# **BASIX** Certificate

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

# **Alterations and Additions**

Certificate number: A496521

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: Tuesday, 06, June 2023

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



### **Project address** Project name 2035 Haefeli BarrenjoeyRd 940 Barrenjoey Road Palm Beach 2108 Street address Local Government Area Northern Beaches Council Deposited Plan DP13686 Plan type and number 5 Lot number 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: Deneb Design

ABN (if applicable): 56 428 957 371

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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.   | <b>✓</b>            | <b>✓</b>                              | ✓                  |
| Lighting   | 1                   |                                       |                    |
| 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. |                     | <b>~</b>                              | <b>✓</b>           |
| 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.                                |                     | <b>✓</b>                              | ✓                  |
| 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.                     |                     | <b>✓</b>                              | ✓                  |
| 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.                                 |                     | <b>~</b>                              |                    |

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| Construction  |  |   | Show on<br>DA Plans | Show on<br>CC/CDC<br>Plans &<br>specs | Certifier<br>Check |
|---|--|---|---------------------|---------------------------------------|--------------------|
| Insulation requirements                                 |  |   |                     |                                       |                    |
|   | d construction (floor(s), walls, and ceilings/roofs) ation is not required where the area of new construction where insulation already exists. |   | <b>V</b>            | <b>√</b>                              | <b>✓</b>           |
| Construction  | Additional insulation required (R-value)   | Other specifications                    |                     |                                       |                    |
| 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)  |   |                     |                                       |                    |
| flat ceiling, pitched roof                              | ceiling: R1.45 (up), roof: foil backed blanket (75 mm)   | medium (solar absorptance 0.475 - 0.70) |                     |                                       |                    |
| raked ceiling, pitched/skillion roof: framed            | ceiling: R1.74 (up), roof: foil backed blanket (75 mm)   | medium (solar absorptance 0.475 - 0.70) |                     |                                       |                    |
| flat ceiling, flat roof: framed                         | ceiling: R1.58 (up), roof: foil backed blanket (75 mm)   | medium (solar absorptance 0.475 - 0.70) |                     |                                       |                    |

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| Glazing requ  | irements      |                               |                           |                              |   |  | Show on<br>DA Plans | Show on<br>CC/CDC<br>Plans &<br>specs | Certifier<br>Check |
|---|---------------|-------------------------------|---------------------------|------------------------------|---|--|---------------------|---------------------------------------|--------------------|
| Windows and   | glazed do     | ors                           |                           |                              |   |  |                     |                                       |                    |
|   |               |                               |                           |                              | nading devices, in accordance with reach window and glazed door.      | the specifications listed in the table below.  | <b>✓</b>            | <b>✓</b>                              | <b>✓</b>           |
| The following re  | equirements r | nust also                     | be satisfi                | ed in relation               | n to each window and glazed door:                                     |  |                     | ✓                                     | ✓                  |
| have a U-value must be calcula  | and a Solar l | Heat Gair<br>Iance with       | n Coefficie<br>n National | ent (SHGC) r<br>Fenestration | no greater than that listed in the tab                                | ear glazing, or toned/air gap/clear glazing must<br>ble below. Total system U-values and SHGCs<br>s. The description is provided for information |                     | <b>✓</b>                              | <b>~</b>           |
|   |               |                               |                           |                              | f each eave, pergola, verandah, bal<br>than 2400 mm above the sill.   | Icony or awning must be no more than 500 mm  | ✓                   | ✓                                     | ~                  |
| Pergolas with p   | olycarbonate  | roof or si                    | imilar tran               | slucent mate                 | erial must have a shading coefficien                                  | nt of less than 0.35.  |                     | ✓                                     | <b>✓</b>           |
|   |               |                               |                           |                              | e window or glazed door above whi<br>ens must not be more than 50 mm. | ich they are situated, unless the pergola also   |                     | ✓                                     | <b>✓</b>           |
| 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 an  | d glazed o    | loors g                       | lazing r                  | equireme                     | nts   |  |                     |                                       |                    |
| Window / door no.   | Orientation   | Area of glass inc. frame (m2) | Oversha<br>Height<br>(m)  | dowing<br>Distance<br>(m)    | Shading device  | Frame and glass type   |                     |                                       |                    |
| W1  | S             | 2.2                           | 0                         | 0                            | eave/verandah/pergola/balcony<br>>=900 mm                             | standard aluminium, single pyrolytic low-e, (U-value: 5.7, SHGC: 0.47)   |                     |                                       |                    |
| W2  | N             | 0.75                          | 5                         | 3                            | none  | standard aluminium, single pyrolytic low-e, (U-value: 5.7, SHGC: 0.47)   |                     |                                       |                    |
| W3  | N             | 1.1                           | 5                         | 3                            | none  | standard aluminium, single pyrolytic low-e, (U-value: 5.7, SHGC: 0.47)   |                     |                                       |                    |
| W4  | Е             | 3.85                          | 5                         | 4                            | none  | standard aluminium, single pyrolytic low-e,  |                     |                                       |                    |

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| Glazing requirements |             |                               |                          |                            |   |  |  | Show on<br>CC/CDC<br>Plans &<br>specs | Certifier<br>Check |
|----------------------|-------------|-------------------------------|--------------------------|----------------------------|---|--|--|---------------------------------------|--------------------|
| Window / doo<br>no.  | Orientation | Area of glass inc. frame (m2) | Oversha<br>Height<br>(m) | adowing<br>Distance<br>(m) | Shading device                            | Frame and glass type   |  |                                       |                    |
|                      |             |                               |                          |                            |   | (U-value: 5.7, SHGC: 0.47)   |  |                                       |                    |
| W5                   | E           | 3.85                          | 5                        | 4                          | none                                      | standard aluminium, single pyrolytic low-e, (U-value: 5.7, SHGC: 0.47) |  |                                       |                    |
| W6                   | Е           | 2.36                          | 5                        | 4                          | none                                      | standard aluminium, single pyrolytic low-e, (U-value: 5.7, SHGC: 0.47) |  |                                       |                    |
| W7                   | S           | 1                             | 0                        | 0                          | none                                      | standard aluminium, single pyrolytic low-e, (U-value: 5.7, SHGC: 0.47) |  |                                       |                    |
| W8                   | S           | 1                             | 0                        | 0                          | none                                      | standard aluminium, single pyrolytic low-e, (U-value: 5.7, SHGC: 0.47) |  |                                       |                    |
| W9                   | N           | 2.47                          | 0                        | 0                          | eave/verandah/pergola/balcony<br>>=900 mm | standard aluminium, single pyrolytic low-e, (U-value: 5.7, SHGC: 0.47) |  |                                       |                    |
| W10                  | N           | 1.1                           | 0                        | 0                          | eave/verandah/pergola/balcony<br>>=450 mm | standard aluminium, single pyrolytic low-e, (U-value: 5.7, SHGC: 0.47) |  |                                       |                    |
| W11                  | Е           | 3.5                           | 0                        | 0                          | eave/verandah/pergola/balcony<br>>=450 mm | standard aluminium, single pyrolytic low-e, (U-value: 5.7, SHGC: 0.47) |  |                                       |                    |
| W12                  | Е           | 3.5                           | 0                        | 0                          | eave/verandah/pergola/balcony<br>>=450 mm | standard aluminium, single pyrolytic low-e, (U-value: 5.7, SHGC: 0.47) |  |                                       |                    |
| W13                  | Е           | 2.15                          | 0                        | 0                          | eave/verandah/pergola/balcony<br>>=450 mm | standard aluminium, single pyrolytic low-e, (U-value: 5.7, SHGC: 0.47) |  |                                       |                    |
| W14                  | N           | 3.44                          | 0                        | 0                          | eave/verandah/pergola/balcony<br>>=900 mm | standard aluminium, single pyrolytic low-e, (U-value: 5.7, SHGC: 0.47) |  |                                       |                    |
| W15                  | W           | 1.68                          | 0                        | 0                          | eave/verandah/pergola/balcony<br>>=900 mm | standard aluminium, single pyrolytic low-e, (U-value: 5.7, SHGC: 0.47) |  |                                       |                    |
| W16                  | W           | 3.44                          | 0                        | 0                          | eave/verandah/pergola/balcony<br>>=900 mm | standard aluminium, single pyrolytic low-e, (U-value: 5.7, SHGC: 0.47) |  |                                       |                    |
| W2a                  | N           | 0.37                          | 0                        | 0                          | none                                      | standard aluminium, single pyrolytic low-e,                            |  |                                       |                    |

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| Glazing requirements |             |                               |                          |                            |   |  |  | Show on<br>CC/CDC<br>Plans &<br>specs | Certifier<br>Check |
|----------------------|-------------|-------------------------------|--------------------------|----------------------------|---|--|--|---------------------------------------|--------------------|
| Window / door no.    | Orientation | Area of glass inc. frame (m2) | Oversha<br>Height<br>(m) | adowing<br>Distance<br>(m) | Shading device                            | Frame and glass type   |  |                                       |                    |
|                      |             |                               |                          |                            |   | (U-value: 5.7, SHGC: 0.47)   |  |                                       |                    |
| D1                   | N           | 2.78                          | 0                        | 0                          | eave/verandah/pergola/balcony<br>>=900 mm | standard aluminium, single pyrolytic low-e, (U-value: 5.7, SHGC: 0.47) |  |                                       |                    |
| D2                   | W           | 5.56                          | 0                        | 0                          | eave/verandah/pergola/balcony<br>>=900 mm | standard aluminium, single pyrolytic low-e, (U-value: 5.7, SHGC: 0.47) |  |                                       |                    |
| D3                   | W           | 5.56                          | 0                        | 0                          | eave/verandah/pergola/balcony<br>>=900 mm | standard aluminium, single pyrolytic low-e, (U-value: 5.7, SHGC: 0.47) |  |                                       |                    |
| D4                   | N           | 2.78                          | 0                        | 0                          | eave/verandah/pergola/balcony<br>>=900 mm | standard aluminium, single pyrolytic low-e, (U-value: 5.7, SHGC: 0.47) |  |                                       |                    |
| D5                   | W           | 4.74                          | 0                        | 0                          | eave/verandah/pergola/balcony<br>>=900 mm | standard aluminium, single pyrolytic low-e, (U-value: 5.7, SHGC: 0.47) |  |                                       |                    |
| D6                   | W           | 4.94                          | 0                        | 0                          | eave/verandah/pergola/balcony<br>>=900 mm | standard aluminium, single pyrolytic low-e, (U-value: 5.7, SHGC: 0.47) |  |                                       |                    |
| D7                   | W           | 5.56                          | 0                        | 0                          | eave/verandah/pergola/balcony<br>>=900 mm | standard aluminium, single pyrolytic low-e, (U-value: 5.7, SHGC: 0.47) |  |                                       |                    |
| D8                   | W           | 5.56                          | 0                        | 0                          | eave/verandah/pergola/balcony<br>>=900 mm | standard aluminium, single pyrolytic low-e, (U-value: 5.7, SHGC: 0.47) |  |                                       |                    |
| D9                   | N           | 7.21                          | 0                        | 0                          | eave/verandah/pergola/balcony<br>>=750 mm | standard aluminium, single pyrolytic low-e, (U-value: 5.7, SHGC: 0.47) |  |                                       |                    |
| D10                  | W           | 9.89                          | 0                        | 0                          | eave/verandah/pergola/balcony<br>>=900 mm | standard aluminium, single pyrolytic low-e, (U-value: 5.7, SHGC: 0.47) |  |                                       |                    |

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## 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.