

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

## Single Dwelling

Certificate number: 1137791S

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

Secretary

**BASIX** 

Date of issue: Monday, 21 September 2020

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



Project summary			
Project name	16 GRANDVIEW DRIVE		
Street address	16 GRANDVIEW Drive Newport 2106		
Local Government Area	Northern Beaches Council		
Plan type and plan number	deposited DP16029		
Lot no.	93		
Section no.	-		
Project type	separate dwelling house		
No. of bedrooms	2		
Project score			
Water	✓ 40 Target 40		
Thermal Comfort	✓ Pass Target Pass		
Energy	✓ 51 Target 50		

Certificate	Prepared	by

Name / Company Name: Michal Korecky

ABN (if applicable): 79393130294

Planning, Industry & Environment www.basix.nsw.gov.au Version: 3.0 / DARWINIA\_3\_12\_7 Certificate No.: 1137791S Monday, 21 September 2020 page 1/9

## **Description of project**

BASIX

Project address			
Project name	16 GRANDVIEW DRIVE		
Street address	16 GRANDVIEW Drive Newport 2106		
Local Government Area	Northern Beaches Council		
Plan type and plan number	Deposited Plan DP16029		
Lot no.	93		
Section no.	-		
Project type			
Project type	separate dwelling house		
No. of bedrooms	2		
Site details			
Site area (m²)	557		
Roof area (m²)	82		
Conditioned floor area (m2)	60.0		
Unconditioned floor area (m2)	0.0		
Total area of garden and lawn (m2)	172		

Assessor details and thermal loads							
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						
Project score							
Water	<b>✓</b> 40	Target 40					
Thermal Comfort	✓ Pass	Target Pass					
Energy	<b>✓</b> 51	Target 50					

Planning, Industry & Environment www.basix.nsw.gov.au Version: 3.0 / DARWINIA\_3\_12\_7 Certificate No.: 1137791S Monday, 21 September 2020 page 2/9

## **Schedule of BASIX commitments**

BASIX

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 4 star (> 4.5 but <= 6 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 6 star in each toilet in the development.		V	V
The applicant must install taps with a minimum rating of 6 star in the kitchen in the development.		~	
The applicant must install basin taps with a minimum rating of 6 star in each bathroom in the development.		V	
Alternative water			
Rainwater tank			
The applicant must install a rainwater tank of at least 2400 litres on the site. This rainwater tank must meet, and be installed in accordance with, the requirements of all applicable regulatory authorities.	V	~	~
The applicant must configure the rainwater tank to collect rain runoff from at least 82 square metres of the roof area of the development (excluding the area of the roof which drains to any stormwater tank or private dam).		V	V
The applicant must connect the rainwater tank to:			
all toilets in the development		~	V
<ul> <li>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.)</li> </ul>		<b>~</b>	V

Planning, Industry & Environment www.basix.nsw.gov.au Version: 3.0 / DARWINIA\_3\_12\_7 Certificate No.: 1137791S Monday, 21 September 2020 page 3/9

Thermal Comfort Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
General features			
The dwelling must not have more than 2 storeys.	V	<b>~</b>	-
The conditioned floor area of the dwelling must not exceed 300 square metres.	V	<b>~</b>	V
The dwelling must not contain open mezzanine area exceeding 25 square metres.	V	<b>~</b>	V
The dwelling must not contain third level habitable attic room.	V	<b>V</b>	V
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.	V	V	V

Construction	Additional insulation required (R-Value)	Other specifications
floor - suspended floor above open subfloor, framed	0.8 (or 1.5 including construction) (down)	
external wall - framed (weatherboard, fibre cement, metal clad)	2.00 (or 2.40 including construction)	
ceiling and roof - flat ceiling / flat roof, framed	ceiling: 4 (up), roof: foil/sarking	framed; medium (solar absorptance 0.475-0.70)

Note	Insulation specified in this Certificate must be installed in accordance with Part 3.12.1.1 of the Building Code of Australia.
Note	In some climate zones, insulation should be installed with due consideration of condensation and associated interaction with adjoining building materials.

Planning, Industry & Environment www.basix.nsw.gov.au Version: 3.0 / DARWINIA\_3\_12\_7 Certificate No.: 1137791S Monday, 21 September 2020 page 4/9

BASIX

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.	V	<b>→</b>	~
The dwelling may have 1 skylight (<0.7 square metres) which is not listed in the table.	V	<b>~</b>	V
The following requirements must also be satisfied in relation to each window and glazed door:	~	<b>y</b>	V
• For the following glass and frame types, the certifier check can be performed by visual inspection.			
- Aluminium single clear			_
- Aluminium double (air) clear			
- Timber/uPVC/fibreglass single clear			
- Timber/uPVC/fibreglass double (air) clear			
• For other glass or frame types, each window and glazed door must be accompanied with certification showing a U value no greater than that listed and a Solar Heat Gain Coefficient (SHGC) within the range of those listed. Total system U values and SHGC must be calculated in accordance with National Fenestration Rating Council (NFRC) conditions. Frame and glass types shown in the table below are for reference only.			~
• Pergolas with polycarbonate roof or similar translucent material must have a shading coefficient of less than 0.35.		<b>✓</b>	V
<ul> <li>Vertical external louvres and blinds must fully shade the window or glazed door beside which they are situated when fully drawn or closed.</li> </ul>		<b>→</b>	V
<ul> <li>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 exceed the height of the battens.</li> </ul>		~	~
<ul> <li>Overshadowing buildings/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.</li> </ul>	•	<b>✓</b>	V

Window/glazed door no.	Maximum height (mm)	Maximum width (mm)	Туре	Shading Device (Dimension within 10%)	Overshadowing
North-East facing					
W4	1500	730	aluminium, single, clear	external louvre/vertical blind (fixed)	not overshadowed

BASIX Planning, Industry & Environment www.basix.nsw.gov.au Version: 3.0 / DARWINIA\_3\_12\_7 Certificate No.: 1137791S Monday, 21 September 2020 page 5/9

Window/glazed door no.	Maximum height (mm)	Maximum width (mm)	Туре	Shading Device (Dimension within 10%)	Overshadowing
W5	600	1570	aluminium, single, clear	external louvre/vertical blind (fixed)	not overshadowed
W6	900	730	aluminium, single, clear	external louvre/vertical blind (fixed)	not overshadowed
South-East facing					
W7	500	1450	aluminium, single, clear	external louvre/vertical blind (fixed)	not overshadowed
South-West facing					
W1	900	730	aluminium, single, clear	external louvre/vertical blind (fixed)	>4 m high, 8-12 m away
W2	600	1570	aluminium, single, clear	external louvre/vertical blind (fixed)	>4 m high, 8-12 m away
W3	1500	730	aluminium, single, clear	external louvre/vertical blind (fixed)	>4 m high, 8-12 m away
North-West facing					
D1	2100	1810	U-value: 5.6, SHGC: 0.369 - 0.451 (aluminium, single, Lo-Tsol Low-e)	pergola (fixed battens) 400 mm, 200 mm above head of window or glazed door	not overshadowed
D2	2100	2410	U-value: 5.6, SHGC: 0.369 - 0.451 (aluminium, single, Lo-Tsol Low-e)	pergola (fixed battens) 400 mm, 200 mm above head of window or glazed door	not overshadowed
D3	2100	1810	U-value: 5.6, SHGC: 0.369 - 0.451 (aluminium, single, Lo-Tsol Low-e)	pergola (fixed battens) 400 mm, 200 mm above head of window or glazed door	not overshadowed

Planning, Industry & Environment www.basix.nsw.gov.au Version: 3.0 / DARWINIA\_3\_12\_7 Certificate No.: 1137791S Monday, 21 September 2020 page 6/9

BASIX

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: electric storage.	~	<b>V</b>	-
Cooling system			
The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 living area: 1-phase airconditioning; Energy rating: 6 star (average zone)		~	~
The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 bedroom: ceiling fans + 1-phase airconditioning; Energy rating: 6 star (average zone)		<b>~</b>	V
The cooling system must provide for day/night zoning between living areas and bedrooms.		<b>~</b>	-
Heating system			
The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 living area: 1-phase airconditioning; Energy rating: 6 star (average zone)		~	~
The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 bedroom: 1-phase airconditioning; Energy rating: 6 star (average zone)		<b>~</b>	~
The heating system must provide for day/night zoning between living areas and bedrooms.		<b>~</b>	•
Ventilation			
The applicant must install the following exhaust systems in the development:			
At least 1 Bathroom: individual fan, ducted to façade or roof; Operation control: interlocked to light		<b>✓</b>	•
Kitchen: individual fan, ducted to façade or roof; Operation control: manual switch on/off		<b>✓</b>	-
Laundry: natural ventilation only, or no laundry; Operation control: n/a		V	~
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 2 of the bedrooms / study; dedicated		<b>V</b>	-

BASIX Planning, Industry & Environment www.basix.nsw.gov.au Version: 3.0 / DARWINIA\_3\_12\_7 Certificate No.: 1137791S Monday, 21 September 2020 page 7/9

Energy Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
at least 1 of the living / dining rooms; dedicated		<b>~</b>	V
the kitchen; dedicated		<b>~</b>	V
all bathrooms/toilets; dedicated		<b>~</b>	V
the laundry; dedicated		<b>~</b>	V
all hallways; dedicated		<b>~</b>	V
Natural lighting			
The applicant must install a window and/or skylight in 2 bathroom(s)/toilet(s) in the development for natural lighting.	-	•	~
Alternative energy			
The applicant must install a photovoltaic system with the capacity to generate at least 1.1 peak kilowatts of electricity as part of the development. The applicant must connect this system to the development's electrical system.	~	~	~
Other			
The applicant must construct each refrigerator space in the development so that it is "well ventilated", as defined in the BASIX definitions.		<b>→</b>	
The applicant must install a fixed outdoor clothes drying line as part of the development.		U U	

BASIX Planning, Industry & Environment www.basix.nsw.gov.au Version: 3.0 / DARWINIA\_3\_12\_7 Certificate No.: 1137791S Monday, 21 September 2020 page 8/9

## Legend

BASIX

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.

Planning, Industry & Environment www.basix.nsw.gov.au Version: 3.0 / DARWINIA\_3\_12\_7 Certificate No.: 1137791S Monday, 21 September 2020 page 9/9