

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

## **Alterations and Additions**

Certificate number: A490307\_03

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 Definitions" dated 10/09/2020 published by the Department. This document is available at www.basix.nsw.gov.au

This certificate is a revision of certificate number A490307\_02 lodged with the consent authority or certifier on 16 May 2023 with application CDC2023/0326.

It is the responsibility of the applicant to verify with the consent authority that the original, or any revised certificate, complies with the requirements of Schedule 1 Clause 2A, 4A or 6A of the Environment Planning and Assessment Regulation 2000

## Secretary

Date of issue: Wednesday, 19 March 2025

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



| Project address                            |  |
|--|--|
| Project name                               | 374 Joalah Road_02_03  |
| Street address                             | 374 JOALAH ROAD - DUFFYS FOREST 2084   |
| Local Government Area                      | Northern Beaches Council   |
| Plan type and number                       | Deposited Plan 752017  |
| Lot number                                 | 374  |
| Section number                             | -  |
| Project type                               |  |
| Dwelling type                              | Dwelling house (detached)  |
| Type of alteration and addition            | The estimated development cost for my renovation work is \$50,000 or more, and does not include a pool (and/or spa). |
| N/A  | N/A  |
| Certificate Prepared by (please            | e complete before submitting to Council or PCA)  |
| Name / Company Name: Ella Fairbairn        |  |
| Traine / Company Traine. Ella i all ballit |  |

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| Fixtures and systems  | Show on DA Plans | Show on CC/CDC<br>Plans & specs | Certifier<br>Check |
|---|------------------|---------------------------------|--------------------|
| Hot water   |                  |                                 |                    |
| The applicant must install the following hot water system in the development: electric heat pump system that is eligible to create Renewable Energy Certificates under the (Commonwealth) Renewable Energy (Electricity) Regulations 2001 (incorporating Amendment Regulations 2005 (No. 2)). | ~                | ~                               | ~                  |
| 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  | 7                |                                 |                    |
| 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.  |                  | ~                               |                    |

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| Construction  | Show on DA Plans  | Show on CC/CDC<br>Plans & specs            | Certifier<br>Check |   |   |
|---|---|--|--------------------|---|---|
| Insulation requirements                                 |   |  |                    |   |   |
| listed in the table below, except that a) add           | tered construction (floor(s), walls, and ceilings/<br>ditional insulation is not required where the are<br>s of altered construction where insulation alrea | a of new construction is less than 2m2, b) | *                  | ~ | ~ |
| Construction  | Additional insulation required (R-value)  | Other specifications                       |                    |   |   |
| concrete slab on ground floor.                          | nil   | N/A  |                    |   |   |
| external wall: framed (weatherboard, fibro, metal clad) | R1.30 (or R1.70 including construction)   |  |                    |   |   |
| external wall: brick veneer                             | R1.16 (or R1.70 including construction)   |  |                    |   |   |
| flat ceiling, flat roof: framed                         | ceiling: R1.82 (up), roof: foil/sarking   | light (solar absorptance < 0.475)          |                    |   |   |

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| Glazing requirements   | Show on DA Plans | Show on CC/CDC<br>Plans & specs | Certifier<br>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.  |                  | ~                               | ~                  |
| 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.  |                  | ~                               | ~                  |
| External louvres and blinds must fully shade the window or glazed door beside which they are situated when fully drawn or closed.  |                  | ~                               | ~                  |
| 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.  | V                | ~                               | ~                  |

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| Glazing requir        | ements            |                                    |                             |                            |  |  | Show on DA Plans | Show on CC/CDC<br>Plans & specs | Certifier<br>Check |
|-----------------------|-------------------|------------------------------------|-----------------------------|----------------------------|--|--|------------------|---------------------------------|--------------------|
| Windows and gla       | zed doors glazing |                                    |                             |                            |  |  |                  |                                 |                    |
| Window/door<br>number | Orientation       | Area of glass including frame (m2) | Overshadowing<br>height (m) | Overshadowing distance (m) | Shading<br>device                        | Frame and glass type   |                  |                                 |                    |
| W08.2                 | N                 | 6.26                               | 10.65                       | 2                          | none                                     | standard<br>aluminium,<br>single clear, (or<br>U-value: 7.63,<br>SHGC: 0.75) |                  |                                 |                    |
| W08                   | N                 | 1.71                               | 9.2                         | 16                         | external<br>louvre/blind<br>(adjustable) | standard<br>aluminium,<br>single clear, (or<br>U-value: 7.63,<br>SHGC: 0.75) |                  |                                 |                    |
| W07                   | N                 | 1.71                               | 9.2                         | 16                         | external<br>louvre/blind<br>(adjustable) | standard<br>aluminium,<br>single clear, (or<br>U-value: 7.63,<br>SHGC: 0.75) |                  |                                 |                    |
| W06.2                 | N                 | 6.26                               | 9.2                         | 16                         | external<br>louvre/blind<br>(adjustable) | standard<br>aluminium,<br>single clear, (or<br>U-value: 7.63,<br>SHGC: 0.75) |                  |                                 |                    |
| W03                   | N                 | 1.71                               | 0                           | 0                          | external<br>louvre/blind<br>(adjustable) | standard<br>aluminium,<br>single clear, (or<br>U-value: 7.63,<br>SHGC: 0.75) |                  |                                 |                    |

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| Glazing require       | ements      |  |                          |                            |   |  | Show on<br>DA Plans | Show on CC/CDC<br>Plans & specs | Certifier<br>Check |
|-----------------------|-------------|--|--------------------------|----------------------------|---|--|---------------------|---------------------------------|--------------------|
| Window/door<br>number | Orientation | Area of glass<br>including<br>frame (m2) | Overshadowing height (m) | Overshadowing distance (m) | Shading<br>device                                 | Frame and glass type   |                     |                                 |                    |
| D03                   | N           | 12.78                                    | 11.25                    | 12                         | external<br>louvre/blind<br>(adjustable)          | standard<br>aluminium,<br>single clear, (or<br>U-value: 7.63,<br>SHGC: 0.75)           |                     |                                 |                    |
| W02                   | N           | 1.71                                     | 11.25                    | 12                         | external<br>louvre/blind<br>(adjustable)          | standard<br>aluminium,<br>single clear, (or<br>U-value: 7.63,<br>SHGC: 0.75)           |                     |                                 |                    |
| W18                   | N           | 2.88                                     | 0                        | 0                          | eave/<br>verandah/<br>pergola/balcony<br>>=900 mm | standard<br>aluminium,<br>single clear, (or<br>U-value: 7.63,<br>SHGC: 0.75)           |                     |                                 |                    |
| W06.1                 | E           | 2  | 2.85                     | 4.5                        | external<br>louvre/blind<br>(adjustable)          | standard<br>aluminium,<br>single clear, (or<br>U-value: 7.63,<br>SHGC: 0.75)           |                     |                                 |                    |
| W06                   | E           | 1.71                                     | 2.85                     | 3.2                        | none  | standard<br>aluminium,<br>single pyrolytic<br>low-e, (U-<br>value: 5.7,<br>SHGC: 0.47) |                     |                                 |                    |

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| Glazing requir        | ements            |  |                             |                            |  |  | Show on DA Plans | Show on CC/CDC<br>Plans & specs | Certifier<br>Check |
|-----------------------|-------------------|--|-----------------------------|----------------------------|--|--|------------------|---------------------------------|--------------------|
| Windows and gla       | zed doors glazinç | g requirements                           |                             |                            |  |  |                  |                                 |                    |
| Window/door<br>number | Orientation       | Area of glass<br>including<br>frame (m2) | Overshadowing<br>height (m) | Overshadowing distance (m) | Shading<br>device                        | Frame and glass type   |                  |                                 |                    |
| W21                   | E                 | 1.71                                     | 0                           | 0                          | external<br>louvre/blind<br>(adjustable) | standard<br>aluminium,<br>single clear, (or<br>U-value: 7.63,<br>SHGC: 0.75)         |                  |                                 |                    |
| W13.1                 | E                 | 1.71                                     | 2.5                         | 2.4                        | external<br>louvre/blind<br>(adjustable) | standard<br>aluminium,<br>single clear, (or<br>U-value: 7.63,<br>SHGC: 0.75)         |                  |                                 |                    |
| W01                   | E                 | 1.71                                     | 0                           | 0                          | external<br>louvre/blind<br>(adjustable) | standard<br>aluminium,<br>single clear, (or<br>U-value: 7.63,<br>SHGC: 0.75)         |                  |                                 |                    |
| D02                   | E                 | 12.78                                    | 0                           | 0                          | external<br>louvre/blind<br>(adjustable) | standard<br>aluminium,<br>single clear, (or<br>U-value: 7.63,<br>SHGC: 0.75)         |                  |                                 |                    |
| W17.1                 | N                 | 2.57                                     | 3                           | 3                          | none                                     | aluminium,<br>double Lo-<br>Tsol/air gap/<br>clear, (U-value:<br>4.9, SHGC:<br>0.33) |                  |                                 |                    |

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| Glazing requir        | ements      |                                    |                             |                            |                   |  | Show on<br>DA Plans | Show on CC/CDC<br>Plans & specs | Certifier<br>Check |
|-----------------------|-------------|------------------------------------|-----------------------------|----------------------------|-------------------|--|---------------------|---------------------------------|--------------------|
| Window/door<br>number | Orientation | Area of glass including frame (m2) | Overshadowing<br>height (m) | Overshadowing distance (m) | Shading<br>device | Frame and<br>glass type  |                     |                                 |                    |
| W11.1                 | SE          | 2                                  | 0                           | 0                          | none              | standard<br>aluminium,<br>single pyrolytic<br>low-e, (U-<br>value: 5.7,<br>SHGC: 0.47) |                     |                                 |                    |
| W11                   | S           | 1.66                               | 0                           | 0                          | none              | standard<br>aluminium,<br>single clear, (or<br>U-value: 7.63,<br>SHGC: 0.75)           |                     |                                 |                    |
| W12                   | S           | 1.71                               | 0                           | 0                          | none              | standard<br>aluminium,<br>single clear, (or<br>U-value: 7.63,<br>SHGC: 0.75)           |                     |                                 |                    |
| W13                   | S           | 1.71                               | 0                           | 0                          | none              | standard<br>aluminium,<br>single clear, (or<br>U-value: 7.63,<br>SHGC: 0.75)           |                     |                                 |                    |
| W13.2                 | S           | 5.02                               | 0                           | 0                          | none              | standard<br>aluminium,<br>single clear, (or<br>U-value: 7.63,<br>SHGC: 0.75)           |                     |                                 |                    |

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| Glazing requir        | rements           |                                    |                             | Show on DA Plans           | Show on CC/CDC<br>Plans & specs | Certifier<br>Check   |  |  |  |
|-----------------------|-------------------|------------------------------------|-----------------------------|----------------------------|---------------------------------|--|--|--|--|
| Windows and gla       | zed doors glazing | g requirements                     |                             |                            |                                 |  |  |  |  |
| Window/door<br>number | Orientation       | Area of glass including frame (m2) | Overshadowing<br>height (m) | Overshadowing distance (m) | Shading<br>device               | Frame and glass type   |  |  |  |
| W19                   | S                 | 1.71                               | 0                           | 0                          | none                            | standard<br>aluminium,<br>single clear, (or<br>U-value: 7.63,<br>SHGC: 0.75) |  |  |  |
| D04                   | S                 | 12.78                              | 0                           | 0                          | none                            | standard<br>aluminium,<br>single clear, (or<br>U-value: 7.63,<br>SHGC: 0.75) |  |  |  |
| W16                   | S                 | 1.71                               | 0                           | 0                          | none                            | standard<br>aluminium,<br>single clear, (or<br>U-value: 7.63,<br>SHGC: 0.75) |  |  |  |
| W17.2                 | N                 | 2.31                               | 3                           | 3                          | none                            | aluminium,<br>single Lo-<br>Tsol low-e,<br>(U-value: 5.6,<br>SHGC: 0.36)     |  |  |  |
| W08.1                 | W                 | 2                                  | 10.65                       | 5.1                        | none                            | standard<br>aluminium,<br>single clear, (or<br>U-value: 7.63,<br>SHGC: 0.75) |  |  |  |

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| Glazing requir        | ements      |  |                          |                            |  |  | Show on DA Plans | Show on CC/CDC<br>Plans & specs | Certifier<br>Check |
|-----------------------|-------------|--|--------------------------|----------------------------|--|--|------------------|---------------------------------|--------------------|
| Window/door<br>number | Orientation | Area of glass<br>including<br>frame (m2) | Overshadowing height (m) | Overshadowing distance (m) | Shading<br>device                        | Frame and glass type   |                  |                                 |                    |
| W20                   | W           | 1.71                                     | 10.65                    | 5.1                        | none                                     | standard<br>aluminium,<br>single clear, (or<br>U-value: 7.63,<br>SHGC: 0.75) |                  |                                 |                    |
| W09                   | W           | 1.89                                     | 10.65                    | 5.1                        | none                                     | standard<br>aluminium,<br>single clear, (or<br>U-value: 7.63,<br>SHGC: 0.75) |                  |                                 |                    |
| W10                   | W           | 1.93                                     | 10.65                    | 5.1                        | none                                     | standard<br>aluminium,<br>single clear, (or<br>U-value: 7.63,<br>SHGC: 0.75) |                  |                                 |                    |
| W11.2                 | W           | 5.09                                     | 3                        | 3.4                        | external<br>louvre/blind<br>(adjustable) | standard<br>aluminium,<br>single clear, (or<br>U-value: 7.63,<br>SHGC: 0.75) |                  |                                 |                    |
| W15                   | W           | 4.31                                     | 2.85                     | 4.3                        | external<br>louvre/blind<br>(adjustable) | standard<br>aluminium,<br>single clear, (or<br>U-value: 7.63,<br>SHGC: 0.75) |                  |                                 |                    |

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| Glazing requir        | ements            |                                    |                          |                            |   |  | Show on<br>DA Plans | Show on CC/CDC<br>Plans & specs | Certifier<br>Check |
|-----------------------|-------------------|------------------------------------|--------------------------|----------------------------|---|--|---------------------|---------------------------------|--------------------|
| Windows and gla       | zed doors glazinç |                                    |                          |                            |   |  |                     |                                 |                    |
| Window/door<br>number | Orientation       | Area of glass including frame (m2) | Overshadowing height (m) | Overshadowing distance (m) | Shading<br>device                                   | Frame and glass type   |                     |                                 |                    |
| W04                   | W                 | 4.28                               | 7                        | 2                          | none  | standard<br>aluminium,<br>single clear, (or<br>U-value: 7.63,<br>SHGC: 0.75)         |                     |                                 |                    |
| D09                   | N                 | 4.8                                | 0                        | 0                          | eave/<br>verandah/<br>pergola/balcony<br>>=900 mm   | standard<br>aluminium,<br>single clear, (or<br>U-value: 7.63,<br>SHGC: 0.75)         |                     |                                 |                    |
| W14.1                 | SE                | 7.1                                | 2.85                     | 4.3                        | none  | standard<br>aluminium,<br>single clear, (or<br>U-value: 7.63,<br>SHGC: 0.75)         |                     |                                 |                    |
| W05.1                 | NW                | 7.1                                | 2                        | 2.4                        | none  | aluminium,<br>double Lo-<br>Tsol/air gap/<br>clear, (U-value:<br>4.9, SHGC:<br>0.33) |                     |                                 |                    |
| W05.2                 | NW                | 4.52                               | 0                        | 0                          | projection/<br>height above<br>sill ratio<br>>=0.43 | standard<br>aluminium,<br>single clear, (or<br>U-value: 7.63,<br>SHGC: 0.75)         |                     |                                 |                    |

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| Glazing require       | ements      | Show on DA Plans                   | Show on CC/CDC<br>Plans & specs | Certifier<br>Check         |                   |  |  |  |  |
|-----------------------|-------------|------------------------------------|---------------------------------|----------------------------|-------------------|--|--|--|--|
| Window/door<br>number | Orientation | Area of glass including frame (m2) | Overshadowing height (m)        | Overshadowing distance (m) | Shading<br>device | Frame and glass type   |  |  |  |
| W14.2                 | SE          | 4.52                               | 1                               | 4.3                        | none              | standard<br>aluminium,<br>single clear, (or<br>U-value: 7.63,<br>SHGC: 0.75) |  |  |  |
| D07                   | N           | 4.94                               | 3                               | 3                          | none              | aluminium,<br>single Lo-<br>Tsol low-e,<br>(U-value: 5.6,<br>SHGC: 0.36)     |  |  |  |
| W22                   | S           | 2.46                               | 0                               | 0                          | none              | standard<br>aluminium,<br>single clear, (or<br>U-value: 7.63,<br>SHGC: 0.75) |  |  |  |

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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.