

# 84 Tallawong Road, Rouse Hill

## BASIX Compliance Report

Project No.	P02227
Revision	03
Issued	28 October 2025
Client	LK Property Group



**E-LAB Consulting**  
Where Engineering and Science Inspire Design.





## Issue And Revision Record

Revision	Date	Comments	Engineer	Reviewer
01	03/09/2025	For Issue	MR/NA	AK
02	17/09/2025	S4.5 Issue	MR/NA	AK
03	28/10/2025	Revision for S4.5 Issue	MR/NA	AK
04				

The building's energy and water performance are computed using the online BASIX tool and an energy model developed for thermal comfort and provides only an estimation and potential performance of the building.

This cannot be used alone to determine performance in actual practice as they are based on the idealised version of the building which does not and cannot fully consider all the complexities of the building's maintenance and operation.

Engineering Lab NSW Pty Ltd

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**Authorised by:**

Engineering Lab NSW Pty Ltd

Alex Kobler | Director

Sustainability

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We recognise the Traditional Custodians of the land on which the proposed development will be constructed. We respect their enduring cultural and spiritual connections to the land and waters, and celebrate their knowledge, kinship, and values. We acknowledge that these connections to the land and waters have existed for millennia and will continue into the future. We respect the Elders who have gone before, together with those of today for their guidance on our shared journey. We recognise that we are, and always will be, on Aboriginal land.



## Executive Summary

This BASIX Report has been prepared by E-LAB Consulting (E-LAB) to accompany a State Significant Development Application (SSD- 80287510) for residential development within in-fill affordable housing at 84 Tallawong Road, Rouse Hill (the site). This SSDA seeks consent to amend three existing concepts (SPP-17-00031, SPP-17-00032, and SPP-17-00033) for residential development comprising 1 shop-to housing building and 5 residential flat buildings with a combined total for 411 units (including 70 affordable housing units).

The legal description of the site is Lot 63 in Deposited Plan 30186.

This report has been prepared to address the Secretary's Environmental Assessment Requirements (SEARs) issued for the project (SSD-80287510).

This report concludes that the proposed development is suitable and warrants approval subject to the implementation of the following mitigation measures.

- Energy efficiency design
- Water efficient fixtures

**E-LAB have assessed the development and confirm that based on the design of the residential portion of the at 84 Tallawong Road, Rouse Hill development and the inputs provided to BASIX, the proposal is positioned to comply with the requirements of BASIX. The information and performance required to achieve this is contained within this report**

This report outlines the results of the BASIX assessment; and details of how each section is independently meeting minimum legislated BASIX benchmarks using various sustainability opportunities the development is considering for BASIX certification. The minimum compliance requirements are per the below:

*Table 1: BASIX Summary*

Area	Minimum Compliance Requirement	Lot 1 Score	Lot 2 Score	Lot 3 Score
Energy	35%	35%	35%	35%
Water	40%	40%	40%	40%
Thermal Comfort	Pass	Pass	Pass	Pass

Note: Percentages stated for Energy and Water are the percentage improvement upon the NSW average dwelling's consumption.

# 1 Introduction

This BASIX Report has been prepared to support a State Significant Development Application (SSDA) at 84 Tallawong Road, Rouse Hill (the site) for residential development with in-fill affordable housing.

This SSDA seeks modification of existing consents related to the site (SPP-17-00031, SPP-17-00032, and SPP-17-00033) in accordance with the consent authority's powers under s4.17(1)(b) and (5) of the Environmental Planning and Assessment Act 1979. Those powers enable a consent authority to amend conditions in existing consents as part of the approval of a fresh development application including allowing substitution of plan references in conditions.

More particularly this SSDA seeks consent for an additional 78 dwellings (including 70 affordable housing units) and 21 car spaces to deliver a total of 411 apartments and 526 car spaces within the development of 1 shop-to housing building and 5 residential flat buildings consistent with the in-fill affordable housing provisions of Chapter 2, Part 2, Div. 1 of State Environmental Planning Policy (Housing) 2021.

A comparison of the approved developments and the scope of the modifications are as follows:

Approved Under Existing Consents	Sought For Consent Under This SSDA	Total
<b>Apartment Yield</b>		
<b>Lot 1</b>		
112	+ 25 Apartments	135
<b>Lot 2</b>		
112	+ 28 Apartments	138
<b>Lot 3</b>		
109	+ 26 Apartments	138
<b>Total</b>		
333	+ 78 Apartments (including 70 affordable housing units)	411
<b>Retail Floor Space (Lot 1 Only)</b>		
120sqm	-1.81 sqm	118.19 sqm
<b>Parking</b>		
<b>Lot 1</b>		
175	-9 car spaces	166
<b>Lot 2</b>		
168	+ 22 car spaces	190
<b>Lot 3</b>		
168	+ 2 car spaces	170
<b>Total</b>		
511	+ 15 car spaces	526



Figure 1, Proposed Site Plan (Source: Place Studio, August 2025)

## 1.1 Purpose of the Report

This report has been prepared in response to the requirements contained within the Secretary’s Environmental Assessment Requirements (SEARs) dated 26 March 2025 and issued for the SSDA (SSD-892875190). Specifically, this report has been prepared to respond to the SEARs requirements issued below.

Item	Description of Requirement	Section Reference
BASIX Certificates	Identify how ESD principles (as defined in section 193 of the EP&A Regulation) are incorporated in the design and ongoing operation of the development	Section 15

## 2 BASIX Summary

### 2.1 Overview

BASIX Compliance is the minimum sustainability performance requirement in the state of NSW. It serves as the only pathway for compliance to demonstrate compliance with the National Construction Code, Part J.

E-LAB Consulting has completed modelling of all sections of the BASIX assessment; Water, Thermal Comfort and Energy for Lots 1, 2 and 3 of the 84 Tallawong Road, Rouse Hill development.

The BASIX outcome achieved based on the assumptions listed in the report and information provided to date are as follows:

*Table 2: BASIX Summary*

Area	Minimum Compliance Requirement	Lot 1 Score	Lot 2 Score	Lot 3 Score
Energy	35%	35%	35%	35%
Water	40%	40%	40%	40%
Thermal Comfort	Pass	Pass	Pass	Pass

### 2.2 BASIX Certification Details

*Table 3: Project Summary*

Category	Lot 1 Entry	Lot 2 Entry	Lot 3 Entry
Project Name	LOT 1, 84 TALLAWONG RD ROUSE HILL_06	LOT 2, 84 TALLAWONG RD ROUSE HILL_6	Lot 3, 84 TALLAWONG RD ROUSE HILL_02
Local Government Area	Blacktown	Blacktown	Blacktown
Plan Type	Deposited Plan (DP)	Deposited Plan (DP)	Deposited Plan (DP)
Plan No.	63/--/DP30186	63/--/DP30186	63/--/DP30186
No. of Residential Buildings	2 Buildings	2 Buildings	2 Buildings
Total Number of Units & Townhouses	135	138	138
Project Type	Residential Flat Buildings	Residential Flat Buildings	Residential Flat Buildings
BASIX Certificate Number	859998M_06	863987M_06	1330947M_02

### 2.3 Energy Modelling Software

Simulation method in BASIX has been used to show the thermal comfort compliance. For energy simulations, FirstRate5 (Version 5.3.2) has been used which is approved under Thermal comfort protocol of BASIX since March 2021. This method does not guarantee or warrantee the performance in practical world as it only considers a simplified and idealistic building.



## 3 BASIX Energy

### 3.1 Energy

The following minimum standards will be required to comply with the BASIX targets for the project.

Table 4: BASIX Energy Requirements

Design Element	Compliance Criteria			
Domestic hot water systems	<b>Lots 1,2 and 3:</b> Gas-fired boiler with a minimum of R1.0 (38mm) insulation to the internal and external pipework.			
Cooking	<b>Lots 1,2 and 3:</b> Gas Cooktop and electric oven			
Mechanical heating and cooling	<b>Lots 1,2 and 3:</b> Heating: 1-phase air conditioning system with unit efficiency rating of 3.5-4.0 <b>Lots 1,2 and 3:</b> Cooling: 1-phase air conditioning system with unit efficiency rating of 3.0-3.5			
Ceiling Fans	<b>Lots 1,2 and 3:</b> Not specified.			
Apartment ventilation	<b>Lots 1,2 and 3:</b> Bathroom: individual fan, ducted to façade or roof –with manual switch on/off <b>Lots 1,2 and 3:</b> Laundry: individual fan, open to façade or roof – Manual switch on/off <b>Lots 1,2 and 3:</b> Kitchen range hood: Individual fan, open to façade or roof – Manual switch on/off			
Apartment artificial lighting	<b>Lots 1,2 and 3:</b> LEDs located throughout each dwelling in all Bedrooms, Living/Dining rooms, Kitchens, Bathrooms, Laundry and Hallways			
Appliances in Apartments (minimum Energy Star rating)	<b>Lots 1,2 and 3:</b> Dishwashers: Minimum 4.0 Star Energy Rated (To all apartments) <b>Lots 1,2 and 3:</b> Clothes washer: Not Specified <b>Lots 1,2 and 3:</b> Clothes Dryers: Minimum 2.0 Star Energy Rated (To all apartments) <b>Lots 1,2 and 3:</b> Refrigerator: Not Specified			
Appliances in Common Areas (minimum Energy Star rating)	<b>Lots 1,2 and 3:</b> Clothes Washers: No common laundry facilities <b>Lots 1,2 and 3:</b> Clothes Dryers: No common laundry facilities			
Photovoltaic Array	<b>Lots 1 and 3:</b> 10 kW PV photovoltaic system is required in each lot <b>Lot 2:</b> 15kW PV photovoltaic system is required.			
Building Management System (BMS)	<b>Lots 1,2 and 3:</b> No BMS in the development			
Vertical transport	All Lifts: gearless traction with VVVF motor ( >= 1001 kg but <= 1500kg)			
<b>Common area Ventilation &amp; artificial lighting Lot 1</b>				
Common area	Ventilation system type	Ventilation efficiency measure	Primary type of artificial lighting	Lighting efficiency measure
Car park	Ventilation (supply + exhaust)	Carbon monoxide monitor + VSD fan	Light-emitting diode	Motion sensor

Chute Discharge	Ventilation exhaust only	N/A	Light-emitting diode	Motion sensor
Bulky Waste	Ventilation exhaust only	N/A	Light-emitting diode	Motion sensor
Bin Holding	Ventilation exhaust only	N/A	Light-emitting diode	Motion sensor
Plant Room	Ventilation supply only	Interlocked to light	Light-emitting diode	Manual on / manual off
Fire Stairs – Basement	No mechanical ventilation	N/A	Light-emitting diode	Motion sensor
Fire Stairs – A	No mechanical ventilation	N/A	Light-emitting diode	Motion sensor
Fire Stairs – B	No mechanical ventilation	N/A	Light-emitting diode	Motion sensor
Lift Lobby	No mechanical ventilation	N/A	Light-emitting diode	Motion sensor
Hallway/lobby Building A	No mechanical ventilation	N/A	Light-emitting diode	Motion sensor
Hallway/lobby Building B	No mechanical ventilation	N/A	Light-emitting diode	Motion sensor
All lifts	N/A	N/A	Light-emitting diode	Connected to lift call button

Common area Ventilation & artificial lighting Lot 2

Common area	Ventilation system type	Ventilation efficiency measure	Primary type of artificial lighting	Lighting efficiency measure
Car park	Ventilation (supply + exhaust)	Carbon monoxide monitor + VSD fan	Light-emitting diode	Motion sensor
Chute Discharge	Ventilation exhaust only	N/A	Light-emitting diode	Motion sensor
Plant Room	Ventilation supply only	Interlocked to light	Light-emitting diode	Manual on / manual off
Fire Stairs – Basement	No mechanical ventilation	N/A	Light-emitting diode	Motion sensor
Fire Stairs –C	No mechanical ventilation	N/A	Light-emitting diode	Motion sensor
Fire Stairs – D	No mechanical ventilation	N/A	Light-emitting diode	Motion sensor
Lift Lobby	No mechanical ventilation	N/A	Light-emitting diode	Motion sensor
Hallway/lobby Building C	No mechanical ventilation	N/A	Light-emitting diode	Time clock and motion sensors



Hallway/lobby Building D	No mechanical ventilation	N/A	Light-emitting diode	Time clock and motion sensors
All lifts	N/A	N/A	Light-emitting diode	Connected to lift call button
Common area Ventilation & artificial lighting Lot 3				
Common area	Ventilation system type	Ventilation efficiency measure	Primary type of artificial lighting	Lighting efficiency measure
Car park	Ventilation (supply + exhaust)	Carbon monoxide monitor + VSD fan	Light-emitting diode	Motion sensor
Chute Discharge	Ventilation exhaust only	N/A	Light-emitting diode	Motion sensor
Plant Room	Ventilation supply only	Interlocked to light	Light-emitting diode	Interlocked to light
Fire Stairs – Basement	No mechanical ventilation	N/a	Light-emitting diode	Motion sensor
Fire Stairs –E	No mechanical ventilation	N/a	Light-emitting diode	Motion sensor
Fire Stairs – F	No mechanical ventilation	N/a	Light-emitting diode	Motion sensor
Lift Lobby	No mechanical ventilation	N/a	Light-emitting diode	Motion sensor
Hallway/lobby Building E	No mechanical ventilation	N/a	Light-emitting diode	Time clock and motion sensors
Hallway/lobby Building F	No mechanical ventilation	N/a	Light-emitting diode	Time clock and motion sensors
All lifts	N/A	N/A	Light-emitting diode	Connected to lift call button
Car park	Ventilation (supply + exhaust)	Carbon monoxide monitor + VSD fan	Light-emitting diode	Motion sensor
All lifts	N/A	N/A	Light-emitting diode	Connected to lift call button

## 4 BASIX Thermal Comfort

### 4.1 Thermal Comfort

The following minimum standards are required to comply with the BASIX Thermal Comfort requirements for the project.

Table 5: BASIX Thermal Comfort Requirements

Design Element	Compliance Criteria
Glazed Doors / Windows	<p>The following glazed elements are used throughout the development</p> <p><u>Fixed and Sliding Windows</u>            Total System U-Value = 4.80 (equal to or less than)            Total System SHGC = 0.51 (+/- 5%)</p> <p><u>Awning Windows</u>            Total System U-Value = 4.80 (equal to or less than)            Total System SHGC = 0.59 (+/- 5%)</p> <p>Operability – max available while meeting window safety device requirements defined in the BCA.</p> <p>Note – all glazing systems are whole of system, including glazing and frame systems.</p>
External Solid Walls	<p>Added R2.5 bulk insulation for all apartment external walls. No thermal break required for the metal stud frame for thermal bridging controls.</p> <p>Medium or light colour</p>
Walls to Internal Corridors or Non-Conditioned Zones:	<p>Added R1.5 bulk insulation for all internal walls between apartment unit and non-conditioned enclosed internal zones. No thermal break required for the metal stud frame for thermal bridging controls.</p>
Exposed Roofs/Balconies (Over conditioned spaces)	<p>Added R4.0 soffit slab insulation to apartments concrete slab roofs.</p> <p>Medium or light colour.</p>
Suspended Floor Slabs (Enclosed floor levels between conditioned and internal non-conditioned spaces and open to outside)	<p>Added R2.0 soffit slab insulation to underside of suspended concrete slabs.</p>
Floors Covering	<p>Carpet in Bedrooms, Timber in Living/Dining Rooms.</p> <p>Tile in Kitchen/Bathrooms.</p>



## 5 BASIX Water

### 5.1 Water

The following minimum standards are required to comply with the BASIX Water Targets for the project.

*Table 6: BASIX Water Requirements*

Design Element	Compliance Criteria
Fixtures	<b>Lots 1,2 and 3:</b> Showers: Minimum 4 Star (> 6 but <= 7.5 L/min) WELS Rated <b>Lots 1,2 and 3:</b> Toilets: Minimum 4 Star WELS Rated <b>Lots 1,2 and 3:</b> Bathroom Taps: Minimum 5 Star WELS Rated <b>Lots 1,2 and 3:</b> Kitchen Sink Taps: Minimum 5 Star WELS Rated
Fixtures within common areas	<b>Lots 1,2 and 3:</b> Showers: No common facility <b>Lots 1,2 and 3:</b> Toilets: No common facility <b>Lots 1,2 and 3:</b> All Taps: No common facility
Fittings/Appliances within units	<b>Lots 1,2 and 3:</b> Clothes Washer: Not specified <b>Lot 1:</b> Dishwasher: Minimum 4.0 Star WELS Rated <b>Lots 2 and 3:</b> Dishwasher: Minimum 3.5 Star WELS Rated
Fittings/Appliances within common areas	<b>Lots 1,2 and 3:</b> Clothes Washer: no common laundry facility
Fire Sprinkler Water Test	All Fire sprinkler systems test water contained in a closed system so that fire sprinkler test water is contained within the fire sprinkler system for re-use, rather than disposed.
Alternative Water	<b>Lots 1, 2 and 3</b> do not require a rainwater tank as part of the development
Common Landscape	<b>Lot 1</b> Common lawn area: 694 m <sup>2</sup> <b>Lot 2</b> Common Lawn area: 834,67 m <sup>2</sup> <b>Lot 3</b> Common Lawn area: 499 m <sup>2</sup>
Hot Water Recirculation System	<b>Lots 1,2 and 3:</b> No hot water recirculation or diversion system will be installed in the development.

## 6 Results

E-LAB Consulting are engaged by LK Property Group to provide BASIX compliance consultancy of Lots 1, 2 and 3 of the 84 Tallawong Road, Rouse Hill NSW development. The report has confirmed the minimum requirements to satisfy the legislated minimum BASIX requirements for certification.

**E-LAB have assessed the development and confirm the that based on the design of the residential portion of Lots 1, 2 and 3 of the 84 Tallawong Road, Rouse Hill NSW development and the inputs provided to BASIX, the proposal is positioned to comply with the requirements of BASIX.**

This report has outlined the results of the BASIX assessment; and details of how each section is independently meeting minimum legislated BASIX benchmarks using various sustainability opportunities the development is considering for BASIX certification. The minimum compliance requirements are per the below:

*Table 7: BASIX Summary*

Area	Minimum Compliance Requirement	Lot 1 Score	Lot 2 Score	Lot 3 Score
Energy	35%	35%	35%	33%
Water	40%	40%	40%	40%
Thermal Comfort	Pass	Pass	Pass	Pass

Note: Percentages stated for Energy and Water are the percentage improvement upon the NSW average dwelling's consumption.



## Appendix A Lot 1 BASIX Certificate

Refer to next page.

# BASIX™ Certificate

Building Sustainability Index

[www.planningportal.nsw.gov.au/development-and-assessment/basix](http://www.planningportal.nsw.gov.au/development-and-assessment/basix)

## Multi Dwelling

Certificate number: 859998M\_06

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.planningportal.nsw.gov.au/definitions](http://www.planningportal.nsw.gov.au/definitions)

This certificate is a revision of certificate number 859998M lodged with the consent authority or certifier on 28 September 2017 with application SPP-17-00031.

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, 03 September 2025

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



When submitting this BASIX certificate with a development application or complying development certificate application, it must be accompanied by NatHERS certificate HR-GKHKUB-02.

Project summary		
Project name	LOT 1, 84 TALLAWONG RD ROUSE HILL _06	
Street address	84 TALLAWONG ROAD ROUSE HILL 2155	
Local Government Area	BLACKTOWN	
Plan type and plan number	Deposited Plan 30186	
Lot no.	63	
Section no.	-	
No. of residential flat buildings	2	
No. of units in residential flat buildings	135	
No. of multi-dwelling houses	0	
No. of single dwelling houses	0	
Project score		
Water	✔ 40	Target 40
Thermal Comfort	✔ Pass	Target Pass
Energy	✔ 35	Target 35

Certificate Prepared by
Name / Company Name: E-LAB Consulting
ABN (if applicable): 84647520634

# Description of project

## Project address

Project name	LOT 1, 84 TALLAWONG RD ROUSE HILL _06
Street address	84 TALLAWONG ROAD ROUSE HILL 2155
Local Government Area	BLACKTOWN
Plan type and plan number	Deposited Plan 30186
Lot no.	63
Section no.	-

## Project type

No. of residential flat buildings	2
No. of units in residential flat buildings	135
No. of multi-dwelling houses	0
No. of single dwelling houses	0

## Site details

Site area (m <sup>2</sup> )	5086.02
Roof area (m <sup>2</sup> )	2640
Non-residential floor area (m <sup>2</sup> )	120.00
Residential car spaces	175
Non-residential car spaces	0




## Common area landscape

Common area lawn (m <sup>2</sup> )	694
Common area garden (m <sup>2</sup> )	0
Area of indigenous or low water use species (m <sup>2</sup> )	0.00

## Assessor details and thermal loads

Assessor number	DMN/20/1972
Certificate number	HR-GKHKUB-02
Climate zone	28
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	 35	Target 35

## Description of project

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

### Residential flat buildings - Building A, 66 dwellings, 5 storeys above ground

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
A101E	2	68.6	0.00	0.00	0.00
A103E	2	72.6	0.00	0.00	0.00
A105E	2	74.00	0.00	0.00	0.00
A107E	2	80.00	0.00	0.00	0.00
A202E	2	72.6	0.00	0.00	0.00
A204E	2	70.00	0.00	0.00	0.00
A206E	2	80.00	0.00	0.00	0.00
A301E	2	80.00	0.00	0.00	0.00
A303E	2	72	0.00	0.00	0.00
A305E	2	74.00	0.00	0.00	0.00
A307E	2	80.00	0.00	0.00	0.00
A402E	2	72.3	0.00	0.00	0.00
A404E	2	70.00	0.00	0.00	0.00
A406E	2	80.00	0.00	0.00	0.00
A503	3	80.00	0.00	0.00	0.00
A507	3	90.4	0.00	0.00	0.00
AG04W	2	70.00	0.00	0.00	0.00
A101W	2	80.00	0.00	0.00	0.00
A103W	2	74.00	0.00	0.00	0.00
A105W	2	72.8	0.00	0.00	0.00
A107W	2	80.00	0.00	0.00	0.00
A202W	2	80.00	0.00	0.00	0.00
A204W	2	70.00	0.00	0.00	0.00
A206W	2	78.00	0.00	0.00	0.00
A301W	2	80.00	0.00	0.00	0.00
A303W	2	75.00	0.00	0.00	0.00
A305W	2	73.4	0.00	0.00	0.00
A307W	2	80.00	0.00	0.00	0.00
A402W	2	76.00	0.00	0.00	0.00
A404W	2	78.00	0.00	0.00	0.00
A407E	3	90.2	0.00	0.00	0.00
A504	2	69.00	0.00	0.00	0.00
AG01W	2	80.00	0.00	0.00	0.00
AG05W	2	73.6	0.00	0.00	0.00
A102E	2	78.00	0.00	0.00	0.00
A104E	2	70.00	0.00	0.00	0.00
A106E	2	80.00	0.00	0.00	0.00
A201E	2	80.00	0.00	0.00	0.00
A203E	2	72	0.00	0.00	0.00
A205E	2	74.00	0.00	0.00	0.00
A207E	2	80.00	0.00	0.00	0.00
A302E	2	72.6	0.00	0.00	0.00
A304E	2	70.00	0.00	0.00	0.00
A306E	2	80.00	0.00	0.00	0.00
A401E	2	80.00	0.00	0.00	0.00
A403E	2	71.7	0.00	0.00	0.00
A405E	3	90.00	0.00	0.00	0.00
A501	2	80.00	0.00	0.00	0.00
A505	2	77.00	0.00	0.00	0.00
AG02W	2	80.00	0.00	0.00	0.00
A102W	2	80.00	0.00	0.00	0.00
A104W	2	70.00	0.00	0.00	0.00
A106W	2	78.00	0.00	0.00	0.00
A201W	2	80.00	0.00	0.00	0.00
A203W	2	74.00	0.00	0.00	0.00
A205W	2	72.8	0.00	0.00	0.00
A207W	2	80.00	0.00	0.00	0.00
A302W	2	80.00	0.00	0.00	0.00
A304W	2	69.00	0.00	0.00	0.00
A306W	2	78.00	0.00	0.00	0.00
A401W	3	95.6	0.00	0.00	0.00
A403W	2	80.00	0.00	0.00	0.00
A405W	2	80.00	0.00	0.00	0.00
A502	2	72.6	0.00	0.00	0.00
A506	3	108.00	0.00	0.00	0.00
AG03W	2	75.00	0.00	0.00	0.00

## Residential flat buildings - Building B, 69 dwellings, 5 storeys above ground

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
B101E	2	80.00	0.00	0.00	0.00
B103E	2	73.00	0.00	0.00	0.00
B105E	1	50.00	0.00	0.00	0.00
B107E	2	73.5	0.00	0.00	0.00
B201W	2	80.00	0.00	0.00	0.00
B203W	2	63.2	0.00	0.00	0.00
B205W	2	74.00	0.00	0.00	0.00
B207W	2	78.00	0.00	0.00	0.00
B302W	2	73.5	0.00	0.00	0.00
B304W	2	69.00	0.00	0.00	0.00
B306W	2	69.5	0.00	0.00	0.00
B401W	2	80.00	0.00	0.00	0.00
B403W	2	80.00	0.00	0.00	0.00
B405W	3	100.00	0.00	0.00	0.00
B502	3	108.00	0.00	0.00	0.00
B506	2	78.00	0.00	0.00	0.00
BG03W	1	44.5	0.00	0.00	0.00
BG07W	2	80.00	0.00	0.00	0.00
Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
B101W	2	80.00	0.00	0.00	0.00
B103W	2	63.2	0.00	0.00	0.00
B105W	2	73.00	0.00	0.00	0.00
B107W	2	78.00	0.00	0.00	0.00
B202E	2	69.6	0.00	0.00	0.00
B204E	2	70.00	0.00	0.00	0.00
B206E	2	74.4	0.00	0.00	0.00
B301E	2	80.00	0.00	0.00	0.00
B303E	2	74.00	0.00	0.00	0.00
B305E	2	60.5	0.00	0.00	0.00
B307E	2	80.00	0.00	0.00	0.00
B402E	2	72.00	0.00	0.00	0.00
B404E	2	69.2	0.00	0.00	0.00
B406E	2	78.00	0.00	0.00	0.00
B503	2	77.00	0.00	0.00	0.00
B507	2	80.00	0.00	0.00	0.00
BG04W	1	45.00	0.00	0.00	0.00
Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
B102E	2	69.4	0.00	0.00	0.00
B104E	1	45.00	0.00	0.00	0.00
B106E	1	50.00	0.00	0.00	0.00
B108E	2	68	0.00	0.00	0.00
B202W	2	73.5	0.00	0.00	0.00
B204W	2	69.00	0.00	0.00	0.00
B206W	2	69.5	0.00	0.00	0.00
B301W	2	80.00	0.00	0.00	0.00
B303W	2	63.2	0.00	0.00	0.00
B305W	2	74.00	0.00	0.00	0.00
B307W	2	80	0.00	0.00	0.00
B402W	2	80.00	0.00	0.00	0.00
B404W	2	76.00	0.00	0.00	0.00
B407E	2	80.00	0.00	0.00	0.00
B504	2	69.00	0.00	0.00	0.00
BG01W	3	90.4	0.00	0.00	0.00
BG05W	2	73.00	0.00	0.00	0.00
Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
B102W	2	73.5	0.00	0.00	0.00
B104W	2	69.00	0.00	0.00	0.00
B106W	2	71.4	0.00	0.00	0.00
B201E	2	80.00	0.00	0.00	0.00
B203E	2	74.00	0.00	0.00	0.00
B205E	2	61.7	0.00	0.00	0.00
B207E	2	80.00	0.00	0.00	0.00
B302E	2	69.7	0.00	0.00	0.00
B304E	2	70.00	0.00	0.00	0.00
B306E	2	78.00	0.00	0.00	0.00
B401E	3	90.3	0.00	0.00	0.00
B403E	3	90	0.00	0.00	0.00
B405E	2	60.1	0.00	0.00	0.00
B501	3	90.7	0.00	0.00	0.00
B505	2	84.00	0.00	0.00	0.00
BG02W	2	65.3	0.00	0.00	0.00
BG06W	2	71.4	0.00	0.00	0.00

## Description of project

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

### Common areas of the development (non-building specific)

Common area	Floor area (m <sup>2</sup> )	Common area	Floor area (m <sup>2</sup> )	Common area	Floor area (m <sup>2</sup> )
Car park	4421.88	Chute Discharge	89.22	Bulky waste	51.1
Bin Holding	120.88	Fire Stairs - Basement	66.97	Fire Stairs - Building A	111.45

### Common areas of unit building - Building A

Common area	Floor area (m <sup>2</sup> )	Common area	Floor area (m <sup>2</sup> )	Common area	Floor area (m <sup>2</sup> )
Lift car (No. 1)	0.00	Lift car (No. 2)	0.00	Hallway - Building A	397.11

### Common areas of unit building - Building B

Common area	Floor area (m <sup>2</sup> )	Common area	Floor area (m <sup>2</sup> )	Common area	Floor area (m <sup>2</sup> )
Lift car (No. 3)	0.00	Lift car (No. 4)	0.00	Fire Stairs - Building B	111.02
Lift Lobby - Basement	88.26				

# Schedule of BASIX commitments

## 1. Commitments for Residential flat buildings - Building A

### (a) Dwellings

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

### (b) Common areas and central systems/facilities

- (i) Water
- (ii) Energy

## 2. Commitments for Residential flat buildings - Building B

### (a) Dwellings

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

### (b) Common areas and central systems/facilities

- (i) Water
- (ii) Energy

## 3. Commitments for single dwelling houses

## 4. Commitments for multi-dwelling houses

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

### (a) Common areas and central systems/facilities

- (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 - Building A

#### (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: (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	4 star (> 6 but <= 7.5 L/min)	4 star	5 star	5 star	-	not specified	4 star	-	-	-	-	-	-	-

Dwelling no.	Alternative water source								
	Alternative water supply systems	Size	Configuration	Landscape connection	Toilet connection (s)	Laundry connection	Pool top-up	Spa top-up	
All dwellings	No alternative water supply	-	-	-	-	-	-	-	

(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.		✔	✔
(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.	✔	✔	✔

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(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 (No. 1)	individual fan, ducted to façade or roof	manual switch on/off	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 diningroom	Each kitchen	All bathrooms/toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
A401W, A405E, A407E, A503, A506, A507	1-phase airconditioning / EER 3.0 - 3.5	1-phase airconditioning / EER 3.0 - 3.5	1-phase airconditioning / EER 3.5 - 4.0	1-phase airconditioning / EER 3.5 - 4.0	3(dedicated)	1(dedicated)	yes(dedicated)	yes(dedicated)	yes(dedicated)	yes(dedicated)	0	no

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 diningroom	Each kitchen	All bathrooms/toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
All other dwellings	1-phase airconditioning / EER 3.0 - 3.5	1-phase airconditioning / EER 3.0 - 3.5	1-phase airconditioning / EER 3.5 - 4.0	1-phase airconditioning / EER 3.5 - 4.0	2(dedicated)	1(dedicated)	yes(dedicated)	yes(dedicated)	yes(dedicated)	yes(dedicated)	0	no

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
A405W, A406E, A407E, A501, A502, A503, A504, A505, A506, A507, AG01W, AG02W, AG03W, AG04W, AG05W	-	-	-	-	gas cooktop & electric oven	not specified	no	4 star	-	2 star	no	no
All other dwellings	-	-	-	-	gas cooktop & electric oven	not specified	no	4 star	-	2 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>(iii) Thermal Comfort</b>	<b>Show on DA plans</b>	<b>Show on CC/CDC plans &amp; specs</b>	<b>Certifier check</b>
(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.			
(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.	✔	✔	✔

<b>Thermal loads</b>		
Dwelling no.	Area adjusted heating load (in MJ/m <sup>2</sup> /yr)	Area adjusted cooling load (in MJ/m <sup>2</sup> /yr)
A101E	9	18.8
A102E	9.30	26.60
A102W	10.80	16.30
A103E	56.60	12.10
A103W	30.70	18.30
A104E	48.90	11.90
A104W	30.60	18.80
A105E	46.8	11
A105W	30.40	30.00
A106E	22.40	8.80
A106W	12.40	32.80

Dwelling no.	Thermal loads	
	Area adjusted heating load (in MJ/m <sup>2</sup> /yr)	Area adjusted cooling load (in MJ/m <sup>2</sup> /yr)
A107E	16	13.1
A107W	7.80	21.70
A201E	8.00	21.70
A202E	10.80	23.90
A202W	9.80	16.70
A203E	37.60	19.50
A203W	30.40	18.90
A204E	29.80	20.30
A204W	30.30	19.00
A205E	30.60	18.90
A205W	30.90	30.20
A206E	9.40	15.50
A206W	12.90	31.70
A207E	10.20	20.30
A207W	5.80	21.80
A301E	8.50	22.50
A301W	9.40	19.20
A302E	11.20	24.50
A302W	10.40	18.20
A303E	36.30	19.60
A303W	33.40	21.60
A304E	29	20.50
A304W	31.90	21.50
A305E	30	19.80
A305W	33.60	34.20
A306E	9.6	16.80
A306W	13.30	31.00
A307E	10.80	20.40
A307W	6	21.90
A401E	20.60	18.60
A401W	16.40	16.50

Dwelling no.	Thermal loads	
	Area adjusted heating load (in MJ/m <sup>2</sup> /yr)	Area adjusted cooling load (in MJ/m <sup>2</sup> /yr)
A402E	10.50	27.50
A402W	48.3	25.1
A403E	33.80	21.60
A403W	48.60	40.80
A404E	31.60	19.90
A404W	27.80	34.50
A405E	27.20	17.20
A405W	18.50	27.10
A406E	18.60	15
A407E	10.20	18.10
A501	20.80	27.50
A502	23	35.30
A503	35.10	39.10
A504	55.90	36.70
A505	52.20	47.10
A506	13.60	58.10
A507	24	26.40
AG01W	13.40	14.40
AG02W	43.60	10.40
AG03W	60.70	9.00
AG04W	53.90	10.80
AG05W	45.30	25
All other dwellings	8.5	19.30

**(b) Common areas and central systems/facilities**

<b>(i) Water</b>	<b>Show on DA plans</b>	<b>Show on CC/CDC plans &amp; specs</b>	<b>Certifier check</b>
(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.		✓	✓

<b>Common area</b>	<b>Showerheads rating</b>	<b>Toilets rating</b>	<b>Taps rating</b>	<b>Clothes washers rating</b>
All common areas	no common facility	no common facility	no common facility	no common laundry facility

<b>Central systems</b>	<b>Size</b>	<b>Configuration</b>	<b>Connection (to allow for...)</b>
Fire sprinkler system (No. 2)	-	So that fire sprinkler test water is contained within the fire sprinkler system for re-use, rather than disposed.	-

<b>(ii) Energy</b>	<b>Show on DA plans</b>	<b>Show on CC/CDC plans &amp; specs</b>	<b>Certifier check</b>
(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 ventilation system		Common area lighting		
Common area	Ventilation system type	Ventilation efficiency measure	Primary type of artificial lighting	Lighting efficiency measure	Lighting control system/ BMS
Lift car (No. 1)	-	-	light-emitting diode	connected to lift call button	yes
Lift car (No. 2)	-	-	light-emitting diode	connected to lift call button	yes
Fire Stairs - Building A	no mechanical ventilation	-	light-emitting diode	motion sensors	yes
Hallway - Building A	no mechanical ventilation	-	light-emitting diode	motion sensors	yes

Central energy systems	Type	Specification
Lift (No. 1)	gearless traction with V V V F motor	Number of levels (including basement): 7
Lift (No. 2)	gearless traction with V V V F motor	Number of levels (including basement): 7
Central hot water system (No. 1)	gas-fired boiler	Piping insulation (ringmain & supply risers): (a) Piping external to building: R1.0 (~38 mm); (b) Piping internal to building: R1.0 (~38 mm)

## 2. Commitments for Residential flat buildings - Building B

### (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"> <li>(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</li> <li>(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.</li> </ul>		✓ ✓	✓ ✓
(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	4 star (> 6 but ≤ 7.5 L/min)	4 star	5 star	5 star	-	not specified	4 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
All dwellings	No alternative water supply	-	-	-	-	-	-	-

(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.		✔	✔
(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:			

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(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 (No. 2)	individual fan, ducted to façade or roof	manual switch on/off	individual fan, ducted to façade or roof	manual switch on/off	individual fan, ducted to façade or roof	manual switch on/off

	Cooling		Heating		Artificial lighting						Natural lighting	
Dwelling no.	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or diningroom	Each kitchen	All bathrooms/toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
B104E, B105E, B106E, BG03W, BG04W	1-phase airconditioning / EER 3.0 - 3.5	1-phase airconditioning / EER 3.0 - 3.5	1-phase airconditioning / EER 3.5 - 4.0	1-phase airconditioning / EER 3.5 - 4.0	1(dedicated)	1(dedicated)	yes(dedicated)	yes(dedicated)	yes(dedicated)	yes(dedicated)	0	no
B401E, B403E, B501, B502, BG01W	1-phase airconditioning / EER 3.0 - 3.5	1-phase airconditioning / EER 3.0 - 3.5	1-phase airconditioning / EER 3.5 - 4.0	1-phase airconditioning / EER 3.5 - 4.0	3(dedicated)	1(dedicated)	yes(dedicated)	yes(dedicated)	yes(dedicated)	yes(dedicated)	0	no
All other dwellings	1-phase airconditioning / EER 3.0 - 3.5	1-phase airconditioning / EER 3.0 - 3.5	1-phase airconditioning / EER 3.5 - 4.0	1-phase airconditioning / EER 3.5 - 4.0	2(dedicated)	1(dedicated)	yes(dedicated)	yes(dedicated)	yes(dedicated)	yes(dedicated)	0	no

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
B108E, B307W, B401E, B401W, B402E, B402W, B403E, B403W, B404E, B404W, B405E, B405W, B406E, B407E, B501, B502, B503, B504, B505, B506, B507	-	-	-	-	gas cooktop & electric oven	not specified	no	4 star	-	2 star	no	no
All other dwellings	-	-	-	-	gas cooktop & electric oven	not specified	no	4 star	-	2 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.			

<b>(iii) Thermal Comfort</b>	<b>Show on DA plans</b>	<b>Show on CC/CDC plans &amp; specs</b>	<b>Certifier check</b>
(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.	✓	✓	✓

<b>Thermal loads</b>		
Dwelling no.	Area adjusted heating load (in MJ/m <sup>2</sup> /yr)	Area adjusted cooling load (in MJ/m <sup>2</sup> /yr)
B101E	53.30	12.90
B101W	31	20.50
B102E	36.5	10.60
B102W	35	35.20
B103E	42.10	11.50
B103W	28.60	29.90
B104E	31.20	18.90
B104W	19.30	25.80
B105E	42.80	17.90
B105W	18.20	23.90
B106E	20.30	23.80
B106W	19.70	19.90
B107E	41.90	16.80
B107W	29.90	21.00

Dwelling no.	Thermal loads	
	Area adjusted heating load (in MJ/m <sup>2</sup> /yr)	Area adjusted cooling load (in MJ/m <sup>2</sup> /yr)
B108E	39.50	15.30
B201E	30.30	18.20
B201W	27.70	20.50
B202E	20	18.50
B202W	32.20	35
B203E	15.70	22.40
B203W	24.60	29.70
B204E	14.10	24
B204W	12	26.20
B205E	16.50	22.80
B205W	11.40	25.40
B206E	28.80	32.70
B206W	17.90	20.30
B207E	31.40	19.20
B207W	31.70	21
B301E	30.80	18.10
B301W	28.10	20.20
B302E	14.60	18.70
B302W	32.80	34.70
B303E	9.20	24.70
B303W	25.10	34.20
B304E	6.60	25.20
B304W	31.2	25.40
B305E	14.60	26.30
B305W	9.60	32.20
B306E	23.20	33.70
B306W	15.4	21.6
B307E	28.7	19.6
B307W	32.5	21
B401E	31.5	16.1
B401W	41.1	27.1

Dwelling no.	Thermal loads	
	Area adjusted heating load (in MJ/m <sup>2</sup> /yr)	Area adjusted cooling load (in MJ/m <sup>2</sup> /yr)
B402E	22.2	17.9
B402W	32.8	46.8
B403E	5.7	36.8
B403W	25.1	49.7
B404E	3.8	31.6
B404W	5.9	29.2
B405E	14.6	30
B405W	39.7	20
B406E	14.9	32.2
B407E	30	17.7
B501	45.1	24.5
B502	50.7	38.6
B503	13	55.6
B504	13.7	49.7
B505	7.6	63
B506	17.6	41.3
B507	41	24.9
BG01W	43.7	16.9
BG02W	40.8	37.8
BG03W	19.3	34.2
BG04W	53.6	17.1
BG05W	50.30	11.2
BG06W	56.3	11.7
All other dwellings	46	14.1

**(b) Common areas and central systems/facilities**

<b>(i) Water</b>	<b>Show on DA plans</b>	<b>Show on CC/CDC plans &amp; specs</b>	<b>Certifier check</b>
(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.		✓	✓

<b>Common area</b>	<b>Showerheads rating</b>	<b>Toilets rating</b>	<b>Taps rating</b>	<b>Clothes washers rating</b>
All common areas	no common facility	no common facility	no common facility	no common laundry facility

<b>Central systems</b>	<b>Size</b>	<b>Configuration</b>	<b>Connection (to allow for...)</b>
Fire sprinkler system (No. 3)	-	So that fire sprinkler test water is contained within the fire sprinkler system for re-use, rather than disposed.	-

<b>(ii) Energy</b>	<b>Show on DA plans</b>	<b>Show on CC/CDC plans &amp; specs</b>	<b>Certifier check</b>
(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 ventilation system		Common area lighting		
Common area	Ventilation system type	Ventilation efficiency measure	Primary type of artificial lighting	Lighting efficiency measure	Lighting control system/ BMS
Hallway - Building B	no mechanical ventilation	-	-	-	yes
Lift car (No. 3)	-	-	light-emitting diode	connected to lift call button	yes
Lift car (No. 4)	-	-	light-emitting diode	connected to lift call button	yes
Fire Stairs - Building B	no mechanical ventilation	-	light-emitting diode	motion sensors	yes

Central energy systems	Type	Specification
Lift (No. 3)	gearless traction with V V V F motor	Number of levels (including basement): 7
Lift (No. 4)	gearless traction with V V V F motor	Number of levels (including basement): 7
Central hot water system (No. 2)	gas-fired boiler	Piping insulation (ringmain & supply risers): (a) Piping external to building: R1.0 (~38 mm); (b) Piping internal to building: R1.0 (~38 mm)

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

### (a) 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.	✓	✓	✓

	Common area ventilation system		Common area lighting		
Common area	Ventilation system type	Ventilation efficiency measure	Primary type of artificial lighting	Lighting efficiency measure	Lighting control system/ BMS
Car park	ventilation (supply + exhaust)	carbon monoxide monitor + VSD fan	light-emitting diode	motion sensors	yes
Chute Discharge	ventilation exhaust only	-	light-emitting diode	motion sensors	yes
Bulky waste	ventilation exhaust only	-	light-emitting diode	motion sensors	yes
Bin Holding	ventilation exhaust only	-	light-emitting diode	motion sensors	yes
Fire Stairs - Basement	no mechanical ventilation	-	light-emitting diode	motion sensors	yes
Lift Lobby - Basement	no mechanical ventilation	-	light-emitting diode	motion sensors	yes

Central energy systems	Type	Specification
Alternative energy supply	Photovoltaic system	Rated electrical output (min): 10 peak kW
Other	-	-

## 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).

## Appendix B Lot 2 BASIX Certificate

Refer to next page.

# BASIX™ Certificate

Building Sustainability Index

[www.planningportal.nsw.gov.au/development-and-assessment/basix](http://www.planningportal.nsw.gov.au/development-and-assessment/basix)

## Multi Dwelling

Certificate number: 863987M\_06

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.planningportal.nsw.gov.au/definitions](http://www.planningportal.nsw.gov.au/definitions)

This certificate is a revision of certificate number 863987M lodged with the consent authority or certifier on 28 September 2017 with application SPP-17-00032.

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: Tuesday, 02 September 2025

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



When submitting this BASIX certificate with a development application or complying development certificate application, it must be accompanied by NatHERS certificate HR-VECP91-02.

Project summary		
Project name	LOT 2, 84 TALLAWONG RD ROUSE HILL_06	
Street address	84 TALLAWONG ROAD ROUSE HILL 2155	
Local Government Area	BLACKTOWN	
Plan type and plan number	Deposited Plan 30186	
Lot no.	63	
Section no.	-	
No. of residential flat buildings	2	
No. of units in residential flat buildings	138	
No. of multi-dwelling houses	0	
No. of single dwelling houses	0	
Project score		
Water	✓ 40	Target 40
Thermal Comfort	✓ Pass	Target Pass
Energy	✓ 35	Target 35

Certificate Prepared by
Name / Company Name: E-LAB Consulting
ABN (if applicable): 84647520634

# Description of project

## Project address

Project name	LOT 2, 84 TALLAWONG RD ROUSE HILL_06
Street address	84 TALLAWONG ROAD ROUSE HILL 2155
Local Government Area	BLACKTOWN
Plan type and plan number	Deposited Plan 30186
Lot no.	63
Section no.	-

## Project type

No. of residential flat buildings	2
No. of units in residential flat buildings	138
No. of multi-dwelling houses	0
No. of single dwelling houses	0

## Site details

Site area (m <sup>2</sup> )	5497.69
Roof area (m <sup>2</sup> )	2638
Non-residential floor area (m <sup>2</sup> )	0.00
Residential car spaces	160
Non-residential car spaces	0




## Common area landscape

Common area lawn (m <sup>2</sup> )	834.67
Common area garden (m <sup>2</sup> )	0
Area of indigenous or low water use species (m <sup>2</sup> )	-

## Assessor details and thermal loads

Assessor number	DMN/20/1972
Certificate number	HR-VECP91-02
Climate zone	28
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	 35	Target 35

## Description of project

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

### Residential flat buildings - Building C, 68 dwellings, 5 storeys above ground

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
C101E	2	70.00	0.00	0.00	0.00
C103E	2	72.6	0.00	0.00	0.00
C105E	2	74.00	0.00	0.00	0.00
C107E	2	80.00	0.00	0.00	0.00
C202E	2	73.2	0.00	0.00	0.00
C204E	2	70.00	0.00	0.00	0.00
C206E	2	80.00	0.00	0.00	0.00
C301E	2	70.00	0.00	0.00	0.00
C303E	2	72	0.00	0.00	0.00
C305E	2	74.00	0.00	0.00	0.00
C307E	2	80.00	0.00	0.00	0.00
C402E	2	72.9	0.00	0.00	0.00
C404E	2	70.00	0.00	0.00	0.00
C406E	2	80.00	0.00	0.00	0.00
C503	3	100.00	0.00	0.00	0.00
C507	3	90.4	0.00	0.00	0.00
CG04W	2	70.00	0.00	0.00	0.00
C101W	2	80.00	0.00	0.00	0.00
C103W	2	74.00	0.00	0.00	0.00
C105W	2	72.8	0.00	0.00	0.00
C107W	2	80.00	0.00	0.00	0.00
C202W	2	80.00	0.00	0.00	0.00
C204W	2	70.00	0.00	0.00	0.00
C206W	2	78.00	0.00	0.00	0.00
C301W	2	80.00	0.00	0.00	0.00
C303W	2	74.00	0.00	0.00	0.00
C305W	2	72.8	0.00	0.00	0.00
C307W	2	80.00	0.00	0.00	0.00
C402W	2	76.00	0.00	0.00	0.00
C404W	2	78.00	0.00	0.00	0.00
C407E	3	92.9	0.00	0.00	0.00
C504	2	70.00	0.00	0.00	0.00
CG01W	2	80.00	0.00	0.00	0.00
CG05W	2	72.9	0.00	0.00	0.00
C102E	2	80.00	0.00	0.00	0.00
C104E	2	70.00	0.00	0.00	0.00
C106E	2	80.00	0.00	0.00	0.00
C201E	2	70.00	0.00	0.00	0.00
C203E	2	72	0.00	0.00	0.00
C205E	2	74.00	0.00	0.00	0.00
C207E	2	80.00	0.00	0.00	0.00
C302E	2	73.2	0.00	0.00	0.00
C304E	2	70.00	0.00	0.00	0.00
C306E	2	80.00	0.00	0.00	0.00
C401E	2	80.00	0.00	0.00	0.00
C403E	2	71.6	0.00	0.00	0.00
C405E	3	90.00	0.00	0.00	0.00
C501	2	80.00	0.00	0.00	0.00
C505	2	77.00	0.00	0.00	0.00
CG02W	2	80.00	0.00	0.00	0.00
CG06W	2	76.8	0.00	0.00	0.00
C102W	2	80	0.00	0.00	0.00
C104W	2	70.00	0.00	0.00	0.00
C106W	2	78.00	0.00	0.00	0.00
C201W	2	80.00	0.00	0.00	0.00
C203W	2	74.00	0.00	0.00	0.00
C205W	2	72.8	0.00	0.00	0.00
C207W	2	80.00	0.00	0.00	0.00
C302W	2	80.00	0.00	0.00	0.00
C304W	2	70.00	0.00	0.00	0.00
C306W	2	78.00	0.00	0.00	0.00
C401W	3	100.00	0.00	0.00	0.00
C403W	2	80.00	0.00	0.00	0.00
C405W	2	80.00	0.00	0.00	0.00
C502	2	73.2	0.00	0.00	0.00
C506	3	108.00	0.00	0.00	0.00
CG03W	2	75.00	0.00	0.00	0.00
CG07W	2	64.4	0.00	0.00	0.00

## Residential flat buildings - Building D, 70 dwellings, 5 storeys above ground

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
D101E	2	80.00	0.00	0.00	0.00
D103E	2	73.00	0.00	0.00	0.00
D105E	1	50.00	0.00	0.00	0.00
D107E	2	72.60	0.00	0.00	0.00
D201W	2	80.00	0.00	0.00	0.00
D203W	2	63.4	0.00	0.00	0.00
D205W	2	74.00	0.00	0.00	0.00
D207W	2	80.00	0.00	0.00	0.00
D302W	2	71.6	0.00	0.00	0.00
D304W	2	71.00	0.00	0.00	0.00
D306W	2	71.4	0.00	0.00	0.00
D401W	2	80.00	0.00	0.00	0.00
D403W	2	80.00	0.00	0.00	0.00
D405W	3	100.00	0.00	0.00	0.00
D502	3	108.00	0.00	0.00	0.00
D506	2	78.00	0.00	0.00	0.00
DG03W	1	50.00	0.00	0.00	0.00
DG07W	2	69.4	0.00	0.00	0.00
D101W	2	80.00	0.00	0.00	0.00
D103W	2	63.4	0.00	0.00	0.00
D105W	2	74.00	0.00	0.00	0.00
D107W	2	80.00	0.00	0.00	0.00
D202E	2	70.8	0.00	0.00	0.00
D204E	2	71.00	0.00	0.00	0.00
D206E	2	72.00	0.00	0.00	0.00
D301E	2	80.00	0.00	0.00	0.00
D303E	2	74.00	0.00	0.00	0.00
D305E	2	61.5	0.00	0.00	0.00
D307E	2	80.00	0.00	0.00	0.00
D402E	2	70.1	0.00	0.00	0.00
D404E	2	71.00	0.00	0.00	0.00
D406E	2	78.00	0.00	0.00	0.00
D503	2	77.00	0.00	0.00	0.00
D507	2	80.00	0.00	0.00	0.00
DG04W	1	44.9	0.00	0.00	0.00
DG08W	2	80.00	0.00	0.00	0.00
D102E	2	70.1	0.00	0.00	0.00
D104E	1	45.00	0.00	0.00	0.00
D106E	1	50.00	0.00	0.00	0.00
D108E	2	68.00	0.00	0.00	0.00
D202W	2	71.6	0.00	0.00	0.00
D204W	2	71.00	0.00	0.00	0.00
D206W	2	71.4	0.00	0.00	0.00
D301W	2	80.00	0.00	0.00	0.00
D303W	2	63.4	0.00	0.00	0.00
D305W	2	74.00	0.00	0.00	0.00
D307W	2	80.00	0.00	0.00	0.00
D402W	2	71.3	0.00	0.00	0.00
D404W	2	76.00	0.00	0.00	0.00
D407E	2	80.00	0.00	0.00	0.00
D504	2	70.00	0.00	0.00	0.00
DG01W	2	68.00	0.00	0.00	0.00
DG05W	1	45.00	0.00	0.00	0.00
D102W	2	71.6	0.00	0.00	0.00
D104W	2	71.00	0.00	0.00	0.00
D106W	2	71.4	0.00	0.00	0.00
D201E	2	80.00	0.00	0.00	0.00
D203E	2	74.00	0.00	0.00	0.00
D205E	2	61.5	0.00	0.00	0.00
D207E	2	80.00	0.00	0.00	0.00
D302E	2	70.7	0.00	0.00	0.00
D304E	2	71.00	0.00	0.00	0.00
D306E	2	78.00	0.00	0.00	0.00
D401E	3	91.1	0.00	0.00	0.00
D403E	3	90.00	0.00	0.00	0.00
D405E	2	61.5	0.00	0.00	0.00
D501	3	92.8	0.00	0.00	0.00
D505	2	85.00	0.00	0.00	0.00
DG02W	2	74	0.00	0.00	0.00
DG06W	2	73.00	0.00	0.00	0.00

## Description of project

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

### Common areas of the development (non-building specific)

Common area	Floor area (m <sup>2</sup> )
Car park	8373.84
Fire Stairs - Basement	112.94

Common area	Floor area (m <sup>2</sup> )
Chute Discharge	75.08
Lift Lobby	151.97

Common area	Floor area (m <sup>2</sup> )
Plant Room	445.16

# Schedule of BASIX commitments

## 1. Commitments for Residential flat buildings - Building C

### (a) Dwellings

(i) Water

(ii) Energy

(iii) Thermal Comfort

### (b) Common areas and central systems/facilities

(i) Water

(ii) Energy

## 2. Commitments for Residential flat buildings - Building D

### (a) Dwellings

(i) Water

(ii) Energy

(iii) Thermal Comfort

### (b) Common areas and central systems/facilities

(i) Water

(ii) Energy

## 3. Commitments for single dwelling houses

## 4. Commitments for multi-dwelling houses

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

### (a) Common areas and central systems/facilities

(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 - Building C








#### (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: (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	4 star (> 6 but <= 7.5 L/min)	4 star	5 star	5 star	-	not specified	4 star	-	-	-	-	-	-	-

Dwelling no.	Alternative water source							
	Alternative water supply systems	Size	Configuration	Landscape connection	Toilet connection (s)	Laundry connection	Pool top-up	Spa top-up
All dwellings	No alternative water supply	-	-	-	-	-	-	-


(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.		✔	✔
(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.	✔	✔	✔

<b>(ii) Energy</b>	<b>Show on DA plans</b>	<b>Show on CC/CDC plans &amp; specs</b>	<b>Certifier check</b>
(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".			

	<b>Hot water</b>	<b>Bathroom ventilation system</b>		<b>Kitchen ventilation system</b>		<b>Laundry ventilation system</b>	
<b>Dwelling no.</b>	<b>Hot water system</b>	<b>Each bathroom</b>	<b>Operation control</b>	<b>Each kitchen</b>	<b>Operation control</b>	<b>Each laundry</b>	<b>Operation control</b>
All dwellings	Central hot water system (No. 1)	individual fan, ducted to façade or roof	manual switch on/off	individual fan, ducted to façade or roof	manual switch on/off	individual fan, ducted to façade or roof	manual switch on/off

	<b>Cooling</b>		<b>Heating</b>		<b>Artificial lighting</b>						<b>Natural lighting</b>	
<b>Dwelling no.</b>	<b>living areas</b>	<b>bedroom areas</b>	<b>living areas</b>	<b>bedroom areas</b>	<b>No. of bedrooms &amp;/or study</b>	<b>No. of living &amp;/or diningroom</b>	<b>Each kitchen</b>	<b>All bathrooms/toilets</b>	<b>Each laundry</b>	<b>All hallways</b>	<b>No. of bathrooms &amp;/or toilets</b>	<b>Main kitchen</b>
All dwellings	1-phase airconditioning / EER 3.0 - 3.5	1-phase airconditioning / EER 3.0 - 3.5	1-phase airconditioning / EER 3.5 - 4.0	1-phase airconditioning / EER 3.5 - 4.0	2(dedicated)	1(dedicated)	yes(dedicated)	yes(dedicated)	yes(dedicated)	yes(dedicated)	0	no

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
C307W, C401E, C401W, C402E, C402W, C403E, C403W, C404E, C404W, C405E, C405W, C406E, C407E, C501, C502, C503, C504, C505, C506, C507	-	-	-	-	gas cooktop & electric oven	not specified	no	4 star	not specified	2 star	no	no
All other dwellings	-	-	-	-	gas cooktop & electric oven	not specified	no	4 star	not specified	2 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.			
(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.			

<b>(iii) Thermal Comfort</b>	<b>Show on DA plans</b>	<b>Show on CC/CDC plans &amp; specs</b>	<b>Certifier check</b>
(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.	✓	✓	✓

<b>Thermal loads</b>		
Dwelling no.	Area adjusted heating load (in MJ/m <sup>2</sup> /yr)	Area adjusted cooling load (in MJ/m <sup>2</sup> /yr)
C101E	9.7	16.7
C101W	9.1	19.1
C102E	9.9	19.1
C102W	12.1	16
C103E	62.3	10.5
C103W	33.3	19.7
C104E	50.9	12.5
C104W	32.9	19.6
C105E	53.6	9.8
C105W	38.4	17.2
C106E	23.1	8.7
C106W	24.8	17.1
C107E	13.3	14.8
C107W	7.8	21.5
C201E	9.9	23.40
C201W	9.6	19

Dwelling no.	Thermal loads	
	Area adjusted heating load (in MJ/m <sup>2</sup> /yr)	Area adjusted cooling load (in MJ/m <sup>2</sup> /yr)
C202E	7.9	28.1
C202W	12.3	16.2
C203E	39.1	21.5
C203W	33.2	20.20
C204E	34.4	19.9
C204W	33.5	19.5
C205E	35.3	16.8
C205W	37	19.9
C206E	11.3	15.4
C206W	23.7	18.2
C207E	10.10	20.30
C207W	5.9	21.9
C301E	8.4	23.5
C301W	10	19.4
C302E	7.5	31
C302W	13.3	17.2
C303E	38.5	21.6
C303W	34.6	21.6
C304E	33.2	20.8
C304W	34.1	22
C305E	34.2	18.8
C305W	37.9	25.6
C306E	11.4	16.3
C306W	23	19.9
C307E	10.6	20.30
C307W	6.2	21.7
C401E	9.7	20.10
C401W	13.8	19.2
C402E	9.1	29.2
C402W	47.9	25.2
C403E	41.5	25.5

Dwelling no.	Thermal loads	
	Area adjusted heating load (in MJ/m <sup>2</sup> /yr)	Area adjusted cooling load (in MJ/m <sup>2</sup> /yr)
C403W	54.8	35.1
C404E	36.7	22.30
C404W	35.8	28.7
C405E	33	19.5
C405W	18.2	27.3
C406E	22.4	19.2
C407E	10.4	16.6
C501	21.2	27.9
C502	15.9	51
C503	35.9	42.4
C504	53.3	27.1
C505	53.6	44.8
C506	13.8	56.1
C507	24	26.1
CG01W	13.6	14.4
CG02W	43.9	10.70
CG03W	63.1	10.2
CG04W	58.7	9.3
CG05W	49.8	10.3
CG06W	11.8	25.3
All other dwellings	6.3	18.3

**(b) Common areas and central systems/facilities**

<b>(i) Water</b>	<b>Show on DA plans</b>	<b>Show on CC/CDC plans &amp; specs</b>	<b>Certifier check</b>
(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.		✓	✓

<b>Common area</b>	<b>Showerheads rating</b>	<b>Toilets rating</b>	<b>Taps rating</b>	<b>Clothes washers rating</b>
All common areas	no common facility	no common facility	no common facility	no common laundry facility

<b>Central systems</b>	<b>Size</b>	<b>Configuration</b>	<b>Connection (to allow for...)</b>
Fire sprinkler system (No. 2)	-	So that fire sprinkler test water is contained within the fire sprinkler system for re-use, rather than disposed.	-

<b>(ii) Energy</b>	<b>Show on DA plans</b>	<b>Show on CC/CDC plans &amp; specs</b>	<b>Certifier check</b>
(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
Chute discharge	-	-	light-emitting diode	connected to lift call button	yes
Fire Stairs - Building C	no mechanical ventilation	-	light-emitting diode	motion sensors	yes
Hallway - Building C	no mechanical ventilation	-	light-emitting diode	motion sensors	yes

Central energy systems	Type	Specification
Lift (No. 1)	gearless traction with V V V F motor	Number of levels (including basement): 7
Lift (No. 2)	gearless traction with V V V F motor	Number of levels (including basement): 7
Central hot water system (No. 1)	gas-fired boiler	Piping insulation (ringmain & supply risers): (a) Piping external to building: R1.0 (~38 mm); (b) Piping internal to building: R1.0 (~38 mm)

## 2. Commitments for Residential flat buildings - Building D

### (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"> <li>(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</li> <li>(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.</li> </ul>		✓ ✓	✓ ✓
(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	4 star (> 6 but ≤ 7.5 L/min)	4 star	5 star	5 star	-	not specified	4 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
All dwellings	No alternative water supply	-	-	-	-	-	-	-

(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.		✔	✔
(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:			


(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(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 (No. 2)	individual fan, ducted to façade or roof	manual switch on/off	individual fan, ducted to façade or roof	manual switch on/off	individual fan, ducted to façade or roof	manual switch on/off

	Cooling		Heating		Artificial lighting						Natural lighting	
Dwelling no.	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or diningroom	Each kitchen	All bathrooms/toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
All dwellings	1-phase airconditioning / EER 3.0 - 3.5	1-phase airconditioning / EER 3.0 - 3.5	1-phase airconditioning / EER 3.5 - 4.0	1-phase airconditioning / EER 3.5 - 4.0	2(dedicated)	1(dedicated)	yes(dedicated)	yes(dedicated)	yes(dedicated)	yes(dedicated)	0	no

	Individual pool		Individual spa		Appliances & other efficiency measures							
Dwelling no.	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
D108E, D307W,	-	-	-	-	gas cooktop & electric oven	not specified	no	4 star	not specified	2 star	no	no

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
D401E, D401W, D402E, D402W, D403E, D403W, D404E, D404W, D405E, D405W, D406E, D407E, D501, D502, D503, D504, D505, D506, D507												
All other dwellings	-	-	-	-	gas cooktop & electric oven	not specified	no	4 star	not specified	2 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.			
(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.			

<b>(iii) Thermal Comfort</b>	<b>Show on DA plans</b>	<b>Show on CC/CDC plans &amp; specs</b>	<b>Certifier check</b>
(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.	✓	✓	✓

<b>Thermal loads</b>		
Dwelling no.	Area adjusted heating load (in MJ/m <sup>2</sup> /yr)	Area adjusted cooling load (in MJ/m <sup>2</sup> /yr)
D101E	42.90	14.50
D101W	28.60	22.20
D102E	38.60	12.90
D102W	36.20	26.50
D103E	39.30	11.70
D103W	35.40	22.60
D104E	36	19.40
D104W	21.30	25.00
D105E	47.50	19.30
D105W	21.30	20.70
D106E	30	14.20
D106W	21	19.50
D107E	35.70	9.70
D107W	30.60	22.10
D108E	41.70	15.40
D201E	31.10	18.30

Dwelling no.	Thermal loads	
	Area adjusted heating load (in MJ/m <sup>2</sup> /yr)	Area adjusted cooling load (in MJ/m <sup>2</sup> /yr)
D201W	26.30	22
D202E	19	19
D202W	37.10	27.30
D203E	13.30	22.80
D203W	30.40	23.20
D204E	12.10	23.60
D204W	13.60	25.70
D205E	18.20	21.30
D205W	15.10	21.50
D206E	32.10	26.90
D206W	19.70	19.30
D207E	30.50	17
D207W	31.30	21.70
D301E	31.60	18.20
D301W	26.70	21.70
D302E	16.60	18.60
D302W	35.20	31.10
D303E	8.20	24.90
D303W	29.10	25.90
D304E	6.40	24.70
D304W	9.80	29.80
D305E	15.30	23.20
D305W	12.40	26.40
D306E	30.90	27.30
D306W	18.30	18.70
D307E	27.70	17.30
D307W	31.90	21.70
D401E	32.3	18.6
D401W	39.50	29.60
D402E	17.60	18.80
D402W	46.80	41.10

Dwelling no.	Thermal loads	
	Area adjusted heating load (in MJ/m <sup>2</sup> /yr)	Area adjusted cooling load (in MJ/m <sup>2</sup> /yr)
D403E	5.30	33.70
D403W	23.9	37.5
D404E	6.10	25.20
D404W	7.70	26
D405E	18.30	26.10
D405W	34	21.3
D406E	28	25.30
D407E	28.90	15.50
D501	43.10	20.10
D502	43.80	29.80
D503	15.80	38.30
D504	18.50	29.90
D505	14.20	40.70
D506	17.50	34.50
D507	39.80	21.90
DG01W	38.50	16.50
DG02W	38.80	15.50
DG03W	34.10	18.50
DG04W	43.30	16.70
DG05W	49.9	15.9
DG06W	45.60	11.30
DG07W	62.70	16.30
All other dwellings	46.70	13.50

**(b) Common areas and central systems/facilities**

<b>(i) Water</b>	<b>Show on DA plans</b>	<b>Show on CC/CDC plans &amp; specs</b>	<b>Certifier check</b>
(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.		✓	✓

<b>Common area</b>	<b>Showerheads rating</b>	<b>Toilets rating</b>	<b>Taps rating</b>	<b>Clothes washers rating</b>
All common areas	no common facility	no common facility	no common facility	no common laundry facility

<b>Central systems</b>	<b>Size</b>	<b>Configuration</b>	<b>Connection (to allow for...)</b>
Fire sprinkler system (No. 3)	-	So that fire sprinkler test water is contained within the fire sprinkler system for re-use, rather than disposed.	-

<b>(ii) Energy</b>	<b>Show on DA plans</b>	<b>Show on CC/CDC plans &amp; specs</b>	<b>Certifier check</b>
(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
Fire Stairs - Basement	-	-	light-emitting diode	connected to lift call button	yes
Fire Stairs - Building D	no mechanical ventilation	-	light-emitting diode	motion sensors	yes
Hallway - Building D	no mechanical ventilation	-	light-emitting diode	motion sensors	yes

Central energy systems	Type	Specification
Lift (No. 3)	gearless traction with V V V F motor	Number of levels (including basement): 7
Lift (No. 4)	gearless traction with V V V F motor	Number of levels (including basement): 7
Central hot water system (No. 2)	gas-fired boiler	Piping insulation (ringmain & supply risers): (a) Piping external to building: R1.0 (~38 mm); (b) Piping internal to building: R1.0 (~38 mm)

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

### (a) 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.	✓	✓	✓

	Common area ventilation system		Common area lighting		
Common area	Ventilation system type	Ventilation efficiency measure	Primary type of artificial lighting	Lighting efficiency measure	Lighting control system/ BMS
Car park	ventilation (supply + exhaust)	carbon monoxide monitor + VSD fan	light-emitting diode	motion sensors	yes
Chute Discharge	ventilation exhaust only	-	light-emitting diode	motion sensors	yes
Plant Room	ventilation supply only	interlocked to light	light-emitting diode	manual on / manual off	yes
Fire Stairs - Basement	no mechanical ventilation	-	light-emitting diode	motion sensors	yes
Lift Lobby	no mechanical ventilation	-	light-emitting diode	motion sensors	yes

Central energy systems	Type	Specification
Alternative energy supply	Photovoltaic system	Rated electrical output (min): 25.00 peak kW
Other	-	-

## 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).



## Appendix C Lot 3 BASIX Certificate

Refer to next page.

# BASIX™ Certificate

Building Sustainability Index

[www.planningportal.nsw.gov.au/development-and-assessment/basix](http://www.planningportal.nsw.gov.au/development-and-assessment/basix)

## Multi Dwelling

Certificate number: 1330947M\_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.planningportal.nsw.gov.au/definitions](http://www.planningportal.nsw.gov.au/definitions)

This certificate is a revision of certificate number 1330947M lodged with the consent authority or certifier on 22 August 2022 with application DA-183170.

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, 03 September 2025

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



When submitting this BASIX certificate with a development application or complying development certificate application, it must be accompanied by NatHERS certificate #HR-2DYP9F-01.

Project summary		
Project name	Lot 3, 84 TALLAWONG RD ROUSE HILL _02	
Street address	84 TALLAWONG RISE ROUSE HILL 2155	
Local Government Area	BLACKTOWN	
Plan type and plan number	Deposited Plan 30186	
Lot no.	63	
Section no.	-	
No. of residential flat buildings	2	
No. of units in residential flat buildings	138	
No. of multi-dwelling houses	0	
No. of single dwelling houses	0	
Project score		
Water	✔ 40	Target 40
Thermal Comfort	✔ Pass	Target Pass
Energy	✔ 35	Target 25

Certificate Prepared by
Name / Company Name: E-LAB Consulting
ABN (if applicable): 84647520634

# Description of project

## Project address

Project name	Lot 3, 84 TALLAWONG RD ROUSE HILL _02
Street address	84 TALLAWONG RISE ROUSE HILL 2155
Local Government Area	BLACKTOWN
Plan type and plan number	Deposited Plan 30186
Lot no.	63
Section no.	-

## Project type

No. of residential flat buildings	2
No. of units in residential flat buildings	138
No. of multi-dwelling houses	0
No. of single dwelling houses	0

## Site details

Site area (m <sup>2</sup> )	5078
Roof area (m <sup>2</sup> )	1205
Non-residential floor area (m <sup>2</sup> )	0.00
Residential car spaces	158
Non-residential car spaces	0




## Common area landscape

Common area lawn (m <sup>2</sup> )	499
Common area garden (m <sup>2</sup> )	0
Area of indigenous or low water use species (m <sup>2</sup> )	-

## Assessor details and thermal loads

Assessor number	DMN/20/1972
Certificate number	#HR-2DYP9F-01
Climate zone	28
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	 35	Target 25

## Description of project

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

### Residential flat buildings - Building E, 68 dwellings, 6 storeys above ground

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
E101E	3	105.00	0.00	0.00	0.00
E103E	2	71.9	0.00	0.00	0.00
E105E	2	73.00	0.00	0.00	0.00
E107E	2	80.00	0.00	0.00	0.00
E202E	3	105.00	0.00	0.00	0.00
E204E	2	72.00	0.00	0.00	0.00
E206E	2	80.00	0.00	0.00	0.00
E301E	3	93	0.00	0.00	0.00
E303E	2	73	0.00	0.00	0.00
E305E	2	73.00	0.00	0.00	0.00
E307E	2	80.00	0.00	0.00	0.00
E402E	3	105	0.00	0.00	0.00
E404E	2	71	0.00	0.00	0.00
E406E	2	80	0.00	0.00	0.00
E503	3	100	0.00	0.00	0.00
E507	3	90.50	0.00	0.00	0.00
EG04W	2	71.00	0.00	0.00	0.00
E101W	2	80.00	0.00	0.00	0.00
E103W	2	74.4	0.00	0.00	0.00
E105W	2	71.8	0.00	0.00	0.00
E107W	2	80.00	0.00	0.00	0.00
E202W	2	80.00	0.00	0.00	0.00
E204W	2	72.1	0.00	0.00	0.00
E206W	2	72.3	0.00	0.00	0.00
E301W	2	80.00	0.00	0.00	0.00
E303W	2	73.00	0.00	0.00	0.00
E305W	2	71.8	0.00	0.00	0.00
E307W	2	80.00	0.00	0.00	0.00
E402W	2	76	0.00	0.00	0.00
E404W	2	71.9	0.00	0.00	0.00
E407E	3	91.6	0.00	0.00	0.00
E504	2	70	0.00	0.00	0.00
EG01W	2	80.00	0.00	0.00	0.00
EG05W	2	73.6	0.00	0.00	0.00
E102E	3	105.00	0.00	0.00	0.00
E104E	2	72.00	0.00	0.00	0.00
E106E	2	80.00	0.00	0.00	0.00
E201E	3	93	0.00	0.00	0.00
E203E	2	73	0.00	0.00	0.00
E205E	2	73.00	0.00	0.00	0.00
E207E	2	80.00	0.00	0.00	0.00
E302E	3	105.00	0.00	0.00	0.00
E304E	2	72.00	0.00	0.00	0.00
E306E	2	80.00	0.00	0.00	0.00
E401E	3	93	0.00	0.00	0.00
E403E	2	73	0.00	0.00	0.00
E405E	3	90	0.00	0.00	0.00
E501	3	93	0.00	0.00	0.00
E505	2	77	0.00	0.00	0.00
EG02W	2	80.00	0.00	0.00	0.00
EG06W	2	74.7	0.00	0.00	0.00
E102W	2	80.00	0.00	0.00	0.00
E104W	2	72.1	0.00	0.00	0.00
E106W	2	70.00	0.00	0.00	0.00
E201W	2	80.00	0.00	0.00	0.00
E203W	2	73.00	0.00	0.00	0.00
E205W	2	71.8	0.00	0.00	0.00
E207W	2	80.00	0.00	0.00	0.00
E302W	2	80.00	0.00	0.00	0.00
E304W	2	72.1	0.00	0.00	0.00
E306W	2	72.3	0.00	0.00	0.00
E401W	3	100	0.00	0.00	0.00
E403W	2	80	0.00	0.00	0.00
E405W	2	80	0.00	0.00	0.00
E502	3	105	0.00	0.00	0.00
E506	3	108	0.00	0.00	0.00
EG03W	2	73.00	0.00	0.00	0.00
EG07W	2	64.4	0.00	0.00	0.00

## Residential flat buildings - Building F, 70 dwellings, 6 storeys above ground

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
F101E	2	80.00	0.00	0.00	0.00
F103E	2	72.00	0.00	0.00	0.00
F105E	1	50.00	0.00	0.00	0.00
F107E	2	72.8	0.00	0.00	0.00
F201W	2	80.00	0.00	0.00	0.00
F203W	2	63.2	0.00	0.00	0.00
F205W	2	73.00	0.00	0.00	0.00
F207W	2	80.00	0.00	0.00	0.00
F302W	2	71.5	0.00	0.00	0.00
F304W	2	72.00	0.00	0.00	0.00
F306W	2	70	0.00	0.00	0.00
F401W	2	80.00	0.00	0.00	0.00
F403W	2	78.00	0.00	0.00	0.00
F405W	3	100.00	0.00	0.00	0.00
F502	3	108.00	0.00	0.00	0.00
F506	2	78.00	0.00	0.00	0.00
FG03W	1	50.00	0.00	0.00	0.00
FG07W	2	71.5	0.00	0.00	0.00
Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
F101W	2	80.00	0.00	0.00	0.00
F103W	2	63.2	0.00	0.00	0.00
F105W	2	73.00	0.00	0.00	0.00
F107W	2	80.00	0.00	0.00	0.00
F202E	2	69.2	0.00	0.00	0.00
F204E	2	71.00	0.00	0.00	0.00
F206E	2	73.7	0.00	0.00	0.00
F301E	2	80.00	0.00	0.00	0.00
F303E	2	73.00	0.00	0.00	0.00
F305E	2	60.8	0.00	0.00	0.00
F307E	2	80.00	0.00	0.00	0.00
F402E	2	68.1	0.00	0.00	0.00
F404E	2	72.00	0.00	0.00	0.00
F406E	2	78.00	0.00	0.00	0.00
F503	2	77.00	0.00	0.00	0.00
F507	2	80.00	0.00	0.00	0.00
FG04W	1	50.00	0.00	0.00	0.00
FG08W	2	80.00	0.00	0.00	0.00
Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
F102E	2	70	0.00	0.00	0.00
F104E	1	45.00	0.00	0.00	0.00
F106E	1	50.00	0.00	0.00	0.00
F108E	2	68	0.00	0.00	0.00
F202W	2	71.5	0.00	0.00	0.00
F204W	2	72.00	0.00	0.00	0.00
F206W	2	70	0.00	0.00	0.00
F301W	2	80.00	0.00	0.00	0.00
F303W	2	63.1	0.00	0.00	0.00
F305W	2	73	0.00	0.00	0.00
F307W	2	80.00	0.00	0.00	0.00
F402W	2	71.5	0.00	0.00	0.00
F404W	2	76.00	0.00	0.00	0.00
F407E	2	80.00	0.00	0.00	0.00
F504	2	70.00	0.00	0.00	0.00
FG01W	2	68.00	0.00	0.00	0.00
FG05W	1	45.00	0.00	0.00	0.00
Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
F102W	2	71.5	0.00	0.00	0.00
F104W	2	72.00	0.00	0.00	0.00
F106W	2	70	0.00	0.00	0.00
F201E	2	80.00	0.00	0.00	0.00
F203E	2	73.00	0.00	0.00	0.00
F205E	2	60.8	0.00	0.00	0.00
F207E	2	80.00	0.00	0.00	0.00
F302E	2	69.7	0.00	0.00	0.00
F304E	2	71.00	0.00	0.00	0.00
F306E	2	78.00	0.00	0.00	0.00
F401E	3	90.2	0.00	0.00	0.00
F403E	3	89.00	0.00	0.00	0.00
F405E	2	60.4	0.00	0.00	0.00
F501	3	94.00	0.00	0.00	0.00
F505	2	85.00	0.00	0.00	0.00
FG02W	2	72.6	0.00	0.00	0.00
FG06W	2	73.00	0.00	0.00	0.00

## Description of project

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

### Common areas of the development (non-building specific)

Common area	Floor area (m <sup>2</sup> )
Car park	6179.35
Fire Stairs - Basement	82.66

Common area	Floor area (m <sup>2</sup> )
Chute Discharge	74.02
Lift Lobby	123.61

Common area	Floor area (m <sup>2</sup> )
Plant Room	150.97

### Common areas of unit building - Building E

Common area	Floor area (m <sup>2</sup> )
Hallway - Building E	412.66

### Common areas of unit building - Building F

Common area	Floor area (m <sup>2</sup> )
Hallway - Building F	408.99

# Schedule of BASIX commitments

## 1. Commitments for Residential flat buildings - Building E

### (a) Dwellings

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

### (b) Common areas and central systems/facilities

- (i) Water
- (ii) Energy

## 2. Commitments for Residential flat buildings - Building F

### (a) Dwellings

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

### (b) Common areas and central systems/facilities

- (i) Water
- (ii) Energy

## 3. Commitments for single dwelling houses

## 4. Commitments for multi-dwelling houses

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

### (a) Common areas and central systems/facilities

- (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 - Building E

#### (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"> <li>(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</li> <li>(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.</li> </ul>		✓	✓
(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	4 star (> 6 but <= 7.5 L/min)	4 star	5 star	5 star	-	not specified	4 star	-	-	-	-	-	-	-

Dwelling no.	Alternative water source								
	Alternative water supply systems	Size	Configuration	Landscape connection	Toilet connection (s)	Laundry connection	Pool top-up	Spa top-up	
All dwellings	No alternative water supply	-	-	-	-	-	-	-	

(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.		✔	✔
(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.	✔	✔	✔

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(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 (No. 1)	individual fan, ducted to façade or roof	manual switch on/off	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 diningroom	Each kitchen	All bathrooms/toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
E101E, E102E, E201E, E202E, E301E, E401E, E401W,	1-phase airconditioning / EER 3.0 - 3.5	1-phase airconditioning / EER 3.0 - 3.5	1-phase airconditioning / EER 3.5 - 4.0	1-phase airconditioning / EER 3.5 - 4.0	3(dedicated)	1(dedicated)	yes(dedicated)	yes(dedicated)	yes(dedicated)	yes(dedicated)	0	no

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 diningroom	Each kitchen	All bathrooms/toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
E402E, E405E, E407E, E501, E502, E503, E506, E507												
All other dwellings	1-phase airconditioning / EER 3.0 - 3.5	1-phase airconditioning / EER 3.0 - 3.5	1-phase airconditioning / EER 3.5 - 4.0	1-phase airconditioning / EER 3.5 - 4.0	2(dedicated)	1(dedicated)	yes(dedicated)	yes(dedicated)	yes(dedicated)	yes(dedicated)	0	no

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
E307W, E401E, E401W, E402E, E402W, E403E, E403W, E404E, E404W, E405E, E405W, E406E, E407E, E501, E502, E503, E504,	-	-	-	-	gas cooktop & electric oven	not specified	no	4 star	not specified	2 star	no	no

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
E505, E506, E507												
All other dwellings	-	-	-	-	gas cooktop & electric oven	not specified	no	4 star	not specified	2 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.			
(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.	✓	✓	✓

Dwelling no.	Thermal loads	
	Area adjusted heating load (in MJ/m <sup>2</sup> /yr)	Area adjusted cooling load (in MJ/m <sup>2</sup> /yr)
E101E	3.70	17.40
E101W	9.5	19
E102E	5.4	17.60
E102W	10.6	16.9
E103E	21.7	19.5
E103W	33.6	19.4
E104E	51.6	12.2
E104W	31.1	17.8
E105E	52.40	11.30
E105W	33.6	16.5
E106W	11	18
E107E	11.90	14
E107W	7.9	21.7
E201E	9.70	21.30
E201W	10	19.10
E202E	1.4	30.30
E202W	11	16.90
E203E	8.7	37.70
E203W	33.30	19.9
E204E	42.60	20.30
E204W	31.40	17.30
E205E	40.20	19.5
E205W	33.20	18.10
E206E	10.20	16
E206W	11.5	17.30
E207E	10.40	20.60
E207W	6	21.6
E301W	10.50	19.30
E302E	1.30	29.9
E302W	11.80	17.90
E303E	8.7	37.40

Dwelling no.	Thermal loads	
	Area adjusted heating load (in MJ/m <sup>2</sup> /yr)	Area adjusted cooling load (in MJ/m <sup>2</sup> /yr)
E303W	37	21.90
E304E	41.80	20.70
E304W	33	19.40
E305E	40.90	19.40
E305W	35.50	20.80
E306E	11	16.40
E306W	11.70	17.20
E307E	11	20.80
E307W	6.3	21.70
E401E	9.6	19.20
E401W	15.60	18
E402E	2.5	25.60
E402W	50.60	23.30
E403E	11.50	41.20
E403W	53.80	30.90
E404E	42.90	22.70
E404W	23.40	24.80
E405E	32.50	20.7
E405W	18	27.80
E406E	19.5	17.6
E407E	10.6	19.60
E501	22.10	27.40
E502	8.6	32.70
E503	22.50	37
E504	56.10	35.60
E505	49.7	47.90
E506	14.20	56
E507	29.20	26
EG01W	13.9	15.10
EG02W	45.20	10.10
EG03W	62.20	9.5

	Thermal loads	
Dwelling no.	Area adjusted heating load (in MJ/m <sup>2</sup> /yr)	Area adjusted cooling load (in MJ/m <sup>2</sup> /yr)
EG04W	55.20	10.20
EG05W	53.90	9.8
EG06W	30	23.6
EG07W	7	17.4
All other dwellings	21.4	9.10

**(b) Common areas and central systems/facilities**

<b>(i) Water</b>	<b>Show on DA plans</b>	<b>Show on CC/CDC plans &amp; specs</b>	<b>Certifier check</b>
(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.		✓	✓

<b>Common area</b>	<b>Showerheads rating</b>	<b>Toilets rating</b>	<b>Taps rating</b>	<b>Clothes washers rating</b>
All common areas	no common facility	no common facility	no common facility	no common laundry facility

<b>Central systems</b>	<b>Size</b>	<b>Configuration</b>	<b>Connection (to allow for...)</b>
Fire sprinkler system (No. 2)	-	So that fire sprinkler test water is contained within the fire sprinkler system for re-use, rather than disposed.	-

<b>(ii) Energy</b>	<b>Show on DA plans</b>	<b>Show on CC/CDC plans &amp; specs</b>	<b>Certifier check</b>
(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 ventilation system		Common area lighting		
Common area	Ventilation system type	Ventilation efficiency measure	Primary type of artificial lighting	Lighting efficiency measure	Lighting control system/ BMS
Lift car (No. 1)	-	-	light-emitting diode	connected to lift call button	yes
Lift car (No. 2)	-	-	light-emitting diode	connected to lift call button	yes
Fire Stairs - Building E	no mechanical ventilation	-	light-emitting diode	motion sensors	yes
Hallway - Building E	no mechanical ventilation	-	light-emitting diode	motion sensors	yes

Central energy systems	Type	Specification
Lift (No. 1)	gearless traction with V V V F motor	Number of levels (including basement): 7
Lift (No. 2)	gearless traction with V V V F motor	Number of levels (including basement): 7
Central hot water system (No. 1)	gas-fired boiler	Piping insulation (ringmain & supply risers): (a) Piping external to building: R1.0 (~38 mm); (b) Piping internal to building: R1.0 (~38 mm)

## 2. Commitments for Residential flat buildings - Building F

### (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"> <li>(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</li> <li>(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.</li> </ul>		✓ ✓	✓ ✓
(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	4 star (> 6 but ≤ 7.5 L/min)	4 star	5 star	5 star	-	not specified	4 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
All dwellings	No alternative water supply	-	-	-	-	-	-	-

(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.		✔	✔
(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:			

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(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 (No. 2)	individual fan, ducted to façade or roof	manual switch on/off	individual fan, ducted to façade or roof	manual switch on/off	individual fan, ducted to façade or roof	manual switch on/off

	Cooling		Heating		Artificial lighting						Natural lighting	
Dwelling no.	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or diningroom	Each kitchen	All bathrooms/toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
F401E, F405W, F501, F502	1-phase airconditioning / EER 3.0 - 3.5	1-phase airconditioning / EER 3.0 - 3.5	1-phase airconditioning / EER 3.5 - 4.0	1-phase airconditioning / EER 3.5 - 4.0	3(dedicated)	1(dedicated)	yes(dedicated)	yes(dedicated)	yes(dedicated)	yes(dedicated)	0	no
F104E, F105E, F106E, FG03W, FG04W, FG05W	1-phase airconditioning / EER 3.0 - 3.5	1-phase airconditioning / EER 3.0 - 3.5	1-phase airconditioning / EER 3.5 - 4.0	1-phase airconditioning / EER 3.5 - 4.0	1(dedicated)	1(dedicated)	yes(dedicated)	yes(dedicated)	yes(dedicated)	yes(dedicated)	0	no
All other dwellings	1-phase airconditioning / EER 3.0 - 3.5	1-phase airconditioning / EER 3.0 - 3.5	1-phase airconditioning / EER 3.5 - 4.0	1-phase airconditioning / EER 3.5 - 4.0	2(dedicated)	1(dedicated)	yes(dedicated)	yes(dedicated)	yes(dedicated)	yes(dedicated)	0	no

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
F107E, F108E, F307W, F401E, F401W, F402E, F402W, F403E, F403W, F404E, F404W, F405E, F405W, F406E, F407E, F501, F502, F503, F504, F505, F506, F507	-	-	-	-	gas cooktop & electric oven	not specified	no	4 star	not specified	2 star	no	no
All other dwellings	-	-	-	-	gas cooktop & electric oven	not specified	no	4 star	not specified	2 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.			

<b>(iii) Thermal Comfort</b>	<b>Show on DA plans</b>	<b>Show on CC/CDC plans &amp; specs</b>	<b>Certifier check</b>
(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.	✔	✔	✔

<b>Thermal loads</b>		
Dwelling no.	Area adjusted heating load (in MJ/m <sup>2</sup> /yr)	Area adjusted cooling load (in MJ/m <sup>2</sup> /yr)
F101E	49	12.7
F101W	28	21
F102E	37.20	14.10
F102W	35.9	25.10
F103E	47.8	9.30
F103W	34.4	21.2
F104E	40.7	17.7
F104W	25.8	19.8
F105E	48.2	19
F105W	21.90	19.2
F106E	3.4	46.7
F106W	16.7	19.1
F107E	11.4	28.7
F107W	30.50	20.50

Dwelling no.	Thermal loads	
	Area adjusted heating load (in MJ/m <sup>2</sup> /yr)	Area adjusted cooling load (in MJ/m <sup>2</sup> /yr)
F108E	40.50	15.80
F201E	29	17.8
F201W	27.2	19.20
F202E	18.6	18.6
F202W	35.2	26.70
F203E	17.50	19.20
F203W	32.8	22.6
F204E	16.3	19.4
F204W	18	20.70
F205E	4	55.10
F205W	20.40	19.6
F206E	4.8	38
F206W	15.10	19.2
F207E	31	19.90
F207W	31.30	20.30
F301E	29.6	17.70
F301W	27.80	19
F302E	15.3	18.7
F302W	34.40	28.4
F303E	10.4	20.4
F303W	27.7	26.7
F304E	8.5	20.30
F304W	13.5	23.2
F305E	2.3	55.30
F305W	16.7	23.5
F306E	5	37.7
F306W	13.4	20.10
F307E	28.7	19.90
F307W	32	20.30
F401E	31.6	16.5
F401W	39.5	28.4

Dwelling no.	Thermal loads	
	Area adjusted heating load (in MJ/m <sup>2</sup> /yr)	Area adjusted cooling load (in MJ/m <sup>2</sup> /yr)
F402E	15.3	21.7
F402W	45.4	38.7
F403E	7.7	21.4
F403W	33.5	36.2
F404E	6	20.30
F404W	12	26.60
F405E	5.2	58.2
F405W	34.6	20.10
F406E	6.3	35.2
F407E	30.10	17.80
F501	50.60	23.80
F502	49.6	29.2
F503	15.6	43.8
F504	16.9	63
F505	13.10	63
F506	13.7	43.9
F507	40.50	24.40
FG01W	37	18.00
FG02W	38.7	16.9
FG03W	36.3	20.30
FG04W	48.40	17.10
FG05W	53.20	17
FG06W	49.10	10.50
FG07W	62.90	15.7
All other dwellings	49.1	12.4

**(b) Common areas and central systems/facilities**

<b>(i) Water</b>	<b>Show on DA plans</b>	<b>Show on CC/CDC plans &amp; specs</b>	<b>Certifier check</b>
(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.		✓	✓

<b>Common area</b>	<b>Showerheads rating</b>	<b>Toilets rating</b>	<b>Taps rating</b>	<b>Clothes washers rating</b>
All common areas	no common facility	no common facility	no common facility	no common laundry facility

<b>Central systems</b>	<b>Size</b>	<b>Configuration</b>	<b>Connection (to allow for...)</b>
Fire sprinkler system (No. 3)	-	So that fire sprinkler test water is contained within the fire sprinkler system for re-use, rather than disposed.	-

<b>(ii) Energy</b>	<b>Show on DA plans</b>	<b>Show on CC/CDC plans &amp; specs</b>	<b>Certifier check</b>
(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 ventilation system		Common area lighting		
Common area	Ventilation system type	Ventilation efficiency measure	Primary type of artificial lighting	Lighting efficiency measure	Lighting control system/ BMS
Lift car (No. 3)	-	-	light-emitting diode	connected to lift call button	yes
Lift car (No. 4)	-	-	light-emitting diode	connected to lift call button	yes
Fire Stairs - Building F	no mechanical ventilation	-	light-emitting diode	motion sensors	yes
Hallway - Building F	no mechanical ventilation	-	light-emitting diode	motion sensors	yes

Central energy systems	Type	Specification
Lift (No. 3)	gearless traction with V V V F motor	Number of levels (including basement): 7
Lift (No. 4)	gearless traction with V V V F motor	Number of levels (including basement): 7
Central hot water system (No. 2)	gas-fired boiler	Piping insulation (ringmain & supply risers): (a) Piping external to building: R1.0 (~38 mm); (b) Piping internal to building: R1.0 (~38 mm)

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

### (a) 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.	✓	✓	✓

	Common area ventilation system		Common area lighting		
Common area	Ventilation system type	Ventilation efficiency measure	Primary type of artificial lighting	Lighting efficiency measure	Lighting control system/ BMS
Car park	ventilation (supply + exhaust)	carbon monoxide monitor + VSD fan	light-emitting diode	motion sensors	yes
Chute Discharge	ventilation exhaust only	-	light-emitting diode	motion sensors	yes
Plant Room	ventilation supply only	interlocked to light	light-emitting diode	motion sensors	yes
Fire Stairs - Basement	no mechanical ventilation	-	light-emitting diode	motion sensors	yes
Lift Lobby	no mechanical ventilation	-	light-emitting diode	motion sensors	yes

Central energy systems	Type	Specification
Alternative energy supply	Photovoltaic system	Rated electrical output (min): 10 peak kW
Other	-	-

## 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).

