

BASIX[®]Certificate

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

Alterations and Additions

Certificate number: A253440

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 18/09/2014 published by Planning & Infrastructure. This document is available at www.basix.nsw.gov.au

Director-General

Date of issue: Tuesday, 28, June 2016

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



Planning &
Infrastructure

Description of project

| Project address | |
|---------------------------------|---|
| Project name | Garden House Additions |
| Street address | 38 Elaine Avenue Avalon Beach 2107 |
| Local Government Area | Pittwater Council |
| Plan type and number | Deposited Plan 21687 |
| Lot number | 5 |
| Section number | 0 |
| 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: Don Edgar Pty. Ltd.

ABN (if applicable): 002098580

| 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 776 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 100 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 15 kilolitres. | ✓ | ✓ | ✓ |
| The swimming pool must have a pool cover. | | ✓ | ✓ |
| 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 | | | |
| 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) | | | | |
| flat ceiling, pitched roof | ceiling: R1.95 (up), roof: foil backed blanket (55 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 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. | | | | | | | | ✓ | ✓ |
| 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. | | | | | | | ✓ | ✓ | ✓ |
| 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. | | | | | | | | ✓ | ✓ |
| Windows and glazed doors glazing requirements | | | | | | | | | |
| Window / door no. | Orientation | Area of glass inc. frame (m ²) | Overshadowing | | Shading device | Frame and glass type | | | |
| | | | Height (m) | Distance (m) | | | | | |
| W1 | W | 7.5 | 0 | 0 | eave/verandah/pergola/balcony >=900 mm | timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66) | | | |
| W2 | N | 5 | 0 | 0 | eave/verandah/pergola/balcony >=750 mm | timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66) | | | |
| W3 | N | 3.4 | 0 | 0 | eave/verandah/pergola/balcony >=750 mm | timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66) | | | |
| W4 | N | 5.4 | 0 | 0 | eave/verandah/pergola/balcony >=600 mm | timber or uPVC, single toned, (or U-value: 5.67, SHGC: 0.49) | | | |
| W5 | N | 3.4 | 0 | 0 | eave/verandah/pergola/balcony >=750 mm | timber or uPVC, single clear, (or U-value: 5.71, 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 | W | 3.8 | 0 | 0 | eave/verandah/ pergola/balcony >=900 mm | timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66) | | | |
| W7 | S | 2 | 0 | 0 | eave/verandah/ pergola/balcony >=600 mm | timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66) | | | |
| W8 | S | 2 | 0 | 0 | eave/verandah/ pergola/balcony >=600 mm | timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66) | | | |
| W9 | S | 2.5 | 0 | 0 | eave/verandah/ pergola/balcony >=600 mm | timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66) | | | |
| W10 | E | 0.8 | 0 | 0 | eave/verandah/ pergola/balcony >=900 mm | timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66) | | | |
| W11 | S | 0.9 | 0 | 0 | eave/verandah/ pergola/balcony >=900 mm | timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66) | | | |
| W12 | S | 1.1 | 0 | 0 | eave/verandah/ pergola/balcony >=900 mm | timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66) | | | |
| W13 | N | 2.4 | 0 | 0 | eave/verandah/ pergola/balcony >=600 mm | timber or uPVC, single toned, (or U-value: 5.67, SHGC: 0.49) | | | |
| W14 | N | 2.4 | 0 | 0 | eave/verandah/ pergola/balcony >=600 mm | timber or uPVC, single toned, (or U-value: 5.67, SHGC: 0.49) | | | |
| W15 | N | 1.4 | 0 | 0 | eave/verandah/ pergola/balcony >=600 mm | timber or uPVC, single toned, (or U-value: 5.67, SHGC: 0.49) | | | |

| 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. |