](http://www.basix.nsw.gov.au)




Secretary

Date of issue: Monday, 20 December 2021

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



Planning,  
Industry &  
Environment

Project summary		
Project name	Altmann-Granny Flat	
Street address	65 Hillside Road Newport 2106	
Local Government Area	Northern Beaches Council	
Plan type and plan number	deposited 9224	
Lot no.	46	
Section no.	-	
Project type	attached dwelling house - secondary dwelling	
No. of bedrooms	1	
Project score		
Water	 41	Target 40
Thermal Comfort	 Pass	Target Pass
Energy	 54	Target 50

Certificate Prepared by
Name / Company Name: Rapid Plans
ABN (if applicable): 43150064592

# Description of project

## Project address

Project name	Altmann-Granny Flat
Street address	65 Hillside Road Newport 2106
Local Government Area	Northern Beaches Council
Plan type and plan number	Deposited Plan 9224
Lot no.	46
Section no.	-

## Project type

Project type	attached dwelling house - secondary dwelling
No. of bedrooms	1

## Site details

Site area (m <sup>2</sup> )	482
Roof area (m <sup>2</sup> )	36
Conditioned floor area (m2)	48.8
Unconditioned floor area (m2)	0.0
Total area of garden and lawn (m2)	16
Roof area (m2) of the existing dwelling	160
No. of bedrooms in the existing dwelling	4

## Assessor details and thermal loads

Assessor number	10056
Certificate number	0006941629
Climate zone	56
Area adjusted cooling load (MJ/m <sup>2</sup> .year)	21
Area adjusted heating load (MJ/m <sup>2</sup> .year)	31
Ceiling fan in at least one bedroom	Yes
Ceiling fan in at least one living room or other conditioned area	Yes

## Project score

Water	✓ 41	Target 40
Thermal Comfort	✓ Pass	Target Pass
Energy	✓ 54	Target 50

## 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
<b>Landscape</b>			
The applicant must plant indigenous or low water use species of vegetation throughout 16 square metres of the site.	✓	✓	
<b>Fixtures</b>			
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 5 star in each toilet in the development.		✓	✓
The applicant must install taps with a minimum rating of 5 star in the kitchen in the development.		✓	
The applicant must install basin taps with a minimum rating of 5 star in each bathroom in the development.		✓	

Thermal Comfort Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
<b>Simulation Method</b>			
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 show on the plans accompanying the development application for the proposed development, the locations of ceiling fans set out in the Assessor Certificate. The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), the locations of ceiling fans set out in the Assessor Certificate.	✓	✓	✓
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 - new floor above another dwelling or building	All or part of floor area

Energy Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
<b>Hot water</b>			
The applicant must install the following hot water system in the development, or a system with a higher energy rating: electric instantaneous.	✓	✓	✓
<b>Cooling system</b>			
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.		✓	✓
<b>Heating system</b>			
The living areas must not incorporate any heating system, or any ducting which is designed to accommodate a heating system.		✓	✓
The bedrooms must not incorporate any heating system, or any ducting which is designed to accommodate a heating system.		✓	✓
<b>Ventilation</b>			
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: no mechanical ventilation (ie. natural); Operation control: n/a		✓	✓
Laundry: natural ventilation only, or no laundry; Operation control: n/a		✓	✓
<b>Artificial lighting</b>			
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: <ul style="list-style-type: none"> <li>at least 1 of the bedrooms / study; dedicated</li> <li>at least 1 of the living / dining rooms; dedicated</li> <li>the kitchen; dedicated</li> </ul>		✓ ✓ ✓	✓ ✓ ✓

Energy Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
<ul style="list-style-type: none"> <li>all bathrooms/toilets; dedicated</li> </ul>		✓	✓
<ul style="list-style-type: none"> <li>the laundry; dedicated</li> </ul>		✓	✓
<ul style="list-style-type: none"> <li>all hallways; dedicated</li> </ul>		✓	✓
<b>Natural lighting</b>			
The applicant must install a window and/or skylight in the kitchen of the dwelling for natural lighting.	✓	✓	✓
<b>Alternative energy</b>			
The applicant must install a photovoltaic system with the capacity to generate at least 1 peak kilowatts of electricity as part of the development. The applicant must connect this system to the development's electrical system.	✓	✓	✓
<b>Other</b>			
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  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.