# BASIX® Certificate

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

## Alterations and Additions

Certificate number: A437642

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

Secretary
Date of issue: Monday, 24, October 2022
To be valid, this certificate must be lodged within 3 months of the date of issue.

NSW | Planning, Industry & Environment

Description of project

| Project address | |
|---|---|
| Project name | QUIRK RESIDENCE |
| Street address | 29 WANDEEN Road CLAREVILLE 2107 |
| Local Government Area | Northern Beaches Council |
| Plan type and number | Deposited Plan 13760 |
| Lot number | 89 |
| 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: Vanessa Miles |
| ABN (if applicable): N/A |



| Pool and Spa | Show on DA Plans | Show on CC/CDC Plans & specs | Certifier Check |
|---|---|---|---|
| **Rainwater tank** | | | |
| The applicant must install a rainwater tank of at least 2996 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 120 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. | | ✓ | ✓ |
| **Outdoor swimming pool** | | | |
| The swimming pool must be outdoors. | ✓ | ✓ | ✓ |
| The swimming pool must not have a capacity greater than 70 kilolitres. | ✓ | ✓ | ✓ |
| The applicant must install a pool pump timer for the swimming pool. | | ✓ | ✓ |
| The applicant must not incorporate any heating system for the swimming pool that is part of this development. | | ✓ | ✓ |



| Fixtures and systems | Show on DA Plans | Show on CC/CDC Plans & specs | Certifier Check |
|---|---|---|---|
| **Lighting** | | | |
| 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. | | ✓ | ✓ |
| **Fixtures** | | | |
| 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 |
|---|---|---|
| concrete slab on ground floor. | nil | |
| floor above existing dwelling or building. | nil | |
| external wall: concrete block/plasterboard | R1.18 (or R1.70 including construction) | |
| external wall: framed (weatherboard, fibro, metal clad) | R1.30 (or R1.70 including construction) | |
| external wall: brick veneer | R1.16 (or R1.70 including construction) | |
| raked ceiling, pitched/skillion roof: framed | ceiling: R1.74 (up), roof: foil backed blanket (55 mm) | dark (solar absorptance > 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 standard aluminium or timber frames and single clear or toned glass 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. Total system U-values and SHGCs must be calculated in accordance with National Fenestration Rating Council (NFRC) conditions. | | ✓ | ✓ |
| 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. | | ✓ | ✓ |
| 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) | | |
| D101 | E | 1.9 | 0 | 0 | eave/verandah/pergola/balcony >=900 mm | standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75) |

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| Rev | Description | By | Date |
|---|---|---|---|
| 1 | Client Revision | | 9/11/2021 |
| 2 | Client Revision | | 23/11/2021 |
| 3 | Client Revision | | 22/3/2022 |

**Clareville House**
DEVELOPMENT APPLICATION
29 Wandeen Road, Clareville
Lot 89 // DP 13760
for
Trish Quirk

# BASIX Commitments

| Date | 9/11/2021 | A01 |
|---|---|---|
| Project no. | 2013 | |
| Drawn by: | VM | Scale |

| 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 Height (m) | Overshadowing Distance (m) | Shading device | Frame and glass type | | | |
| D102 | W | 7 | 0 | 0 | eave/verandah/pergola/balcony >=900 mm | standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75) | | | |
| D103 | S | 12.18 | 0 | 0 | none | standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75) | | | |
| Wg01 | W | 0.4 | 0 | 0 | none | standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75) | | | |
| W101 | N | 3.381 | 0 | 0 | eave/verandah/pergola/balcony >=900 mm | standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75) | | | |
| W102 | W | 7.66 | 0 | 0 | eave/verandah/pergola/balcony >=600 mm | improved aluminium, single pyrolytic low-e, (U-value: 4.48, SHGC: 0.46) | | | |
| W103 | W | 1.6 | 0 | 0 | eave/verandah/pergola/balcony >=900 mm | standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75) | | | |
| W104 | E | 2.89 | 1.5 | 0.8 | none | standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75) | | | |
| W201 | N | 1.71 | 1.09 | 1.57 | projection/height above sill ratio >=0.29 | improved aluminium, single pyrolytic low-e, (U-value: 4.48, SHGC: 0.46) | | | |
| W202 | N | 1.71 | 1.09 | 1.57 | projection/height above sill ratio >=0.23 | improved aluminium, single pyrolytic low-e, (U-value: 4.48, SHGC: 0.46) | | | |
| W203 | N | 2.41 | 1.85 | 1.59 | eave/verandah/pergola/balcony >=450 mm | improved aluminium, single pyrolytic low-e, (U-value: 4.48, SHGC: 0.46) | | | |
| W204 | N | 2.038 | 1.09 | 1.87 | eave/verandah/pergola/balcony >=450 mm | standard aluminium, single pyrolytic low-e, (U-value: 5.7, SHGC: 0.47) | | | |
| W205 | N | 2.038 | 1.09 | 1.87 | eave/verandah/pergola/balcony >=450 mm | standard aluminium, single pyrolytic low-e, (U-value: 5.7, SHGC: 0.47) | | | |
| W206 | W | 2.038 | 1.09 | 1.87 | eave/verandah/pergola/balcony >=600 mm | standard aluminium, single pyrolytic low-e, (U-value: 5.7, 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 Height (m) | Overshadowing Distance (m) | Shading device | Frame and glass type | | | |
| W207 | W | 2.038 | 1.09 | 1.87 | eave/verandah/pergola/balcony >=600 mm | standard aluminium, single pyrolytic low-e, (U-value: 5.7, SHGC: 0.47) | | | |
| W208 | W | 2.038 | 1.09 | 1.87 | eave/verandah/pergola/balcony >=600 mm | standard aluminium, single pyrolytic low-e, (U-value: 5.7, SHGC: 0.47) | | | |
| W209 | W | 2.038 | 1.09 | 1.87 | eave/verandah/pergola/balcony >=600 mm | standard aluminium, single pyrolytic low-e, (U-value: 5.7, SHGC: 0.47) | | | |
| W210 | S | 2.038 | 1.09 | 1.87 | eave/verandah/pergola/balcony >=450 mm | standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75) | | | |
| W211 | S | 2.038 | 1.09 | 1.87 | eave/verandah/pergola/balcony >=450 mm | standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75) | | | |
| W212 | W | 1.696 | 1.45 | 1.17 | eave/verandah/pergola/balcony >=600 mm | standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75) | | | |
| W213 | W | 2.431 | 1.09 | 2.23 | eave/verandah/pergola/balcony >=600 mm | standard aluminium, single pyrolytic low-e, (U-value: 5.7, SHGC: 0.47) | | | |
| W214 | W | 2.431 | 1.09 | 2.23 | eave/verandah/pergola/balcony >=600 mm | standard aluminium, single pyrolytic low-e, (U-value: 5.7, SHGC: 0.47) | | | |
| W215 | W | 2.431 | 1.09 | 2.23 | eave/verandah/pergola/balcony >=600 mm | standard aluminium, single pyrolytic low-e, (U-value: 5.7, SHGC: 0.47) | | | |
| W216 | S | 1.777 | 1.09 | 1.63 | eave/verandah/pergola/balcony >=450 mm | standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75) | | | |
| W217 | S | 1.777 | 1.09 | 1.63 | projection/height above sill ratio >=0.23 | standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75) | | | |
| W218 | S | 2.44 | 1.774 | 1.75 | eave/verandah/pergola/balcony >=450 mm | standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75) | | | |
| W219 | E | 0.838 | 0.66 | 1.27 | eave/verandah/pergola/balcony >=600 mm | standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75) | | | |



| Glazing requirements | Show on DA Plans | Show on CC/CDC Plans & specs | Certifier Check |
|---|---|---|---|
| **Skylights** | | | |
| The applicant must install the skylights in accordance with the specifications listed in the table below. | ✓ | ✓ | ✓ |
| 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. | | ✓ | ✓ |

**Skylights glazing requirements**

| Skylight number | Area of glazing inc. frame (m2) | Shading device | Frame and glass type |
|---|---|---|---|
| SR01 | 1.092 | no shading | timber, low-E internal/argon fill/clear external, (or U-value: 2.5, SHGC: 0.456) |
| SR02 | 0.608 | no shading | timber, low-E internal/argon fill/clear external, (or U-value: 2.5, SHGC: 0.456) |
| SR03 | 0.385 | 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. |

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DEVELOPMENT APPLICATION
29 Wandeen Road, Clareville
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for
Trish Quirk

# BASIX Commitments

| | | |
|---|---|---|
| Date | 9/11/2021 | A01a |
| | | |
| Project no. | 2013 | |
| Drawn by: | VM | Scale |