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## **BASIX** Certificate

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

## Alterations and Additions

Certificate number: A357552

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

Secretarv

Date of issue: Tuesday, 03, September 2019 To be valid, this certificate must be lodged within 3 months of the date of issue.



| Project name                    | 42 Elanora Rd   |
|---------------------------------|---|
| Street address                  | 42 Elanora Road Elanora Heights 2101  |
| Local Government Area           | Northern Beaches Council  |
| Plan type and number            | Deposited Plan 13643  |
| Lot number                      | 91  |
| Section number                  |   |
| Project type                    |   |
| Dwelling type                   | Separate dwelling house   |
| Type of alteration and addition | My renovation work is valued at \$50,000 or m and does not include a pool (and/or spa). |

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

Name / Company Name: Phil Brown Drafting

ABN (if applicable): 16164362569

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| Fixtures and systems   | Show on<br>DA Plans | Show on<br>CC/CDC<br>Plans &<br>specs | Certifier<br>Check |
|--|---------------------|---------------------------------------|--------------------|
| Hot water  |                     |                                       |                    |
| The applicant must install the following hot water system in the development: gas instantaneous.   | $\checkmark$        | $\checkmark$                          | ~                  |
| 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   |                     | 1                                     |                    |
| 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.                                |                     | <ul> <li></li> </ul>                  | ~                  |
| 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.                     |                     | $\checkmark$                          | $\checkmark$       |
| 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.                                 |                     | $\checkmark$                          |                    |

| Construction   | Show on<br>DA Plans                                    | Show on<br>CC/CDC<br>Plans &<br>specs   | Certifier<br>Check |  |  |
|--|--|---|--------------------|--|--|
| Insulation requirements  |  |   |                    |  |  |
| The applicant must construct the new or altered<br>the table below, except that a) additional insulat<br>is not required for parts of altered construction v | ~  | ~                                       | ~                  |  |  |
| Construction   | Additional insulation required (R-value)               | Other specifications                    |                    |  |  |
| concrete slab on ground floor.   | nil  |   |                    |  |  |
| suspended floor with enclosed subfloor: framed (R0.7).   | R0.60 (down) (or R1.30 including construction)         |   |                    |  |  |
| suspended floor above garage: framed (R0.7).   | nil  |   |                    |  |  |
| external wall: framed (weatherboard, fibro, metal clad)  | R1.30 (or R1.70 including construction)                |   |                    |  |  |
| flat ceiling, flat roof: framed  | ceiling: R2.08 (up), roof: foil backed blanket (55 mm) | medium (solar absorptance 0.475 - 0.70) |                    |  |  |

|   | equirements  |   |  |   |   |   | Show on<br>DA Plans  | Show on<br>CC/CDC<br>Plans &<br>specs | Certifier<br>Check |
|---|--|---|--|---|---|---|----------------------|---------------------------------------|--------------------|
| Windows #   | and glazed do  | ors   |  |   |   |   |                      |                                       |                    |
| 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. |  |   |  |   |   | ~   | <ul> <li></li> </ul> | ~                                     |                    |
| The following requirements must also be satisfied in relation to each window and glazed door:   |  |   |  |   |   | $\checkmark$  | $\checkmark$         |                                       |                    |
| have a U-va<br>must be cal  | alue and a Solar l   | Heat Gair<br>Jance with   | n Coefficie<br>n National                              | ent (SHGC) r<br>Fenestratio                                   | no greater than that listed in the tab  | ar glazing, or toned/air gap/clear glazing must<br>le below. Total system U-values and SHGCs<br>s. The description is provided for information  |                      | ~                                     | ~                  |
|   |  |   |  |   | f each eave, pergola, verandah, bal<br>than 2400 mm above the sill.   | cony or awning must be no more than 500 mm  | $\checkmark$         | $\checkmark$                          | $\checkmark$       |
| Pergolas with polycarbonate roof or similar translucent material must have a shading coefficient of less than 0.35.   |  |   |  |   |   | ~   | $\checkmark$         |                                       |                    |
|   |  |   |  |   |   |   |                      |                                       |                    |
| shades a pe   | erpendicular wind  | dow. The  | spacing b  | etween batte  | ens must not be more than 50 mm.  | ch they are situated, unless the pergola also   | _                    | ~                                     | ~                  |
| shades a pe   | erpendicular wind<br>s and glazed o                                  | dow. The s<br>doors g   | spacing b<br>lazing r                                  | etween batte<br>equireme                                      | ens must not be more than 50 mm.<br>nts   |   | -                    | ~                                     | ~                  |
| shades a pe   | erpendicular wind  | dow. The s<br>doors gl<br>Area of<br>glass<br>inc.<br>frame                       | spacing b  | etween batte<br>equireme                                      | ens must not be more than 50 mm.  | ch they are situated, unless the pergola also<br>Frame and glass type   |                      | ~                                     | ~                  |
| shades a pe<br>Windows<br>Window / d<br>no.   | erpendicular wind<br>s and glazed o                                  | dow. The s<br>doors gl<br>Area of<br>glass<br>inc.                                | spacing b<br>lazing r<br>Oversha<br>Height             | etween batte<br>equiremen<br>adowing<br>Distance              | ens must not be more than 50 mm.<br>nts   |   | -                    | ~                                     | ~                  |
| shades a pe<br>Windows<br>Window / d<br>no.   | erpendicular wind<br>s and glazed of<br>door Orientation             | dow. The s<br>doors gl<br>Area of<br>glass<br>inc.<br>frame<br>(m2)               | spacing b<br>lazing r<br>Oversha<br>Height<br>(m)      | etween batte<br>equiremen<br>adowing<br>Distance<br>(m)       | ens must not be more than 50 mm.  nts Shading device eave/verandah/pergola/balcony  | Frame and glass type<br>improved aluminium, single clear, (U-value:   |                      | ~                                     | ~                  |
| shades a pe<br>Windows<br>Window / d<br>no.<br>W1   | erpendicular wind<br>s and glazed of<br>door Orientation<br>SE       | dow. The s<br>doors gl<br>Area of<br>glass<br>inc.<br>frame<br>(m2)<br>9.7        | spacing b<br>lazing r<br>Oversha<br>Height<br>(m)<br>0 | etween batte<br>equiremen<br>adowing<br>Distance<br>(m)<br>0  | ens must not be more than 50 mm.  nts Shading device eave/verandah/pergola/balcony >=600 mm eave/verandah/pergola/balcony   | Frame and glass type<br>improved aluminium, single clear, (U-value:<br>6.44, SHGC: 0.75)<br>improved aluminium, single clear, (U-value:   |                      |                                       | ~                  |
| shades a pe<br>Windows<br>Window / d<br>no.<br>W1<br>W2   | erpendicular wind<br>s and glazed of<br>door Orientation<br>SE<br>SE | dow. The s<br>doors gl<br>Area of<br>glass<br>inc.<br>frame<br>(m2)<br>9.7<br>7.5 | spacing b<br>lazing r<br>Oversha<br>Height<br>(m)<br>0 | etween batte<br>equirement<br>adowing<br>Distance<br>(m)<br>0 | ens must not be more than 50 mm.  The serve of the serve | Frame and glass type<br>improved aluminium, single clear, (U-value:<br>6.44, SHGC: 0.75)<br>improved aluminium, single clear, (U-value:<br>6.44, SHGC: 0.75)<br>improved aluminium, single clear, (U-value: |                      |                                       | ~                  |

| Glazing requirements |             |                       |                   |          |   | Show on<br>DA Plans   | Show on<br>CC/CDC<br>Plans &<br>specs | Certifier<br>Check |  |
|----------------------|-------------|-----------------------|-------------------|----------|---|---|---------------------------------------|--------------------|--|
| Window / door<br>no. | Orientation | Area of<br>glass      | Oversha<br>Height | Distance | Shading device                            | Frame and glass type  |                                       |                    |  |
|                      |             | inc.<br>frame<br>(m2) | (m)               | (m)      |   |   |                                       |                    |  |
| W6                   | NW          | 0.8                   | 0                 | 0        | eave/verandah/pergola/balcony<br>>=600 mm | improved aluminium, single pyrolytic low-e, (U-value: 4.48, SHGC: 0.46) |                                       |                    |  |
| W7                   | NW          | 4.8                   | 0                 | 0        | eave/verandah/pergola/balcony<br>>=600 mm | improved aluminium, single pyrolytic low-e, (U-value: 4.48, SHGC: 0.46) |                                       |                    |  |
| W8                   | SW          | 16.1                  | 0                 | 0        | eave/verandah/pergola/balcony<br>>=600 mm | improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)           |                                       |                    |  |

## 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.