BASIX Certificate

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

Alterations and Additions

Certificate number: A331967

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: Wednesday, 03, July 2019

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



Project address Kennett Residence Project name Street address 13 Bruce Street Mona Vale 2103 Local Government Area Northern Beaches Council Deposited Plan 15762 Plan type and number Lot number 10 Section number Project type Separate dwelling house Dwelling type Type of alteration and My renovation work is valued at \$50,000 or more, addition and does not include a pool (and/or spa).

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

Name / Company Name: Richard Cole Architecture

ABN (if applicable): 58 093 598 415

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BASIX Certificate number: A331967 page 2 / 8

| 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. | | ✓ | |

BASIX Certificate number: A331967 page 3 / 8

| Construction | | | Show on DA Plans | Show on CC/CDC Plans & specs | Certifier Check |
|---|--|---|---------------------|---------------------------------------|--------------------|
| Insulation requirements | | | | | |
| | d construction (floor(s), walls, and ceilings/roofs) ation is not required where the area of new construments where insulation already exists. | | V | V | ✓ |
| Construction | Additional insulation required (R-value) | Other specifications | | | |
| concrete slab on ground floor. | nil | | | | |
| suspended floor with open subfloor: framed (R0.7). | R0.8 (down) (or R1.50 including construction) | | | | |
| floor above existing dwelling or building. | nil | | | | |
| 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) | | | |

BASIX Certificate number: A331967 page 4 / 8

| Glazing requirements | Show on DA Plans | Show on CC/CDC Plans & | Certifier Check |
|--|---------------------|------------------------------|--------------------|
| | | specs | |
| Windows and glazed doors | T. | | |
| 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 Shading device Shading device Frame and glass type | | | |
| WF01 N 1.44 0 0 eave/verandah/pergola/balcony timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66) | | | |

BASIX Certificate number: A331967 page 5 / 8

| Glazing requirements | | | | | | | Show on DA Plans | Show on CC/CDC Plans & specs | Certifier Check |
|----------------------|-------------|-------------------------------|--------------------------|-----------------|---|--|---------------------|---------------------------------------|--------------------|
| Window / doo no. | Orientation | Area of glass inc. frame (m2) | Oversha Height (m) | Distance (m) | Shading device | Frame and glass type | | | |
| WF02 | E | 14.6 | 1.25 | 2.4 | awning (adjustable) >=900 mm | timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66) | | | |
| WF03 | S | 1.44 | 0 | 0 | eave/verandah/pergola/balcony >=750 mm | timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66) | | | |
| WF04 | W | 7 | 0 | 0 | eave/verandah/pergola/balcony >=900 mm | timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66) | | | |
| WF05 | W | 3.85 | 0 | 0 | eave/verandah/pergola/balcony >=900 mm | timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66) | | | |
| WG01 | Е | 0.8 | 0 | 0 | eave/verandah/pergola/balcony >=900 mm | timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66) | | | |
| WG02 | N | 2.08 | 2.3 | 4.46 | eave/verandah/pergola/balcony >=600 mm | timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66) | | | |
| WG03 | Е | 7.06 | 0 | 0 | eave/verandah/pergola/balcony >=600 mm | timber or uPVC, single pyrolytic low-e, (U-value: 3.99, SHGC: 0.4) | | | |
| WG04 | Е | 7.13 | 0 | 0 | eave/verandah/pergola/balcony >=600 mm | timber or uPVC, single pyrolytic low-e, (U-value: 3.99, SHGC: 0.4) | | | |
| WG05 | Е | 0.23 | 0 | 0 | eave/verandah/pergola/balcony >=900 mm | timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66) | | | |
| WG06 | W | 0.23 | 0 | 0 | eave/verandah/pergola/balcony >=900 mm | timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66) | | | |
| WG07 | S | 0.84 | 2.7 | 3.5 | eave/verandah/pergola/balcony >=600 mm | timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66) | | | |
| WG08 | E | 0.22 | 0 | 0 | eave/verandah/pergola/balcony >=900 mm | timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66) | | | |
| WG09 | W | 0.22 | 0 | 0 | eave/verandah/pergola/balcony >=900 mm | timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66) | | | |

BASIX Certificate number: A331967 page 6 / 8

| Glazing requirements | | | | | | | Show on DA Plans | Show on CC/CDC Plans & specs | Certifier Check |
|----------------------|-------------|-------------------------------|--------------------------|-----------------|---|--|---------------------|---------------------------------------|--------------------|
| Window / door no. | Orientation | Area of glass inc. frame (m2) | Oversha Height (m) | Distance (m) | Shading device | Frame and glass type | | | |
| WG10 | W | 1.4 | 3.63 | 8.6 | eave/verandah/pergola/balcony >=450 mm | timber or uPVC, single pyrolytic low-e, (U-value: 3.99, SHGC: 0.4) | | | |
| WLG01 | N | 0.71 | 4.9 | 4.8 | awning (fixed) >=900 mm | timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66) | | | |
| WLG02 | N | 1.93 | 4.9 | 4.8 | awning (fixed) >=900 mm | timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66) | | | |
| WLG03 | N | 0.76 | 4.9 | 4.8 | awning (fixed) >=900 mm | timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66) | | | |
| WLG04 | N | 1.58 | 0 | 0 | awning (fixed) >=900 mm | timber or uPVC, single pyrolytic low-e, (U-value: 3.99, SHGC: 0.4) | | | |
| WLG05 | E | 1.7 | 0 | 0 | awning (fixed) >=900 mm | timber or uPVC, single pyrolytic low-e, (U-value: 3.99, SHGC: 0.4) | | | |
| WLG06 | Е | 1.95 | 0 | 0 | eave/verandah/pergola/balcony >=450 mm | timber or uPVC, single pyrolytic low-e, (U-value: 3.99, SHGC: 0.4) | | | |
| WLG07 | E | 2.24 | 0 | 0 | eave/verandah/pergola/balcony >=750 mm | timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66) | | | |
| WLG08 | S | 0.42 | 0 | 0 | eave/verandah/pergola/balcony >=750 mm | timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66) | | | |
| WLG09 | Е | 0.23 | 4 | 0.9 | none | timber or uPVC, single pyrolytic low-e, (U-value: 3.99, SHGC: 0.4) | | | |
| WLG10 | W | 0.23 | 4.4 | 2.5 | none | timber or uPVC, single toned, (or U-value: 5.67, SHGC: 0.49) | | | |
| WLG11 | S | 0.28 | 0 | 0 | none | timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66) | | | |
| WLG12 | S | 0.42 | 0 | 0 | projection/height above sill ratio >=0.43 | timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66) | | | |

BASIX Certificate number: A331967 page 7 / 8

| Glazing requi | rements | | | Show on DA Plans | Show on CC/CDC Plans & specs | Certifier Check |
|--------------------|------------------------|-----------------------------------|---|------------------|---------------------------------------|--------------------|
| Glazed roofs | | | | | | |
| The applicant m | ust install the glazed | roofs described in the table belo | ow, in accordance with the specifications listed in the table. | ✓ | ✓ | ✓ |
| The following re | quirements must also | be satisfied in relation to each | glazed roof: | | ✓ | ✓ |
| Glazed roofs | glazing requirer | ments | | | | |
| Glazed roof number | Area of glazing (m2) | Shading device | Glass type | | | |
| G1 | 5.5 | no shading | improved aluminium, single pyrolytic low-e, (U-value: 4.48, SHGC: 0.46) | | | |

BASIX Certificate number: A331967 page 8 / 8

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.