BASIX Certificate

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

Single Dwelling

Certificate number: 1406630S 02

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

Secretary

Date of issue: Tuesday, 09 July 2024

To be valid, this certificate must be submitted with a development application or lodged with a complying development certificate application within 3 months of the date of issue.



| Project summary | | | |
|---------------------------|--|-------------|--|
| Project name | 64 Powderworks Road North Narrabeen (House D)_02 | | |
| Street address | 64 POWDERWORKS ROAD NAR | RABEEN 2101 | |
| Local Government Area | Northern Beaches Council | | |
| Plan type and plan number | Deposited Plan P6462 | | |
| Lot no. | 35 | | |
| Section no. | - | | |
| Project type | dwelling house (detached) | | |
| No. of bedrooms | 5 | | |
| Project score | _ | | |
| Water | ✓ 41 | Target 40 | |
| Thermal Performance | V Pass | Target Pass | |
| Energy | 73 | Target 72 | |
| Materials | ✓ -15 | Target n/a | |

Certificate Prepared by

Name / Company Name: PAUL&DAVID CONSULTING PTY LTD.

ABN (if applicable): 20655264341

BASIX Department of Planning, Housing and Infrastructure

Version: 4.03 / EUCALYPTUS 03 01 0 Certificate No.: 1406630S 02 Tuesday, 09 July 2024

Description of project

Project address Project name 64 Powderworks Road North Narrabeen (House D)_02 Street address 64 POWDERWORKS ROAD NARRABEEN 2101 Local Government Area Northern Beaches Council Plan type and plan number Deposited Plan P6462 Lot no. 35

| Section no. | - |
|--|---------------------------|
| Project type | |
| Project type | dwelling house (detached) |
| No. of bedrooms | 5 |
| Site details | |
| Site area (m ²) | 580 |
| Roof area (m ²) | 183 |
| Conditioned floor area (m ²) | 191.8 |
| Unconditioned floor area (m ²) | 9.6 |
| Total area of garden and lawn (m ²) | 275 |
| Roof area of the existing dwelling (m ²) | 0 |

| Assessor details and thermal loads | | | |
|---|-------------------------|-------------|--|
| Assessor number | 101225 | | |
| Certificate number | KNVGYCKM5P | | |
| Climate zone | 56 | | |
| Area adjusted cooling load (MJ/ m ² .year) | 15 | | |
| Area adjusted heating load (MJ/ m².year) | 15 | | |
| Project score | | | |
| Water | ✓ 41 | Target 40 | |
| Thermal Performance | V Pass | Target Pass | |
| Energy | 73 | Target 72 | |
| Materials | ✓ -15 | Target n/a | |

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Schedule of BASIX commitments

The commitments set out below regulate how the proposed development is to be carried out. It is a condition of any development consent granted, or complying development certificate issued, for the proposed development, that BASIX commitments be complied with.

| Water Commitments | Show on DA plans | Show on CC/CDC plans & specs | Certifier check |
|---|---------------------|---------------------------------|--------------------|
| Fixtures | | | |
| The applicant must install showerheads with a minimum rating of 4 star (> 4.5 but <= 6 L/min plus spray force and/or coverage tests) in all showers in the development. | | ~ | ~ |
| The applicant must install a toilet flushing system with a minimum rating of 4 star in each toilet in the development. | | ~ | ~ |
| The applicant must install taps with a minimum rating of 4 star in the kitchen in the development. | | ~ | |
| The applicant must install basin taps with a minimum rating of 4 star in each bathroom in the development. | | ~ | |
| Alternative water | - | | |
| Rainwater tank | | | |
| | | | |
| The applicant must install a rainwater tank of at least 1200 litres on the site. This rainwater tank must meet, and be installed in accordance with, the requirements of all applicable regulatory authorities. | ~ | ~ | ~ |
| accordance with, the requirements of all applicable regulatory authorities. | ~ | ~ | ~ |
| accordance with, the requirements of all applicable regulatory authorities. The applicant must configure the rainwater tank to collect rain runoff from at least 150 square metres of the roof area of the | ~ | ~ ~ | > |
| accordance with, the requirements of all applicable regulatory authorities. The applicant must configure the rainwater tank to collect rain runoff from at least 150 square metres of the roof area of the development (excluding the area of the roof which drains to any stormwater tank or private dam). | ✓ | ~ ~ ~ | > > > |
| accordance with, the requirements of all applicable regulatory authorities. The applicant must configure the rainwater tank to collect rain runoff from at least 150 square metres of the roof area of the development (excluding the area of the roof which drains to any stormwater tank or private dam). The applicant must connect the rainwater tank to: | ✓ | | > > > |

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| Thermal Performance and Materials commitments | Show on DA plans | Show on CC/CDC plans & specs | Certifier check |
|--|---------------------|------------------------------|--------------------|
| Simulation Method | | | |
| Assessor details and thermal loads | - | | |
| The applicant must attach the certificate referred to under "Assessor Details" on the front page of this BASIX certificate (the "Assessor Certificate") to the development application and construction certificate application for the proposed development (or, if the applicant is applying for a complying development certificate for the proposed development, to that application). The applicant must also attach the Assessor Certificate to the application for an occupation certificate for the proposed development. | | | |
| The Assessor Certificate must have been issued by an Accredited Assessor in accordance with the Thermal Comfort Protocol. | | | |
| The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX certificate, including the Cooling and Heating loads shown on the front page of this certificate and the "Construction" and "Glazing" tables below. | | | |
| The applicant must show on the plans accompanying the development application for the proposed development, all matters which the Assessor Certificate requires to be shown on those plans. Those plans must bear a stamp of endorsement from the Accredited Assessor to certify that this is the case. The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all thermal performance specifications set out in the Assessor Certificate, and all aspects of the proposed development which were used to calculate those specifications. | ~ | ~ | ~ |
| The applicant must construct the development in accordance with all thermal performance specifications set out in the Assessor Certificate, and in accordance with those aspects of the development application or application for a complying development certificate which were used to calculate those specifications. | | ~ | ~ |
| The applicant must show on the plans accompanying the development application for the proposed development, the locations of ceiling fans set out in the Assessor Certificate. The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), the locations of ceiling fans set out in the Assessor Certificate. | ~ | ~ | ~ |

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| Thermal Performance and Materials commitments | Show on DA plans | Show on CC/CDC plans & specs | Certifier check |
|---|---------------------|------------------------------|--------------------|
| Construction | | | |
| The applicant must construct the floors, walls, roofs, ceilings and glazing of the dwelling in accordance with the specifications listed in the tables below. | ~ | ~ | ~ |
| The applicant must show through receipts that the materials purchased for construction are consistent with the specifications listed in the tables below. | | | ~ |

| Construction | Area - m² | Insulation |
|--|-----------|--|
| floor - concrete slab on ground, conventional slab. | 119.6 | none |
| floor - suspended floor above garage, treated softwood; frame: timber - H2 treated softwood. | 110.7 | none |
| garage floor - concrete slab on ground. | 28.9 | none |
| external wall: brick veneer; frame: timber - H2 treated softwood. | 111 | fibreglass batts or roll+ foil/sarking |
| external wall: framed (fibre cement sheet or boards); frame: timber - H2 treated softwood. | 117 | fibreglass batts or roll+ foil/sarking |
| external garage wall: brick veneer; frame: timber - H2 treated softwood. | 26 | fibreglass batts or roll+ foil/sarking |
| internal wall shared with garage: plasterboard; frame: timber - H2 treated softwood. | 26 | fibreglass batts or roll |
| internal wall: plasterboard; frame: timber - H2 treated softwood. | 141 | none |
| ceiling and roof - flat ceiling / pitched roof, framed - terracotta tiles , timber - H2 treated softwood. | 183 | ceiling: fibreglass batts or roll; roof: foil/sarking. |

| Thermal Performance and Materials commitments | Show on DA plans | Show on CC/CDC plans & specs | Certifier check |
|--|---------------------|------------------------------|----------------------|
| Glazing | | | |
| The applicant must install windows, glazed doors and skylights as described in the table below, in accordance with the specifications listed in the table. | > | ✓ | |

| Frames | Maximum area - m2 |
|-----------|-------------------|
| aluminium | 34.45 |
| timber | 0 |
| uPVC | 0 |
| steel | 0 |
| composite | 0 |

| Glazing | Maximum area - m2 |
|---------|-------------------|
| single | 34.45 |
| double | 0 |
| triple | 0 |

| Energy Commitments | Show on DA plans | Show on CC/CDC plans & specs | Certifier check |
|---|---------------------|--|----------------------|
| Hot water | | | |
| The applicant must install the following hot water system in the development, or a system with a higher energy rating: gas instantaneous with a performance of 6 stars. | ~ | ~ | ~ |
| Cooling system | | | |
| The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 living area: 1-phase airconditioning - non ducted; Energy rating: 2.5 star (average zone) | | ~ | ~ |
| The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 bedroom: 1-phase airconditioning - non ducted; Energy rating: 2.5 star (average zone) | | ~ | ~ |
| Heating system | | | |
| The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 living area: 1-phase airconditioning - non ducted; Energy rating: 2.5 star (average zone) | | ~ | ~ |
| The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 bedroom: 1-phase airconditioning - non ducted; Energy rating: 2.5 star (average zone) | | ~ | ~ |
| Ventilation | | | - |
| The applicant must install the following exhaust systems in the development: | | | |
| At least 1 Bathroom: individual fan, ducted to façade or roof; Operation control: manual on / timer off | | ✓ | ~ |
| Kitchen: individual fan, ducted to façade or roof; Operation control: manual switch on/off | | | ~ |
| Laundry: individual fan, ducted to façade or roof; Operation control: manual switch on/off | | | |
| Artificial lighting | <u>_</u> | • | |
| The applicant must ensure that a minimum of 80% of light fixtures are fitted with fluorescent, compact fluorescent, or light-emitting- diode (LED) lamps. | | Image: A second s | ~ |
| Natural lighting | | | |
| The applicant must install a window and/or skylight in 4 bathroom(s)/toilet(s) in the development for natural lighting. | | _ | |

| Energy Commitments | Show on DA plans | Show on CC/CDC plans & specs | Certifier check |
|--|---------------------|---------------------------------|--------------------|
| Other | | | |
| The applicant must install a gas cooktop & electric oven in the kitchen of the dwelling. | | ~ | |
| The applicant must install a fixed outdoor clothes drying line as part of the development. | | ~ | |

Legend

In these commitments, "applicant" means the person carrying out the development.

Commitments identified with a V 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 V in the "Show on CC/CDC plans and 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 V in the "Certifier check" column must be certified by a certifying authority as having been fulfilled, before a final occupation certificate (either interim or final) for the development may be issued.