

10 Young Street, West Gosford

BASIX Report for Residential Component

Prepared for: Japrico Developments Pty Ltd

Date: 28 April 2022

Prepared by: Juhi Banerji

Ref: 46890

Stantec Australia Pty Ltd

Level 6, Building B, 207 Pacific Highway, St Leonards NSW 2065

Tel: +61 2 8484 7000 Web: www.stantec.com

Revision

Revision	Date	Comment	Prepared By	Approved By
1	14.08.2020	DA Issue	RL	LHT
2	28.04.2022	DA Issue	JBA	RL

Qualifications to this Report

The following qualifications apply to this report:

- Information has been based on our understanding of the proposed building and level of documentation provided, as noted.
- This report outlines the performance requirements required for BASIX compliance only in relation to the residential component of the development. Additional requirements such as building services, architecture, structure, fire safety, civil/stormwater, façade design, acoustic, condensation control, safety in design/installation/operation requirements should be coordinated with the relevant consultants.
- As this project involves no detailed design or site supervision by Stantec, we advise that we will not prepare a Safety in Design report for this project. We confirm that the responsibility for complying with the requirements of the state OS&H legislation remains with the project designer in conjunction with the project team and the client.

Disclaimer

The energy models prepared for BASIX thermal comfort compliance provides an estimate of the base building's energy performance. This estimate is based on a necessarily simplified and idealised version of the building that does not and cannot fully represent all of the intricacies of the building and its operation. As a result, the energy model results only represent an interpretation of the potential performance of the building. No guarantee or warrantee of building performance in practice can be based on energy modelling results alone.

Prepared by:



Juhi Banerji

Graduate Sustainability Engineer

Stantec Australia Pty Ltd

Approved by:



Ray Leung

Sustainability Engineer

Stantec Australia Pty Ltd

Contents

1.	Executive Summary	1
2.	Introduction	2
3.	Design Documentation	3
4.	Thermal Comfort Design Assessment	4
5.	BASIX Design Specification Summary	5
5.1	BASIX Compliant Design Specification Summary	5
6.	BASIX Certification Detail	10
	Appendix A NatHERS Group Certificate	1
	Appendix B Draft BASIX Certificate	2

1. Executive Summary

In summary, we can confirm the following outcome of the BASIX analysis:

- Based on the assumptions & commitments outlined in this report, the proposed residential building component can achieve BASIX Certification with the following scores:
 - Water: 40% (Required target: 40%)
 - Thermal Comfort: pass (Required target: pass)
 - Energy: 27% (Required target: 20%)
- The formal BASIX certificate has been included as a supplementary document to this report.
- The NatHERS group certificate is provided in Appendix A.
- Further information regarding the thermal comfort and building fabric specification has been outlined within Section 5 of this report. Note this specification detail forms the basis of BASIX compliance and therefore must be documented within the project design/specification in order to achieve CC approval.
- Our assessment works have been conducted based on the Architectural Plans drawings received on 29 March 2022 prepared and issued by Marchese Partners.



2. Introduction

Stantec have completed a Building Sustainability Index (BASIX) assessment for the BCA Class 2 Residential Apartment components (and associated areas) of the proposed 10 Young Street Mixed Used Development located at 10 Young Street, West Gosford, NSW 2250. The non-residential component of the development (hotel, commercial, retail etc.) does not form part of this report.

Based on information provided to date and the assumptions & commitments outlined in this report, the following BASIX outcome has been achieved:

- Water: 40% (Required target: 40%)
- Thermal Comfort: pass (Required target: pass)
- Energy: 27% (Required target: 20%)

Design Target

We understand that the residential component of the project is required to demonstrate BASIX compliance in support of the application for development approval (Class 2 Multi-unit residential dwellings).

Table 1: BASIX Targets

	BASIX Target
Energy	20
Water	40

Building Sustainability Index (BASIX)

BASIX is implemented under the Environmental Planning and Assessment Act and applies to all residential dwelling types within NSW. BASIX forms both part of the development application and building certification process within the state of NSW.

BASIX sets water and greenhouse gas reduction targets relative to the NSW average benchmark for per person potable water consumption & greenhouse gas emissions within the residential sector. BASIX also sets the minimum performance levels for thermal comfort of the dwelling and replaces portions of the NCC Energy Efficiency requirements within the state of NSW. Thermal comfort levels are assessed via a simulation method in accordance with the NatHERS House Energy Rating protocol.

Development Overview

The proposed development in relation to BASIX (residential) includes:

- A total of 1 building containing NCC Class 2 residential apartment dwellings, hotel, commercial and car parking areas. There is a total of 58 Apartment Dwelling units (assumed NCC Class 2).
- The development includes areas and common areas that are shared between the various building uses.
- There are 58 residential car parking spaces (including 6 accessible car parking spaces) and 60 non-residential car parking spaces (including 1 accessible car parking spaces) for the proposed development.



3. Design Documentation

The following assessment is based on all architectural drawings received from Marchese Partners dated 29 March 2022 and associated design notes, including:

19062 - WEST GOSFORD_ARC_ORIGINAL OPTION_2022.04.18.pdf

Notes:

Changes to the design drawings and specifications will affect the outcome of this assessment and potentially the certification of the proposed building works. Any changes nominated by the design team are to be immediately communicated to Stantec as it may affect the outcome of the BASIX Compliance. We recommend any design changes be reviewed and approved prior to documentation.



4. Thermal Comfort Design Assessment

The thermal comfort aspect of this assessment (for the residential apartments) was conducted using the FirstRate5 Thermal Performance Assessment Software, which assesses the thermal performance of a Class 1 or Class 2 dwelling in accordance with the requirements of National House Energy Rating Scheme (NatHERS) scheme as stated in the BASIX Thermal Comfort Protocol.

Compliance requires that the average area adjusted heating and cooling loads are below or equal to the average area adjusted heating and cooling loads calculated by BASIX. In addition, individual dwellings must also meet prescriptive targets as defined by BASIX.

Based on information received to date and the assumptions & commitments outlined in this report, the development average area adjusted heating and cooling loads were found to be as noted in the table below.

10 Young St, West Gosford	Heating Load (MJ/m ² /year)	Cooling Load (MJ/m ² /year)
BASIX Maximum Average	54	32
Development Average	29	25.6

Note: Full summary of NatHERS Thermal Performance Results is attached within Appendix B.

Energy Modelling Software

Thermal comfort compliance has been demonstrated via the simulation method within BASIX. Stantec have conducted energy simulations utilising FirstRate5 software (Version 5.3) which is approved under the BASIX Thermal Comfort Protocol (July 2017).

Energy Modelling Limitations

The energy modelling results obtained from the FirstRate5 software provides an estimate of the base building energy performance only. This estimate is based upon a simplified and idealised version of the building that does not fully comply with the intricacies of a building and its operation. As a result, the energy model represents an interpretation of the potential building performance only. Several dependent factors will affect the actual operational performance of the building, including local climate variation, building occupant behaviour, construction technique and building services commissioning. No guarantee or warrantee of building performance in practice can be based on energy modelling results alone.



5. BASIX Design Specification Summary

5.1 BASIX Compliant Design Specification Summary

– Refer to BASIX Certificate for all details

5.1.1 Design Specification – Residential Apartment Dwellings Building Fabric:

Design Specification – Residential Apartment Units BUILDING FABRIC
<p>External Walls:</p> <p>A minimum of R2.5 insulation added to all External Walls to achieve a minimum Total R-Value of R2.8.</p> <p>Walls to Internal Corridors and Non-Conditioned Zones:</p> <p>A minimum of R1.5 insulation added to partition walls between apartment unit and non-conditioned corridor to achieve a minimum Total R-Value of R1.8.</p> <p>There is no minimum thermal insulation requirement for partition walls between apartment unit and lift core / stairwell / waste room.</p> <p>Internal Walls to Adjoining Apartment:</p> <p>As the adjoining apartment unit is considered a conditioned space there is no minimum thermal insulation requirement for these specific walls. Therefore, the insulation to this wall shall be as per acoustic or other design requirements.</p>
<p>Ceilings:</p> <p>We have assumed floor to ceiling heights as indicated on the architectural drawings received.</p>
<p>Roof Type:</p> <p>A minimum of R2.85 roof insulation to be added to all Residential Apartment Units with an exposed roof (Minimum Total R-value R3.2 to be achieved). Roof colour for solar absorptance assumed to be 'medium'.</p>
<p>Floor Coverings</p> <p>The following design specifications have been included within the NatHERS Assessments:</p> <p>Carpet to all bedrooms</p> <p>Floating Timber to all living spaces</p> <p>Tiles to bathrooms/toilets/laundry/kitchen areas</p>
<p>Windows and Glazed Doors (Fixed and/or Operable):</p> <p>The façade glazing thermal performance specification of Total System U-Value of 4.3 W/m2.K and Total System SHGC of 0.53 is required for fixed and sliding windows/doors for all apartment units <u>except for 1203,1204,1205</u>.</p> <p>The façade glazing thermal performance specification of Total System U-Value of 4.3 W/m2.K and Total System SHGC of 0.47 is required for awning windows for all apartment units <u>except for 1203,1204,1205</u>.</p> <p>The façade glazing thermal performance specification of Total System U-Value of 3.5 W/m2.K and Total System SHGC of 0.64 is required for fixed and sliding windows/doors for apartment units 1203,1204.</p>



The façade glazing thermal performance specification of **Total System U-Value of 3.5 W/m².K and Total System SHGC of 0.47** is required for **awning windows** for apartment unit 1203.

The façade glazing thermal performance specification of **Total System U-Value of 4.8 W/m².K and Total System SHGC of 0.34** is required for **apartment unit 1205**.

No roof lights assumed to be present.

All windows/glazed doors etc. must be specified with weather-strips to prevent air infiltration when closed. This is standard compliance with AS2047.

Note: The thermal performance values for all windows/roof lights/glazed doors etc. detailed above are 'Total System' values for glass and framing system combined.

In-slab heating or cooling system:

None. It is assumed that there are no in-slab heating or cooling systems present

5.1.2 Design Specification – WATER for Residential Apartment Dwellings Component:

Design Specification – WATER for Residential Apartment Units & Related Areas (refer BASIX Certificate)

Alternative Water Supply:

A minimum 30,000L rainwater storage/re-use tank system is mandatorily required for exclusive use of the residential apartment component only. Rainwater for the 30,000L residential rainwater tank shall be collected from non-trafficable roof spaces with a total catchment area of not less than 516m².

The rainwater collected shall be re-used for the **Level 05 to Level 07** apartments' toilet flushing.

The above requirements do not account for any non-residential building component rainwater demands.

For all other hydraulic/stormwater requirements, please refer to the Hydraulic/Civil Engineer's detailed specifications.

Fixtures & Fittings:

We note that fixtures and appliances with the following minimum WELS performance ratings have been included in the BASIX Assessment:

Residential Common Areas (as applicable)

No Common Facility

Residential Apartment Units - All

3 Star WELS minimum rated Showerheads (>6.0 but <= 7.5 L/min)

4 Star WELS minimum rated Toilets

6 Star WELS minimum rated Kitchen and Bathroom Taps

6 Star WELS minimum rated Dishwashers

We note a reduction in the water efficiency quality of these appliances/fixtures will affect the water aspect of the BASIX rating.



5.1.3 Design Specification - ENERGY for Residential Apartment Dwellings Component:

Design Specification – ENERGY for Residential Apartment Units & Related Areas (refer BASIX Certificate)
<p>Alternative Energy Supply:</p> <p>A minimum 15kW peak Photovoltaic System (PV) is mandatorily required for exclusive use of the residential apartment component only.</p> <p>The above requirements do not account for any non-residential building component energy demands.</p>
<p>Air Leakage:</p> <p>All apartment kitchen, bathroom and laundry exhaust shall be via individual fan ducted to Façade/Roof. Refer to BASIX certificate and Mechanical Ventilation System section below for operation control.</p> <p>Back-draft dampers must be installed to prevent air infiltration.</p> <p>Ceiling Downlights (if used) must be the 'sealed' type</p>
<p>Hot Water System:</p> <p>A centralised domestic hot water system (gas-fired boiler with manifolded storage) has been specified within the BASIX Certificate.</p> <p>Domestic Hot Water pipework is required to have a minimum of R 0.6 insulation for all external piping and R 0.6 for all internal piping.</p> <p>It should be noted that a less efficient hot water system will affect the rating of the BASIX Energy Target.</p>
<p>Lifts:</p> <p>Lift 1 (gearless traction with VVVF motor): 13 Levels Served</p> <p>Lift 2 (gearless traction with VVVF motor): 13 Levels Served</p>
<p>Mechanical Ventilation Systems:</p> <p>Common Areas:</p> <p>Level 01 and Level 02 Car park areas / Level 00 to Level 13 Fire Stairs / Level 00 Lobby / Level 00 Store / Level 00 and Level 00 Mezzanine corridors / Level 05 to Level 13 Corridors – natural ventilation only, no mechanical ventilation</p> <p>Level 00 Loading Dock – Ventilation Exhaust Only (VSD controlled and CO monitoring)</p> <p>Level 00 Electric Room – Ventilation Supply Only (Continuous)</p> <p>Level 00 Comms Room – Air-conditioning system (Thermostatically controlled)</p> <p>Level 00 Residential Waste Room / Level 06 to 09 Waste Room – Ventilation exhaust Only (Continuous)</p> <p>Level 00 Service Room / Level 00 Mezzanine Service Rooms – Ventilation Supply Only (Thermostatically controlled)</p> <p>Level 00 Fire Pump Room and Fire Control Room – Ventilation Supply and Exhaust (Continuous)</p> <p>Level 00 AC Toilet, Level 13 ACC Toilet – Ventilation Exhaust only (Time clock or BMS controlled)</p>



Residential Apartment Units - All

Bathrooms – Ducted Ventilation exhaust only (interlocked to light)

Laundry – Ducted Ventilation exhaust only (Manual switch on/off)

Kitchen – Ducted Ventilation exhaust only (Manual switch on/off)

Residential Apartment Units Air-Conditioning Systems:

Cooling (bedroom + living):

Individual 3-phase air-conditioning with EER 2.5-3.0

Heating (bedroom + living):

Individual 3-phase air-conditioning with EER 2.5-3.0

Day-night zoning between living room and bedrooms is not required.

Lighting:

Common Areas Lighting:

Level 01 and Level 02 carpark areas - LED Lighting with zoned switching and motion sensor control

Level 00 Fire Pump Room and Fire Control Room / Level 00 Store – LED Lighting with manual on/off control

Level 00 Loading Dock / Level 00 Electric Room / Level 00 Comms Room / Level 00 Residential Waste Room / Level 06 to Level 09 Waste Room / Level 00 Service Rooms / Level 00 Mezzanine Service Rooms / Level 00 to Level 13 Fire Stairs / Level 00 and Level 00 Mezzanine Corridors / Level 05 to Level 13 Corridors / Level 00 and 13 ACC Toilets – LED Lighting with motion sensors controlled

Level 00 Lobby - LED Lighting with zoned switching controlled

Residential Apartment Units Lighting - All

Dedicated LED Lighting for all rooms

Lifts Lighting – serving the Residential Apartment Units

LED lighting connected to lift call button

Residential Apartment Units Appliance Specifications (for each unit):

The following minimum energy performance specifications have been included within the BASIX assessment and shall be supplied for each unit:

Gas cooktop and electric ovens to all dwellings.

Dishwasher – 2.5 Star minimum Energy rating

Clothes Dryer – 1.5 Star minimum Energy rating

Compliance Note: A reduction in the energy efficiency quality of any of these appliances will affect the energy aspect of the BASIX rating.



Note: In addition to the BASIX commitments, BCA Class 2 buildings must continue to be designed and constructed to comply with “NCC 2019 NSW Subsection J(A) Energy Efficiency”. For Deemed-to-Satisfy solution compliance, this includes (but is not limited to):

- NSW Part J(A)1 Building Fabric
- NSW Part J(A)2 Building Sealing
- NSW Part J(A)3 Air-conditioning and Ventilation Systems
- NSW Part J(A)4 Heated Water Supply
- NSW Part J(A)5 Facilities for Energy Monitoring



6. BASIX Certification Detail

Project Summary	
Project Name	10 Young Street, West Gosford Residential Component
Street Address	10 Young Street, West Gosford, NSW 2250
Local Government Area	Central Coast Council
Plan Type / Number	DP 1194024
Lot No#	1
Section No#	NA
No. of Residential Buildings	1
No. of units in Residential Flat Buildings	58
No. of multi-dwelling houses	0
No. of single dwelling houses	0
BASIX Certificate No#	1123256M_02
Project Score	
Water	40%
Thermal Comfort	Pass
Energy	27%



Appendix A NatHERS Group Certificate



Nationwide House Energy Rating Scheme — Class 2 summary

NatHERS Certificate No. 4YM6YGXYMK

Generated on 27 Apr 2022 using FirstRate5 v5.3.2a

Property

Address 10 Young St, West Gosford, NSW, 2250

Lot/DP

NatHERS climate zone

Accredited assessor



Stantec Australia

Stantec

NatHERS@stantec.com

0410136876

Accreditation No. DMN/21/2042

Assessor Accrediting Organisation Design Matters

National

6.9
Average Rating

NATIONWIDE HOUSE
ENERGY RATING SCHEME

The rating above is the average of all dwellings in this summary.

For more information on your dwelling's rating see:
www.nathers.gov.au



Verification

To verify this certificate, scan the QR code or visit

<https://www.fr5.com.au/QRCodeLanding?PublicId=4YM6YGXYMK&GrpCert=1> When using either link, ensure you are visiting www.fr5.com.au.

Summary of all dwellings

Certificate number and link	Unit number	Heating load (MJ/m ² /p.a.)	Cooling load (MJ/m ² /p.a.)	Total load (MJ/m ² /p.a.)	Star rating
4FV6TI9F2E	1001	6.7	19.4	26.1	8.4
D4QSTWWWTI	1002	19.1	24	43.1	7.4
EQ5UTCBO3L	1003	52.7	32.3	85	5.1
7R8C88DHFE	1004	49.3	24	73.3	5.6
H7Q2N0N5VF	1005	20.5	35.9	56.4	6.6
HDVRINKBNR	1006	5.5	19.1	24.6	8.6
HVLQHW5NUU	1101	5.8	16.9	22.7	8.7

Continued over

National Construction Code (NCC) requirements

The NCC's requirements for NatHERS-rated houses are detailed in 3.12.0(a)(i) and 3.12.5 of the NCC Volume Two. For apartments the requirements are detailed in J0.2 and J5 to J8 of the NCC Volume One.

In NCC 2019, these requirements include minimum star ratings and separate heating and cooling load limits that need to be met by buildings and apartments through the NatHERS assessment. Requirements additional to the NatHERS assessment that must also be satisfied include, but are not limited to: insulation installation methods, thermal breaks, building sealing, water heating and pumping, and artificial lighting requirements. The NCC and NatHERS Heating and Cooling Load Limits (Australian Building Codes Board Standard) are available at www.abcb.gov.au.

State and territory variations and additions to the NCC may also apply.

Summary of and links to all dwellings (continued)

Certificate number and link	Unit number	Heating load (MJ/m ² /p.a.)	Cooling load (MJ/m ² /p.a.)	Total load (MJ/m ² /p.a.)	Star rating
TOROBGADH2	1102	18.8	23	41.8	7.5
YF2YD45Q4U	1103	52.7	24	76.7	5.4
YC4Y7WW9U1	1104	55	21.7	76.7	5.4
5ALAV2VGQB	1105	20.4	35.4	55.8	6.6
NH3U2B2XNN	1106	5.4	20.4	25.8	8.5
OPS96RU2RO	1201	19.2	24.4	43.6	7.4
UASQ6Y42CK	1202	32.2	26.2	58.4	6.4
IZA2HQIJ65	1203	56.1	25.3	81.4	5.2
48WHAQSMDE	1204	59.4	25.7	85.1	5
I3YBRNYNXE	1205	54.8	35.1	89.9	4.8
H9VCFAOZ1P	1206	16.3	26.8	43.1	7.4
IK6WUVNLPQ	501	6.2	21.4	27.6	8.4
GSY8COB8K4	502	15	24.3	39.3	7.7
14V1X4MUBA	503	32.1	29.6	61.7	6.3
B2UX577BR5	504	38.8	23.8	62.6	6.2
9N8H8ZKX91	505	35.1	25.5	60.6	6.4
9QO6YOZE9Z	506	39.1	31.6	70.7	5.8
I2JPPN7ACE	507	19	33.8	52.8	6.8
Q9QP4O6O37	508	5.8	20.4	26.2	8.4
TZUKBUNX9R	601	4.7	21.2	25.9	8.5
I3C1WHET1U	602	15.8	25.2	41	7.6
2KU5K999BJ	603	34.4	29.3	63.7	6.2
RKKBGTH8N5	604	41	21.4	62.4	6.3
AJBV6X7Z2X	605	37.2	21.1	58.3	6.4
JMXJFJFZAC	606	40.7	31.6	72.3	5.7
UNVZ97SAUD	607	17.5	35.4	52.9	6.8
AFF5TSI89W	608	4.1	20.3	24.4	8.6
BKHOAFXB66	701	4.9	21	25.9	8.5
NR8LKXYLW8	702	16.1	25.1	41.2	7.6
E6EYXEH1ZX	703	34.9	29.3	64.2	6.2
JREY0SG3V6	704	41.4	21.5	62.9	6.2
47MASEFT16	705	37.6	21.3	58.9	6.4
76LJ5G1VL9	706	41.1	31.6	72.7	5.7
RQW1YW2Q8F	707	17.8	35.4	53.2	6.8
7NF32D4Z45	708	4.3	19.9	24.2	8.6
FWQ36NG42T	801	5.1	21	26.1	8.4
OVSVONLUM6	802	16.4	25	41.4	7.5

Continued over

Summary of and links to all dwellings (continued)

Certificate number and link	Unit number	Heating load (MJ/m ² /p.a.)	Cooling load (MJ/m ² /p.a.)	Total load (MJ/m ² /p.a.)	Star rating
MYVV8T0SQ2	803	35.4	29.7	65.1	6.1
MB0P44A25L	804	41.8	21.1	62.9	6.2
P7Y00M5UOP	805	37.9	21.3	59.2	6.4
2JN8TQB44M	806	41.6	31.4	73	5.7
WYO9HY4C0T	807	18.1	35.7	53.8	6.8
MSZAQOAGHW	808	4.5	19.9	24.4	8.6
YFDA9CY26O	901	6.5	19.6	26.1	8.4
3G8SY1TYGZ	902	18.7	24.1	42.8	7.4
R244DJUMSF	903	40	28.9	68.9	5.9
P4WHXQUN9E	904	44.4	20.3	64.7	6.1
ABGM0FUGLY	905	40.5	20	60.5	6.4
5MARF6LJ70	906	48.3	30.2	78.5	5.4
SLK198U14I	907	20.4	34.7	55.1	6.7
GFYBZQWSD7	908	6	18.8	24.8	8.6
Average		26.9	25.6	52.5	6.9

Explanatory notes

About this report

This summary rating is the average rating of all NCC Class 2 dwellings in a development. The individual dwellings' ratings are a comprehensive, dynamic computer modelling evaluation of a home, using the floorplans, elevations and specifications to estimate the energy load. It addresses the building layout, orientation and fabric (i.e. walls, windows, floors, roofs and ceilings), but does not cover the water or energy use of appliances, or energy production of solar panels. For more details about an individual dwelling's assessment, refer to the individual dwelling's NatHERS Certificate (accessible via link).

Accredited Assessors

To ensure the NatHERS Certificate is of a high quality, always use an accredited or licenced assessor. NatHERS accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO). AAOs have specific quality assurance processes in place, and continuing professional development requirements, to maintain a high and consistent standard of assessments across the country.

Any questions or concerns about this report should be directed to the assessor in the first instance. If the assessor is unable to address these questions or concerns, the AAO specified on the front of this certificate should be contacted.

Disclaimer

The format of the NatHERS Certificate was developed by the NatHERS Administrator. However the content, input and creation of the NatHERS Certificate is by the assessor. It is the responsibility of the assessor who prepared this certificate to use NatHERS accredited software correctly and follow the NatHERS Technical Notes to produce a NatHERS Certificate.

Appendix B Draft BASIX Certificate



BASIX[®]Certificate

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

Multi Dwelling

Certificate number: 1123256M_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

This certificate is a revision of certificate number 1123256M lodged with the consent authority or certifier on 17 August 2020 with application DA 10609.

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 Environmental Planning and Assessment Regulation 2000

Secretary

Date of issue: Thursday, 28 April 2022

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



Planning,
Industry &
Environment

Project summary		
Project name	West Gosford_02	
Street address	10 Young Street West Gosford 2250	
Local Government Area	Central Coast Council	
Plan type and plan number	deposited 1194024	
Lot no.	1	
Section no.	1	
No. of residential flat buildings	1	
No. of units in residential flat buildings	58	
No. of multi-dwelling houses	0	
No. of single dwelling houses	0	
Project score		
Water	✓ 40	Target 40
Thermal Comfort	✓ Pass	Target Pass
Energy	✓ 27	Target 20

Certificate Prepared by

Name / Company Name: Stantec Australia Pty Ltd

ABN (if applicable): 17007820322

Description of project

Project address

Project name	West Gosford_02
Street address	10 Young Street West Gosford 2250
Local Government Area	Central Coast Council
Plan type and plan number	deposited 1194024
Lot no.	1
Section no.	1

Project type

No. of residential flat buildings	1
No. of units in residential flat buildings	58
No. of multi-dwelling houses	0
No. of single dwelling houses	0

Site details

Site area (m ²)	3750
Roof area (m ²)	516
Non-residential floor area (m ²)	4034.0
Residential car spaces	58
Non-residential car spaces	50

Common area landscape

Common area lawn (m ²)	65.0
Common area garden (m ²)	927.0
Area of indigenous or low water use species (m ²)	0.0

Assessor details

Assessor number	DMN/21/2042
Certificate number	4YM6YGXYMK
Climate zone	15
Ceiling fan in at least one bedroom	No
Ceiling fan in at least one living room or other conditioned area	No

Project score

Water	 40	Target 40
Thermal Comfort	 Pass	Target Pass
Energy	 27	Target 20

Description of project

The tables below describe the dwellings and common areas within the project

Residential flat buildings - Building1, 58 dwellings, 13 storeys above ground

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
501	2	81.4	0.0	0.0	0.0
506	2	76.9	0.0	0.0	0.0
603	2	86.7	0.0	0.0	0.0
608	2	81.4	0.0	0.0	0.0
705	2	76.9	0.0	0.0	0.0
802	2	81.9	0.0	0.0	0.0
807	2	81.9	0.0	0.0	0.0
904	2	76.9	0.0	0.0	0.0
1001	2	81.4	0.0	0.0	0.0
1006	2	81.4	0.0	0.0	0.0
1105	2	81.9	0.0	0.0	0.0
1204	3	140.1	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
502	2	81.9	0.0	0.0	0.0
507	2	81.9	0.0	0.0	0.0
604	2	76.9	0.0	0.0	0.0
701	2	81.4	0.0	0.0	0.0
706	2	76.9	0.0	0.0	0.0
803	2	86.7	0.0	0.0	0.0
808	2	81.4	0.0	0.0	0.0
905	2	76.9	0.0	0.0	0.0
1002	2	81.9	0.0	0.0	0.0
1101	2	81.4	0.0	0.0	0.0
1106	2	81.4	0.0	0.0	0.0
1205	2	82.0	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
503	2	86.7	0.0	0.0	0.0
508	2	81.4	0.0	0.0	0.0
605	2	76.9	0.0	0.0	0.0
702	2	81.9	0.0	0.0	0.0
707	2	81.9	0.0	0.0	0.0
804	2	76.9	0.0	0.0	0.0
901	2	81.4	0.0	0.0	0.0
906	2	76.9	0.0	0.0	0.0
1003	3	162.2	0.0	0.0	0.0
1102	2	81.9	0.0	0.0	0.0
1201	2	81.4	0.0	0.0	0.0
1206	2	81.8	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
504	2	76.9	0.0	0.0	0.0
601	2	81.4	0.0	0.0	0.0
606	2	76.9	0.0	0.0	0.0
703	2	86.7	0.0	0.0	0.0
708	2	81.4	0.0	0.0	0.0
805	2	76.9	0.0	0.0	0.0
902	2	81.9	0.0	0.0	0.0
907	2	81.9	0.0	0.0	0.0
1004	3	140.1	0.0	0.0	0.0
1103	3	160.6	0.0	0.0	0.0
1202	2	81.9	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
505	2	76.9	0.0	0.0	0.0
602	2	81.9	0.0	0.0	0.0
607	2	81.9	0.0	0.0	0.0
704	2	76.9	0.0	0.0	0.0
801	2	81.4	0.0	0.0	0.0
806	2	76.9	0.0	0.0	0.0
903	2	86.7	0.0	0.0	0.0
908	2	81.4	0.0	0.0	0.0
1005	2	81.9	0.0	0.0	0.0
1104	3	140.1	0.0	0.0	0.0
1203	3	160.6	0.0	0.0	0.0

Description of project

The tables below describe the dwellings and common areas within the project

Common areas of unit building - Building1

Common area	Floor area (m ²)
Level 1 and 2 Carpark Area	3774.0
Lift car (No.2)	-
Level 00 Residential Waste Room	62.0
Level 00 Fire Pump and Control Room	19.0
Level 00 to Level 4 Fire Stairs	156.0
Level 13 ACC Toilet	8.0
Level 5 to 13 Corridors	578.0

Common area	Floor area (m ²)
Level 00 Loading Dock	56.0
Level 00 Elec. Room	9.0
Level 6 to 9 Waste Room	23.0
Level 00 Store	12.0
Level 5 to Level 13 Fire Stairs	234.0
Level 00 Ground floor Lobby	157.0

Common area	Floor area (m ²)
Lift car (No.1)	-
Level 00 Comms Aoom	10.0
Level 00 Services Rooms	8.0
Level 00M Services Rooms	116.0
Level 00 ACC Toilet	5.0
Level 00 + 00M Corridors	80.0

Schedule of BASIX commitments

1. Commitments for Residential flat buildings - Building1

(a) Dwellings

- (i) Water
- (ii) Energy
- (iii) Thermal Comfort

(b) Common areas and central systems/facilities

- (i) Water
- (ii) Energy

2. Commitments for multi-dwelling houses

3. Commitments for single dwelling houses

4. Commitments for common areas and central systems/facilities for the development (non-building specific)

- (i) Water
- (ii) Energy

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.

1. Commitments for Residential flat buildings - Building1

(a) Dwellings

(i) Water	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must comply with the commitments listed below in carrying out the development of a dwelling listed in a table below.			
(b) The applicant must plant indigenous or low water use species of vegetation throughout the area of land specified for the dwelling in the "Indigenous species" column of the table below, as private landscaping for that dwelling. (This area of indigenous vegetation is to be contained within the "Area of garden and lawn" for the dwelling specified in the "Description of Project" table).	✓	✓	
(c) If a rating is specified in the table below for a fixture or appliance to be installed in the dwelling, the applicant must ensure that each such fixture and appliance meets the rating specified for it.		✓	✓
(d) The applicant must install an on demand hot water recirculation system which regulates all hot water use throughout the dwelling, where indicated for a dwelling in the "HW recirculation or diversion" column of the table below.		✓	✓
(e) The applicant must install: <ul style="list-style-type: none"> (aa) a hot water diversion system to all showers, kitchen sinks and all basins in the dwelling, where indicated for a dwelling in the "HW recirculation or diversion" column of the table below; and (bb) a separate diversion tank (or tanks) connected to the hot water diversion systems of at least 100 litres. The applicant must connect the hot water diversion tank to all toilets in the dwelling. 		✓ ✓	✓ ✓
(e) The applicant must not install a private swimming pool or spa for the dwelling, with a volume exceeding that specified for it in the table below.	✓	✓	
(f) If specified in the table, that pool or spa (or both) must have a pool cover or shading (or both).		✓	
(g) The pool or spa must be located as specified in the table.	✓	✓	
(h) The applicant must install, for the dwelling, each alternative water supply system, with the specified size, listed for that dwelling in the table below. Each system must be configured to collect run-off from the areas specified (excluding any area which supplies any other alternative water supply system), and to divert overflow as specified. Each system must be connected as specified.	✓	✓	✓

Dwelling no.	Fixtures					Appliances		Individual pool				Individual spa		
	All shower-heads	All toilet flushing systems	All kitchen taps	All bathroom taps	HW recirculation or diversion	All clothes washers	All dish-washers	Volume (max volume)	Pool cover	Pool location	Pool shaded	Volume (max volume)	Spa cover	Spa shaded
All dwellings	3 star (> 6 but <= 7.5 L/min)	4 star	6 star	6 star	no	-	6 star	-	-	-	-	-	-	-

Alternative water source								
Dwelling no.	Alternative water supply systems	Size	Configuration	Landscape connection	Toilet connection (s)	Laundry connection	Pool top-up	Spa top-up
501, 502, 505, 506, 601, 603, 604, 606, 704, 706, 708, 801, 803, 805, 903, 907, 908, 1003, 1101, 1104, 1105, 1201, 1203, 1206	central water tank (no. 1)	See central systems	See central systems	-	yes	-	-	-

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must comply with the commitments listed below in carrying out the development of a dwelling listed in a table below.			
(b) The applicant must install each hot water system specified for the dwelling in the table below, so that the dwelling's hot water is supplied by that system. If the table specifies a central hot water system for the dwelling, then the applicant must connect that central system to the dwelling, so that the dwelling's hot water is supplied by that central system.	✓	✓	✓
(c) The applicant must install, in each bathroom, kitchen and laundry of the dwelling, the ventilation system specified for that room in the table below. Each such ventilation system must have the operation control specified for it in the table.		✓	✓

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(d) The applicant must install the cooling and heating system/s specified for the dwelling under the "Living areas" and "Bedroom areas" headings of the "Cooling" and "Heating" columns in the table below, in/for at least 1 living/bedroom area of the dwelling. If no cooling or heating system is specified in the table for "Living areas" or "Bedroom areas", then no systems may be installed in any such areas. If the term "zoned" is specified beside an air conditioning system, then the system must provide for day/night zoning between living areas and bedrooms.		✓	✓
(e) This commitment applies to each room or area of the dwelling which is referred to in a heading to the "Artificial lighting" column of the table below (but only to the extent specified for that room or area). The applicant must ensure that the "primary type of artificial lighting" for each such room in the dwelling is fluorescent lighting or light emitting diode (LED) lighting. If the term "dedicated" is specified for a particular room or area, then the light fittings in that room or area must only be capable of being used for fluorescent lighting or light emitting diode (LED) lighting.		✓	✓
(f) This commitment applies to each room or area of the dwelling which is referred to in a heading to the "Natural lighting" column of the table below (but only to the extent specified for that room or area). The applicant must ensure that each such room or area is fitted with a window and/or skylight.	✓	✓	✓
(g) This commitment applies if the applicant installs a water heating system for the dwelling's pool or spa. The applicant must: (aa) install the system specified for the pool in the "Individual Pool" column of the table below (or alternatively must not install any system for the pool). If specified, the applicant must install a timer, to control the pool's pump; and (bb) install the system specified for the spa in the "Individual Spa" column of the table below (or alternatively must not install any system for the spa). If specified, the applicant must install a timer to control the spa's pump.		✓ ✓	
(h) The applicant must install in the dwelling: (aa) the kitchen cook-top and oven specified for that dwelling in the "Appliances & other efficiency measures" column of the table below; (bb) each appliance for which a rating is specified for that dwelling in the "Appliances & other efficiency measures" column of the table, and ensure that the appliance has that minimum rating; and (cc) any clothes drying line specified for the dwelling in the "Appliances & other efficiency measures" column of the table.		✓ ✓ ✓	✓
(i) If specified in the table, the applicant must carry out the development so that each refrigerator space in the dwelling is "well ventilated".		✓	

	Hot water	Bathroom ventilation system		Kitchen ventilation system		Laundry ventilation system	
Dwelling no.	Hot water system	Each bathroom	Operation control	Each kitchen	Operation control	Each laundry	Operation control
All dwellings	central hot water system 1	individual fan, ducted to façade or roof	interlocked to light	individual fan, ducted to façade or roof	manual switch on/off	individual fan, ducted to façade or roof	manual switch on/off

Dwelling no.	Cooling		Heating		Artificial lighting						Natural lighting	
	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or dining rooms	Each kitchen	All bathrooms/toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
602, 605, 702, 906, 1202, 1205	3-phase airconditioning EER 2.5 - 3.0	3	2	yes	yes	yes	yes	0	-			
All other dwellings	3-phase airconditioning EER 2.5 - 3.0	2	2	yes	yes	yes	yes	0	-			

Dwelling no.	Individual pool		Individual spa		Appliances & other efficiency measures							
	Pool heating system	Timer	Spa heating system	Timer	Kitchen cooktop/oven	Refrigerator	Well ventilated fridge space	Dishwasher	Clothes washer	Clothes dryer	Indoor or sheltered clothes drying line	Private outdoor or unsheltered clothes drying line
All dwellings	-	-	-	-	gas cooktop & electric oven	-	no	2.5 star	-	1.5 star	no	no

(iii) Thermal Comfort	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) 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 a final occupation certificate for the proposed development.			
(b) The Assessor Certificate must have been issued by an Accredited Assessor in accordance with the Thermal Comfort Protocol.			
(c) The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX Certificate, including the details shown in the "Thermal Loads" table below.			

(iii) Thermal Comfort	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(d) The applicant must show on the plans accompanying the development application for the proposed development, all matters which the Thermal Comfort Protocol 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.	✓		
(e) 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.		✓	
(f) 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.		✓	✓
(g) Where there is an in-slab heating or cooling system, the applicant must: (aa) Install insulation with an R-value of not less than 1.0 around the vertical edges of the perimeter of the slab; or (bb) On a suspended floor, install insulation with an R-value of not less than 1.0 underneath the slab and around the vertical edges of the perimeter of the slab.	✓	✓	✓
(h) The applicant must construct the floors and walls of the development in accordance with the specifications listed in the table below.	✓	✓	✓

Thermal loads		
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)
501	6.2	21.4
502	15.0	24.3
503	32.1	29.6
504	38.8	23.8
505	35.1	25.5
506	39.1	31.6
507	19.0	33.8
508	5.8	20.4
601	4.7	21.2

	Thermal loads	
Dwelling no.	Area adjusted heating load (in mJ/m ² /yr)	Area adjusted cooling load (in mJ/m ² /yr)
602	15.8	25.2
603	34.4	29.3
604	41.0	21.4
605	37.2	21.1
606	40.7	31.6
607	17.5	35.4
608	4.1	20.3
701	4.9	21.0
702	16.1	25.1
703	34.9	29.3
704	41.4	21.5
705	37.6	21.3
706	41.1	31.6
707	17.8	35.4
708	4.3	19.9
801	5.1	21.0
802	16.4	25.0
803	35.4	29.7
804	41.8	21.1
805	37.9	21.3
806	41.6	31.4
807	18.1	35.7
808	4.5	19.9
901	6.5	19.6
902	18.7	24.1
903	40.0	28.9
904	44.4	20.3

Dwelling no.	Thermal loads	
	Area adjusted heating load (in mJ/m ² /yr)	Area adjusted cooling load (in mJ/m ² /yr)
905	40.5	20.0
906	48.3	30.2
907	20.4	34.7
908	6.0	18.8
1001	6.7	19.4
1002	19.1	24.0
1003	52.7	32.3
1004	49.3	24.0
1005	20.5	35.9
1006	5.5	19.1
1101	5.8	16.9
1102	18.8	23.0
1103	52.7	24.0
1104	55.0	21.7
1105	20.4	35.4
1106	5.4	20.4
1201	19.2	24.4
1202	32.2	26.2
1203	56.1	25.3
1204	59.4	25.7
1205	54.8	35.1
All other dwellings	16.3	26.8

(b) Common areas and central systems/facilities

(i) Water	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) If, in carrying out the development, the applicant installs a showerhead, toilet, tap or clothes washer into a common area, then that item must meet the specifications listed for it in the table.		✓	✓
(b) The applicant must install (or ensure that the development is serviced by) the alternative water supply system(s) specified in the "Central systems" column of the table below. In each case, the system must be sized, be configured, and be connected, as specified in the table.	✓	✓	✓
(c) A swimming pool or spa listed in the table must not have a volume (in kLs) greater than that specified for the pool or spa in the table.	✓	✓	
(d) A pool or spa listed in the table must have a cover or shading if specified for the pool or spa in the table.		✓	
(e) The applicant must install each fire sprinkler system listed in the table so that the system is configured as specified in the table.		✓	✓
(f) The applicant must ensure that the central cooling system for a cooling tower is configured as specified in the table.		✓	✓

Common area	Showerheads rating	Toilets rating	Taps rating	Clothes washers rating
All common areas	no common facility	no common facility	no common facility	no common laundry facility

Central systems	Size	Configuration	Connection (to allow for...)
Central water tank - rainwater or stormwater (No. 1)	30000.0	To collect run-off from at least: - 516.0 square metres of roof area of buildings in the development - 0.0 square metres of impervious area in the development - 0.0 square metres of garden/lawn area in the development - 0.0 square metres of planter box area in the development (excluding, in each case, any area which drains to, or supplies, any other alternative water supply system).	- irrigation of 0.0 square metres of common landscaped area on the site - car washing in 0 car washing bays on the site
Fire sprinkler system (No. 1)	-	-	-
Fire sprinkler system (No. 2)	-	-	-

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) If, in carrying out the development, the applicant installs a ventilation system to service a common area specified in the table below, then that ventilation system must be of the type specified for that common area, and must meet the efficiency measure specified.		✓	✓
(b) In carrying out the development, the applicant must install, as the "primary type of artificial lighting" for each common area specified in the table below, the lighting specified for that common area. This lighting must meet the efficiency measure specified. The applicant must also install a centralised lighting control system or Building Management System (BMS) for the common area, where specified.		✓	✓
(c) The applicant must install the systems and fixtures specified in the "Central energy systems" column of the table below. In each case, the system or fixture must be of the type, and meet the specifications, listed for it in the table.	✓	✓	✓

Common area	Common area ventilation system		Common area lighting		
	Ventilation system type	Ventilation efficiency measure	Primary type of artificial lighting	Lighting efficiency measure	Lighting control system/BMS
Level 1 and 2 Carpark Area	no mechanical ventilation	-	light-emitting diode	zoned switching with motion sensor	No
Level 00 Loading Dock	ventilation exhaust only	carbon monoxide monitor + VSD fan	light-emitting diode	motion sensors	No
Lift car (No.1)	-	-	light-emitting diode	connected to lift call button	No
Lift car (No.2)	-	-	light-emitting diode	connected to lift call button	No
Level 00 Elec. Room	ventilation supply only	none ie. continuous	light-emitting diode	motion sensors	No
Level 00 Comms Aoom	air conditioning system	thermostatically controlled	light-emitting diode	motion sensors	No
Level 00 Residential Waste Room	ventilation exhaust only	-	light-emitting diode	motion sensors	No
Level 6 to 9 Waste Room	ventilation exhaust only	-	light-emitting diode	motion sensors	No
Level 00 Services Rooms	ventilation supply only	thermostatically controlled	light-emitting diode	motion sensors	No
Level 00 Fire Pump and Control Room	ventilation (supply + exhaust)	none ie. continuous	light-emitting diode	manual on / manual off	No
Level 00 Store	no mechanical ventilation	-	light-emitting diode	manual on / manual off	No
Level 00M Services Rooms	ventilation supply only	thermostatically controlled	light-emitting diode	motion sensors	No
Level 00 to Level 4 Fire Stairs	no mechanical ventilation	-	light-emitting diode	motion sensors	No

Common area	Common area ventilation system		Common area lighting		
	Ventilation system type	Ventilation efficiency measure	Primary type of artificial lighting	Lighting efficiency measure	Lighting control system/BMS
Level 5 to Level 13 Fire Stairs	no mechanical ventilation	-	light-emitting diode	motion sensors	No
Level 00 ACC Toilet	ventilation exhaust only	time clock or BMS controlled	light-emitting diode	motion sensors	No
Level 13 ACC Toilet	ventilation exhaust only	time clock or BMS controlled	light-emitting diode	motion sensors	No
Level 00 Ground floor Lobby	no mechanical ventilation	-	light-emitting diode	zoned switching	No
Level 00 + 00M Corridors	no mechanical ventilation	-	light-emitting diode	motion sensors	No
Level 5 to 13 Corridors	no mechanical ventilation	-	light-emitting diode	motion sensors	No

Central energy systems	Type	Specification
Central hot water system (No. 1)	gas-fired storage (manifolded)	Piping insulation (ringmain & supply risers): (a) Piping external to building: R0.6 (~25 mm); (b) Piping internal to building: R0.6 (~25 mm)
Lift (No. 1)	gearless traction with V V V F motor	Number of levels (including basement): 13
Lift (No. 2)	gearless traction with V V V F motor	Number of levels (including basement): 13

4. Commitments for common areas and central systems/facilities for the development (non-building specific)

(b) Common areas and central systems/facilities

(i) Water	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) If, in carrying out the development, the applicant installs a showerhead, toilet, tap or clothes washer into a common area, then that item must meet the specifications listed for it in the table.		✓	✓
(b) The applicant must install (or ensure that the development is serviced by) the alternative water supply system(s) specified in the "Central systems" column of the table below. In each case, the system must be sized, be configured, and be connected, as specified in the table.	✓	✓	✓
(c) A swimming pool or spa listed in the table must not have a volume (in kLs) greater than that specified for the pool or spa in the table.	✓	✓	
(d) A pool or spa listed in the table must have a cover or shading if specified for the pool or spa in the table.		✓	
(e) The applicant must install each fire sprinkler system listed in the table so that the system is configured as specified in the table.		✓	✓
(f) The applicant must ensure that the central cooling system for a cooling tower is configured as specified in the table.		✓	✓

Common area	Showerheads rating	Toilets rating	Taps rating	Clothes washers rating
All common areas	no common facility	no common facility	no common facility	no common laundry facility

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) If, in carrying out the development, the applicant installs a ventilation system to service a common area specified in the table below, then that ventilation system must be of the type specified for that common area, and must meet the efficiency measure specified.		✓	✓
(b) In carrying out the development, the applicant must install, as the "primary type of artificial lighting" for each common area specified in the table below, the lighting specified for that common area. This lighting must meet the efficiency measure specified. The applicant must also install a centralised lighting control system or Building Management System (BMS) for the common area, where specified.		✓	✓
(c) The applicant must install the systems and fixtures specified in the "Central energy systems" column of the table below. In each case, the system or fixture must be of the type, and meet the specifications, listed for it in the table.	✓	✓	✓

Central energy systems	Type	Specification
Alternative energy supply	Photovoltaic system	Rated electrical output (min): 15.0 peak kW

Notes

1. In these commitments, "applicant" means the person carrying out the development.
2. The applicant must identify each dwelling, building and common area listed in this certificate, on the plans accompanying any development application, and on the plans and specifications accompanying the application for a construction certificate / complying development certificate, for the proposed development, using the same identifying letter or reference as is given to that dwelling, building or common area in this certificate.
3. This note applies if the proposed development involves the erection of a building for both residential and non-residential purposes (or the change of use of a building for both residential and non-residential purposes). Commitments in this certificate which are specified to apply to a "common area" of a building or the development, apply only to that part of the building or development to be used for residential purposes.
4. If this certificate lists a central system as a commitment for a dwelling or building, and that system will also service any other dwelling or building within the development, then that system need only be installed once (even if it is separately listed as a commitment for that other dwelling or building).
5. If a star or other rating is specified in a commitment, this is a minimum rating.
6. All alternative water systems to be installed under these commitments (if any), must be installed in accordance with the requirements of all applicable regulatory authorities. NOTE: NSW Health does not recommend that stormwater, recycled water or private dam water be used to irrigate edible plants which are consumed raw, or that rainwater be used for human consumption in areas with potable water supply.

Legend

1. 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).
2. Commitments identified with a "✓" 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.
3. Commitments identified with a "✓" in the "Certifier check" column must be certified by a certifying authority as having been fulfilled. (Note: a certifying authority must not issue an occupation certificate (either interim or final) for a building listed in this certificate, or for any part of such a building, unless it is satisfied that each of the commitments whose fulfilment it is required to monitor in relation to the building or part, has been fulfilled).

Design with
community in mind

Level 6, Building B
207 Pacific Highway
St Leonards NSW 2065
Tel +61 2 8484 7000

For more information please visit
www.stantec.com

