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## **BASIX** Certificate

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

## Alterations and Additions

Certificate number: A421749

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: Monday, 28, June 2021 To be valid, this certificate must be lodged within 3 months of the date of issue.



Planning, Industry & Environment

| Project name                    | 43 Powderworks Road, North Narrabeen   |  |  |  |  |
|---------------------------------|--|--|--|--|--|
| Street address                  | 43 Powderworks Road North Narrabeen 2107   |  |  |  |  |
| Local Government Area           | Northern Beaches Council   |  |  |  |  |
| Plan type and number            | Deposited Plan 6462  |  |  |  |  |
| Lot number                      | 38<br>6  |  |  |  |  |
| 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 does not include a pool (and/or spa). |  |  |  |  |

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

Name / Company Name: AENEC - Office: 02 9994 8906

ABN (if applicable): 32612556377

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| Fixtures and systems   | Show on<br>DA Plans | Show on<br>CC/CDC<br>Plans &<br>specs | Certifier<br>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. |                     | ×                                     | ~                  |

| 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 insula<br>is not required for parts of altered construction | ~   | ~                               | ~                   |                                       |                    |
| 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)       |                                 |                     |                                       |                    |
| raked ceiling, pitched/skillion roof: framed  | ceiling: R3.00 (up), roof: foil/sarking       | dark (solar absorptance > 0.70) |                     |                                       |                    |

| Glazing requ   | irements      |                                |               |                 |   |   | Show on<br>DA Plans | Show on<br>CC/CDC<br>Plans &<br>specs | Certifier<br>Check |
|--|---------------|--------------------------------|---------------|-----------------|---|---|---------------------|---------------------------------------|--------------------|
| Nindows and  | l glazed do   | ors                            |               |                 |   |   |                     | I                                     |                    |
| 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>                  | $\checkmark$       |
| The following r  | equirements i | must also                      | be satisfi    | ed in relatior  | n to each window and glazed door:         |   |                     | $\checkmark$                          | $\checkmark$       |
| 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 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.<br>Windows and glazed doors glazing requirements  |               |                                |               |                 |   | the window or glazed door sill must be at                                   | ~                   | ~                                     | ~                  |
| Window / door  |               |                                | Oversha       | <u> </u>        | Shading device                            | Frame and glass type  |                     |                                       |                    |
| no.  |               | glass<br>inc.<br>frame<br>(m2) | Height<br>(m) | Distance<br>(m) |   |   |                     |                                       |                    |
| W02  | NW            | 2.17                           | 0             | 0               | none                                      | timber or uPVC, double Lo-Tsol/air<br>gap/clear, (U-value: 2.3, SHGC: 0.19) |                     |                                       |                    |
| W03  | NW            | 0.94                           | 0             | 0               | none                                      | timber or uPVC, double Lo-Tsol/air<br>gap/clear, (U-value: 2.3, SHGC: 0.19) |                     |                                       |                    |
| W04  | NE            | 1.13                           | 0             | 0               | projection/height above sill ratio >=0.23 | timber or uPVC, single pyrolytic low-e,<br>(U-value: 3.99, SHGC: 0.4)       |                     |                                       |                    |
| W05  | NE            | 3.73                           | 0             | 0               | projection/height above sill ratio >=0.23 | timber or uPVC, single pyrolytic low-e,<br>(U-value: 3.99, SHGC: 0.4)       |                     |                                       |                    |
| W06  | NE            | 1.13                           | 0             | 0               | projection/height above sill ratio        | timber or uPVC, single pyrolytic low-e,                                     |                     |                                       |                    |

| 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<br>inc.<br>frame<br>(m2) | Oversha<br>Height<br>(m) | dowing<br>Distance<br>(m) | Shading device                            | Frame and glass type  |                     |                                       |                    |
| W07                  | NE          | 0.36                                      | 0                        | 0                         | projection/height above sill ratio >=0.43 | timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66)        |                     |                                       |                    |
| W08                  | NE          | 1.2                                       | 0                        | 0                         | projection/height above sill ratio >=0.43 | timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66)        |                     |                                       |                    |
| W09                  | NE          | 0.36                                      | 0                        | 0                         | projection/height above sill ratio >=0.43 | timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66)        |                     |                                       |                    |
| W10                  | SE          | 1.44                                      | 0                        | 0                         | projection/height above sill ratio >=0.43 | timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66)        |                     |                                       |                    |
| W11                  | NE          | 6.72                                      | 0                        | 0                         | projection/height above sill ratio >=0.43 | timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66)        |                     |                                       |                    |
| W12                  | NE          | 1.92                                      | 0                        | 0                         | projection/height above sill ratio >=0.43 | timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66)        |                     |                                       |                    |
| W01                  | SE          | 0.51                                      | 0                        | 0                         | none                                      | standard aluminium, single clear, (or<br>U-value: 7.63, SHGC: 0.75) |                     |                                       |                    |
| Ex. Door             | SE          | 4.9                                       | 0                        | 0                         | projection/height above sill ratio >=0.43 | timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66)        |                     |                                       |                    |

## 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 "
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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.