

BASIX[®]Certificate

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

Single Dwelling

Certificate number: 1329256S_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 10/09/2020 published by the Department. This document is available at www.basix.nsw.gov.au

Secretary

Date of issue: Wednesday, 10 August 2022

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



Planning,
Industry &
Environment

Project summary

| | |
|---------------------------|-------------------------------------|
| Project name | 17 Illawong Crescent duplex_02 |
| Street address | 17 illawong Crescent greenacre 2190 |
| Local Government Area | Canterbury-Bankstown Council |
| Plan type and plan number | deposited 31054 |
| Lot no. | 6 |
| Section no. | - |
| Project type | separate dwelling house |
| No. of bedrooms | 4 |

Project score

| | | |
|-----------------|--------|-------------|
| Water | ✓ 43 | Target 40 |
| Thermal Comfort | ✓ Pass | Target Pass |
| Energy | ✓ 55 | Target 50 |

Certificate Prepared by

Name / Company Name: msconsult

ABN (if applicable): 31963963857

Description of project

Project address

| | |
|---------------------------|-------------------------------------|
| Project name | 17 Illawong Crescent duplex_02 |
| Street address | 17 illawong Crescent greenacre 2190 |
| Local Government Area | Canterbury-Bankstown Council |
| Plan type and plan number | Deposited Plan 31054 |
| Lot no. | 6 |
| Section no. | - |

Project type

| | |
|-----------------|-------------------------|
| Project type | separate dwelling house |
| No. of bedrooms | 4 |

Site details

| | |
|------------------------------------|-------|
| Site area (m ²) | 309 |
| Roof area (m ²) | 165 |
| Conditioned floor area (m2) | 140.0 |
| Unconditioned floor area (m2) | 14.0 |
| Total area of garden and lawn (m2) | 77 |

Assessor details and thermal loads

| | |
|---|-----|
| Assessor number | n/a |
| Certificate number | n/a |
| Climate zone | n/a |
| Area adjusted cooling load (MJ/m ² .year) | n/a |
| Area adjusted heating load (MJ/m ² .year) | n/a |
| Ceiling fan in at least one bedroom | n/a |
| Ceiling fan in at least one living room or other conditioned area | n/a |

Project score

| | | |
|-----------------|--------|-------------|
| Water | ✓ 43 | Target 40 |
| Thermal Comfort | ✓ Pass | Target Pass |
| Energy | ✓ 55 | 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 |
|---|------------------|------------------------------|-----------------|
| 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 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. | | ✓ | |
| Alternative water | | | |
| Rainwater tank | | | |
| The applicant must install a rainwater tank of at least 1000 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 155 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: <ul style="list-style-type: none"> 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.) | | ✓ ✓ ✓ | ✓ ✓ ✓ |
| Swimming pool | | | |
| The swimming pool must not have a volume greater than 30 kilolitres. | ✓ | ✓ | |
| The swimming pool must have a pool cover. | | ✓ | |

| Water Commitments | Show on DA plans | Show on CC/CDC plans & specs | Certifier check |
|-------------------------------------|------------------|------------------------------|-----------------|
| The swimming pool must be shaded. | ✓ | ✓ | |
| The swimming pool must be outdoors. | ✓ | ✓ | |

| 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. | ✓ | ✓ | ✓ |
| The conditioned floor area of the dwelling must not exceed 300 square metres. | ✓ | ✓ | ✓ |
| The dwelling must not contain open mezzanine area exceeding 25 square metres. | ✓ | ✓ | ✓ |
| The dwelling must not contain third level habitable attic room. | ✓ | ✓ | ✓ |
| 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 | |
| floor - suspended floor above garage, concrete | nil | |
| external wall - cavity brick | 0.50 (or 1.17 including construction) | |
| internal wall shared with garage - single skin masonry | nil | |
| ceiling and roof - flat ceiling / flat roof, framed | ceiling: 3.5 (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. |

| 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. | ✓ | ✓ | ✓ |
| The dwelling may have 1 skylight (<0.7 square metres) which is not listed in the table. | ✓ | ✓ | ✓ |
| <p>The following requirements must also be satisfied in relation to each window and glazed door:</p> <ul style="list-style-type: none"> For the following glass and frame types, the certifier check can be performed by visual inspection. <ul style="list-style-type: none"> - Aluminium single clear - Aluminium double (air) clear - Timber/uPVC/fibreglass single clear - Timber/uPVC/fibreglass double (air) clear | ✓ | ✓ | ✓ ✓ |

| Window/glazed door no. | Maximum height (mm) | Maximum width (mm) | Type | Shading Device (Dimension within 10%) | Overshadowing |
|------------------------|---------------------|--------------------|--------------------------|--|------------------|
| North facing | | | | | |
| W01 | 800 | 2000 | aluminium, single, clear | solid overhang 2000 mm, 350 mm above head of window or glazed door | not overshadowed |
| W04 | 1200 | 800 | aluminium, single, clear | solid overhang 2000 mm, 350 mm above head of window or glazed door | not overshadowed |
| W06 | 1200 | 800 | aluminium, single, clear | solid overhang 2000 mm, 350 mm above head of window or glazed door | not overshadowed |
| W03 | 800 | 2000 | aluminium, single, clear | solid overhang 2000 mm, 350 mm above head of window or glazed door | not overshadowed |
| East facing | | | | | |
| W19 | 2200 | 1200 | aluminium, single, clear | none | not overshadowed |

| Window/glazed door no. | Maximum height (mm) | Maximum width (mm) | Type | Shading Device (Dimension within 10%) | Overshadowing |
|------------------------|---------------------|--------------------|--------------------------------|--|------------------|
| W20 | 2200 | 1200 | aluminium, single, clear | none | not overshadowed |
| W14 | 600 | 2500 | aluminium, single, clear | none | not overshadowed |
| W15 | 600 | 2500 | aluminium, single, clear | none | not overshadowed |
| South facing | | | | | |
| W18 | 1200 | 2200 | aluminium, single, clear | solid overhang 2000 mm, 350 mm above head of window or glazed door | not overshadowed |
| W17 | 1200 | 1500 | aluminium, single, clear | solid overhang 2000 mm, 350 mm above head of window or glazed door | not overshadowed |
| W19 | 1200 | 1500 | aluminium, single, clear | solid overhang 2000 mm, 350 mm above head of window or glazed door | not overshadowed |
| W16 | 1200 | 800 | aluminium, single, clear | solid overhang 2000 mm, 350 mm above head of window or glazed door | not overshadowed |
| W20 | 1200 | 600 | aluminium, single, clear | solid overhang 2000 mm, 350 mm above head of window or glazed door | not overshadowed |
| West facing | | | | | |
| W27 | 2000 | 600 | aluminium, double (air), clear | none | not overshadowed |
| W24 | 600 | 3000 | aluminium, double (air), clear | none | not overshadowed |
| W28 | 600 | 2500 | aluminium, double (air), clear | none | not overshadowed |
| W21 | 600 | 2500 | aluminium, double (air), clear | none | not overshadowed |
| W23 | 600 | 3000 | aluminium, double (air), clear | none | not overshadowed |
| W22 | 600 | 2500 | aluminium, double (air), clear | none | not overshadowed |

| 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 with a performance of 6 stars. | ✓ | ✓ | ✓ |
| Cooling system | | | |
| The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 living area: airconditioning ducting only; Energy rating: n/a | | ✓ | ✓ |
| The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 bedroom: airconditioning ducting only; Energy rating: n/a | | ✓ | ✓ |
| Heating system | | | |
| The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 living area: gas fixed flued heater; Energy rating: 5 Star | | ✓ | ✓ |
| The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 bedroom: gas fixed flued heater; Energy rating: 5 Star | | ✓ | ✓ |
| 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: manual switch on/off | | ✓ | ✓ |
| Kitchen: individual fan, ducted to façade or roof; Operation control: manual switch on/off | | ✓ | ✓ |
| Laundry: individual fan, ducted to façade or roof; Operation control: manual switch on/off | | ✓ | ✓ |
| 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 5 of the bedrooms / study; | | ✓ | ✓ |
| • at least 3 of the living / dining rooms; | | ✓ | ✓ |
| • the kitchen; | | ✓ | ✓ |

| Energy Commitments | Show on DA plans | Show on CC/CDC plans & specs | Certifier check |
|--|------------------|------------------------------|-----------------|
| <ul style="list-style-type: none"> all bathrooms/toilets; | | ✓ | ✓ |
| Natural lighting | | | |
| The applicant must install a window and/or skylight in the kitchen of the dwelling for natural lighting. | ✓ | ✓ | ✓ |
| The applicant must install a window and/or skylight in 3 bathroom(s)/toilet(s) in the development for natural lighting. | ✓ | ✓ | ✓ |
| Swimming pool | | | |
| The applicant must install the following heating system for the swimming pool in the development (or alternatively must not install any heating system for the swimming pool): solar only | | ✓ | |
| The applicant must install a timer for the swimming pool pump in the development. | | ✓ | |
| Alternative energy | | | |
| The applicant must install a photovoltaic system with the capacity to generate at least 0.5 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 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. | | ✓ | |
| The applicant must install a fixed indoor or sheltered 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.