

# Tempus Street, Rouse Hill

## BASIX Compliance Report

Project No.	P01463
Revision	01
Issued	11 June 2025
Client	Freecity



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





## Issue And Revision Record

Revision	Date	Comments	Engineer	Reviewer
01	11.06.2025	DA Issue	MR/NA	BL
02				
03				
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

This document is issued for the party which commissioned it and for specific purposes connected with the above-captioned project only. It should not be relied upon by any other party or used for any other purpose.

We accept no responsibility for the consequences of this document being relied upon by any other party, or being used for any other purpose, or containing any error or omission which is due to an error or omission in data supplied to us by other parties.

This document contains confidential information and proprietary intellectual property. It should not be shown to other parties without consent from us and from the party which commissioned it.

Ben Loe | Associate

E-LAB Consulting

e-lab.com.au

# Table of Contents

1	Introduction.....	1
1.1	Purpose.....	1
1.2	Site Location .....	1
1.3	Design Documentation.....	1
1.4	Project Overview .....	2
2	BASIX Summary.....	3
2.1	Overview .....	3
2.2	BASIX Certification Details.....	3
2.3	Energy Modelling Software .....	3
3	BASIX Energy .....	4
3.1	Energy.....	4
4	BASIX Thermal Comfort.....	7
4.1	Thermal Comfort .....	7
5	BASIX Water .....	8
5.1	Water .....	8
6	Results .....	9

---

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

E-LAB Consulting are engaged by Freecity to provide BASIX compliance consultancy for the residential portion of the 2–30 Tempus Street, Rouse Hill. The intent of this report is to confirm the minimum requirements to satisfy the legislated minimum BASIX requirements for certification.

**E-LAB have assessed the development and confirm that based on the design of the residential portion of the Tempus Street, 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	Project Score
Energy	61%	61%
Water	40%	49%
Thermal Comfort	Pass	Pass
Material Index	No Target	-100

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

# 1 Introduction

## 1.1 Purpose

This report has been prepared by E-LAB Consulting (E-LAB) at the request of Freecity. Its purpose is to demonstrate compliance with the minimum legislated BASIX benchmarks for certification. It highlights the inputs and development requirements for the BASIX compliance.

**This report has found that based on the design of development and the inputs provided to BASIX, the proposal is positioned to comply with the requirements of BASIX.**

## 1.2 Site Location

The project is located at 2 Tempus Street, Rouse Hill NSW. The site is located in the Hills District, which is north-west of Sydney's CBD. The immediate surrounding of the site is commercial retail and residential. The project is opposite the Castlebrook Memorial Park Rouse Hill.

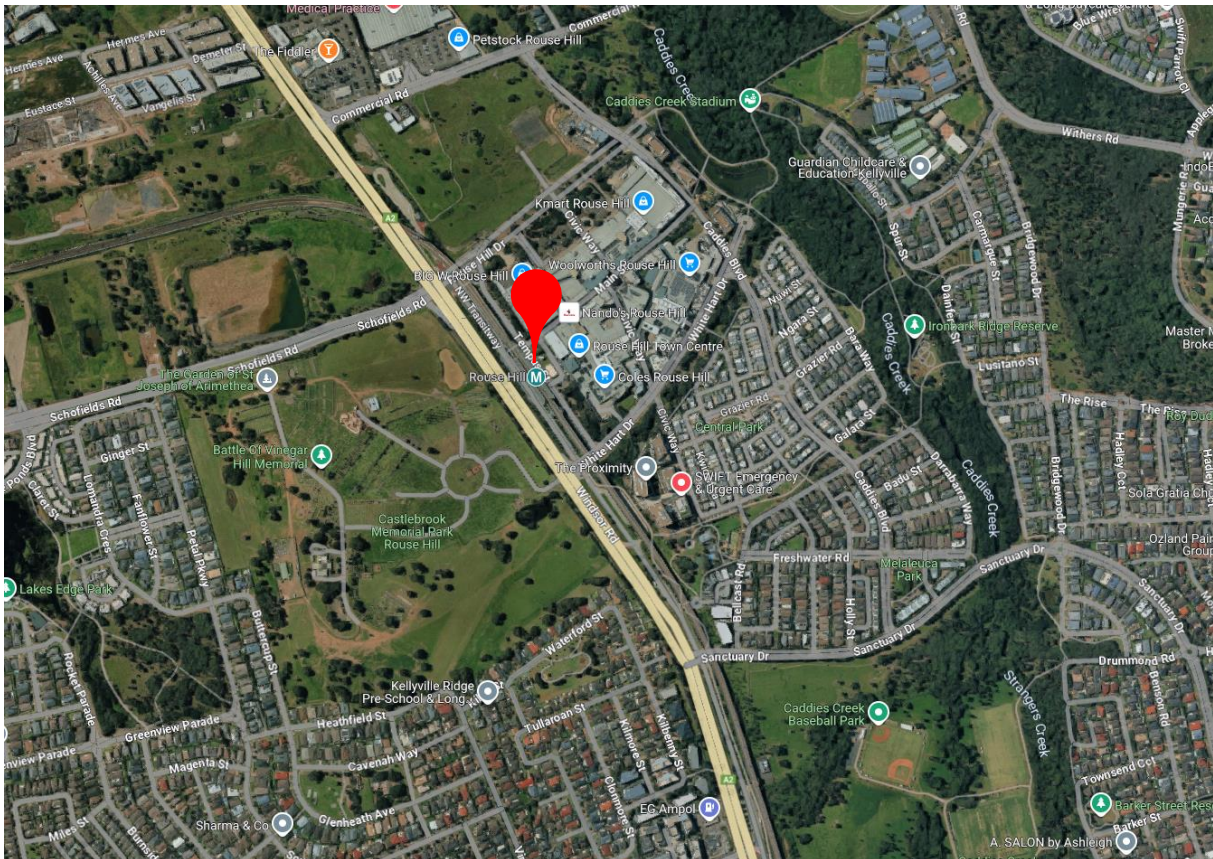


Figure 1: Site Location (source: Google Maps)

## 1.3 Design Documentation

This assessed is based on the Architectural Package provided by Architectus issues as SDRP 2 + BASIX Comments dated 05/06/2025.

## 1.4 Project Overview

The proposed Tempus Street, Rouse Hills development consists of high-rise apartment complex for residential purposes. The development consists of but is not limited to the following spaces:

- Two residential tower which contain 16 and 21 residential levels with units of varying bedrooms and sizes with associated balconies,
- 2 levels of basement within the development for carparking and supporting infrastructure,
- Residential amenities including a, gym, yoga studio, spa, sauna, library, rooftop bar and cinema room
- Rooftop outdoor open spaces.



Figure 2: Project Render (source: Architectus)

## 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 the Tempus Street, 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	Project Score
Energy	61%	61%
Water	40%	49%
Thermal Comfort	Pass	Pass
Material Index	No Target	-100

### 2.2 BASIX Certification Details

*Table 3: Project Summary*

Category	Entry
Project Name	Tempus Street Rouse Hill
Local Government Area	The Hills Shire
Plan Type	Deposited Plan (DP)
Plan No.	19/--/DP280013
No. of Residential Buildings	2 Building
Total Number of Units & Townhouses	227
Project Type	Residential Flat Buildings
BASIX Certificate Number	1799294M

### 2.3 Energy Modelling Software

Simulation method in BASIX has been used to show the thermal comfort compliance. For energy simulations, FirstRate5 (Version 5.5.5) has been used which is approved under Thermal comfort protocol of BASIX since March 2023. 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	Centralised electric heat pump (air sourced) with a $3.0 < COP \leq 3.5$ and minimum R1.0 insulation to internal and external pipework
Cooking	Electric cooktop & electric oven
Mechanical heating and cooling	Reverse cycle air-conditioning (1-Phase ducted) for all units living areas. Minimum EER ratings – Cooling 3.5-4.0, Heating 3.5-4.0
Apartment ventilation	Bathroom: individual fan, ducted to façade or roof - Manual switch on/off Laundry: individual fan, open to façade or roof– Manual switch on/off Kitchen range hood: Individual fan, open to façade or roof– Manual switch on/off
Apartment artificial lighting	LED throughout with dedicated fittings
Appliances in Apartments (minimum Energy Star rating)	Dishwashers: Minimum 4.5 Star Energy Rated (To all apartments) Clothes Dryers: Minimum 2.0 Star Energy Rated (To all apartments)
Appliances in Common Areas (minimum Energy Star rating)	Clothes Washers: No common laundry facilities Clothes Dryers: No common laundry facilities
Photovoltaic Array	Calculated 50kW peak PV
Building Management System (BMS)	Yes
Vertical transport	All Lifts: gearless traction with VVVF motor with Regenerative drive ( $\geq 1001$ kg but $\leq 1500$ kg)
Sauna	Electric resistance heating source with manual on/timer off.

#### Common area Ventilation & artificial lighting

Common area	Ventilation system type	Ventilation efficiency measure	Primary type of artificial lighting	Lighting efficiency measure
L17 Steam and Sauna	Ventilation (Supply + exhaust)	Time clock or BMS controlled	Light-emitting diode	Time clocks
L17 Gym, Yoga, Lounge	Air conditioning System	Time clock or BMS controlled	Light-emitting diode	Time clocks
B02 Carpark	Ventilation (supply + exhaust)	Carbon monoxide monitor + VSD fan	Light-emitting diode	Zoned switching with motion sensors
B01 Carpark	Ventilation (supply + exhaust)	Carbon monoxide monitor + VSD fan	Light-emitting diode	Zoned switching with motion sensors
B02 Services Cabinets	No mechanical ventilation	n/a	Light-emitting diode	Manual on / manual off

B01 Services Cabinets	No mechanical ventilation	n/a	Light-emitting diode	Manual on / manual off
B01 Comms	Air conditioning system	Continues	Light-emitting diode	Manual on / manual off
GF Services Cabinets	Ventilation supply only	Thermostatically controlled	Light-emitting diode	Manual on / manual off
GF main Switch Room, Meter, Substation	Ventilation Supply only	Thermostatically controlled	Light-emitting diode	Manual on / manual off
Tower A Services Cabinet	No mechanical ventilation	n/a	Light-emitting diode	Manual on / manual off
Tower B Services Cabinet	No mechanical ventilation	n/a	Light-emitting diode	Manual on / manual off
Mez Services Cabinet	No mechanical ventilation	n/a	Light-emitting diode	Manual on / manual off
B02 Bulky Waste + Comm/Retail Bin Room	Ventilation Exhaust only	n/a	Light-emitting diode	Motion sensors
B01 Chute Rooms + FOGO	Ventilation Exhaust only	n/a	Light-emitting diode	Motion sensors
GF Chute + Garbage	Ventilation Exhaust only	n/a	Light-emitting diode	Motion sensors
Tower A Chute Rooms	Ventilation Exhaust only	n/a	Light-emitting diode	Motion sensors
Tower B Chute Rooms	Ventilation Exhaust only	n/a	Light-emitting diode	Motion sensors
L17 Lounges	Air conditioning system	Time clock or BMS controlled	Light-emitting diode	Time clock and motion sensors
B02 Fan Rooms	Ventilation supply only	Thermostatically controlled	Light-emitting diode	Manual on / manual off
B01 Fan Rooms	Ventilation supply only	Thermostatically controlled	Light-emitting diode	Manual on / manual off
B01 OSD Tank, Rainwater Tank, Cold Water Tank	Ventilation supply only	Thermostatically controlled	Light-emitting diode	Manual on / manual off
B01 Fire Tank Room, Fire Pump Room	Ventilation supply only	Thermostatically controlled	Light-emitting diode	Manual on / manual off
B01 Grease Arrestor	Ventilation supply only	Thermostatically controlled	Light-emitting diode	Manual on / manual off
GF FCR	Ventilation supply only	Thermostatically controlled	Light-emitting diode	Manual on / manual off
Tower A VRF Condenser Rooms	Ventilation (supply + exhaust)	None i.e, continuous	Light-emitting diode	Manual on / manual off
L18 Hot Water plant	Ventilation supply only	Thermostatically controlled	Light-emitting diode	Manual on / manual off
L18 Mech Plant	Ventilation supply only	Thermostatically controlled	Light-emitting diode	Manual on / manual off
Roof Hot water Plant	Ventilation supply only	Thermostatically controlled	Light-emitting diode	Manual on / manual off
Tower A Lift Motor Rooms	No mechanical ventilation	n/a	Light-emitting diode	Manual on / manual off
Tower B VRF Condensers	Ventilation (Supply + exhaust)	None i.e, continuous	Light-emitting diode	Manual on / manual off
Tower B Lift Motor Room	No mechanical ventilation	n/a	Light-emitting diode	Manual on / manual off
MEZ Grease Arrestor	Ventilation supply only	Thermostatically controlled	Light-emitting diode	Manual on / manual off
B02 Storage	No mechanical ventilation	n/a	Light-emitting diode	Motion sensors
B02 Fire Stairs	No mechanical ventilation	n/a	Light-emitting diode	Motion sensors
B01 Storage	No mechanical ventilation	n/a	Light-emitting diode	Motion sensors



B01 Fire Stairs	No mechanical ventilation	n/a	Light-emitting diode	Motion sensors
B01 BTR Storage	No mechanical ventilation	n/a	Light-emitting diode	Motion sensors
B01 Corridor	Ventilation supply only	Time clock or BMS controlled	Light-emitting diode	Motion sensors
GF Fire Stairs	No mechanical ventilation	n/a	Light-emitting diode	Motion sensors
GF Mail Room	Ventilation (supply + exhaust)	Time clock or BMS controlled	Light-emitting diode	Motion sensors
GF BTR Manager Office	Air conditioning system	Time clock or BMS controlled	Light-emitting diode	Time clock and motion sensors
GF WC, Store, Cleaners	Ventilation exhaust only	Time clock or BMS controlled	Light-emitting diode	Motion sensors
L01-L02 Fire Stairs	No mechanical ventilation	n/a	Light-emitting diode	Time clock and Motion sensors
Tower A Fire stair	No mechanical ventilation	n/a	Light-emitting diode	Motion sensors
Tower B Fire Stairs	No mechanical ventilation		Light-emitting diode	Motion sensors
L17 WC	Ventilation exhaust only	Time clock or BMS controlled	Light-emitting diode	Motion sensors
L22 Lounge	Air conditioning system	Time clock or BMS controlled	Light-emitting diode	Time clock and motion sensors
L22 Bar/Dinning	Air conditioning system	Time clock or BMS controlled	Light-emitting diode	Time clock and motion sensors
L22 WC	Ventilation exhaust only	Time clock or BMS controlled	Light-emitting diode	Motion sensors
L22 Cinema	Air conditioning system	Time clock or BMS controlled	Light-emitting diode	Manual on / manual off
GF Lobby	Air conditioning system	Time clock or BMS controlled	Light-emitting diode	Time clock and Motion sensors
Tower A Lobbies	Ventilation supply only	Time clock or BMS controlled	Light-emitting diode	Time clock and Motion sensors
Tower B Lobbies	Ventilation supply only	Time clock or BMS controlled	Light-emitting diode	Time clock and Motion sensors

## 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 &amp; Sliding Windows/Doors</u>            Total System U-Value = 3.60 (equal to or less than)            Total System SHGC = 0.54 (+/- 5%)</p> <p><u>Awning &amp; Casement Windows/Doors</u>            Total System U-Value = 3.60 (equal to or less than)            Total System SHGC = 0.47 (+/- 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. Minimum nominal 20mm unventilated non-reflective airgap. No thermal break required for the metal stud frame for thermal bridging controls.</p> <p>Refer to Appendix C insulation markups for locations of insulation and additional details.</p> <p>Medium or light colour</p>
Exposed Roofs/Balconies (Over conditioned spaces)	<p>Added R4.0 soffit slab insulation to apartments concrete slab roofs.</p> <p>Refer to Appendix C insulation markups for locations of insulation and additional details.</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 R2.5 soffit slab insulation to underside of suspended concrete slabs.</p> <p>Refer to Appendix C insulation markups for locations of insulation and additional details.</p>
Floors Covering	<p>Carpet in Bedrooms, Timber in Living/Dining Rooms.            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	Showers: Minimum 3 Star (> 7.5 but <= 9.0 L/min) WELS Rated Toilets: Minimum 4 Star WELS Rated Bathroom Taps: Minimum 5 Star WELS Rated Kitchen Sink Taps: Minimum 5 Star WELS Rated
Fixtures within common areas	Showers: Minimum 4 Star (>4.5 but <= 9.0 L/min) WELS Rated Toilets: Minimum 4 Star WELS Rated All Taps: Minimum 5 Star WELS Rated
Fittings/Appliances within units	Clothes Washer: 5 Star WELS Rated Dishwasher: Minimum 5 Star WELS Rated
Hot water recirculation or diversion system	The development will not install a hot water recirculation or diversion system
Fittings/Appliances within common areas	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	10,000 L rainwater tank provision is provided and is required to collect rainwater from building roof area which is not less than 2,476.86 m <sup>2</sup> . The rainwater collected shall be reused for ground and roof common landscape and lawn area irrigation.
Common Area Land scape	Total common lawn area: 570.35 m <sup>2</sup> Total garden area: 90.44 m <sup>2</sup>

## 6 Results

E-LAB Consulting are engaged by Freecity to provide BASIX compliance consultancy for the residential portion of Tempus Street, Rouse Hill. The report has confirmed the minimum requirements to satisfy the legislated minimum BASIX requirements for certification.

**E-LAB have assessed the development and confirm that based on the design of the residential portion of the Tempus Street, Rouse Hill 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	Project Score
Energy	61%	61%
Water	40%	49%
Thermal Comfort	Pass	Pass
Material Index	No Target	-100

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



## Appendix A NatHERS Group Certificate

Refer to next page.

# Nationwide House Energy Rating Scheme® Class 2 Summary NatHERS® Certificate No. 9AYG35L0CS

Thermal performance  
Star rating

Generated on 11 Jun 2025 using FirstRate5 v5.5.5a

## Property

Address 2-30 Tempus Street,  
Rouse Hill, NSW, 2155

Lot/DP

NatHERS Climate Zone Richmond



## Accredited assessor

Name E-LAB Consulting  
Business name E-LAB Consulting  
Email [navid.aghdaei@e-lab.com.au](mailto:navid.aghdaei@e-lab.com.au)  
Phone 0447343451  
Accreditation No. DMN/20/1972  
Assessor Accrediting Organisation

## Verification

To verify this certificate, scan the QR code or visit <https://www.fr5.com.au/QRCodeLanding?PublicId=9AYG35L0CS&GrpCert=1>

When using either link, ensure you are visiting [www.fr5.com.au](http://www.fr5.com.au).



## National Construction Code (NCC) requirements

The NCC allows the use of NatHERS accredited software to comply with the energy efficiency requirements for houses (Class 1 buildings) and apartments (Class 2 sole-occupancy units and Class 4 parts of buildings). The applicable requirements for houses are detailed in Specification 42 of NCC Volume Two. For apartments the requirements are detailed in clauses J3D3 and J3D15 of NCC Volume One.

NCC 2022 includes enhanced thermal performance requirements for houses and apartments. It also includes a new whole-of-home annual energy use budget which applies to the major equipment in the home.

The NCC, and associated ABCB Standards and support material, can be accessed at [www.abcb.gov.au](http://www.abcb.gov.au).

Note, variations and additions to the NCC energy efficiency requirements may apply in some states and territories.

## Summary of all dwellings

Certificate number and link	Unit number	Heating load (load limit) [MJ/m <sup>2</sup> /p.a.]	Cooling load (load limit) [MJ/m <sup>2</sup> /p.a.]	Total load [MJ/m <sup>2</sup> /p.a.]	Star rating	Whole of Home Rating
<a href="#">X353L3U7U3</a>	A10.01	9.9 ( N/A )	34.3 ( N/A )	44.2	7.8	NA
<a href="#">ORJVI4IQEK</a>	A10.02	0.1 ( N/A )	37.0 ( N/A )	37.1	8.2	NA

**7.6**  
Average Rating

**NATIONWIDE HOUSE**  
ENERGY RATING SCHEME®

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

For more information on your dwelling's rating see:  
[www.nathers.gov.au](http://www.nathers.gov.au)

## NCC heating and cooling maximum loads MJ/m<sup>2</sup>/p.a.

Limits taken from ABCB Standard 2022

	Heating	Cooling
Modelled block average	18.8	29.5
Maximum allowable limit	N/A	N/A

## Whole of Home performance rating

No Whole of Home performance rating conducted for this summary certificate or not completed for all dwellings

The rating above is the lowest of all dwellings in this summary



## Summary of all dwellings

Certificate number and link	Unit number	Heating load (load limit) [MJ/m <sup>2</sup> /p.a.]	Cooling load (load limit) [MJ/m <sup>2</sup> /p.a.]	Total load [MJ/m <sup>2</sup> /p.a.]	Star rating	Whole of Home Rating
OE7DD0CI0N	A10.03	13.8 ( N/A )	18.8 ( N/A )	32.6	8.5	NA
7LAEJEUPBF	A10.04	0.1 ( N/A )	37.0 ( N/A )	37.1	8.2	NA
KSDTH23HZB	A10.05	21.6 ( N/A )	17.2 ( N/A )	38.8	8.1	NA
P05X9AWKVF	A10.06	30.0 ( N/A )	39.5 ( N/A )	69.5	6.5	NA
P0SLEXQG2E	A10.07	38.3 ( N/A )	31.5 ( N/A )	69.8	6.5	NA
ODYQNNFG90	A11.01	10.1 ( N/A )	34.1 ( N/A )	44.2	7.8	NA
7AQ9DVWAW2	A11.02	0.1 ( N/A )	37.6 ( N/A )	37.7	8.2	NA
EFTQC7VBF4	A11.03	13.5 ( N/A )	17.8 ( N/A )	31.3	8.6	NA
AU416MEAFZ	A11.04	0.1 ( N/A )	37.3 ( N/A )	37.4	8.2	NA
2M3GB5G6ZO	A11.05	21.7 ( N/A )	18.2 ( N/A )	39.9	8.1	NA
QF0NNH29MX	A11.06	30.3 ( N/A )	38.9 ( N/A )	69.2	6.5	NA
4ZFK74B5OP	A11.07	38.2 ( N/A )	31.4 ( N/A )	69.6	6.5	NA
00SE2R2BVK	A12.01	10.2 ( N/A )	34.3 ( N/A )	44.5	7.8	NA
I9ISAG528C	A12.02	0.1 ( N/A )	36.9 ( N/A )	37.0	8.3	NA
B9KER3AG07	A12.03	14.0 ( N/A )	17.9 ( N/A )	31.9	8.6	NA
WACSHJIHIN	A12.04	0.1 ( N/A )	37.4 ( N/A )	37.5	8.2	NA
GZBBDSTE7	A12.05	22.1 ( N/A )	17.7 ( N/A )	39.8	8.1	NA
DC96Q69BOY	A12.06	30.4 ( N/A )	39.5 ( N/A )	69.9	6.5	NA
M6G3WN1Y14	A12.07	38.4 ( N/A )	32.0 ( N/A )	70.4	6.4	NA
C5NIV5ZWI4	A13.01	10.3 ( N/A )	34.1 ( N/A )	44.4	7.8	NA
FKJU3312Q7	A13.02	0.1 ( N/A )	37.2 ( N/A )	37.3	8.2	NA
YEQ6NKH02Y	A13.03	13.9 ( N/A )	17.6 ( N/A )	31.5	8.6	NA
E6GKVY8H6B	A13.04	0.1 ( N/A )	37.2 ( N/A )	37.3	8.2	NA
WJWKNRO5F4	A13.05	20.3 ( N/A )	16.5 ( N/A )	36.8	8.3	NA
MA40BNFH90	A13.06	31.1 ( N/A )	37.8 ( N/A )	68.9	6.6	NA
DWN9QB0PU3	A13.07	38.5 ( N/A )	32.6 ( N/A )	71.1	6.4	NA
GW1PY5DJF6	A14.01	10.3 ( N/A )	34.0 ( N/A )	44.3	7.8	NA
UBRC937WM5	A14.02	0.1 ( N/A )	36.7 ( N/A )	36.8	8.3	NA
6QMZ768OKL	A14.03	14.0 ( N/A )	17.0 ( N/A )	31.0	8.6	NA
4SMBNRZX0K	A14.04	0.1 ( N/A )	37.1 ( N/A )	37.2	8.2	NA
QCXGQYYQA7	A14.05	21.6 ( N/A )	17.7 ( N/A )	39.3	8.1	NA
2IW2FSZKKE	A14.06	31.0 ( N/A )	37.6 ( N/A )	68.6	6.6	NA
Y4Y9Q8FOLH	A14.07	38.6 ( N/A )	30.9 ( N/A )	69.5	6.5	NA
S7EHPYJWI5	A15.01	10.4 ( N/A )	33.8 ( N/A )	44.2	7.8	NA
71W6YXM5ZU	A15.02	0.1 ( N/A )	36.1 ( N/A )	36.2	8.3	NA
H8N2SYQ7BO	A15.03	14.3 ( N/A )	17.5 ( N/A )	31.8	8.6	NA
GO3KC22YPY	A15.04	0.1 ( N/A )	35.9 ( N/A )	36.0	8.3	NA



## Summary of all dwellings

Certificate number and link	Unit number	Heating load (load limit) [MJ/m <sup>2</sup> /p.a.]	Cooling load (load limit) [MJ/m <sup>2</sup> /p.a.]	Total load [MJ/m <sup>2</sup> /p.a.]	Star rating	Whole of Home Rating
61YDBO5ZR8	A15.05	21.9 ( N/A )	17.0 ( N/A )	38.9	8.1	NA
61ETV408L7	A15.06	30.9 ( N/A )	38.1 ( N/A )	69.0	6.6	NA
ROM7XMDL3Z	A15.07	38.7 ( N/A )	30.8 ( N/A )	69.5	6.5	NA
RZ3EWLCNOA	A16.01	10.4 ( N/A )	33.5 ( N/A )	43.9	7.9	NA
0FDUPK2TDF	A16.02	0.1 ( N/A )	35.8 ( N/A )	35.9	8.3	NA
U9WJE09BPC	A16.03	14.3 ( N/A )	17.4 ( N/A )	31.7	8.6	NA
Q22UY3ZYM4	A16.04	0.3 ( N/A )	40.2 ( N/A )	40.5	8	NA
YTJFVDASLN	A16.05	22.5 ( N/A )	17.7 ( N/A )	40.2	8.1	NA
5QWFEUEL1B	A16.06	31.1 ( N/A )	37.9 ( N/A )	69.0	6.6	NA
0QB2R41Y0F	A16.07	38.9 ( N/A )	30.6 ( N/A )	69.5	6.5	NA
2MGMG1QWR9	A17.01	10.5 ( N/A )	33.7 ( N/A )	44.2	7.8	NA
ISSE6TXCL1	A17.02	0.1 ( N/A )	35.7 ( N/A )	35.8	8.3	NA
HFFMOVAV4S	A17.03	14.3 ( N/A )	17.4 ( N/A )	31.7	8.6	NA
0POIQ2TSUV	A17.04	0.4 ( N/A )	38.0 ( N/A )	38.4	8.2	NA
3U0IPMS0P7	A17.05	22.5 ( N/A )	17.1 ( N/A )	39.6	8.1	NA
2M8RUOEDTO	A17.06	31.3 ( N/A )	38.4 ( N/A )	69.7	6.5	NA
GY9Y0CGPZT	A17.07	39.2 ( N/A )	30.1 ( N/A )	69.3	6.5	NA
UUL5WIJAXT	A18.01	10.5 ( N/A )	33.7 ( N/A )	44.2	7.8	NA
WJN4Z6N851	A18.02	0.1 ( N/A )	36.4 ( N/A )	36.5	8.3	NA
UWFOTY1P6M	A18.03	14.4 ( N/A )	17.4 ( N/A )	31.8	8.6	NA
A2J1WOPQII	A18.04	0.4 ( N/A )	38.3 ( N/A )	38.7	8.1	NA
S5ZSLK4W7W	A18.05	22.5 ( N/A )	17.1 ( N/A )	39.6	8.1	NA
VQDU0Z9URL	A18.06	31.4 ( N/A )	38.2 ( N/A )	69.6	6.5	NA
82P7320PUQ	A18.07	39.3 ( N/A )	30.1 ( N/A )	69.4	6.5	NA
CYTHYPGARQ	A19.01	10.6 ( N/A )	33.6 ( N/A )	44.2	7.8	NA
9UAAD1GADW	A19.02	0.1 ( N/A )	35.8 ( N/A )	35.9	8.3	NA
WZ7EOJYDBH	A19.03	14.4 ( N/A )	17.2 ( N/A )	31.6	8.6	NA
JG653B616H	A19.04	0.4 ( N/A )	37.6 ( N/A )	38.0	8.2	NA
U27MKJW5V4	A19.05	22.5 ( N/A )	16.9 ( N/A )	39.4	8.1	NA
VZDKEQ2BKN	A19.06	31.6 ( N/A )	38.7 ( N/A )	70.3	6.4	NA
528K4GHAP6	A19.07	39.4 ( N/A )	30.5 ( N/A )	69.9	6.5	NA
QUUHRG6FJC	A20.01	10.7 ( N/A )	33.3 ( N/A )	44.0	7.9	NA
J2WNLQT8I0	A20.02	0.1 ( N/A )	35.9 ( N/A )	36.0	8.3	NA
KB0N11V2O2	A20.03	14.5 ( N/A )	17.1 ( N/A )	31.6	8.6	NA
W76TOB3NGS	A20.04	0.4 ( N/A )	36.8 ( N/A )	37.2	8.2	NA
40TQW28FLZ	A20.05	22.6 ( N/A )	16.8 ( N/A )	39.4	8.1	NA



## Summary of all dwellings

Certificate number and link	Unit number	Heating load (load limit) [MJ/m <sup>2</sup> /p.a.]	Cooling load (load limit) [MJ/m <sup>2</sup> /p.a.]	Total load [MJ/m <sup>2</sup> /p.a.]	Star rating	Whole of Home Rating
7IW6GD5NXN	A20.06	31.7 ( N/A )	38.4 ( N/A )	70.1	6.4	NA
WZUMH5OQ6V	A20.07	39.5 ( N/A )	30.1 ( N/A )	69.6	6.5	NA
CYBRGUGJ0J	A21.01	21.9 ( N/A )	41.6 ( N/A )	63.5	6.8	NA
C4J6VVEWJT	A21.02	2.7 ( N/A )	45.5 ( N/A )	48.2	7.6	NA
6UR7CWQSTG	A21.03	25.4 ( N/A )	24.8 ( N/A )	50.2	7.5	NA
9YLNXJGF0W	A21.04	4.2 ( N/A )	48.4 ( N/A )	52.6	7.4	NA
I0S219O3OA	A21.05	33.0 ( N/A )	25.0 ( N/A )	58.0	7.1	NA
J46MD8T18C	A21.06	26.9 ( N/A )	30.6 ( N/A )	57.5	7.1	NA
KQNXXKBPXY	A21.07	44.6 ( N/A )	28.7 ( N/A )	73.3	6.3	NA
SU9QEBTOCX	A3.01	33.1 ( N/A )	14.8 ( N/A )	47.9	7.7	NA
H7AZZ9QFEV	A3.02	48.8 ( N/A )	6.3 ( N/A )	55.1	7.3	NA
741M1S0WT7	A3.03	51.3 ( N/A )	11.3 ( N/A )	62.6	6.9	NA
NST0T0Q7TI	A3.04	37.5 ( N/A )	20.3 ( N/A )	57.8	7.1	NA
ZO6WKY3WZV	A3.05	35.1 ( N/A )	37.9 ( N/A )	73.0	6.3	NA
STV5RKQ15Z	A3.06	24.6 ( N/A )	46.7 ( N/A )	71.3	6.4	NA
74I87G2I22	A4.01	27.9 ( N/A )	16.0 ( N/A )	43.9	7.9	NA
HB092A5E7K	A4.02	38.9 ( N/A )	7.0 ( N/A )	45.9	7.8	NA
RIBDCMBRPB	A4.03	43.7 ( N/A )	14.4 ( N/A )	58.1	7.1	NA
5FC4T89X7Q	A4.04	30.4 ( N/A )	21.4 ( N/A )	51.8	7.4	NA
ZC82FAU65Z	A4.05	29.3 ( N/A )	38.6 ( N/A )	67.9	6.6	NA
BMKC16P61D	A4.06	20.8 ( N/A )	47.2 ( N/A )	68.0	6.6	NA
NUBFXTGJ8B	A5.01	27.3 ( N/A )	25.6 ( N/A )	52.9	7.4	NA
G2GQ0K1MJ1	A5.02	16.4 ( N/A )	21.0 ( N/A )	37.4	8.2	NA
T7VY4Y5GQG	A5.03	9.1 ( N/A )	23.8 ( N/A )	32.9	8.5	NA
URCEIA3FJ8	A5.04	9.6 ( N/A )	23.7 ( N/A )	33.3	8.4	NA
SQ5JVPJCA9	A5.05	19.4 ( N/A )	22.0 ( N/A )	41.4	7.9	NA
1H7NPR2P2N	A5.06	21.1 ( N/A )	46.8 ( N/A )	67.9	6.6	NA
CONQIY6D1Y	A5.07	29.6 ( N/A )	38.0 ( N/A )	67.6	6.6	NA
M9TT1XUCOP	A6.01	26.5 ( N/A )	28.9 ( N/A )	55.4	7.3	NA
MFGPMXKLBX	A6.02	15.8 ( N/A )	21.0 ( N/A )	36.8	8.3	NA
ETX3Z58EYY	A6.03	9.2 ( N/A )	22.0 ( N/A )	31.2	8.6	NA
5VJWZi8UJR	A6.04	9.0 ( N/A )	20.6 ( N/A )	29.6	8.7	NA
F90TPBAEQ4	A6.05	19.4 ( N/A )	21.3 ( N/A )	40.7	8	NA
2Y04H68UZJ	A6.06	21.8 ( N/A )	47.1 ( N/A )	68.9	6.6	NA
BBUMMNHW9A	A6.07	29.6 ( N/A )	37.7 ( N/A )	67.3	6.6	NA
Q4G18698SC	A7.01	23.0 ( N/A )	33.7 ( N/A )	56.7	7.2	NA



## Summary of all dwellings

Certificate number and link	Unit number	Heating load (load limit) [MJ/m <sup>2</sup> /p.a.]	Cooling load (load limit) [MJ/m <sup>2</sup> /p.a.]	Total load [MJ/m <sup>2</sup> /p.a.]	Star rating	Whole of Home Rating
31GKJ4123E	A7.02	13.9 ( N/A )	21.0 ( N/A )	34.9	8.4	NA
LHYHI2RA7G	A7.03	9.2 ( N/A )	21.2 ( N/A )	30.4	8.6	NA
DEOUBCOV7M	A7.04	9.6 ( N/A )	23.0 ( N/A )	32.6	8.5	NA
UZD2WVBQ1P	A7.05	19.5 ( N/A )	21.1 ( N/A )	40.6	8	NA
W8MZ2CJATP	A7.06	21.4 ( N/A )	44.8 ( N/A )	66.2	6.7	NA
80EK2GUAIH	A7.07	30.0 ( N/A )	37.1 ( N/A )	67.1	6.6	NA
L74FJYNJF9	A8.01	17.1 ( N/A )	39.5 ( N/A )	56.6	7.2	NA
2LC0H9W6P5	A8.02	13.1 ( N/A )	19.6 ( N/A )	32.7	8.5	NA
XQJULG2AFA	A8.03	10.0 ( N/A )	20.8 ( N/A )	30.8	8.6	NA
BQ3KCYKX8K	A8.04	10.6 ( N/A )	21.2 ( N/A )	31.8	8.6	NA
KYLP0HW9SW	A8.05	21.1 ( N/A )	18.3 ( N/A )	39.4	8.1	NA
8OZ6EPZOVG	A8.06	22.6 ( N/A )	40.3 ( N/A )	62.9	6.9	NA
RHNLC4X94Z	A8.07	31.1 ( N/A )	33.9 ( N/A )	65.0	6.8	NA
43S6KEZ2ED	A9.01	11.3 ( N/A )	33.0 ( N/A )	44.3	7.8	NA
F4515TAIJJ	A9.02	0.1 ( N/A )	36.9 ( N/A )	37.0	8.3	NA
7P4DW24FUZ	A9.03	13.9 ( N/A )	17.7 ( N/A )	31.6	8.6	NA
6LHI9091FD	A9.04	0.1 ( N/A )	38.7 ( N/A )	38.8	8.1	NA
7XYN2RAN2O	A9.05	21.2 ( N/A )	17.4 ( N/A )	38.6	8.2	NA
63RHFAGKG9	A9.06	30.0 ( N/A )	38.8 ( N/A )	68.8	6.6	NA
S8PJ8038U8	A9.07	38.5 ( N/A )	31.5 ( N/A )	70.0	6.5	NA
RLP1L5C3LQ	B10.01	21.3 ( N/A )	17.3 ( N/A )	38.6	8.2	NA
KDIQWXK0T9	B10.02	0.1 ( N/A )	37.4 ( N/A )	37.5	8.2	NA
FSNCHF1FNT	B10.03	14.5 ( N/A )	16.3 ( N/A )	30.8	8.6	NA
UMKL1LG9I1	B10.04	0.1 ( N/A )	37.1 ( N/A )	37.2	8.2	NA
6FMAJBLEU2	B10.05	21.5 ( N/A )	17.9 ( N/A )	39.4	8.1	NA
H5V6E04R8D	B10.06	38.7 ( N/A )	32.1 ( N/A )	70.8	6.4	NA
VKUZHAD00O	B10.07	38.2 ( N/A )	30.7 ( N/A )	68.9	6.6	NA
6RLAZJ6IC9	B11.01	21.6 ( N/A )	16.7 ( N/A )	38.3	8.2	NA
H693XOVPMO	B11.02	0.3 ( N/A )	38.3 ( N/A )	38.6	8.2	NA
CWULIOPSS4	B11.03	14.1 ( N/A )	16.9 ( N/A )	31.0	8.6	NA
Z2C0EZ6G0L	B11.04	0.1 ( N/A )	36.9 ( N/A )	37.0	8.3	NA
TNFLKFA52	B11.05	21.4 ( N/A )	18.3 ( N/A )	39.7	8.1	NA
RI1HLDD65M	B11.06	38.9 ( N/A )	30.7 ( N/A )	69.6	6.5	NA
0L3MK9JO92	B11.07	38.1 ( N/A )	32.1 ( N/A )	70.2	6.4	NA
EG54WOK9Z4	B12.01	21.5 ( N/A )	17.6 ( N/A )	39.1	8.1	NA
GP1MYTGM96	B12.02	0.3 ( N/A )	39.2 ( N/A )	39.5	8.1	NA



## Summary of all dwellings

Certificate number and link	Unit number	Heating load (load limit) [MJ/m <sup>2</sup> /p.a.]	Cooling load (load limit) [MJ/m <sup>2</sup> /p.a.]	Total load [MJ/m <sup>2</sup> /p.a.]	Star rating	Whole of Home Rating
OXUFCKVKH69	B12.03	14.5 ( N/A )	16.4 ( N/A )	30.9	8.6	NA
SC71RDSA4L	B12.04	0.1 ( N/A )	36.2 ( N/A )	36.3	8.3	NA
HZV9QGWG8J	B12.05	21.9 ( N/A )	18.4 ( N/A )	40.3	8	NA
YU9UQHGMXD	B12.06	38.6 ( N/A )	30.6 ( N/A )	69.2	6.5	NA
YU9UQHGMXD-01	B12.06	38.6 ( N/A )	30.6 ( N/A )	69.2	6.5	NA
1SYV9JDRPN	B12.07	38.1 ( N/A )	32.1 ( N/A )	70.2	6.4	NA
016ZEWE21CX	B13.01	22.0 ( N/A )	17.7 ( N/A )	39.7	8.1	NA
C5449LCE9X	B13.02	0.2 ( N/A )	38.3 ( N/A )	38.5	8.2	NA
AOUEKAW9QM	B13.03	14.6 ( N/A )	15.6 ( N/A )	30.2	8.6	NA
O4WP11K8H6	B13.04	0.1 ( N/A )	35.6 ( N/A )	35.7	8.3	NA
YDYWG9TYWX	B13.05	21.6 ( N/A )	17.6 ( N/A )	39.2	8.1	NA
ZX2UCNC8FX	B13.06	38.7 ( N/A )	31.5 ( N/A )	70.2	6.4	NA
HWMT11ZGIQ	B13.07	38.6 ( N/A )	31.6 ( N/A )	70.2	6.4	NA
7UT9C2IBL6	B14.01	21.8 ( N/A )	17.0 ( N/A )	38.8	8.1	NA
X60Y1O9JC0	B14.02	0.3 ( N/A )	38.4 ( N/A )	38.7	8.2	NA
9CPP4WCNR8	B14.03	13.2 ( N/A )	18.5 ( N/A )	31.7	8.6	NA
TY5MREI0YG	B14.04	0.1 ( N/A )	35.5 ( N/A )	35.6	8.3	NA
0DLJEA45IX	B14.05	21.1 ( N/A )	16.9 ( N/A )	38.0	8.2	NA
389U66MQ1Z	B14.06	38.7 ( N/A )	31.5 ( N/A )	70.2	6.4	NA
A70309BNGW	B14.07	38.7 ( N/A )	30.7 ( N/A )	69.4	6.5	NA
GIV5960GL3	B15.01	22.2 ( N/A )	16.8 ( N/A )	39.0	8.1	NA
1HF3FVYKQU	B15.02	0.3 ( N/A )	38.3 ( N/A )	38.6	8.2	NA
1189F2MRSE	B15.03	14.6 ( N/A )	16.4 ( N/A )	31.0	8.6	NA
9RYVRVNDU9	B15.04	0.1 ( N/A )	32.1 ( N/A )	32.2	8.5	NA
DYWWONL8BZ-01	B15.05	21.9 ( N/A )	18.0 ( N/A )	39.9	8.1	NA
L06V5OJVZH	B15.06	39.2 ( N/A )	31.6 ( N/A )	70.8	6.4	NA
B5LPOTCUM8	B15.07	38.6 ( N/A )	31.0 ( N/A )	69.6	6.5	NA
PEB4E697BA	B16.01	32.7 ( N/A )	25.5 ( N/A )	58.2	7.1	NA
E18ZENG6CO	B16.02	3.7 ( N/A )	49.7 ( N/A )	53.4	7.4	NA
ACUVTP68MD	B16.03	24.4 ( N/A )	24.7 ( N/A )	49.1	7.6	NA
0CF7694SXQ	B16.04	2.6 ( N/A )	48.6 ( N/A )	51.2	7.4	NA
FGF87227YF	B16.05	22.0 ( N/A )	17.8 ( N/A )	39.8	8.1	NA
ZWWXGNZW4W	B16.06	39.1 ( N/A )	31.1 ( N/A )	70.2	6.4	NA
GXOHKKU3HT	B16.07	38.7 ( N/A )	30.7 ( N/A )	69.4	6.5	NA
P86WVK7DVJ	B3.01	7.4 ( N/A )	50.6 ( N/A )	58.0	7.1	NA
G118PHR8XF	B3.02	11.8 ( N/A )	22.7 ( N/A )	34.5	8.4	NA



## Summary of all dwellings

Certificate number and link	Unit number	Heating load (load limit) [MJ/m <sup>2</sup> /p.a.]	Cooling load (load limit) [MJ/m <sup>2</sup> /p.a.]	Total load [MJ/m <sup>2</sup> /p.a.]	Star rating	Whole of Home Rating
CC0GRJ5DD8	B3.03	1.4 ( N/A )	49.0 ( N/A )	50.4	7.5	NA
KTPOG24U1O	B3.04	8.9 ( N/A )	43.6 ( N/A )	52.5	7.4	NA
UDSFNM61EC	B3.05	36.9 ( N/A )	38.1 ( N/A )	75.0	6.2	NA
5UJDJMIZFM-01	B3.06	36.0 ( N/A )	42.8 ( N/A )	78.8	6	NA
O49X9WMN2X	B4.01	5.1 ( N/A )	48.4 ( N/A )	53.5	7.4	NA
M7HIU9UV2E	B4.02	9.2 ( N/A )	19.6 ( N/A )	28.8	8.7	NA
ND8ADZKLE3	B4.03	1.7 ( N/A )	49.9 ( N/A )	51.6	7.4	NA
TFPOAZD5G0	B4.04	5.8 ( N/A )	45.2 ( N/A )	51.0	7.5	NA
AS9Q08NASK	B4.05	29.3 ( N/A )	38.2 ( N/A )	67.5	6.6	NA
2W7A9K59TJ	B4.06	29.1 ( N/A )	42.6 ( N/A )	71.7	6.4	NA
MAJ8DHR2I5	B5.01	7.0 ( N/A )	42.5 ( N/A )	49.5	7.6	NA
5YPBE4ESKE	B5.02	9.2 ( N/A )	22.4 ( N/A )	31.6	8.6	NA
MJ33B6HPOZ	B5.03	8.8 ( N/A )	19.9 ( N/A )	28.7	8.7	NA
3EL6OAJBMS	B5.04	8.7 ( N/A )	19.9 ( N/A )	28.6	8.7	NA
QU1XPDH56F	B5.05	20.6 ( N/A )	20.6 ( N/A )	41.2	7.9	NA
GNYP6CHQ7G	B5.06	29.1 ( N/A )	38.3 ( N/A )	67.4	6.6	NA
ACNTB0NSXD	B5.07	29.7 ( N/A )	38.1 ( N/A )	67.8	6.6	NA
VCF1X2SFO7	B6.01	6.8 ( N/A )	39.9 ( N/A )	46.7	7.7	NA
ZLTJSP69L	B6.02	9.3 ( N/A )	22.1 ( N/A )	31.4	8.6	NA
32DFSOGIVY	B6.03	9.6 ( N/A )	23.1 ( N/A )	32.7	8.5	NA
0ZI2TDH61E	B6.04	9.5 ( N/A )	23.8 ( N/A )	33.3	8.4	NA
UBC9RYTEBV	B6.05	20.3 ( N/A )	19.9 ( N/A )	40.2	8.1	NA
LRSLK299JJ	B6.06	29.1 ( N/A )	38.2 ( N/A )	67.3	6.6	NA
EX0TKNS6IM	B6.07	29.9 ( N/A )	38.0 ( N/A )	67.9	6.6	NA
HSE4010EY4	B7.01	6.9 ( N/A )	42.7 ( N/A )	49.6	7.6	NA
4CH9MIG6S1	B7.02	9.3 ( N/A )	20.9 ( N/A )	30.2	8.6	NA
EIXRTKRM2R	B7.03	9.6 ( N/A )	23.1 ( N/A )	32.7	8.5	NA
U2OWN2MYUS	B7.04	9.8 ( N/A )	19.4 ( N/A )	29.2	8.7	NA
3GH9K95XLQ	B7.05	20.6 ( N/A )	19.3 ( N/A )	39.9	8.1	NA
KOLGJCYUVU	B7.06	28.7 ( N/A )	38.1 ( N/A )	66.8	6.7	NA
7ZMEHXTEFM	B7.07	30.0 ( N/A )	37.7 ( N/A )	67.7	6.6	NA
5S92CL4HJA	B8.01	6.8 ( N/A )	40.7 ( N/A )	47.5	7.7	NA
RJIHXGFH3C	B8.02	10.4 ( N/A )	18.6 ( N/A )	29.0	8.7	NA
IAVK5WK2F5	B8.03	10.6 ( N/A )	21.1 ( N/A )	31.7	8.6	NA
BELA3ZG24R	B8.04	10.4 ( N/A )	20.9 ( N/A )	31.3	8.6	NA
SN624CMONV	B8.05	21.6 ( N/A )	18.1 ( N/A )	39.7	8.1	NA



## Summary of all dwellings

Certificate number and link	Unit number	Heating load (load limit) [MJ/m <sup>2</sup> /p.a.]	Cooling load (load limit) [MJ/m <sup>2</sup> /p.a.]	Total load [MJ/m <sup>2</sup> /p.a.]	Star rating	Whole of Home Rating
04P12C9BHJ	B8.06	32.0 ( N/A )	30.9 ( N/A )	62.9	6.9	NA
H73MMUYLRC	B8.07	31.2 ( N/A )	33.7 ( N/A )	64.9	6.8	NA
7XCH11ADOH	B9.01	21.2 ( N/A )	17.2 ( N/A )	38.4	8.2	NA
0FYBESNUV6	B9.02	0.1 ( N/A )	37.7 ( N/A )	37.8	8.2	NA
AEWCRJ8SBU	B9.03	14.6 ( N/A )	16.1 ( N/A )	30.7	8.6	NA
W1BFXDSB40	B9.04	0.1 ( N/A )	39.8 ( N/A )	39.9	8.1	NA
EA9KD9BXGA	B9.05	21.7 ( N/A )	17.9 ( N/A )	39.6	8.1	NA
07XK1R9WCC	B9.06	38.4 ( N/A )	30.3 ( N/A )	68.7	6.6	NA
L8Q7SHMYSW	B9.07	38.2 ( N/A )	31.6 ( N/A )	69.8	6.5	NA

## Explanatory notes

### About this report

The thermal performance star rating in this Certificate is the average rating of all NCC Class 2 dwellings in an apartment block. The Whole of Home performance rating in this Certificate is the lowest rating for the apartment block. Individual unit ratings are listed in the 'Summary of all dwellings' section of this Certificate. (accessible via link).

NatHERS ratings use computer modelling to evaluate a home's energy efficiency and performance. They use localised climate data and standard assumptions on how people use their home to predict the energy loads and energy value\*. The thermal performance star rating uses the home's building specifications, layout, orientation and fabric (i.e. walls, windows, floors, roofs and ceilings) to predict the heating and cooling energy loads. The Whole of Home performance rating uses information about the home's appliances and onsite energy production and storage to estimate the home's energy value\*.

For more details about an individual dwelling's assessment, refer to the individual dwelling's NatHERS Certificate (accessible via link)

### Accredited Assessors

For high quality NatHERS Certificates, always use an accredited or licenced assessor registered with an Assessor Accrediting Organisation (AAO). AAOs have strict quality assurance processes, and professional development requirements ensuring consistently high standards for assessments.

Non-accredited assessors (Raters) have no ongoing training requirements and are not quality assured.

Licensed assessors in the Australian Capital Territory (ACT) can produce assessments for regulatory purposes only, using endorsed software, as listed on the ACT licensing register

Any queries about this report should be directed to the assessor. If the assessor is unable to address questions or concerns, contact the AAO specified on the front of this certificate.

### Disclaimer

The NatHERS Certificate format is developed by the NatHERS Administrator. However, the content in certificates is entered by the assessor. It is the assessor's responsibility to use NatHERS accredited software correctly and follow the NatHERS Technical Note to produce a NatHERS Certificate.

The predicted annual energy use, cost and greenhouse gas emissions in this NatHERS Certificate are an estimate based on an assessment of the dwelling's design by the assessor. It is not a prediction of actual energy use, cost or emissions. The information and ratings may be used to compare how other dwellings are likely to perform when used in a similar way.

Information presented in this report relies on a range of standard assumptions (both embedded in NatHERS accredited software and made by the assessor who prepared this report), including assumptions about occupancy, behaviour, appliance performance, indoor air temperature and local climate.

Not all assumptions made by the assessor while using the NatHERS accredited software tool are presented in this report and further details or data files may be available from the assessor

## Appendix B 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: 1799294M

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)

Secretary

Date of issue: Wednesday, 11 June 2025

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



When submitting this BASIX certificate with a development application or complying development certificate application, it must be accompanied by NatHERS certificate 9AYG35L0CS.

Project summary		
Project name	Tempus Street Rouse Hill	
Street address	2 TEMPUS STREET ROUSE HILL 2155	
Local Government Area	THE HILLS SHIRE	
Plan type and plan number	Deposited Plan 280013	
No. of residential flat buildings	2	
Residential flat buildings: no. of dwellings	227	
Multi-dwelling housing: no. of dwellings	0	
No. of single dwelling houses	0	
Project score		
Water	✔ 49	Target 40
Thermal Performance	✔ Pass	Target Pass
Energy	✔ 61	Target 61
Materials	✔ -100	Target n/a

### Certificate Prepared by

Name / Company Name: E-LAB Consulting

ABN (if applicable):

# Description of project

## Project address

Project name	Tempus Street Rouse Hill
Street address	2 TEMPUS STREET ROUSE HILL 2155
Local Government Area	THE HILLS SHIRE
Plan type and plan number	Deposited Plan 280013

## Project type

No. of residential flat buildings	2
Residential flat buildings: no. of dwellings	227
Multi-dwelling housing: no. of dwellings	0
No. of single dwelling houses	0

## Site details

Site area (m <sup>2</sup> )	4387
Roof area (m <sup>2</sup> )	2477
Non-residential floor area (m <sup>2</sup> )	13653
Residential car spaces	103
Non-residential car spaces	8

## Common area landscape

Common area lawn (m <sup>2</sup> )	570.35
Common area garden (m <sup>2</sup> )	90.44
Area of indigenous or low water use species (m <sup>2</sup> )	0

## Assessor details and thermal loads

Assessor number	20/1972
Certificate number	9AYG35LOCS
Climate zone	28

## Project score

Water	✔ 49	Target 40
Thermal Performance	✔ Pass	Target Pass
Energy	✔ 61	Target 61
Materials	✔ -100	Target n/a

## Description of project

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

### Residential flat buildings - North Tower A, 131 dwellings, 23 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> )
0301	2	81	0	0	0
0305	3	113	0	0	0
0403	1	52	0	0	0
0501	2	81	0	0	0
0505	1	51	0	0	0
0602	1	52	0	0	0
0606	3	113	0	0	0
0703	1	52	0	0	0
0707	3	112	0	0	0
0804	1	52	0	0	0
0901	2	80	0	0	0
0905	2	80	0	0	0
1002	1	29	0	0	0
1006	3	110	0	0	0
1103	2	81	0	0	0
1107	3	110	0	0	0
1204	1	29	0	0	0
1301	2	80	0	0	0
1305	2	80	0	0	0
1402	1	29	0	0	0
1406	3	110	0	0	0
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> )
0302	2	81	0	0	0
0306	3	112	0	0	0
0404	2	81	0	0	0
0502	1	52	0	0	0
0506	3	113	0	0	0
0603	1	52	0	0	0
0607	3	112	0	0	0
0704	1	52	0	0	0
0801	2	81	0	0	0
0805	1	51	0	0	0
0902	1	29	0	0	0
0906	3	110	0	0	0
1003	2	81	0	0	0
1007	3	110	0	0	0
1104	1	29	0	0	0
1201	2	80	0	0	0
1205	2	80	0	0	0
1302	1	29	0	0	0
1306	3	110	0	0	0
1403	2	81	0	0	0
1407	3	110	0	0	0
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> )
0303	1	52	0	0	0
0401	2	81	0	0	0
0405	3	113	0	0	0
0503	1	52	0	0	0
0507	3	112	0	0	0
0604	1	52	0	0	0
0701	2	81	0	0	0
0705	1	51	0	0	0
0802	1	52	0	0	0
0806	3	113	0	0	0
0903	2	81	0	0	0
0907	3	110	0	0	0
1004	1	29	0	0	0
1101	2	80	0	0	0
1105	2	80	0	0	0
1202	1	29	0	0	0
1206	3	110	0	0	0
1303	2	81	0	0	0
1307	3	110	0	0	0
1404	1	29	0	0	0
1501	2	80	0	0	0
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> )
0304	2	81	0	0	0
0402	2	81	0	0	0
0406	3	112	0	0	0
0504	1	52	0	0	0
0601	2	81	0	0	0
0605	1	51	0	0	0
0702	1	52	0	0	0
0706	3	113	0	0	0
0803	1	52	0	0	0
0807	3	112	0	0	0
0904	1	29	0	0	0
1001	2	80	0	0	0
1005	2	80	0	0	0
1102	1	29	0	0	0
1106	3	110	0	0	0
1203	2	81	0	0	0
1207	3	110	0	0	0
1304	1	29	0	0	0
1401	2	80	0	0	0
1405	2	80	0	0	0
1502	1	29	0	0	0

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> )
1503	2	81	0	0	0
1507	3	110	0	0	0
1604	1	29	0	0	0
1701	2	80	0	0	0
1705	2	80	0	0	0
1802	1	29	0	0	0
1806	3	110	0	0	0
1903	2	81	0	0	0
1907	3	110	0	0	0
2004	1	29	0	0	0
2101	2	80	0	0	0
2105	2	80	0	0	0

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> )
1504	1	29	0	0	0
1601	2	80	0	0	0
1605	2	80	0	0	0
1702	1	29	0	0	0
1706	3	110	0	0	0
1803	2	81	0	0	0
1807	3	110	0	0	0
1904	1	29	0	0	0
2001	2	80	0	0	0
2005	2	80	0	0	0
2102	1	29	0	0	0
2106	3	110	0	0	0

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> )
1505	2	80	0	0	0
1602	1	29	0	0	0
1606	3	110	0	0	0
1703	2	81	0	0	0
1707	3	110	0	0	0
1804	1	29	0	0	0
1901	2	80	0	0	0
1905	2	80	0	0	0
2002	1	29	0	0	0
2006	3	110	0	0	0
2103	2	81	0	0	0
2107	3	110	0	0	0

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> )
1506	3	110	0	0	0
1603	2	81	0	0	0
1607	3	110	0	0	0
1704	1	29	0	0	0
1801	2	80	0	0	0
1805	2	80	0	0	0
1902	1	29	0	0	0
1906	3	110	0	0	0
2003	2	81	0	0	0
2007	3	110	0	0	0
2104	1	29	0	0	0

### Residential flat buildings - South Tower B, 96 dwellings, 18 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> )
0301	2	81	0	1.44	0
0305	3	112	0	1.44	0
0403	2	81	0	1.44	0
0501	2	81	0	1.44	0
0505	1	51	0	0	0
0602	1	52	0	1.44	0

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> )
0302	1	52	0	1.44	0
0306	3	112	0	1.44	0
0404	2	81	0	1.44	0
0502	1	52	0	1.44	0
0506	3	113	0	0	0
0603	1	52	0	1.44	0

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> )
0303	2	81	0	1.44	0
0401	2	81	0	1.44	0
0405	3	112	0	1.44	0
0503	1	52	0	0	0
0507	3	112	0	0	0
0604	1	52	0	1.44	0

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> )
0304	2	81	0	1.44	0
0402	1	52	0	1.44	0
0406	3	112	0	1.44	0
0504	1	52	0	1.44	0
0601	2	81	0	1.44	0
0605	1	51	0	0	0

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> )
0606	3	113	0	0	0
0703	1	52	0	1.44	0
0707	3	112	0	1.44	0
0804	1	52	0	0	0
0901	2	80	0	0	0
0905	2	80	0	0	0
1002	1	29	0	0	0
1006	3	110	0	1.44	0
1103	2	81	0	0	0
1107	3	110	0	0	0
1204	1	29	0	0	0
1301	2	80	0	0	0
1305	2	80	0	0	0
1402	1	29	0	0	0
1406	3	110	0	0	0
1503	2	81	0	0	0
1507	3	110	0	0	0
1604	1	29	0	1.44	0

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> )
0607	3	112	0	0	0
0704	1	52	0	1.44	0
0801	2	81	0	1.44	0
0805	1	51	0	0	0
0902	1	29	0	0	0
0906	3	110	0	0	0
1003	2	81	0	0	0
1007	3	110	0	0	0
1104	1	29	0	0	0
1201	2	80	0	0	0
1205	2	80	0	0	0
1302	1	29	0	0	0
1306	3	110	0	0	0
1403	2	81	0	0	0
1407	3	110	0	0	0
1504	1	29	0	0	0
1601	2	80	0	0	0
1605	2	80	0	0	0

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> )
0701	2	81	0	1.44	0
0705	1	51	0	0	0
0802	1	52	0	0	0
0806	3	113	0	0	0
0903	2	81	0	0	0
0907	3	110	0	0	0
1004	1	29	0	0	0
1101	2	80	0	0	0
1105	2	80	0	1.44	0
1202	1	29	0	0	0
1206	3	110	0	0	0
1303	2	81	0	0	0
1307	3	110	0	0	0
1404	1	29	0	0	0
1501	2	80	0	0	0
1505	2	80	0	0	0
1602	1	29	0	1.44	0
1606	3	110	0	0	0

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> )
0702	1	52	0	1.44	0
0706	3	113	0	0	0
0803	1	52	0	1.44	0
0807	3	112	0	1.44	0
0904	1	29	0	0	0
1001	2	80	0	0	0
1005	2	80	0	1.44	0
1102	1	29	0	0	0
1106	3	110	0	0	0
1203	2	81	0	0	0
1207	3	110	0	0	0
1304	1	29	0	0	0
1401	2	80	0	0	0
1405	2	80	0	0	0
1502	1	29	0	1.44	0
1506	3	110	0	0	0
1603	2	81	0	0	0
1607	3	110	0	0	0

## Description of project

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

### Common areas of unit building - North Tower A

Common area	Floor area (m <sup>2</sup> )
Tower A Services Cabinets	180.6
Tower A VRF Condenser Rooms	91.14
L01-L02 Fire Stairs	84.28
L22 Bar/Dinning	81.23
Tower A Lobbies	1600.99

Common area	Floor area (m <sup>2</sup> )
Mez Services Cabinet	8.99
Roof Hot Water Plant	54.74
Tower A Fire Stairs	414.12
L22 WC	28.44

Common area	Floor area (m <sup>2</sup> )
Tower A Chute Rooms	136.71
Tower A Lift Motor Rooms	14.91
L22 Lounge	175.12
L22 Cinema	26.71

### Common areas of unit building - South Tower B

Common area	Floor area (m <sup>2</sup> )
Lift bank (No. 1)	-
L17 Gym, Yoga, Lounge	163.39
L17 Lounges	64.95
Tower B VRF Condensers	73.5
Tower B Fire Stairs	297.3

Common area	Floor area (m <sup>2</sup> )
Lift bank (No. 2)	-
Tower B Services Cabinets	136.8
L18 Hot Water Plant	48.9
Tower B Lift Motor Room	15.13
L17 WC	28.45

Common area	Floor area (m <sup>2</sup> )
L17 Steam and Sauna	22.53
Tower B Chute Rooms	98.7
L18 Mech Plant	33.15
MEZ Grease Arrestor	28.99
Tower B Lobbies	1131.88

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

Common area	Floor area (m <sup>2</sup> )
B02 Carpark	2816.48
B01 Services Cabinets	16.07
GF Main Switch Room, Meter, Substation	173.1
GF Chute + Garbage	12.9
B01 OSD Tank, Rainwater Tank, Cold Water Tank	273.78
GF FCR	43.46
B01 Storage	12.26
B01 Corridor	63.43
GF BTR Manager Office	20.48

Common area	Floor area (m <sup>2</sup> )
B01 Carpark	1908.57
B01 Comms	28.57
B02 Bulky Waste + Comm/Retail Bin Room	122.74
B02 Fan Rooms	52.69
B01 Fire tank Room, Fire Pump Room	125.73
B02 Storage	23.05
B01 Fire Stairs	48.56
GF Fire Stairs	145.28
GF WC, Store, Cleaners	137.83

Common area	Floor area (m <sup>2</sup> )
B02 Services Cabinets	9.28
GF Services Cabinets	21.19
B01 Chute Rooms + FOGO	153.31
B01 Fan Rooms	32.74
B01 Grease Arrestor	18
B02 Fire Stairs	46.43
B01 BTR Storage	128.39
GF Mail Room	40.24
GF Lobby	562.46

# Schedule of BASIX commitments

## 1. Commitments for Residential flat buildings - North Tower A

### (a) Buildings

(i) Materials

### (b) Dwellings

(i) Water

(ii) Energy

(iii) Thermal Performance

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

(i) Water

(ii) Energy

## 2. Commitments for Residential flat buildings - South Tower B

### (a) Buildings

(i) Materials

### (b) Dwellings

(i) Water

(ii) Energy

(iii) Thermal Performance

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

(i) Water

(ii) Energy

## 3. Commitments for multi-dwelling housing

### (a) Dwellings

(i) Water

(ii) Energy

(iii) Thermal Performance and Materials

4. Commitments for single dwelling houses

(a) Dwellings

(i) Water

(ii) Energy

(iii) Thermal Performance and Materials

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

(a) Buildings 'Other'

(i) Materials

(b) 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 - North Tower A

#### (a) Buildings

(i) Materials	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) 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 "Floor types", "External wall types", "Internal wall types", "Ceiling and roof types", "Frames" and "Glazing" tables below.			✓
(b) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all specifications included in the tables below.		✓	
(c) The applicant must construct the floors, walls, roof, ceiling and roof, windows, glazed doors and skylights of the development in accordance with the specifications listed in the tables below. In the case of glazing, a 5% variance from the area values listed in the "Frames" and "Glazing" tables is permitted.	✓	✓	✓
(d) The applicant must show through receipts that the materials purchased for construction are consistent with the specifications listed in the below tables.			✓

#### Floor types

Floor type	Area (m2)	Insulation	Low emissions option
floors above habitable rooms, frame: suspended concrete slab	20907.24	fibreglass batts or roll	-

#### External wall types

External wall type	Construction type	Area (m2)	Low emissions option	Insulation
External wall type 1	concrete panel/ plasterboard, frame: light steel frame	17218.25	-	fibreglass batts or roll

#### Internal wall types

Internal wall type	Construction type	Area (m2)	Insulation
Internal wall type 1	plasterboard, frame: light steel frame	10330.95	fibreglass batts or roll

**Reinforcement concrete frames/columns**

Building has reinforced concrete frame/columns?	Volume (m <sup>3</sup> )	Low emissions option
yes	1234.39	-

**Ceiling and roof types**

Ceiling and roof type	Area (m <sup>2</sup> )	Roof Insulation	Ceiling Insulation
concrete - bare internal, frame: light steel frame	1426.55	foil/sarking	fibreglass batts or roll

**Glazing types**

**Frame types**

Single glazing (m <sup>2</sup> )	Double glazing (m <sup>2</sup> )	Triple glazing (m <sup>2</sup> )	Aluminium frames (m <sup>2</sup> )	Timber frames (m <sup>2</sup> )	uPVC frames (m <sup>2</sup> )	Steel frames (m <sup>2</sup> )	Composite frames (m <sup>2</sup> )
-	5165.47	-	5165.47	-	-	-	-

**(b) 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.	✔	✔	✔

	Fixtures					Appliances		Individual pool				Individual spa		
Dwelling no.	All shower-heads	All toilet flushing systems	All kitchen taps	All bathroom taps	HW recirculation or diversion	All clothes washers	All dish-washers	Volume (max volume)	Pool cover	Pool location	Pool shaded	Volume (max volume)	Spa cover	Spa shaded
All dwellings	3 star (> 7.5 but <= 9 L/min)	4 star	5 star	5 star	-	5 star	5 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: (aa) the kitchen cook-top and oven specified for that dwelling in the "Appliances & other efficiency measures" column of the table below;		✓	

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(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

	Cooling		Heating		Natural lighting	
Dwelling no.	living areas	bedroom areas	living areas	bedroom areas	No. of bathrooms or toilets	Main kitchen
All dwellings	1-phase airconditioning - ducted / EER 3.5 - 4.0	1-phase airconditioning - ducted / EER 3.5 - 4.0	1-phase airconditioning - ducted / EER 3.5 - 4.0	1-phase airconditioning - ducted / EER 3.5 - 4.0	0	no

	Individual pool			Individual spa		Appliances other efficiency measures				
Dwelling no.	Pool heating system	Pool Pump	Timer	Spa heating system	Timer	Kitchen cooktop/oven	Dishwasher	Clothes dryer	Indoor or sheltered clothes drying line	Private outdoor or unsheltered clothes drying line
All dwellings	-	-	-	-	-	electric cooktop & electric oven	4.5 star	2 star	no	no

<b>(iii) Thermal Performance</b>	<b>Show on DA plans</b>	<b>Show on CC/CDC plans &amp; specs</b>	<b>Certifier check</b>
(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.	✔	✔	✔
(i) The applicant must show on The plans accompanying The development application for The proposed development, The locations of ceiling fans set out in The Assessor Certificate.	✔		
(j) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), the locations of ceiling fans set out in the Assessor Certificate.		✔	

<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)	Area adjusted total load (in MJ/m <sup>2</sup> /yr)
0301	33.1	14.8	47.900
0302	48.8	6.3	55.100
0303	51.3	11.30	62.600
0304	37.5	20.30	57.800

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)	Area adjusted total load (in MJ/m <sup>2</sup> /yr)
0305	35.1	37.90	73.000
0306	24.60	46.70	71.300
0401	27.90	16.0	43.900
0402	38.9	7	45.900
0403	43.70	14.40	58.100
0404	30.4	21.40	51.800
0405	29.30	38.60	67.900
0406	20.80	47.20	68.000
0501	27.30	25.60	52.900
0502	16.4	21.00	37.400
0503	9.1	23.80	32.900
0504	9.60	23.70	33.300
0505	19.40	22.00	41.400
0506	21.10	46.80	67.900
0507	29.60	38.0	67.600
0601	26.50	28.90	55.400
0602	15.80	21.0	36.800
0603	9.20	22.0	31.200
0604	9	20.60	29.600
0605	19.4	21.30	40.700
0606	21.80	47.10	68.900
0607	29.60	37.70	67.300
0701	23.00	33.70	56.700
0702	13.90	21.00	34.900
0703	9.20	21.20	30.400
0704	9.60	23	32.600
0705	19.50	21.10	40.600
0706	21.40	44.80	66.200
0707	30	37.1	67.100
0801	17.10	39.5	56.600
0802	13.1	19.6	32.700

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)	Area adjusted total load (in MJ/m <sup>2</sup> /yr)
0803	10	20.80	30.800
0804	10.6	21.2	31.800
0805	21.10	18.30	39.400
0806	22.60	40.30	62.900
0807	31.10	33.90	65.000
0901	11.30	33.0	44.300
0903	13.90	17.70	31.600
0904	0.1	38.70	38.800
0905	21.20	17.40	38.600
0906	30.0	38.80	68.800
0907	38.50	31.50	70.000
1001	9.9	34.30	44.200
1003	13.80	18.80	32.600
1005	21.60	17.20	38.800
1006	30.0	39.50	69.500
1007	38.30	31.50	69.800
1101	10.1	34.10	44.200
1102	0.1	37.60	37.700
1103	13.50	17.80	31.300
1104	0.1	37.30	37.400
1105	21.70	18.20	39.900
1106	30.30	38.90	69.200
1107	38.20	31.40	69.600
1201	10.20	34.30	44.500
1203	14.0	17.90	31.900
1204	0.1	37.4	37.500
1205	22.1	17.70	39.800
1206	30.40	39.50	69.900
1207	38.40	32.00	70.400
1301	10.30	34.10	44.400
1303	13.90	17.60	31.500

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)	Area adjusted total load (in MJ/m <sup>2</sup> /yr)
1305	20.30	16.50	36.800
1306	31.10	37.80	68.900
1307	38.50	32.60	71.100
1401	10.30	34.0	44.300
1402	0.1	36.70	36.800
1403	14.0	17.0	31.000
1404	0.1	37.10	37.200
1405	21.60	17.70	39.300
1406	31.0	37.60	68.600
1407	38.60	30.90	69.500
1501	10.40	33.80	44.200
1502	0.1	36.1	36.200
1503	14.30	17.50	31.800
1505	21.90	17.0	38.900
1506	30.90	38.1	69.000
1507	38.70	30.80	69.500
1601	10.40	33.50	43.900
1604	0.3	40.20	40.500
1605	22.50	17.70	40.200
1606	31.10	37.90	69.000
1607	38.90	30.60	69.500
1702	0.1	35.70	35.800
1704	0.4	38.0	38.400
1706	31.30	38.40	69.700
1707	39.20	30.10	69.300
1802	0.1	36.40	36.500
1803	14.40	17.40	31.800
1804	0.4	38.30	38.700
1806	31.40	38.20	69.600
1807	39.30	30.10	69.400
1901	10.60	33.60	44.200

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)	Area adjusted total load (in MJ/m <sup>2</sup> /yr)
1903	14.40	17.20	31.600
1904	0.4	37.60	38.000
1905	22.50	16.90	39.400
1906	31.60	38.70	70.300
1907	39.40	30.50	69.900
2001	10.70	33.30	44.000
2003	14.50	17.10	31.600
2004	0.4	36.80	37.200
2005	22.60	16.80	39.400
2006	31.70	38.40	70.100
2007	39.50	30.10	69.600
2101	21.90	41.60	63.500
2102	2.70	45.50	48.200
2103	25.40	24.80	50.200
2104	4.20	48.40	52.600
2105	33.0	25.0	58.000
2106	26.90	30.60	57.500
2107	44.60	28.70	73.300
0902, 1202	0.1	36.90	37.000
1002, 1004	0.1	37.00	37.100
1302, 1304	0.1	37.20	37.300
1504, 2002	0.1	35.90	36.000
1602, 1902	0.1	35.80	35.900
1603, 1703	14.30	17.40	31.700
1701, 1801	10.50	33.70	44.200
All other dwellings	22.50	17.10	39.600

**(c) 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	4 star (> 4.5 but <= 6 L/min)	4 star	5 star	5 star

<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
Tower A Services Cabinets	no mechanical ventilation	-	light-emitting diode	manual on / manual off	no
Mez Services Cabinet	no mechanical ventilation	-	light-emitting diode	manual on / manual off	no
Tower A Chute Rooms	ventilation exhaust only	-	light-emitting diode	motion sensors	no
Tower A VRF Condenser Rooms	ventilation (supply + exhaust)	none i.e., continuous	light-emitting diode	manual on / manual off	no
Roof Hot Water Plant	ventilation supply only	thermostatically controlled	light-emitting diode	manual on / manual off	no
Tower A Lift Motor Rooms	no mechanical ventilation	-	light-emitting diode	manual on / manual off	no
L01-L02 Fire Stairs	no mechanical ventilation	-	light-emitting diode	motion sensors	no
Tower A Fire Stairs	no mechanical ventilation	-	light-emitting diode	motion sensors	no
L22 Lounge	air conditioning system	time clock or BMS controlled	light-emitting diode	time clock and motion sensors	no
L22 Bar/Dinning	air conditioning system	time clock or BMS controlled	light-emitting diode	time clock and motion sensors	no
L22 WC	ventilation exhaust only	time clock or BMS controlled	light-emitting diode	motion sensors	no
L22 Cinema	air conditioning system	time clock or BMS controlled	light-emitting diode	manual on / manual off	no
Tower A Lobbies	ventilation supply only	time clock or BMS controlled	light-emitting diode	time clock and motion sensors	no

Central energy systems	Type	Specification
Lift bank (No. 1)	gearless traction with V V V F motor and regenerative drive	Number of levels (including basement): 20 number of levels from the bottom of the lift shaft to the top of the lift shaft: 25 number of lifts: 2 lift load capacity: >= 1001 kg but <= 1500kg
Central hot water system (No. 1)	electric heat pump – air sourced	Piping insulation (ringmain & supply risers): (a) Piping external to building: R1.0 (~38 mm); (b) Piping internal to building: R1.0 (~38 mm) (c) Unit Efficiency: 3.0 < COP <= 3.5

## 2. Commitments for Residential flat buildings - South Tower B

### (a) Buildings

(i) Materials	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) 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 "Floor types", "External wall types", "Internal wall types", "Ceiling and roof types", "Frames" and "Glazing" tables below.			✓
(b) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all specifications included in the tables below.		✓	
(c) The applicant must construct the floors, walls, roof, ceiling and roof, windows, glazed doors and skylights of the development in accordance with the specifications listed in the tables below. In the case of glazing, a 5% variance from the area values listed in the "Frames" and "Glazing" tables is permitted.	✓	✓	✓
(d) The applicant must show through receipts that the materials purchased for construction are consistent with the specifications listed in the below tables.			✓

#### Floor types

Floor type	Area (m2)	Insulation	Low emissions option
floors above habitable rooms, frame: suspended concrete slab	15393.04	fibreglass batts or roll	-

#### External wall types

External wall type	Construction type	Area (m2)	Low emissions option	Insulation
External wall type 1	concrete panel/ plasterboard,frame:light steel frame	12677	-	fibreglass batts or roll

#### Internal wall types

Internal wall type	Construction type	Area (m2)	Insulation
Internal wall type 1	plasterboard, frame:light steel frame	7606.2	fibreglass batts or roll

#### Reinforcement concrete frames/columns

Building has reinforced concrete frame/columns?	Volume (m³)	Low emissions option
yes	908.82	-

**Ceiling and roof types**

Ceiling and roof type	Area (m <sup>2</sup> )	Roof Insulation	Ceiling Insulation
concrete - bare internal, frame: light steel frame	1050.30	foil/sarking	fibreglass batts or roll

**Glazing types****Frame types**

Single glazing (m <sup>2</sup> )	Double glazing (m <sup>2</sup> )	Triple glazing (m <sup>2</sup> )	Aluminium frames (m <sup>2</sup> )	Timber frames (m <sup>2</sup> )	uPVC frames (m <sup>2</sup> )	Steel frames (m <sup>2</sup> )	Composite frames (m <sup>2</sup> )
-	3803.1	-	3803.1	-	-	-	-

**(b) 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.	✔	✔	✔

	Fixtures					Appliances		Individual pool				Individual spa		
Dwelling no.	All shower-heads	All toilet flushing systems	All kitchen taps	All bathroom taps	HW recirculation or diversion	All clothes washers	All dish-washers	Volume (max volume)	Pool cover	Pool location	Pool shaded	Volume (max volume)	Spa cover	Spa shaded
All dwellings	3 star (> 7.5 but <= 9 L/min)	4 star	5 star	5 star	-	5 star	5 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: (aa) the kitchen cook-top and oven specified for that dwelling in the "Appliances & other efficiency measures" column of the table below;		✓	

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(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		Natural lighting	
Dwelling no.	living areas	bedroom areas	living areas	bedroom areas	No. of bathrooms or toilets	Main kitchen
All dwellings	1-phase airconditioning - ducted / EER 3.5 - 4.0	1-phase airconditioning - ducted / EER 3.5 - 4.0	1-phase airconditioning - ducted / EER 3.5 - 4.0	1-phase airconditioning - ducted / EER 3.5 - 4.0	0	no

	Individual pool			Individual spa		Appliances other efficiency measures				
Dwelling no.	Pool heating system	Pool Pump	Timer	Spa heating system	Timer	Kitchen cooktop/oven	Dishwasher	Clothes dryer	Indoor or sheltered clothes drying line	Private outdoor or unsheltered clothes drying line
All dwellings	-	-	-	-	-	electric cooktop & electric oven	4.5 star	2 star	no	no

<b>(iii) Thermal Performance</b>	<b>Show on DA plans</b>	<b>Show on CC/CDC plans &amp; specs</b>	<b>Certifier check</b>
(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.	✔	✔	✔
(i) The applicant must show on The plans accompanying The development application for The proposed development, The locations of ceiling fans set out in The Assessor Certificate.	✔		
(j) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), the locations of ceiling fans set out in the Assessor Certificate.		✔	

<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)	Area adjusted total load (in MJ/m <sup>2</sup> /yr)
0301	7.4	50.6	58.000
0302	11.8	22.7	34.500
0303	1.4	49	50.400
0304	8.9	43.6	52.500

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)	Area adjusted total load (in MJ/m <sup>2</sup> /yr)
0305	36.9	38.1	75.000
0306	36	42.8	78.800
0401	5.1	48.4	53.500
0402	9.2	19.6	28.800
0403	1.7	49.9	51.600
0404	5.8	45.2	51.000
0405	29.3	38.2	67.500
0406	29.1	42.6	71.700
0501	7	42.5	49.500
0502	9.2	22.4	31.600
0503	8.8	19.9	28.700
0504	8.7	19.9	28.600
0505	20.6	20.6	41.200
0506	29.1	38.3	67.400
0507	29.7	38.1	67.800
0601	6.8	39.9	46.700
0602	9.3	22.1	31.400
0604	9.5	23.8	33.300
0605	20.3	19.9	40.200
0606	29.1	38.2	67.300
0607	29.9	38	67.900
0701	6.9	42.7	49.600
0702	9.3	20.9	30.200
0704	9.8	19.4	29.200
0705	20.6	19.3	39.900
0706	28.7	38.1	66.800
0707	30	37.7	67.700
0801	6.8	40.7	47.500
0802	10.4	18.6	29.000
0803	10.6	21.1	31.700
0804	10.4	20.9	31.300

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)	Area adjusted total load (in MJ/m <sup>2</sup> /yr)
0805	21.6	18.1	39.700
0806	32	30.9	62.900
0807	31.2	33.7	64.900
0901	21.2	17.2	38.400
0902	0.1	37.7	37.800
0903	14.6	16.1	30.700
0904	0.1	39.8	39.900
0905	21.7	17.9	39.600
0906	38.4	30.3	68.700
0907	38.2	31.6	69.800
1001	21.3	17.3	38.600
1002	0.1	37.4	37.500
1003	14.5	16.3	30.800
1004	0.1	37.1	37.200
1005	21.5	17.9	39.400
1006	38.7	32.1	70.800
1007	38.2	30.7	68.900
1101	21.6	16.7	38.300
1103	14.1	16.9	31.000
1104	0.1	36.9	37.000
1105	21.4	18.3	39.700
1106	38.9	30.7	69.600
1201	21.5	17.6	39.100
1202	0.3	39.2	39.500
1203	14.5	16.4	30.900
1204	0.1	36.2	36.300
1205	21.9	18.4	40.300
1206	38.6	30.6	69.200
1301	22	17.7	39.700
1302	0.2	38.3	38.500
1303	14.6	15.6	30.200

	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)	Area adjusted total load (in MJ/m <sup>2</sup> /yr)
1304	0.1	35.6	35.700
1305	21.6	17.6	39.200
1307	38.6	31.6	70.200
1401	21.8	17	38.800
1402	0.3	38.4	38.700
1403	13.2	18.5	31.700
1404	0.1	35.5	35.600
1405	21.1	16.9	38.000
1501	22.2	16.8	39.000
1503	14.6	16.4	31.000
1504	0.1	32.1	32.200
1505	21.9	18	39.900
1506	39.2	31.6	70.800
1507	38.6	31	69.600
1601	32.7	25.5	58.200
1602	3.7	49.7	53.400
1603	24.4	24.7	49.100
1604	2.6	48.6	51.200
1605	22	17.8	39.800
1606	39.1	31.1	70.200
0603, 0703	9.6	23.1	32.700
1102, 1502	0.3	38.3	38.600
1107, 1207	38.1	32.1	70.200
1306, 1406	38.7	31.5	70.200
All other dwellings	38.7	30.7	69.400

**(c) 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	4 star (> 4.5 but <= 6 L/min)	4 star	5 star	5 star

<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
Lift bank (No. 1)	-	-	light-emitting diode	connected to lift call button	no
Lift bank (No. 2)	-	-	light-emitting diode	connected to lift call button	no
L17 Steam and Sauna	ventilation (supply + exhaust)	time clock or BMS controlled	light-emitting diode	time clocks	no
L17 Gym, Yoga, Lounge	air conditioning system	time clock or BMS controlled	light-emitting diode	time clocks	no
Tower B Services Cabinets	no mechanical ventilation	-	light-emitting diode	manual on / manual off	no
Tower B Chute Rooms	ventilation exhaust only	-	light-emitting diode	motion sensors	no
L17 Lounges	air conditioning system	time clock or BMS controlled	light-emitting diode	time clock and motion sensors	no
L18 Hot Water Plant	ventilation supply only	thermostatically controlled	light-emitting diode	manual on / manual off	no
L18 Mech Plant	ventilation supply only	thermostatically controlled	light-emitting diode	manual on / manual off	no
Tower B VRF Condensers	ventilation (supply + exhaust)	none i.e., continuous	light-emitting diode	manual on / manual off	no
Tower B Lift Motor Room	no mechanical ventilation	-	light-emitting diode	manual on / manual off	no
MEZ Grease Arrestor	ventilation supply only	thermostatically controlled	light-emitting diode	manual on / manual off	no
Tower B Fire Stairs	no mechanical ventilation	-	light-emitting diode	motion sensors	no
L17 WC	ventilation exhaust only	time clock or BMS controlled	light-emitting diode	motion sensors	no
Tower B Lobbies	ventilation supply only	time clock or BMS controlled	light-emitting diode	time clock and motion sensors	no

Central energy systems	Type	Specification
Sauna (No. 1)	Heating source: electric resistance	Efficiency measure: manual on / timer off
Lift bank (No. 2)	gearless traction with V V V F motor and regenerative drive	Number of levels (including basement): 15 number of levels from the bottom of the lift shaft to the top of the lift shaft: 20 number of lifts: 2 lift load capacity: $\geq 1001$ kg but $\leq 1500$ kg
Central hot water system (No. 2)	electric heat pump – air sourced	Piping insulation (ringmain & supply risers): (a) Piping external to building: R1.0 (~38 mm); (b) Piping internal to building: R1.0 (~38 mm) (c) Unit Efficiency: $3.0 < COP \leq 3.5$

### 3. Commitments for multi-dwelling housing

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

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

<b>(iii) Thermal Performance and Materials</b>	<b>Show on DA plans</b>	<b>Show on CC/CDC plans &amp; specs</b>	<b>Certifier check</b>
(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.	✔	✔	✔
(i) The applicant must show on The plans accompanying The development application for The proposed development, The locations of ceiling fans set out in The Assessor Certificate.	✔		
(j) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), the locations of ceiling fans set out in the Assessor Certificate.		✔	

## 4. Commitments for single dwelling houses

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

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

<b>(iii) Thermal Performance and Materials</b>	<b>Show on DA plans</b>	<b>Show on CC/CDC plans &amp; specs</b>	<b>Certifier check</b>
(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.	✓	✓	✓
(i) The applicant must show on The plans accompanying The development application for The proposed development, The locations of ceiling fans set out in The Assessor Certificate.	✓		
(j) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), the locations of ceiling fans set out in the Assessor Certificate.		✓	

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

### (a) Buildings 'Other'

(i) Materials	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) 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 "Floor types", "External wall types", "Internal wall types", "Ceiling and roof types", "Frames" and "Glazing" tables below.			✓
(b) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all specifications included in the tables below.		✓	
(c) The applicant must construct the floors, walls, roof, ceiling and roof, windows, glazed doors and skylights of the development in accordance with the specifications listed in the tables below. In the case of glazing, a 5% variance from the area values listed in the "Frames" and "Glazing" tables is permitted.	✓	✓	✓
(d) The applicant must show through receipts that the materials purchased for construction are consistent with the specifications listed in the below tables.			✓

#### Floor types

Floor type	Area (m2)	Insulation	Low emissions option
concrete slab on ground, frame:	2762.2	-	none
suspended floor above garage, frame: suspended concrete slab	1946.06	-	-

#### External wall types

External wall type	Construction type	Area (m2)	Low emissions option	Insulation
External wall type 1	concrete block/ plasterboard,frame:light steel frame	8239.45	-	-

#### Internal wall types

Internal wall type	Construction type	Area (m2)	Insulation
Internal wall type 1	75 mm AAC panel, frame:light steel frame	4943.67	-

**Reinforcement concrete frames/columns**

Building has reinforced concrete frame/columns?	Volume (m <sup>3</sup> )	Low emissions option
yes	590.69	-

**Ceiling and roof types**

Ceiling and roof type	Area (m <sup>2</sup> )	Roof Insulation	Ceiling Insulation
-	-	-	

**Glazing types**

**Frame types**

Single glazing (m <sup>2</sup> )	Double glazing (m <sup>2</sup> )	Triple glazing (m <sup>2</sup> )	Aluminium frames (m <sup>2</sup> )	Timber frames (m <sup>2</sup> )	uPVC frames (m <sup>2</sup> )	Steel frames (m <sup>2</sup> )	Composite frames (m <sup>2</sup> )
-	-	-	-	-	-	-	-

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

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

Common area	Showerheads rating	Toilets rating	Taps rating	Clothes washers rating
All common areas	4 star (> 4.5 but <= 6 L/min)	4 star	5 star	5 star

Central systems	Size	Configuration	Connection (to allow for...)
Central water tank - rainwater or stormwater (No. 1)	10000	To collect run-off from at least: - 2476.86 square metres of roof area of buildings in the development - 0 square metres of impervious area in the development - 0 square metres of garden/lawn area in the development - 0 square metres of planter box area in the development (excluding, in each case, any area which drains to, or supplies, any other alternative water supply system).	- irrigation of 660.79 square metres of common landscaped area on the site - car washing in 0 car washing bays on the site
Fire sprinkler system (No. 1)	-	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
B02 Carpark	ventilation (supply + exhaust)	carbon monoxide monitor + VSD fan	light-emitting diode	zoned switching with motion sensor	no
B01 Carpark	ventilation (supply + exhaust)	carbon monoxide monitor + VSD fan	light-emitting diode	zoned switching with motion sensor	no
B02 Services Cabinets	no mechanical ventilation	-	light-emitting diode	manual on / manual off	no
B01 Services Cabinets	no mechanical ventilation	-	light-emitting diode	manual on / manual off	no
B01 Comms	air conditioning system	none i.e., continuous	light-emitting diode	manual on / manual off	no
GF Services Cabinets	ventilation supply only	thermostatically controlled	light-emitting diode	manual on / manual off	no
GF Main Switch Room, Meter, Substation	ventilation supply only	thermostatically controlled	light-emitting diode	manual on / manual off	no
B02 Bulky Waste + Comm/ Retail Bin Room	ventilation exhaust only	-	light-emitting diode	motion sensors	no
B01 Chute Rooms + FOGO	ventilation exhaust only	-	light-emitting diode	motion sensors	no
GF Chute + Garbage	ventilation exhaust only	-	light-emitting diode	motion sensors	no
B02 Fan Rooms	ventilation supply only	thermostatically controlled	light-emitting diode	manual on / manual off	no
B01 Fan Rooms	ventilation supply only	thermostatically controlled	light-emitting diode	manual on / manual off	no
B01 OSD Tank, Rainwater Tank, Cold Water Tank	ventilation supply only	thermostatically controlled	light-emitting diode	manual on / manual off	no
B01 Fire tank Room, Fire Pump Room	ventilation supply only	thermostatically controlled	light-emitting diode	manual on / manual off	no
B01 Grease Arrestor	ventilation supply only	thermostatically controlled	light-emitting diode	manual on / manual off	no
GF FCR	ventilation supply only	thermostatically controlled	light-emitting diode	manual on / manual off	no

Common area	Common area ventilation system		Common area lighting		
	Ventilation system type	Ventilation efficiency measure	Primary type of artificial lighting	Lighting efficiency measure	Lighting control system/ BMS
B02 Storage	no mechanical ventilation	-	light-emitting diode	motion sensors	no
B02 Fire Stairs	no mechanical ventilation	-	light-emitting diode	motion sensors	no
B01 Storage	no mechanical ventilation	-	light-emitting diode	motion sensors	no
B01 Fire Stairs	no mechanical ventilation	-	light-emitting diode	motion sensors	no
B01 BTR Storage	no mechanical ventilation	-	light-emitting diode	motion sensors	no
B01 Corridor	ventilation supply only	time clock or BMS controlled	light-emitting diode	motion sensors	no
GF Fire Stairs	no mechanical ventilation	-	light-emitting diode	motion sensors	no
GF Mail Room	ventilation (supply + exhaust)	time clock or BMS controlled	light-emitting diode	motion sensors	no
GF BTR Manager Office	air conditioning system	time clock or BMS controlled	light-emitting diode	time clock and motion sensors	no
GF WC, Store, Cleaners	ventilation exhaust only	time clock or BMS controlled	light-emitting diode	motion sensors	no
GF Lobby	air conditioning system	time clock or BMS controlled	light-emitting diode	time clock and motion sensors	no

Central energy systems	Type	Specification
Alternative energy supply	Photovoltaic system	Rated electrical output (min): 50 peak kW
Other	Building management system installed?: yes Active power factor correction installed?: yes	-

## 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 Insulation Markups

Refer to next page.











**Insulation Mark-ups**

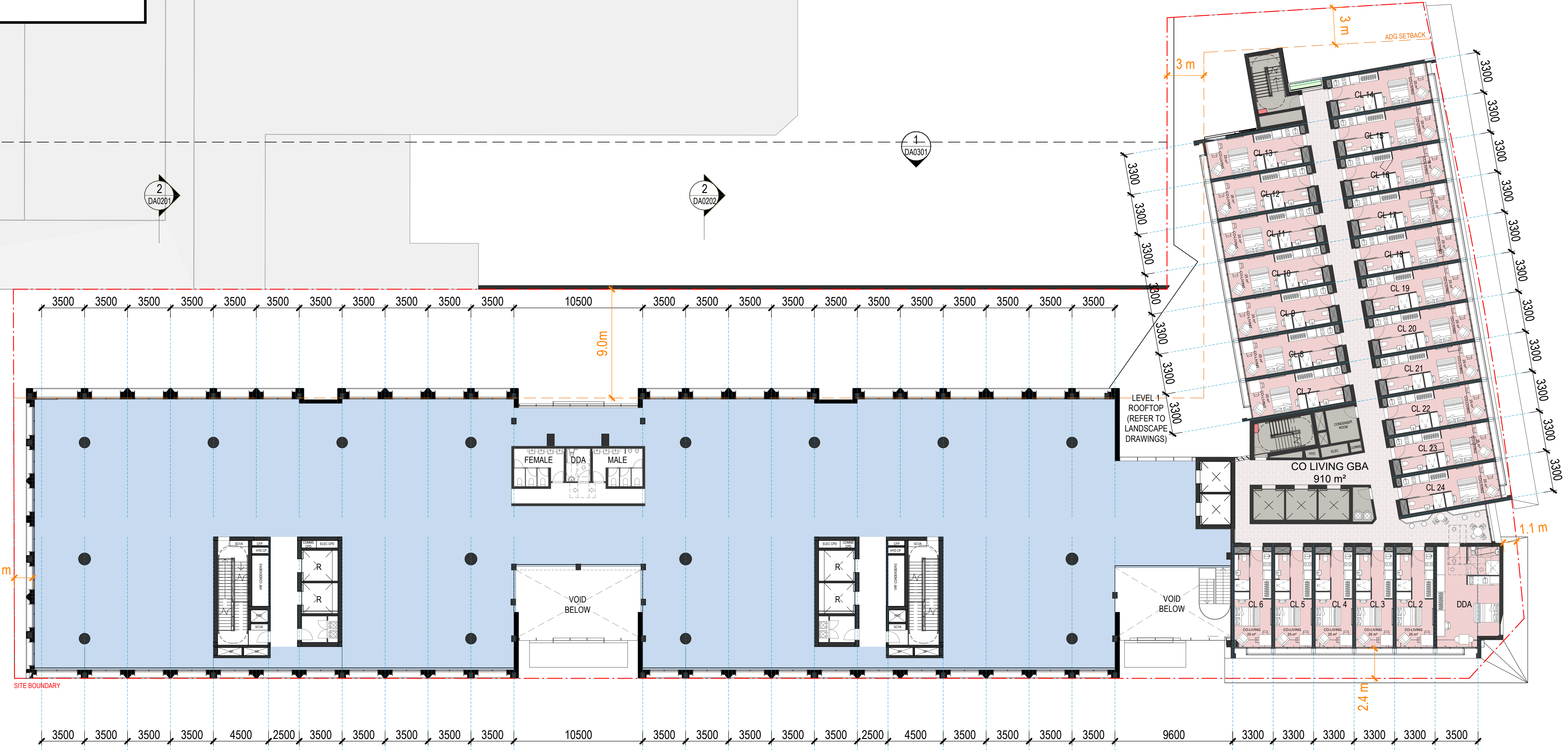
LEGEND

- Add R2.5(Solid external walls)
- Add R2.5 (installed in underside of slab or above)
- Add R4.0 (installed in ceiling - open to air)

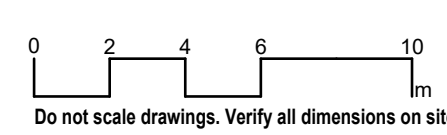
Tempus Street, Rouse Hill MR | P01463 10/06/2025

**Level 2 Insulation Markup**

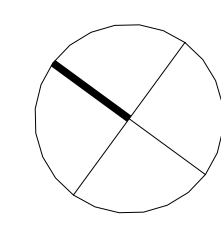
ROUSE HILL TOWN CENTRE



**architectus**  
 Architectus Australia Pty Ltd is the owner of the copyright subsisting in these drawings, plans, designs and specifications. They must not be used, reproduced or copied, in whole or in part, nor may the information, ideas and concepts therein contained (which are confidential to Architectus Australia Pty Ltd) be disclosed to any person without the prior written consent of that company.



revision	purpose of issue	checked	date
P.00	DRAFT SSDA		15.11.24
P.01	DRAFT ISSUE		12.03.25
P.02	SSDA ISSUE		07.04.25
P.03	SDRP 2 COMMENTS		16.05.25
P.04	SDRP 2 + BASIX COMMENTS		05.06.25



**UNIT TYPES**

CO-LIVING	2 BED DK	2 BED DK-STUDIO
STUDIO	3 BED	
1 BED	3 BED DK	3 BED DK-STUDIO
2 BED		

client

**FREECITY**

**architectus**<sup>TM</sup>

Australian Capital Territory  
 New South Wales  
 Queensland  
 South Australia  
 Victoria  
 Western Australia

Gadigal Country  
 Level 17, 25 Martin Place  
 Sydney NSW 2000  
 T (61 2) 8252 8400  
 sydney@architectus.com.au  
 Nominated Architect Ray Brown 6539  
 ABN 90 131 245 684

approved	MD	scale	1:200 @A1
prepared	KL, MK, SD, VJ	project no	240130

project

**TEMPUS STREET ROUSE HILL**  
 Tempus Street, Rouse Hill, NSW

drawing

**DA0101**

Level 1-2 Plan

revision

**P.04**

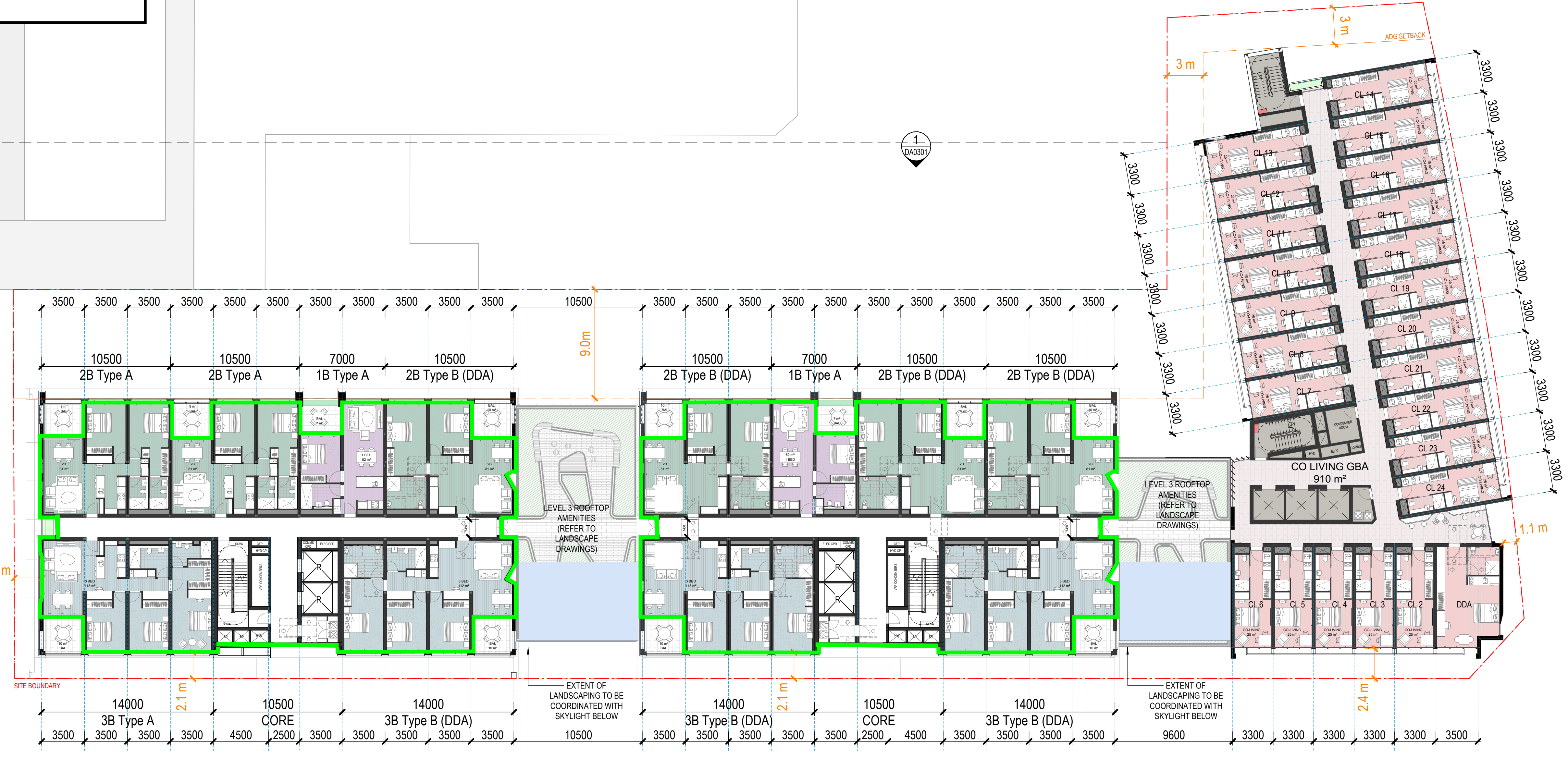
# Level 3 Insulation Markup

**Insulation Mark-ups**

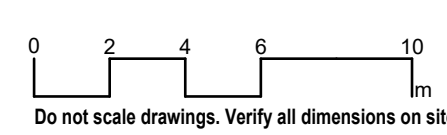
LEGEND

- Add R2.5 (Solid external walls)
- Add R2.5 (installed in underside of slab or above)
- Add R4.0 (installed in ceiling - open to air)

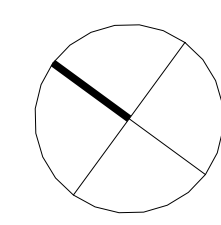
**Tempus Street,  
Rouse Hill  
MR | P01463  
10/06/2025**



**architectus**  
Architectus Australia Pty Ltd is the owner of the copyright subsisting in these drawings, plans, designs and specifications. They must not be used, reproduced or copied, in whole or in part, nor may the information, ideas and concepts therein contained (which are confidential to Architectus Australia Pty Ltd) be disclosed to any person without the prior written consent of that company.



revision	purpose of issue	checked	date
P.00	DRAFT SSDA		15.11.24
P.01	DRAFT ISSUE		12.03.25
P.02	SSDA ISSUE		07.04.25
P.03	SDRP 2 COMMENTS		16.05.25
P.04	SDRP 2 + BASIX COMMENTS		05.06.25



**UNIT TYPES**

<span style="display: inline-block; width: 15px; height: 15px; background-color: #f08080; border: 1px solid black;"></span> CO-LIVING	<span style="display: inline-block; width: 15px; height: 15px; background-color: #c0c0c0; border: 1px solid black;"></span> 2 BED DK	<span style="display: inline-block; width: 15px; height: 15px; background-color: #c0c0c0; border: 1px solid black;"></span> 2 BED DK-STUDIO
<span style="display: inline-block; width: 15px; height: 15px; background-color: #808080; border: 1px solid black;"></span> STUDIO	<span style="display: inline-block; width: 15px; height: 15px; background-color: #808080; border: 1px solid black;"></span> 3 BED	
<span style="display: inline-block; width: 15px; height: 15px; background-color: #404040; border: 1px solid black;"></span> 1 BED	<span style="display: inline-block; width: 15px; height: 15px; background-color: #404040; border: 1px solid black;"></span> 3 BED DK	<span style="display: inline-block; width: 15px; height: 15px; background-color: #404040; border: 1px solid black;"></span> 3 BED DK-STUDIO
<span style="display: inline-block; width: 15px; height: 15px; background-color: #202020; border: 1px solid black;"></span> 2 BED		



**architectus**<sup>TM</sup>

Australian Capital Territory  
New South Wales  
Queensland  
South Australia  
Victoria  
Western Australia

Gadigal Country  
Level 17, 25 Martin Place  
Sydney NSW 2000  
T (61 2) 8252 8400  
sydney@architectus.com.au  
Nominated Architect Ray Brown 6539  
ABN 90 131 245 684

approved	MD	scale	1:200 @A1
prepared	KL, MK, SD, VJ	project no	240130

project **TEMPUS STREET ROUSE HILL**  
Tempus Street, Rouse Hill, NSW

drawing **Level 3-4 Plan**

drawing no. **DA0103** revision **P.04**

5/06/2025 4:41:26 PM







Insulation Mark-ups

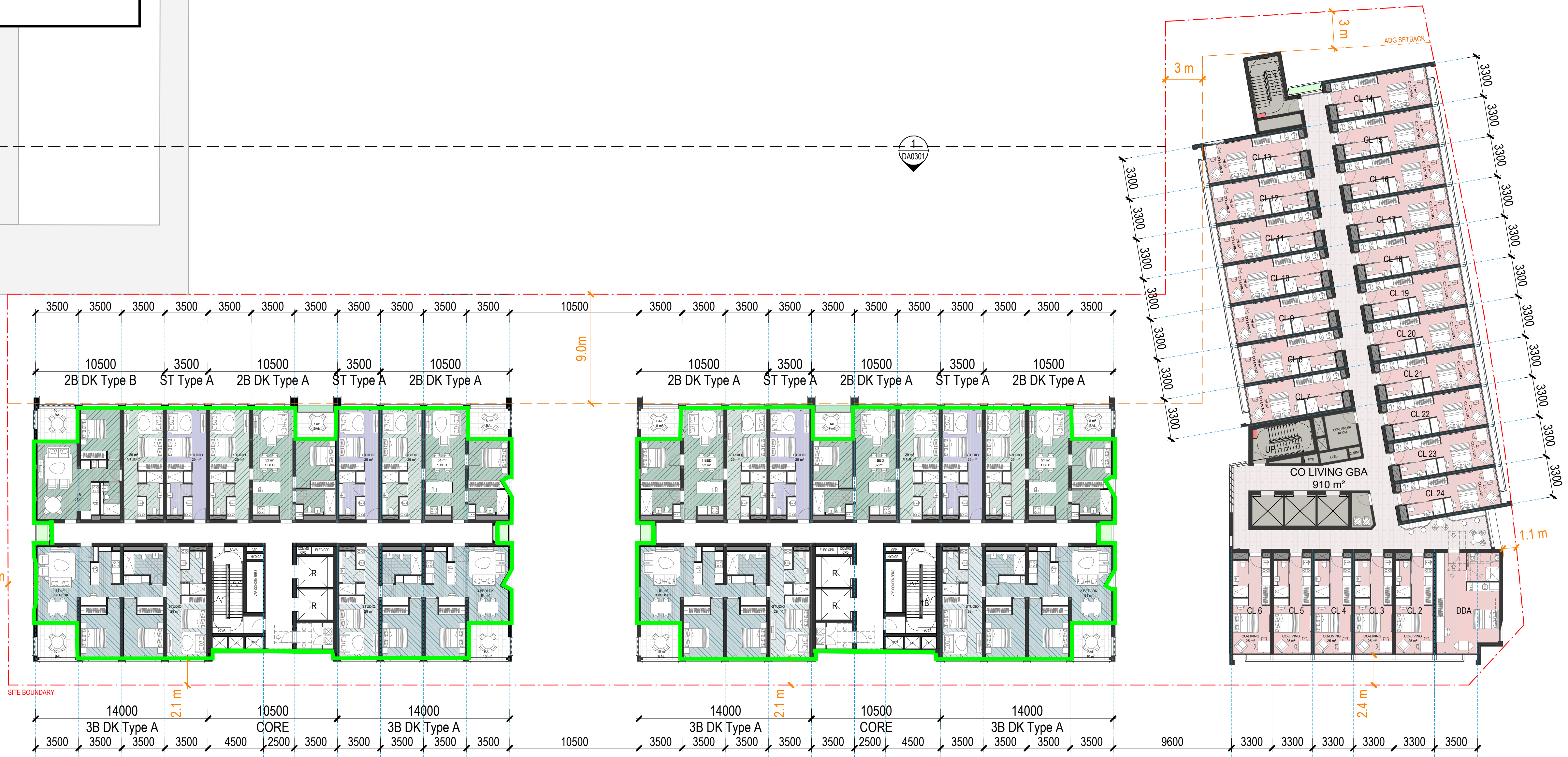
LEGEND

- Add R2.5(Solid external walls)
- Add R2.5 (installed in underside of slab or above)
- Add R4.0 (installed in ceiling - open to air)



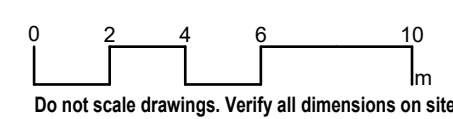
Tempus Street,  
Rouse Hill  
MR | P01463  
10/06/2025

Level 9 Insulation Markup

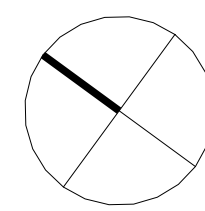


architectus

Architectus Australia Pty Ltd is the owner of the copyright subsisting in these drawings, plans, designs and specifications. They must not be used, reproduced or copied, in whole or in part, nor may the information, ideas and concepts therein contained (which are confidential to Architectus Australia Pty Ltd) be disclosed to any person without the prior written consent of that company.



revision	purpose of issue	checked	date
P.00	DRAFT SSDA		15.11.24
P.01	DRAFT ISSUE		12.03.25
P.02	SSDA ISSUE		07.04.25
P.03	SDRP 2 COMMENTS		16.05.25
P.04	SDRP 2 + BASIX COMMENTS		05.06.25



UNIT TYPES

- CO-LIVING
- STUDIO
- 1 BED
- 2 BED
- 2 BED DK
- 3 BED
- 3 BED DK
- 2 BED DK-STUDIO
- 3 BED DK-STUDIO

client



Australian Capital Territory  
New South Wales  
Queensland  
South Australia  
Victoria  
Western Australia

Gadigal Country  
Level 17, 25 Martin Place  
Sydney NSW 2000  
T (61 2) 8252 8400  
sydney@architectus.com.au  
Nominated Architect Ray Brown 6539  
ABN 90 131 245 684

approved MD scale 1:200 @A1  
prepared KL, MK, SD, VJ project no 240130

project TEMPUS STREET ROUSE HILL

Tempus Street, Rouse Hill, NSW

drawing

Level 9 Plan

drawing no. DA0109

revision P.04

# Level 10 Insulation Markup

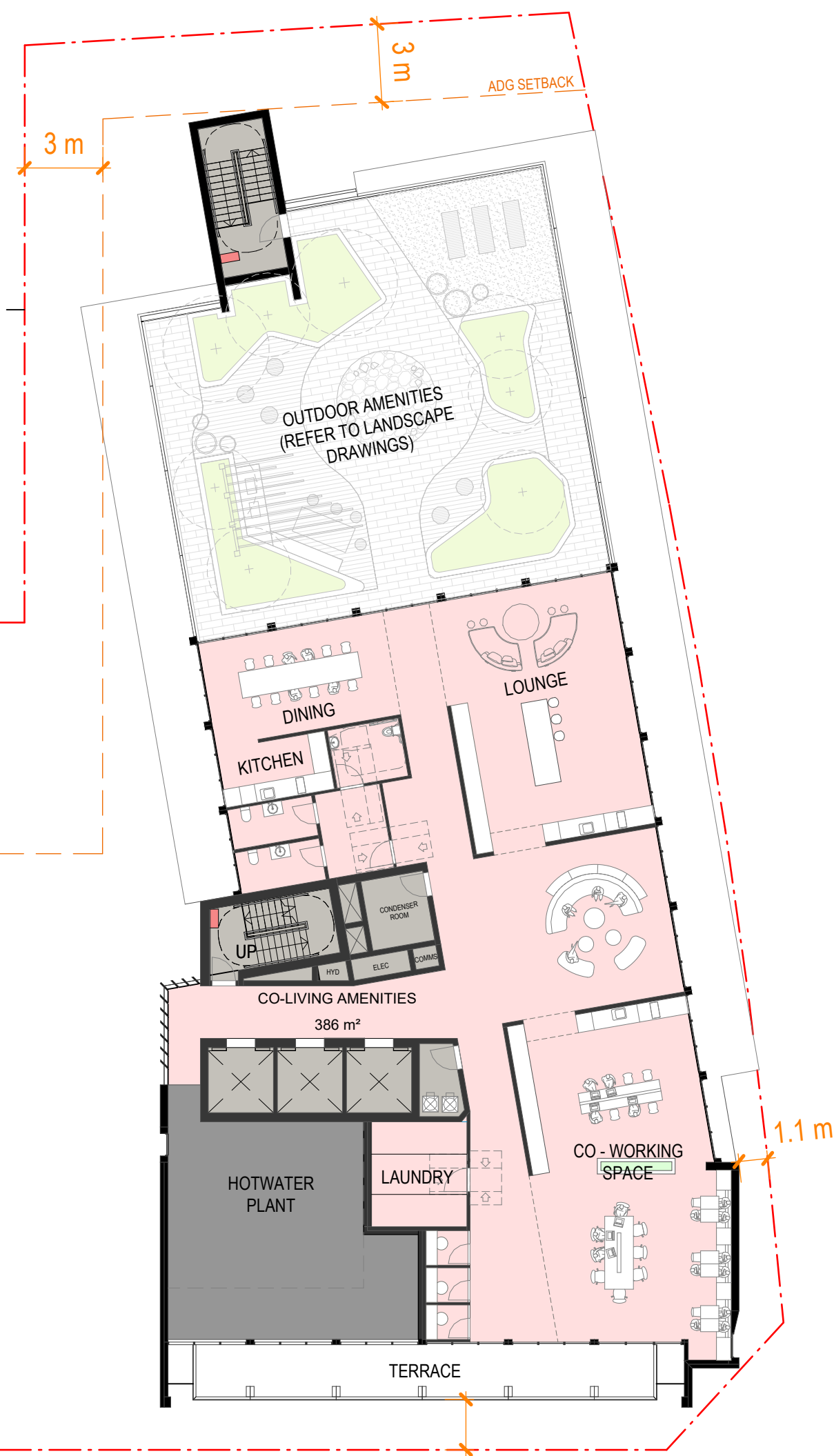
## Insulation Mark-ups

### LEGEND

- Add R2.5(Solid external walls)
- Add R2.5 (installed in underside of slab or above)
- Add R4.0 (installed in ceiling - open to air)

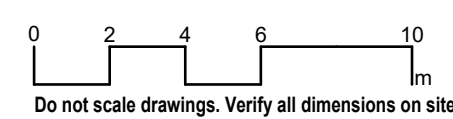


Tempus Street,  
Rouse Hill  
MR | P01463  
10/06/2025

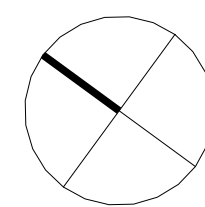


architectus

Architectus Australia Pty Ltd is the owner of the copyright subsisting in these drawings, plans, designs and specifications. They must not be used, reproduced or copied, in whole or in part, nor may the information, ideas and concepts therein contained (which are confidential to Architectus Australia Pty Ltd) be disclosed to any person without the prior written consent of that company.



revision	purpose of issue	checked	date
P.00	DRAFT SSDA		15.11.24
P.01	DRAFT ISSUE		12.03.25
P.02	SSDA ISSUE		07.04.25
P.03	SDRP 2 COMMENTS		16.05.25
P.04	SDRP 2 + BASIX COMMENTS		05.06.25



### UNIT TYPES

- CO-LIVING
- STUDIO
- 1 BED
- 2 BED
- 2 BED DK
- 3 BED
- 3 BED DK
- 2 BED DK-STUDIO
- 3 BED DK-STUDIO

client



architectus™

Australian Capital Territory  
New South Wales  
Queensland  
South Australia  
Victoria  
Western Australia

Gadigal Country  
Level 17, 25 Martin Place  
Sydney NSW 2000  
T (61 2) 8252 8400  
sydney@architectus.com.au  
Nominated Architect Ray Brown 6539  
ABN 90 131 245 684

approved	MD	scale	1:200 @A1
prepared	KL, MK, SD, VJ	project no	240130

project  
TEMPUS STREET ROUSE HILL

Tempus Street, Rouse Hill, NSW

drawing  
Level 10 Plan - Co-living Rooftop Amenities

drawing no. DA0110  
revision P.04





# Level 17 Insulation Markup

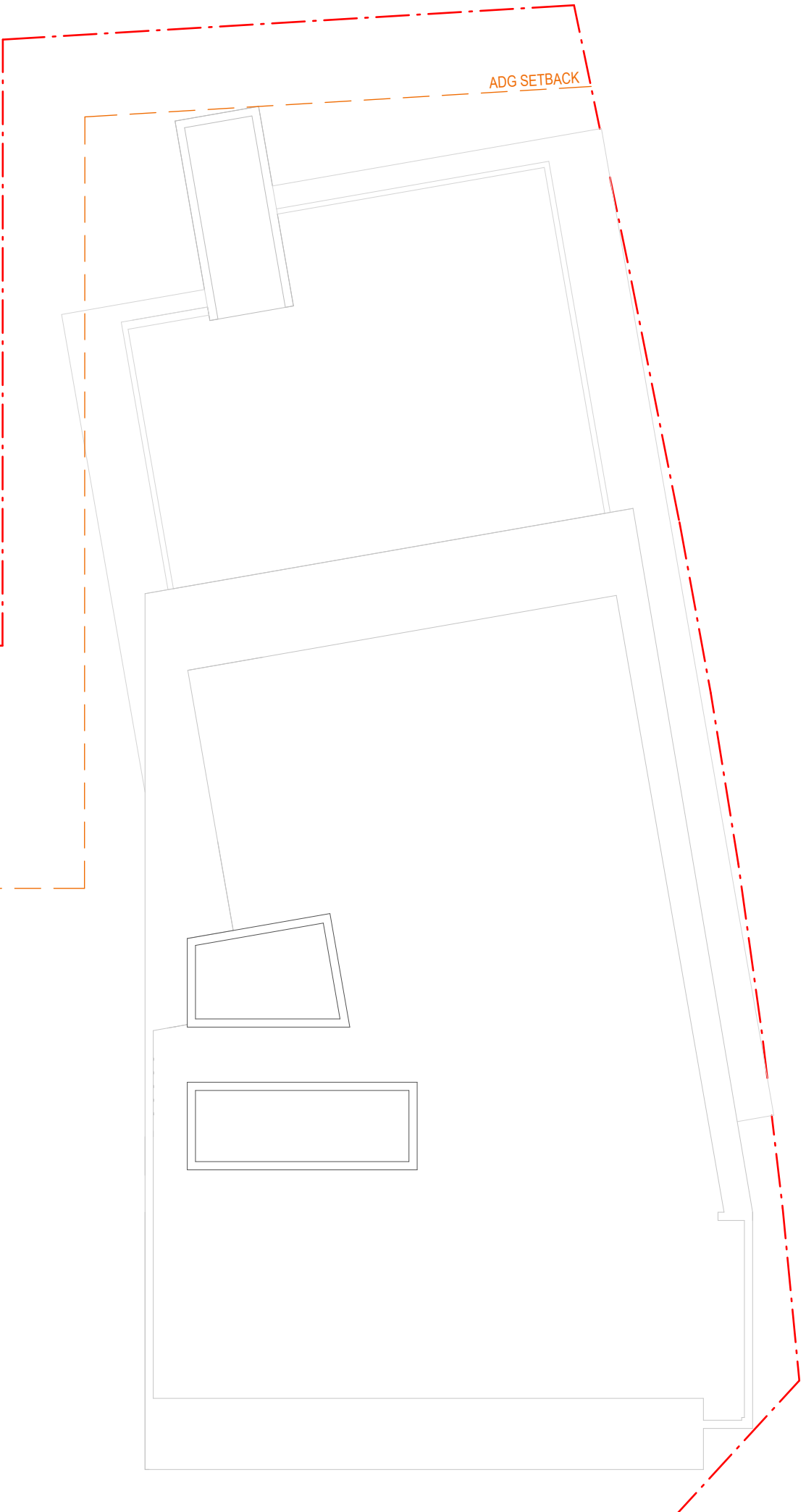
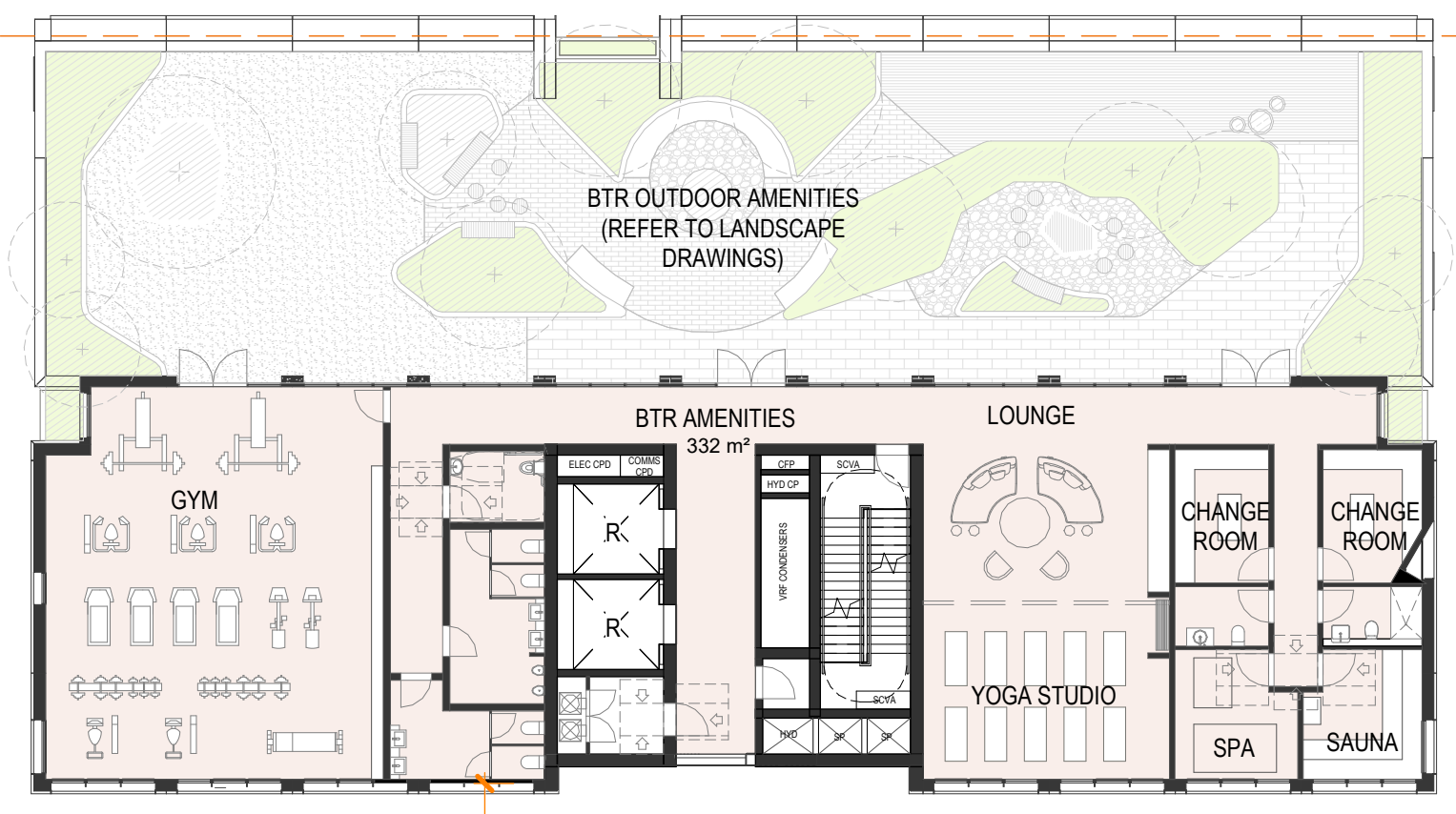
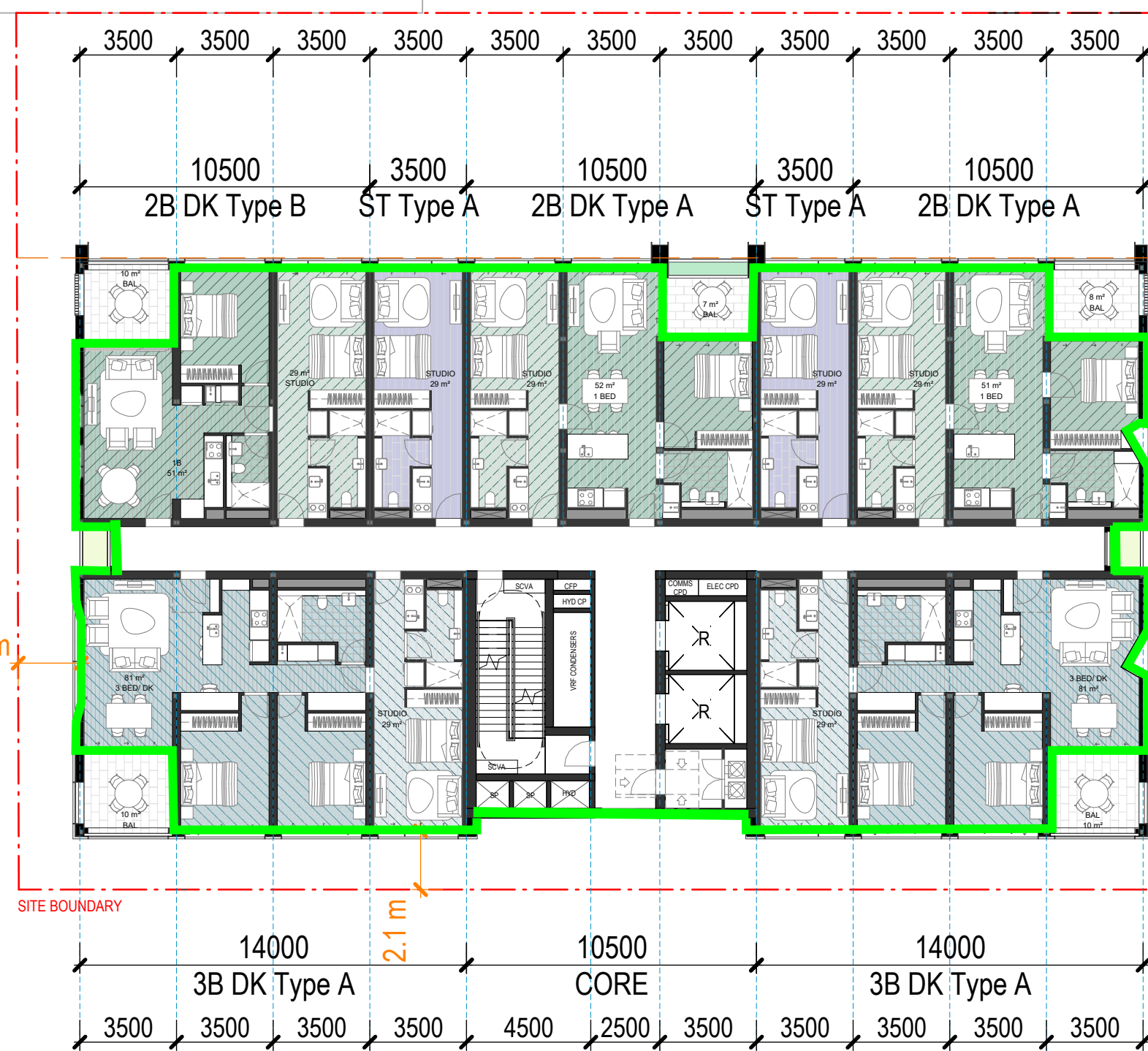
## Insulation Mark-ups

### LEGEND

- Add R2.5(Solid external walls)
- Add R2.5 (installed in underside of slab or above)
- Add R4.0 (installed in ceiling - open to air)

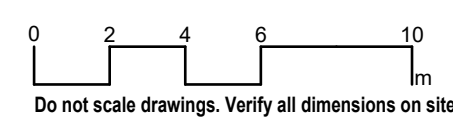


Tempus Street,  
Rouse Hill  
MR | P01463  
10/06/2025

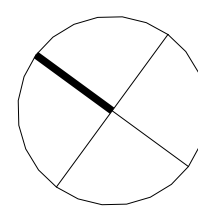


architectus

Architectus Australia Pty Ltd is the owner of the copyright subsisting in these drawings, plans, designs and specifications. They must not be used, reproduced or copied, in whole or in part, nor may the information, ideas and concepts therein contained (which are confidential to Architectus Australia Pty Ltd) be disclosed to any person without the prior written consent of that company.



revision	purpose of issue	checked	date
P.00	DRAFT SSDA		15.11.24
P.01	DRAFT ISSUE		12.03.25
P.02	SSDA ISSUE		07.04.25
P.03	SDRP 2 COMMENTS		16.05.25
P.04	SDRP 2 + BASIX COMMENTS		05.06.25



### UNIT TYPES

- CO-LIVING
- STUDIO
- 1 BED
- 2 BED
- 2 BED DK
- 3 BED
- 3 BED DK
- 2 BED DK-STUDIO
- 3 BED DK-STUDIO

client



Australian Capital Territory  
New South Wales  
Queensland  
South Australia  
Victoria  
Western Australia

architectus™

Gadigal Country  
Level 17, 25 Martin Place  
Sydney NSW 2000  
T (61 2) 8252 8400  
sydney@architectus.com.au  
Nominated Architect Ray Brown 6539  
ABN 90 131 245 684

approved MD scale 1:200 @A1  
prepared KL, MK, SD, VJ project no 240130

project TEMPUS STREET ROUSE HILL

Tempus Street, Rouse Hill, NSW

drawing Level 17 Plan - BTR Rooftop Amenities

drawing no. DA0117 revision P.04

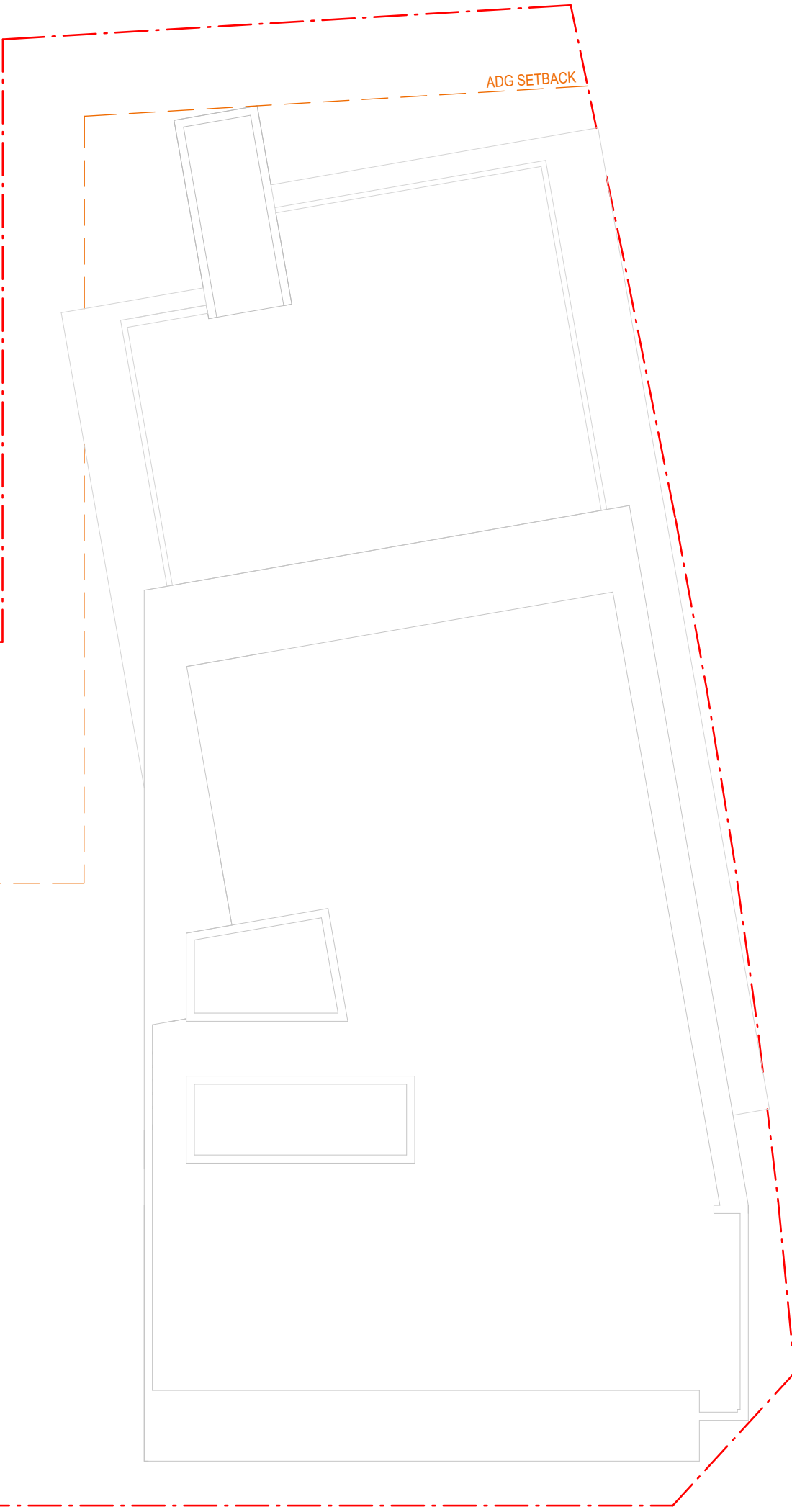
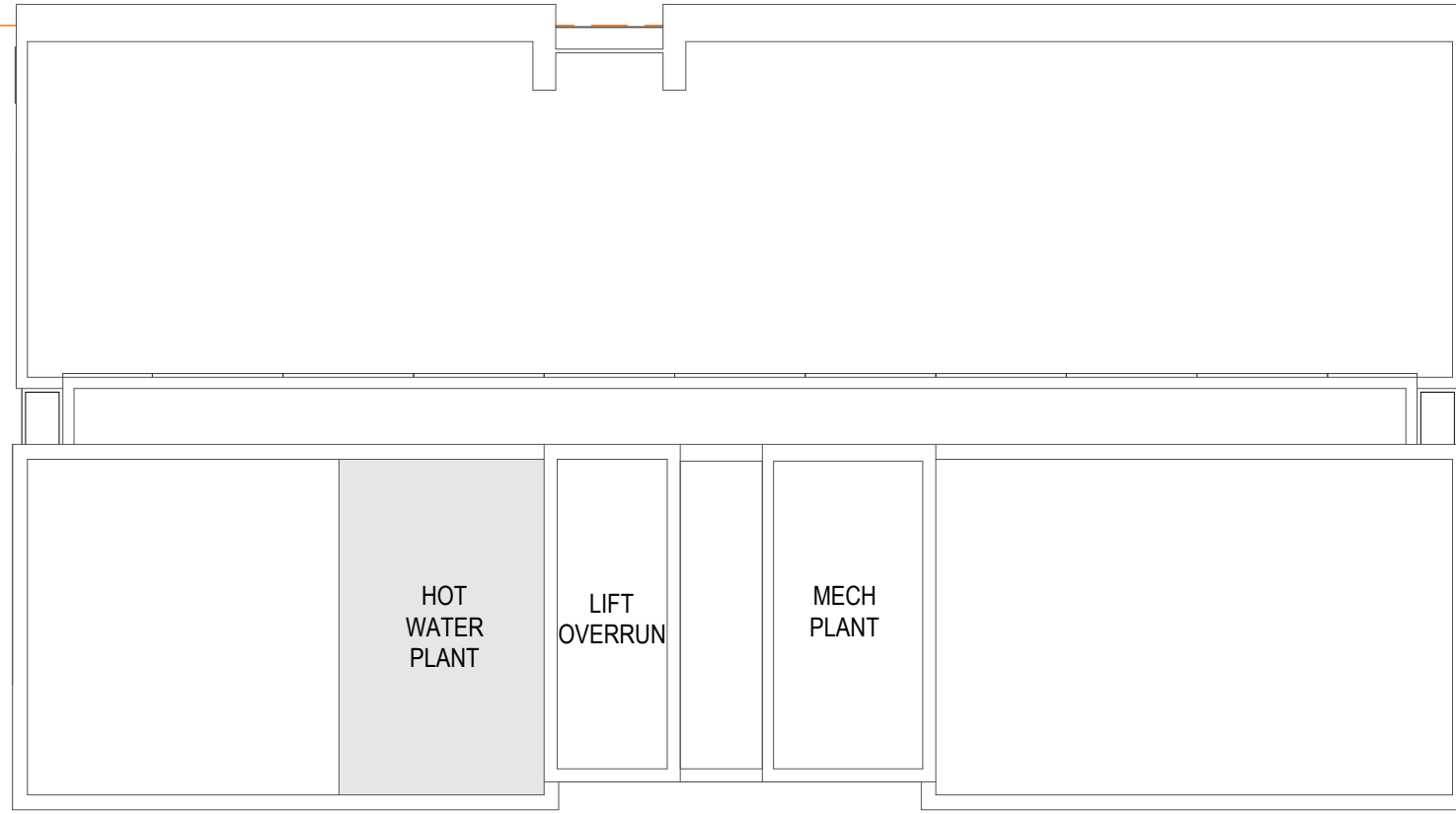
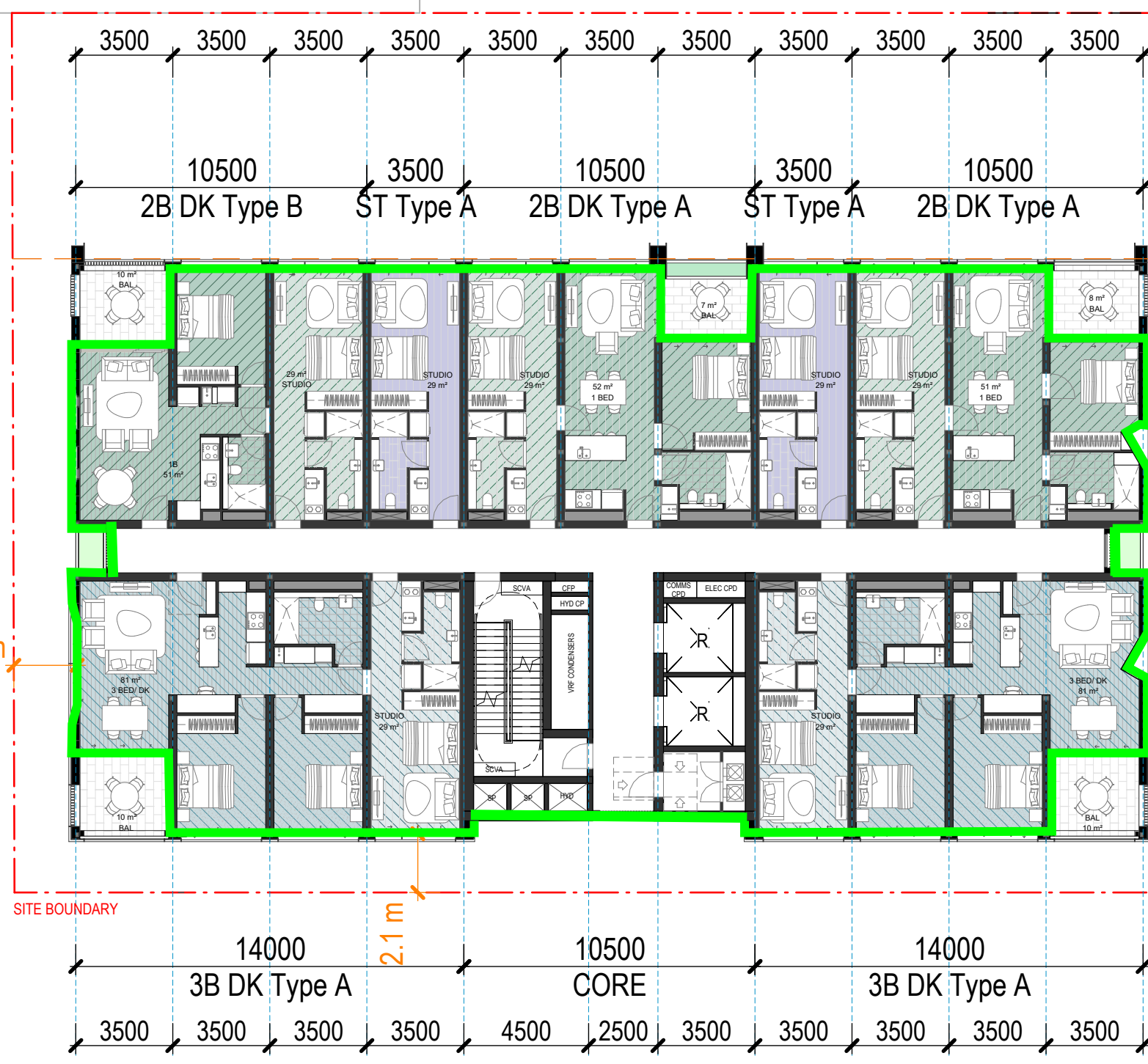
# Level 20-18 Insulation Markup

**Insulation Mark-ups**

LEGEND

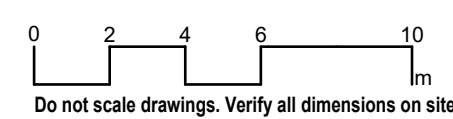
- Add R2.5(Solid external walls)
- Add R2.5 (installed in underside of slab or above)
- Add R4.0 (installed in ceiling - open to air)

Tempus Street,  
Rouse Hill  
MR | P01463  
10/06/2025

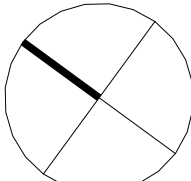


**architectus**

Architectus Australia Pty Ltd is the owner of the copyright subsisting in these drawings, plans, designs and specifications. They must not be used, reproduced or copied, in whole or in part, nor may the information, ideas and concepts therein contained (which are confidential to Architectus Australia Pty Ltd) be disclosed to any person without the prior written consent of that company.



revision	purpose of issue	checked	date
P.00	DRAFT SSDA		15.11.24
P.01	DRAFT ISSUE		12.03.25
P.02	SSDA ISSUE		07.04.25
P.03	SDRP 2 COMMENTS		16.05.25
P.04	SDRP 2 + BASIX COMMENTS		05.06.25



**UNIT TYPES**

<span style="display: inline-block; width: 15px; height: 15px; background-color: #f08080; border: 1px solid black;"></span> CO-LIVING	<span style="display: inline-block; width: 15px; height: 15px; background-color: #c0c0c0; border: 1px solid black;"></span> 2 BED DK	<span style="display: inline-block; width: 15px; height: 15px; background-color: #c0c0c0; border: 1px solid black;"></span> 2 BED DK-STUDIO
<span style="display: inline-block; width: 15px; height: 15px; background-color: #d0d0d0; border: 1px solid black;"></span> STUDIO	<span style="display: inline-block; width: 15px; height: 15px; background-color: #c0c0c0; border: 1px solid black;"></span> 3 BED	
<span style="display: inline-block; width: 15px; height: 15px; background-color: #d0d0d0; border: 1px solid black;"></span> 1 BED	<span style="display: inline-block; width: 15px; height: 15px; background-color: #c0c0c0; border: 1px solid black;"></span> 3 BED DK	<span style="display: inline-block; width: 15px; height: 15px; background-color: #c0c0c0; border: 1px solid black;"></span> 3 BED DK-STUDIO
<span style="display: inline-block; width: 15px; height: 15px; background-color: #c0c0c0; border: 1px solid black;"></span> 2 BED		



**architectus**™

Australian Capital Territory  
New South Wales  
Queensland  
South Australia  
Victoria  
Western Australia

Gadigal Country  
Level 17, 25 Martin Place  
Sydney NSW 2000  
T (61 2) 8252 8400  
sydney@architectus.com.au  
Nominated Architect Ray Brown 6539  
ABN 90 131 245 684

approved MD scale 1:200 @A1  
prepared KL, MK, SD, VJ project no 240130

project **TEMPUS STREET ROUSE HILL**  
Tempus Street, Rouse Hill, NSW

drawing no. **DA0118** revision **P.04**

# Level 21 Insulation Markup

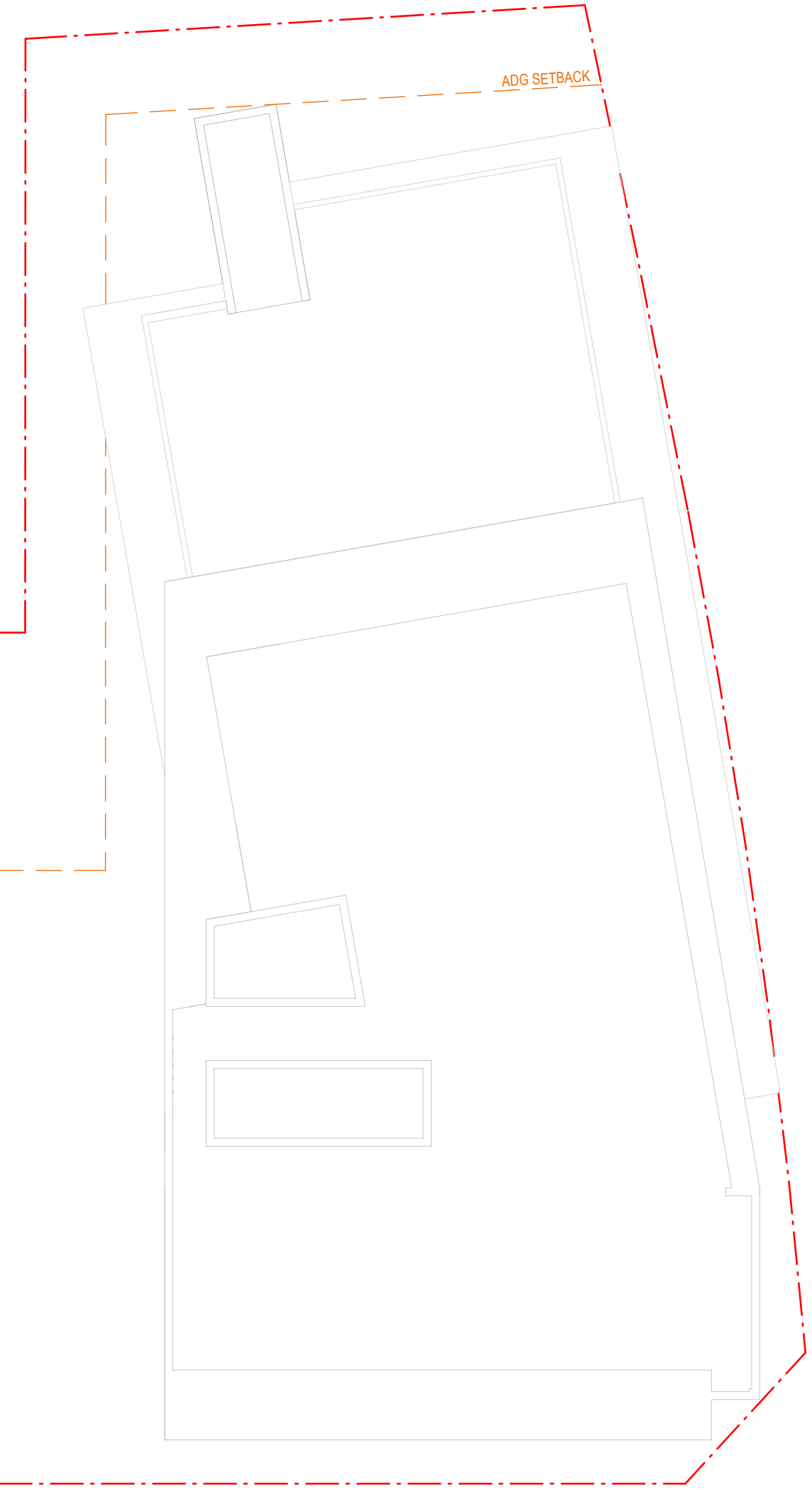
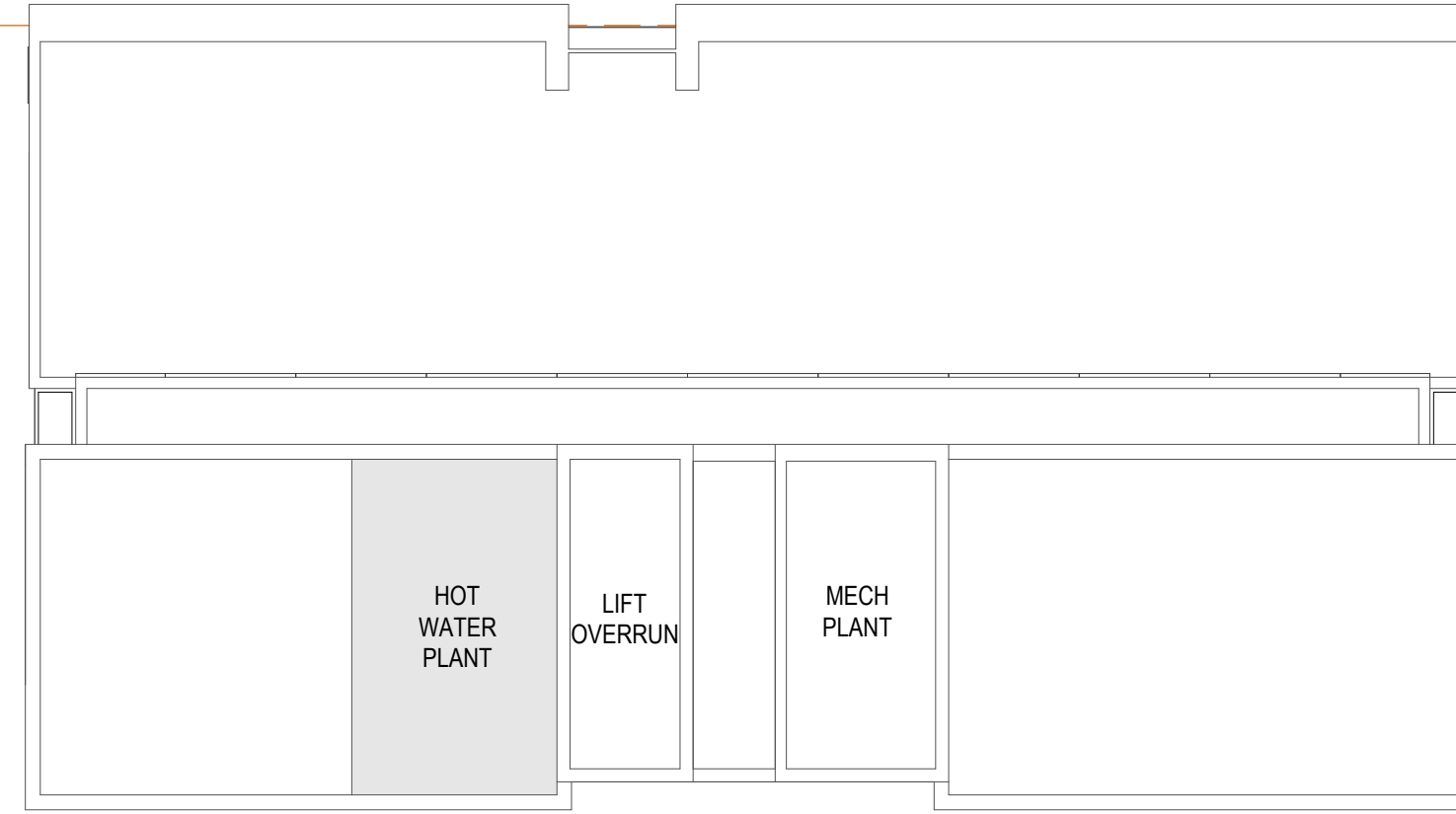
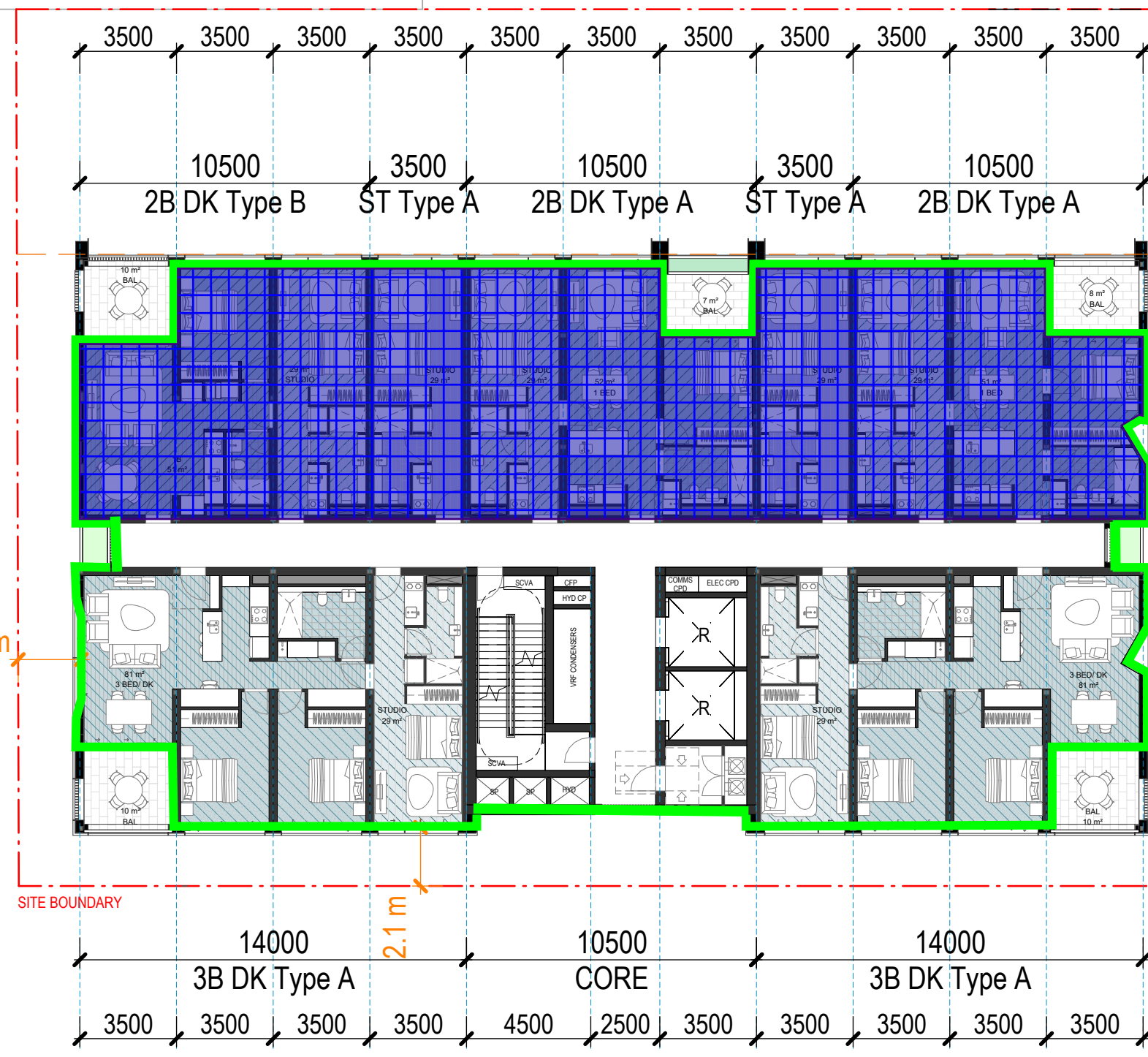
## Insulation Mark-ups

### LEGEND

- Add R2.5(Solid external walls)
- Add R2.5 (installed in underside of slab or above)
- Add R4.0 (installed in ceiling - open to air)

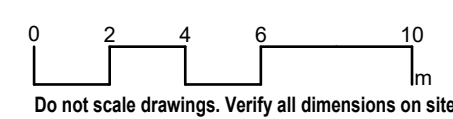


Tempus Street,  
Rouse Hill  
MR | P01463  
10/06/2025

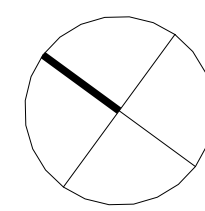


architectus

Architectus Australia Pty Ltd is the owner of the copyright subsisting in these drawings, plans, designs and specifications. They must not be used, reproduced or copied, in whole or in part, nor may the information, ideas and concepts therein contained (which are confidential to Architectus Australia Pty Ltd) be disclosed to any person without the prior written consent of that company.



revision	purpose of issue	checked	date
P.00	DRAFT SSDA		15.11.24
P.01	DRAFT ISSUE		12.03.25
P.02	SSDA ISSUE		07.04.25
P.03	SDRP 2 COMMENTS		16.05.25
P.04	SDRP 2 + BASIX COMMENTS		05.06.25



### UNIT TYPES

- CO-LIVING
- STUDIO
- 1 BED
- 2 BED
- 2 BED DK
- 3 BED
- 3 BED DK
- 2 BED DK-STUDIO
- 3 BED DK-STUDIO

client



architectus™

Australian Capital Territory  
New South Wales  
Queensland  
South Australia  
Victoria  
Western Australia

Gadigal Country  
Level 17, 25 Martin Place  
Sydney NSW 2000  
T (61 2) 8252 8400  
sydney@architectus.com.au  
Nominated Architect Ray Brown 6539  
ABN 90 131 245 684

approved	MD	scale	1:200 @A1
prepared	KL, MK, SD, VJ	project no	240130

project  
**TEMPUS STREET ROUSE HILL**

Tempus Street, Rouse Hill, NSW

drawing

drawing no.	revision
<b>DA0118</b>	<b>P.04</b>

5/06/2025 4:42:24 PM

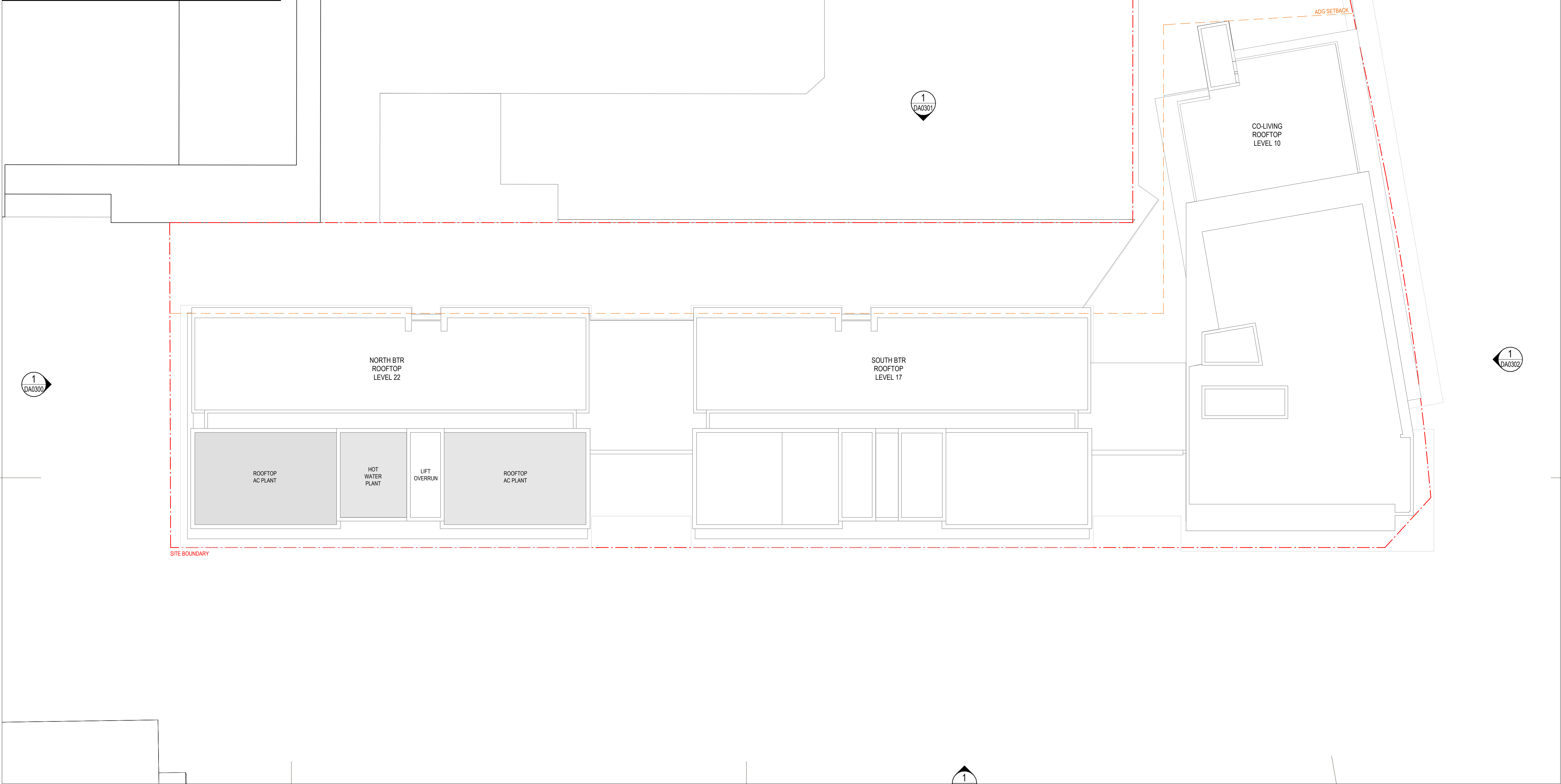


**Insulation Mark-ups**

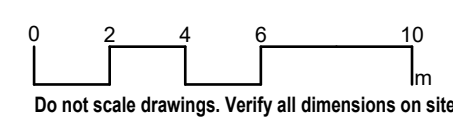
LEGEND

- Add R2.5(Solid external walls)
- Add R2.5 (installed in underside of slab or above)
- Add R4.0 (installed in ceiling - open to air)

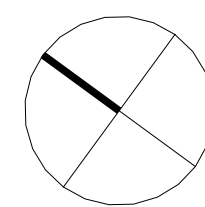
Tempus Street,  
Rouse Hill  
MR | P01463  
10/06/2025



**architectus**  
 Architectus Australia Pty Ltd is the owner of the copyright subsisting in these drawings, plans, designs and specifications. They must not be used, reproduced or copied, in whole or in part, nor may the information, ideas and concepts therein contained (which are confidential to Architectus Australia Pty Ltd) be disclosed to any person without the prior written consent of that company.



revision	purpose of issue	checked	date
P.00	DRAFT SSDA		15.11.24
P.01	DRAFT ISSUE		12.03.25
P.02	SSDA ISSUE		07.04.25
P.03	SDRP 2 COMMENTS		16.05.25
P.04	SDRP 2 + BASIX COMMENTS		05.06.25



client



**architectus**<sup>TM</sup>

Australian Capital Territory  
New South Wales  
Queensland  
South Australia  
Victoria  
Western Australia

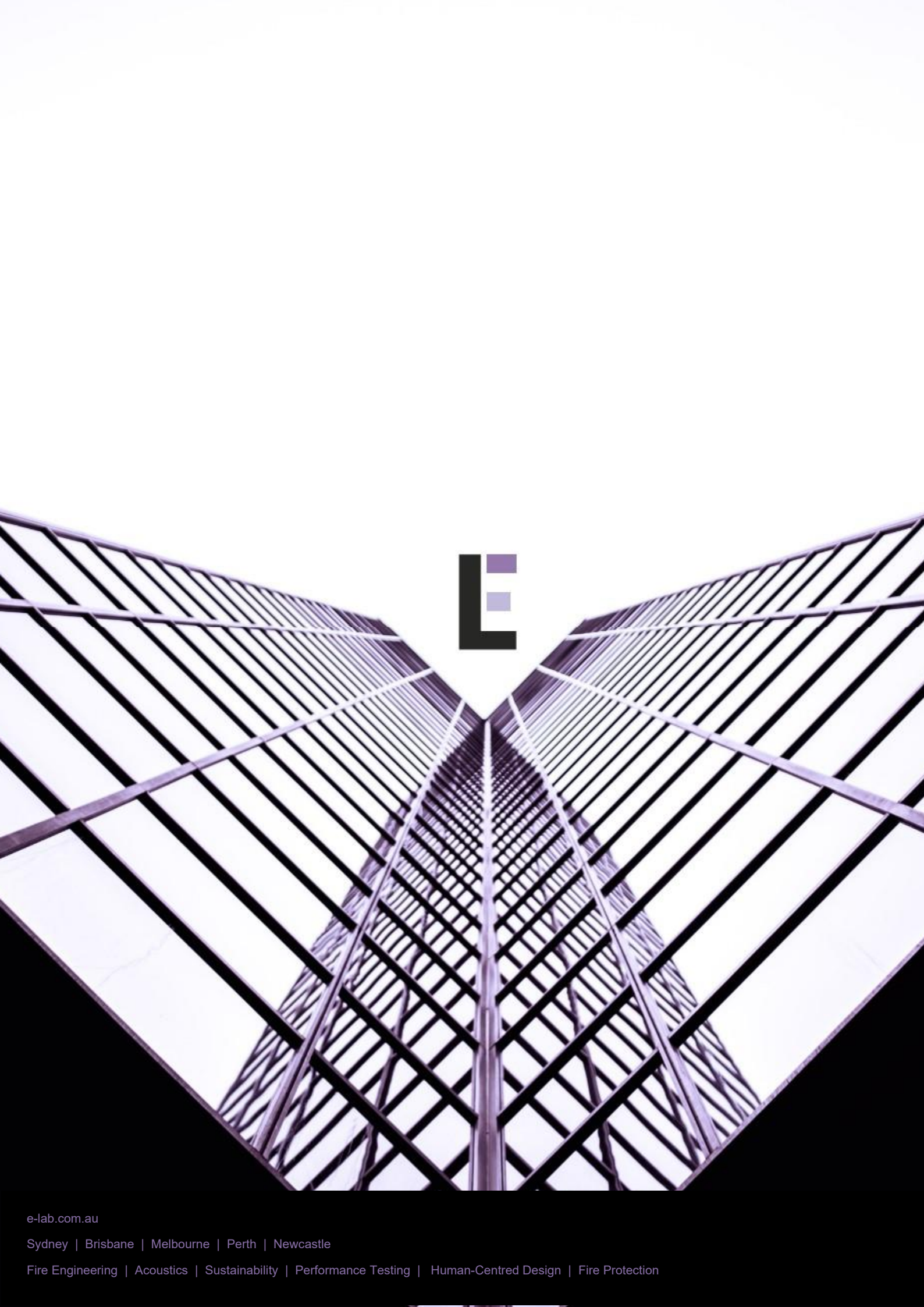
Gadigal Country  
Level 17, 25 Martin Place  
Sydney NSW 2000  
T (61 2) 8252 8400  
sydney@architectus.com.au  
Nominated Architect Ray Brown 6539  
ABN 90 131 245 684

approved MD scale 1:200 @A1  
 prepared KL, MK, SD, VJ project no. 240130

project  
**TEMPUS STREET ROUSE HILL**  
 Tempus Street, Rouse Hill, NSW

drawing no. **DA0123**  
 revision **P.04**

Roof Plan



**E**

# 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: 1799294M

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)

Secretary

Date of issue: Wednesday, 11 June 2025

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



When submitting this BASIX certificate with a development application or complying development certificate application, it must be accompanied by NatHERS certificate 9AYG35L0CS.

Project summary		
Project name	Tempus Street Rouse Hill	
Street address	2 TEMPUS STREET ROUSE HILL 2155	
Local Government Area	THE HILLS SHIRE	
Plan type and plan number	Deposited Plan 280013	
No. of residential flat buildings	2	
Residential flat buildings: no. of dwellings	227	
Multi-dwelling housing: no. of dwellings	0	
No. of single dwelling houses	0	
Project score		
Water	✔ 49	Target 40
Thermal Performance	✔ Pass	Target Pass
Energy	✔ 61	Target 61
Materials	✔ -100	Target n/a

### Certificate Prepared by

Name / Company Name: E-LAB Consulting

ABN (if applicable):

# Description of project

## Project address

Project name	Tempus Street Rouse Hill
Street address	2 TEMPUS STREET ROUSE HILL 2155
Local Government Area	THE HILLS SHIRE
Plan type and plan number	Deposited Plan 280013

## Project type

No. of residential flat buildings	2
Residential flat buildings: no. of dwellings	227
Multi-dwelling housing: no. of dwellings	0
No. of single dwelling houses	0

## Site details

Site area (m <sup>2</sup> )	4387
Roof area (m <sup>2</sup> )	2477
Non-residential floor area (m <sup>2</sup> )	13653
Residential car spaces	103
Non-residential car spaces	8





## Common area landscape

Common area lawn (m <sup>2</sup> )	570.35
Common area garden (m <sup>2</sup> )	90.44
Area of indigenous or low water use species (m <sup>2</sup> )	0

## Assessor details and thermal loads

Assessor number	20/1972
Certificate number	9AYG35LOCS
Climate zone	28

## Project score

Water	 49	Target 40
Thermal Performance	 Pass	Target Pass
Energy	 61	Target 61
Materials	 -100	Target n/a

## Description of project

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

### Residential flat buildings - North Tower A, 131 dwellings, 23 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> )
0301	2	81	0	0	0
0305	3	113	0	0	0
0403	1	52	0	0	0
0501	2	81	0	0	0
0505	1	51	0	0	0
0602	1	52	0	0	0
0606	3	113	0	0	0
0703	1	52	0	0	0
0707	3	112	0	0	0
0804	1	52	0	0	0
0901	2	80	0	0	0
0905	2	80	0	0	0
1002	1	29	0	0	0
1006	3	110	0	0	0
1103	2	81	0	0	0
1107	3	110	0	0	0
1204	1	29	0	0	0
1301	2	80	0	0	0
1305	2	80	0	0	0
1402	1	29	0	0	0
1406	3	110	0	0	0
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> )
0302	2	81	0	0	0
0306	3	112	0	0	0
0404	2	81	0	0	0
0502	1	52	0	0	0
0506	3	113	0	0	0
0603	1	52	0	0	0
0607	3	112	0	0	0
0704	1	52	0	0	0
0801	2	81	0	0	0
0805	1	51	0	0	0
0902	1	29	0	0	0
0906	3	110	0	0	0
1003	2	81	0	0	0
1007	3	110	0	0	0
1104	1	29	0	0	0
1201	2	80	0	0	0
1205	2	80	0	0	0
1302	1	29	0	0	0
1306	3	110	0	0	0
1403	2	81	0	0	0
1407	3	110	0	0	0
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> )
0303	1	52	0	0	0
0401	2	81	0	0	0
0405	3	113	0	0	0
0503	1	52	0	0	0
0507	3	112	0	0	0
0604	1	52	0	0	0
0701	2	81	0	0	0
0705	1	51	0	0	0
0802	1	52	0	0	0
0806	3	113	0	0	0
0903	2	81	0	0	0
0907	3	110	0	0	0
1004	1	29	0	0	0
1101	2	80	0	0	0
1105	2	80	0	0	0
1202	1	29	0	0	0
1206	3	110	0	0	0
1303	2	81	0	0	0
1307	3	110	0	0	0
1404	1	29	0	0	0
1501	2	80	0	0	0
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> )
0304	2	81	0	0	0
0402	2	81	0	0	0
0406	3	112	0	0	0
0504	1	52	0	0	0
0601	2	81	0	0	0
0605	1	51	0	0	0
0702	1	52	0	0	0
0706	3	113	0	0	0
0803	1	52	0	0	0
0807	3	112	0	0	0
0904	1	29	0	0	0
1001	2	80	0	0	0
1005	2	80	0	0	0
1102	1	29	0	0	0
1106	3	110	0	0	0
1203	2	81	0	0	0
1207	3	110	0	0	0
1304	1	29	0	0	0
1401	2	80	0	0	0
1405	2	80	0	0	0
1502	1	29	0	0	0

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> )
1503	2	81	0	0	0
1507	3	110	0	0	0
1604	1	29	0	0	0
1701	2	80	0	0	0
1705	2	80	0	0	0
1802	1	29	0	0	0
1806	3	110	0	0	0
1903	2	81	0	0	0
1907	3	110	0	0	0
2004	1	29	0	0	0
2101	2	80	0	0	0
2105	2	80	0	0	0

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> )
1504	1	29	0	0	0
1601	2	80	0	0	0
1605	2	80	0	0	0
1702	1	29	0	0	0
1706	3	110	0	0	0
1803	2	81	0	0	0
1807	3	110	0	0	0
1904	1	29	0	0	0
2001	2	80	0	0	0
2005	2	80	0	0	0
2102	1	29	0	0	0
2106	3	110	0	0	0

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> )
1505	2	80	0	0	0
1602	1	29	0	0	0
1606	3	110	0	0	0
1703	2	81	0	0	0
1707	3	110	0	0	0
1804	1	29	0	0	0
1901	2	80	0	0	0
1905	2	80	0	0	0
2002	1	29	0	0	0
2006	3	110	0	0	0
2103	2	81	0	0	0
2107	3	110	0	0	0

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> )
1506	3	110	0	0	0
1603	2	81	0	0	0
1607	3	110	0	0	0
1704	1	29	0	0	0
1801	2	80	0	0	0
1805	2	80	0	0	0
1902	1	29	0	0	0
1906	3	110	0	0	0
2003	2	81	0	0	0
2007	3	110	0	0	0
2104	1	29	0	0	0

### Residential flat buildings - South Tower B, 96 dwellings, 18 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> )
0301	2	81	0	1.44	0
0305	3	112	0	1.44	0
0403	2	81	0	1.44	0
0501	2	81	0	1.44	0
0505	1	51	0	0	0
0602	1	52	0	1.44	0

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> )
0302	1	52	0	1.44	0
0306	3	112	0	1.44	0
0404	2	81	0	1.44	0
0502	1	52	0	1.44	0
0506	3	113	0	0	0
0603	1	52	0	1.44	0

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> )
0303	2	81	0	1.44	0
0401	2	81	0	1.44	0
0405	3	112	0	1.44	0
0503	1	52	0	0	0
0507	3	112	0	0	0
0604	1	52	0	1.44	0

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> )
0304	2	81	0	1.44	0
0402	1	52	0	1.44	0
0406	3	112	0	1.44	0
0504	1	52	0	1.44	0
0601	2	81	0	1.44	0
0605	1	51	0	0	0

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> )
0606	3	113	0	0	0
0703	1	52	0	1.44	0
0707	3	112	0	1.44	0
0804	1	52	0	0	0
0901	2	80	0	0	0
0905	2	80	0	0	0
1002	1	29	0	0	0
1006	3	110	0	1.44	0
1103	2	81	0	0	0
1107	3	110	0	0	0
1204	1	29	0	0	0
1301	2	80	0	0	0
1305	2	80	0	0	0
1402	1	29	0	0	0
1406	3	110	0	0	0
1503	2	81	0	0	0
1507	3	110	0	0	0
1604	1	29	0	1.44	0

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> )
0607	3	112	0	0	0
0704	1	52	0	1.44	0
0801	2	81	0	1.44	0
0805	1	51	0	0	0
0902	1	29	0	0	0
0906	3	110	0	0	0
1003	2	81	0	0	0
1007	3	110	0	0	0
1104	1	29	0	0	0
1201	2	80	0	0	0
1205	2	80	0	0	0
1302	1	29	0	0	0
1306	3	110	0	0	0
1403	2	81	0	0	0
1407	3	110	0	0	0
1504	1	29	0	0	0
1601	2	80	0	0	0
1605	2	80	0	0	0

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> )
0701	2	81	0	1.44	0
0705	1	51	0	0	0
0802	1	52	0	0	0
0806	3	113	0	0	0
0903	2	81	0	0	0
0907	3	110	0	0	0
1004	1	29	0	0	0
1101	2	80	0	0	0
1105	2	80	0	1.44	0
1202	1	29	0	0	0
1206	3	110	0	0	0
1303	2	81	0	0	0
1307	3	110	0	0	0
1404	1	29	0	0	0
1501	2	80	0	0	0
1505	2	80	0	0	0
1602	1	29	0	1.44	0
1606	3	110	0	0	0

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> )
0702	1	52	0	1.44	0
0706	3	113	0	0	0
0803	1	52	0	1.44	0
0807	3	112	0	1.44	0
0904	1	29	0	0	0
1001	2	80	0	0	0
1005	2	80	0	1.44	0
1102	1	29	0	0	0
1106	3	110	0	0	0
1203	2	81	0	0	0
1207	3	110	0	0	0
1304	1	29	0	0	0
1401	2	80	0	0	0
1405	2	80	0	0	0
1502	1	29	0	1.44	0
1506	3	110	0	0	0
1603	2	81	0	0	0
1607	3	110	0	0	0

## Description of project

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

### Common areas of unit building - North Tower 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> )
Tower A Services Cabinets	180.6	Mez Services Cabinet	8.99	Tower A Chute Rooms	136.71
Tower A VRF Condenser Rooms	91.14	Roof Hot Water Plant	54.74	Tower A Lift Motor Rooms	14.91
L01-L02 Fire Stairs	84.28	Tower A Fire Stairs	414.12	L22 Lounge	175.12
L22 Bar/Dinning	81.23	L22 WC	28.44	L22 Cinema	26.71
Tower A Lobbies	1600.99				

### Common areas of unit building - South Tower 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 bank (No. 1)	-	Lift bank (No. 2)	-	L17 Steam and Sauna	22.53
L17 Gym, Yoga, Lounge	163.39	Tower B Services Cabinets	136.8	Tower B Chute Rooms	98.7
L17 Lounges	64.95	L18 Hot Water Plant	48.9	L18 Mech Plant	33.15
Tower B VRF Condensers	73.5	Tower B Lift Motor Room	15.13	MEZ Grease Arrestor	28.99
Tower B Fire Stairs	297.3	L17 WC	28.45	Tower B Lobbies	1131.88

### 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> )
B02 Carpark	2816.48	B01 Carpark	1908.57	B02 Services Cabinets	9.28
B01 Services Cabinets	16.07	B01 Comms	28.57	GF Services Cabinets	21.19
GF Main Switch Room, Meter, Substation	173.1	B02 Bulky Waste + Comm/Retail Bin Room	122.74	B01 Chute Rooms + FOGO	153.31
GF Chute + Garbage	12.9	B02 Fan Rooms	52.69	B01 Fan Rooms	32.74
B01 OSD Tank, Rainwater Tank, Cold Water Tank	273.78	B01 Fire tank Room, Fire Pump Room	125.73	B01 Grease Arrestor	18
GF FCR	43.46	B02 Storage	23.05	B02 Fire Stairs	46.43
B01 Storage	12.26	B01 Fire Stairs	48.56	B01 BTR Storage	128.39
B01 Corridor	63.43	GF Fire Stairs	145.28	GF Mail Room	40.24
GF BTR Manager Office	20.48	GF WC, Store, Cleaners	137.83	GF Lobby	562.46

# Schedule of BASIX commitments

## 1. Commitments for Residential flat buildings - North Tower A

### (a) Buildings

(i) Materials

### (b) Dwellings

(i) Water

(ii) Energy

(iii) Thermal Performance

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

(i) Water

(ii) Energy

## 2. Commitments for Residential flat buildings - South Tower B

### (a) Buildings

(i) Materials

### (b) Dwellings

(i) Water

(ii) Energy

(iii) Thermal Performance

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

(i) Water

(ii) Energy

## 3. Commitments for multi-dwelling housing

### (a) Dwellings

(i) Water

(ii) Energy

(iii) Thermal Performance and Materials

4. Commitments for single dwelling houses

(a) Dwellings

(i) Water

(ii) Energy

(iii) Thermal Performance and Materials

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

(a) Buildings 'Other'

(i) Materials

(b) 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 - North Tower A

#### (a) Buildings

(i) Materials	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) 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 "Floor types", "External wall types", "Internal wall types", "Ceiling and roof types", "Frames" and "Glazing" tables below.			✓
(b) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all specifications included in the tables below.		✓	
(c) The applicant must construct the floors, walls, roof, ceiling and roof, windows, glazed doors and skylights of the development in accordance with the specifications listed in the tables below. In the case of glazing, a 5% variance from the area values listed in the "Frames" and "Glazing" tables is permitted.	✓	✓	✓
(d) The applicant must show through receipts that the materials purchased for construction are consistent with the specifications listed in the below tables.			✓

#### Floor types

Floor type	Area (m2)	Insulation	Low emissions option
floors above habitable rooms, frame: suspended concrete slab	20907.24	fibreglass batts or roll	-

#### External wall types

External wall type	Construction type	Area (m2)	Low emissions option	Insulation
External wall type 1	concrete panel/ plasterboard, frame: light steel frame	17218.25	-	fibreglass batts or roll

#### Internal wall types

Internal wall type	Construction type	Area (m2)	Insulation
Internal wall type 1	plasterboard, frame: light steel frame	10330.95	fibreglass batts or roll

**Reinforcement concrete frames/columns**

Building has reinforced concrete frame/columns?	Volume (m <sup>3</sup> )	Low emissions option
yes	1234.39	-

**Ceiling and roof types**

Ceiling and roof type	Area (m <sup>2</sup> )	Roof Insulation	Ceiling Insulation
concrete - bare internal, frame: light steel frame	1426.55	foil/sarking	fibreglass batts or roll

**Glazing types**

**Frame types**

Single glazing (m <sup>2</sup> )	Double glazing (m <sup>2</sup> )	Triple glazing (m <sup>2</sup> )	Aluminium frames (m <sup>2</sup> )	Timber frames (m <sup>2</sup> )	uPVC frames (m <sup>2</sup> )	Steel frames (m <sup>2</sup> )	Composite frames (m <sup>2</sup> )
-	5165.47	-	5165.47	-	-	-	-

**(b) 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.	✔	✔	✔

	Fixtures					Appliances		Individual pool				Individual spa		
Dwelling no.	All shower-heads	All toilet flushing systems	All kitchen taps	All bathroom taps	HW recirculation or diversion	All clothes washers	All dish-washers	Volume (max volume)	Pool cover	Pool location	Pool shaded	Volume (max volume)	Spa cover	Spa shaded
All dwellings	3 star (> 7.5 but <= 9 L/min)	4 star	5 star	5 star	-	5 star	5 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: (aa) the kitchen cook-top and oven specified for that dwelling in the "Appliances & other efficiency measures" column of the table below;		✓	

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(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

	Cooling		Heating		Natural lighting	
Dwelling no.	living areas	bedroom areas	living areas	bedroom areas	No. of bathrooms or toilets	Main kitchen
All dwellings	1-phase airconditioning - ducted / EER 3.5 - 4.0	1-phase airconditioning - ducted / EER 3.5 - 4.0	1-phase airconditioning - ducted / EER 3.5 - 4.0	1-phase airconditioning - ducted / EER 3.5 - 4.0	0	no

	Individual pool			Individual spa		Appliances other efficiency measures				
Dwelling no.	Pool heating system	Pool Pump	Timer	Spa heating system	Timer	Kitchen cooktop/oven	Dishwasher	Clothes dryer	Indoor or sheltered clothes drying line	Private outdoor or unsheltered clothes drying line
All dwellings	-	-	-	-	-	electric cooktop & electric oven	4.5 star	2 star	no	no

<b>(iii) Thermal Performance</b>	<b>Show on DA plans</b>	<b>Show on CC/CDC plans &amp; specs</b>	<b>Certifier check</b>
(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.	✔	✔	✔
(i) The applicant must show on The plans accompanying The development application for The proposed development, The locations of ceiling fans set out in The Assessor Certificate.	✔		
(j) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), the locations of ceiling fans set out in the Assessor Certificate.		✔	

<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)	Area adjusted total load (in MJ/m <sup>2</sup> /yr)
0301	33.1	14.8	47.900
0302	48.8	6.3	55.100
0303	51.3	11.30	62.600
0304	37.5	20.30	57.800

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)	Area adjusted total load (in MJ/m <sup>2</sup> /yr)
0305	35.1	37.90	73.000
0306	24.60	46.70	71.300
0401	27.90	16.0	43.900
0402	38.9	7	45.900
0403	43.70	14.40	58.100
0404	30.4	21.40	51.800
0405	29.30	38.60	67.900
0406	20.80	47.20	68.000
0501	27.30	25.60	52.900
0502	16.4	21.00	37.400
0503	9.1	23.80	32.900
0504	9.60	23.70	33.300
0505	19.40	22.00	41.400
0506	21.10	46.80	67.900
0507	29.60	38.0	67.600
0601	26.50	28.90	55.400
0602	15.80	21.0	36.800
0603	9.20	22.0	31.200
0604	9	20.60	29.600
0605	19.4	21.30	40.700
0606	21.80	47.10	68.900
0607	29.60	37.70	67.300
0701	23.00	33.70	56.700
0702	13.90	21.00	34.900
0703	9.20	21.20	30.400
0704	9.60	23	32.600
0705	19.50	21.10	40.600
0706	21.40	44.80	66.200
0707	30	37.1	67.100
0801	17.10	39.5	56.600
0802	13.1	19.6	32.700

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)	Area adjusted total load (in MJ/m <sup>2</sup> /yr)
0803	10	20.80	30.800
0804	10.6	21.2	31.800
0805	21.10	18.30	39.400
0806	22.60	40.30	62.900
0807	31.10	33.90	65.000
0901	11.30	33.0	44.300
0903	13.90	17.70	31.600
0904	0.1	38.70	38.800
0905	21.20	17.40	38.600
0906	30.0	38.80	68.800
0907	38.50	31.50	70.000
1001	9.9	34.30	44.200
1003	13.80	18.80	32.600
1005	21.60	17.20	38.800
1006	30.0	39.50	69.500
1007	38.30	31.50	69.800
1101	10.1	34.10	44.200
1102	0.1	37.60	37.700
1103	13.50	17.80	31.300
1104	0.1	37.30	37.400
1105	21.70	18.20	39.900
1106	30.30	38.90	69.200
1107	38.20	31.40	69.600
1201	10.20	34.30	44.500
1203	14.0	17.90	31.900
1204	0.1	37.4	37.500
1205	22.1	17.70	39.800
1206	30.40	39.50	69.900
1207	38.40	32.00	70.400
1301	10.30	34.10	44.400
1303	13.90	17.60	31.500

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)	Area adjusted total load (in MJ/m <sup>2</sup> /yr)
1305	20.30	16.50	36.800
1306	31.10	37.80	68.900
1307	38.50	32.60	71.100
1401	10.30	34.0	44.300
1402	0.1	36.70	36.800
1403	14.0	17.0	31.000
1404	0.1	37.10	37.200
1405	21.60	17.70	39.300
1406	31.0	37.60	68.600
1407	38.60	30.90	69.500
1501	10.40	33.80	44.200
1502	0.1	36.1	36.200
1503	14.30	17.50	31.800
1505	21.90	17.0	38.900
1506	30.90	38.1	69.000
1507	38.70	30.80	69.500
1601	10.40	33.50	43.900
1604	0.3	40.20	40.500
1605	22.50	17.70	40.200
1606	31.10	37.90	69.000
1607	38.90	30.60	69.500
1702	0.1	35.70	35.800
1704	0.4	38.0	38.400
1706	31.30	38.40	69.700
1707	39.20	30.10	69.300
1802	0.1	36.40	36.500
1803	14.40	17.40	31.800
1804	0.4	38.30	38.700
1806	31.40	38.20	69.600
1807	39.30	30.10	69.400
1901	10.60	33.60	44.200

	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)	Area adjusted total load (in MJ/m <sup>2</sup> /yr)
1903	14.40	17.20	31.600
1904	0.4	37.60	38.000
1905	22.50	16.90	39.400
1906	31.60	38.70	70.300
1907	39.40	30.50	69.900
2001	10.70	33.30	44.000
2003	14.50	17.10	31.600
2004	0.4	36.80	37.200
2005	22.60	16.80	39.400
2006	31.70	38.40	70.100
2007	39.50	30.10	69.600
2101	21.90	41.60	63.500
2102	2.70	45.50	48.200
2103	25.40	24.80	50.200
2104	4.20	48.40	52.600
2105	33.0	25.0	58.000
2106	26.90	30.60	57.500
2107	44.60	28.70	73.300
0902, 1202	0.1	36.90	37.000
1002, 1004	0.1	37.00	37.100
1302, 1304	0.1	37.20	37.300
1504, 2002	0.1	35.90	36.000
1602, 1902	0.1	35.80	35.900
1603, 1703	14.30	17.40	31.700
1701, 1801	10.50	33.70	44.200
All other dwellings	22.50	17.10	39.600

**(c) 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	4 star (> 4.5 but <= 6 L/min)	4 star	5 star	5 star

<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
Tower A Services Cabinets	no mechanical ventilation	-	light-emitting diode	manual on / manual off	no
Mez Services Cabinet	no mechanical ventilation	-	light-emitting diode	manual on / manual off	no
Tower A Chute Rooms	ventilation exhaust only	-	light-emitting diode	motion sensors	no
Tower A VRF Condenser Rooms	ventilation (supply + exhaust)	none i.e., continuous	light-emitting diode	manual on / manual off	no
Roof Hot Water Plant	ventilation supply only	thermostatically controlled	light-emitting diode	manual on / manual off	no
Tower A Lift Motor Rooms	no mechanical ventilation	-	light-emitting diode	manual on / manual off	no
L01-L02 Fire Stairs	no mechanical ventilation	-	light-emitting diode	motion sensors	no
Tower A Fire Stairs	no mechanical ventilation	-	light-emitting diode	motion sensors	no
L22 Lounge	air conditioning system	time clock or BMS controlled	light-emitting diode	time clock and motion sensors	no
L22 Bar/Dinning	air conditioning system	time clock or BMS controlled	light-emitting diode	time clock and motion sensors	no
L22 WC	ventilation exhaust only	time clock or BMS controlled	light-emitting diode	motion sensors	no
L22 Cinema	air conditioning system	time clock or BMS controlled	light-emitting diode	manual on / manual off	no
Tower A Lobbies	ventilation supply only	time clock or BMS controlled	light-emitting diode	time clock and motion sensors	no

Central energy systems	Type	Specification
Lift bank (No. 1)	gearless traction with V V V F motor and regenerative drive	Number of levels (including basement): 20 number of levels from the bottom of the lift shaft to the top of the lift shaft: 25 number of lifts: 2 lift load capacity: >= 1001 kg but <= 1500kg
Central hot water system (No. 1)	electric heat pump – air sourced	Piping insulation (ringmain & supply risers): (a) Piping external to building: R1.0 (~38 mm); (b) Piping internal to building: R1.0 (~38 mm) (c) Unit Efficiency: 3.0 < COP <= 3.5

## 2. Commitments for Residential flat buildings - South Tower B

### (a) Buildings

(i) Materials	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) 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 "Floor types", "External wall types", "Internal wall types", "Ceiling and roof types", "Frames" and "Glazing" tables below.			✓
(b) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all specifications included in the tables below.		✓	
(c) The applicant must construct the floors, walls, roof, ceiling and roof, windows, glazed doors and skylights of the development in accordance with the specifications listed in the tables below. In the case of glazing, a 5% variance from the area values listed in the "Frames" and "Glazing" tables is permitted.	✓	✓	✓
(d) The applicant must show through receipts that the materials purchased for construction are consistent with the specifications listed in the below tables.			✓

#### Floor types

Floor type	Area (m2)	Insulation	Low emissions option
floors above habitable rooms, frame: suspended concrete slab	15393.04	fibreglass batts or roll	-

#### External wall types

External wall type	Construction type	Area (m2)	Low emissions option	Insulation
External wall type 1	concrete panel/ plasterboard,frame:light steel frame	12677	-	fibreglass batts or roll

#### Internal wall types

Internal wall type	Construction type	Area (m2)	Insulation
Internal wall type 1	plasterboard, frame:light steel frame	7606.2	fibreglass batts or roll

#### Reinforcement concrete frames/columns

Building has reinforced concrete frame/columns?	Volume (m³)	Low emissions option
yes	908.82	-

**Ceiling and roof types**

Ceiling and roof type	Area (m <sup>2</sup> )	Roof Insulation	Ceiling Insulation
concrete - bare internal, frame: light steel frame	1050.30	foil/sarking	fibreglass batts or roll

**Glazing types****Frame types**

Single glazing (m <sup>2</sup> )	Double glazing (m <sup>2</sup> )	Triple glazing (m <sup>2</sup> )	Aluminium frames (m <sup>2</sup> )	Timber frames (m <sup>2</sup> )	uPVC frames (m <sup>2</sup> )	Steel frames (m <sup>2</sup> )	Composite frames (m <sup>2</sup> )
-	3803.1	-	3803.1	-	-	-	-

**(b) 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.	✔	✔	✔

	Fixtures					Appliances		Individual pool				Individual spa		
Dwelling no.	All shower-heads	All toilet flushing systems	All kitchen taps	All bathroom taps	HW recirculation or diversion	All clothes washers	All dish-washers	Volume (max volume)	Pool cover	Pool location	Pool shaded	Volume (max volume)	Spa cover	Spa shaded
All dwellings	3 star (> 7.5 but <= 9 L/min)	4 star	5 star	5 star	-	5 star	5 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: (aa) the kitchen cook-top and oven specified for that dwelling in the "Appliances & other efficiency measures" column of the table below;		✓	

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(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		Natural lighting	
Dwelling no.	living areas	bedroom areas	living areas	bedroom areas	No. of bathrooms or toilets	Main kitchen
All dwellings	1-phase airconditioning - ducted / EER 3.5 - 4.0	1-phase airconditioning - ducted / EER 3.5 - 4.0	1-phase airconditioning - ducted / EER 3.5 - 4.0	1-phase airconditioning - ducted / EER 3.5 - 4.0	0	no

	Individual pool			Individual spa		Appliances other efficiency measures				
Dwelling no.	Pool heating system	Pool Pump	Timer	Spa heating system	Timer	Kitchen cooktop/oven	Dishwasher	Clothes dryer	Indoor or sheltered clothes drying line	Private outdoor or unsheltered clothes drying line
All dwellings	-	-	-	-	-	electric cooktop & electric oven	4.5 star	2 star	no	no

<b>(iii) Thermal Performance</b>	<b>Show on DA plans</b>	<b>Show on CC/CDC plans &amp; specs</b>	<b>Certifier check</b>
(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.	✔	✔	✔
(i) The applicant must show on The plans accompanying The development application for The proposed development, The locations of ceiling fans set out in The Assessor Certificate.	✔		
(j) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), the locations of ceiling fans set out in the Assessor Certificate.		✔	

<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)	Area adjusted total load (in MJ/m <sup>2</sup> /yr)
0301	7.4	50.6	58.000
0302	11.8	22.7	34.500
0303	1.4	49	50.400
0304	8.9	43.6	52.500

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)	Area adjusted total load (in MJ/m <sup>2</sup> /yr)
0305	36.9	38.1	75.000
0306	36	42.8	78.800
0401	5.1	48.4	53.500
0402	9.2	19.6	28.800
0403	1.7	49.9	51.600
0404	5.8	45.2	51.000
0405	29.3	38.2	67.500
0406	29.1	42.6	71.700
0501	7	42.5	49.500
0502	9.2	22.4	31.600
0503	8.8	19.9	28.700
0504	8.7	19.9	28.600
0505	20.6	20.6	41.200
0506	29.1	38.3	67.400
0507	29.7	38.1	67.800
0601	6.8	39.9	46.700
0602	9.3	22.1	31.400
0604	9.5	23.8	33.300
0605	20.3	19.9	40.200
0606	29.1	38.2	67.300
0607	29.9	38	67.900
0701	6.9	42.7	49.600
0702	9.3	20.9	30.200
0704	9.8	19.4	29.200
0705	20.6	19.3	39.900
0706	28.7	38.1	66.800
0707	30	37.7	67.700
0801	6.8	40.7	47.500
0802	10.4	18.6	29.000
0803	10.6	21.1	31.700
0804	10.4	20.9	31.300

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)	Area adjusted total load (in MJ/m <sup>2</sup> /yr)
0805	21.6	18.1	39.700
0806	32	30.9	62.900
0807	31.2	33.7	64.900
0901	21.2	17.2	38.400
0902	0.1	37.7	37.800
0903	14.6	16.1	30.700
0904	0.1	39.8	39.900
0905	21.7	17.9	39.600
0906	38.4	30.3	68.700
0907	38.2	31.6	69.800
1001	21.3	17.3	38.600
1002	0.1	37.4	37.500
1003	14.5	16.3	30.800
1004	0.1	37.1	37.200
1005	21.5	17.9	39.400
1006	38.7	32.1	70.800
1007	38.2	30.7	68.900
1101	21.6	16.7	38.300
1103	14.1	16.9	31.000
1104	0.1	36.9	37.000
1105	21.4	18.3	39.700
1106	38.9	30.7	69.600
1201	21.5	17.6	39.100
1202	0.3	39.2	39.500
1203	14.5	16.4	30.900
1204	0.1	36.2	36.300
1205	21.9	18.4	40.300
1206	38.6	30.6	69.200
1301	22	17.7	39.700
1302	0.2	38.3	38.500
1303	14.6	15.6	30.200

	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)	Area adjusted total load (in MJ/m <sup>2</sup> /yr)
1304	0.1	35.6	35.700
1305	21.6	17.6	39.200
1307	38.6	31.6	70.200
1401	21.8	17	38.800
1402	0.3	38.4	38.700
1403	13.2	18.5	31.700
1404	0.1	35.5	35.600
1405	21.1	16.9	38.000
1501	22.2	16.8	39.000
1503	14.6	16.4	31.000
1504	0.1	32.1	32.200
1505	21.9	18	39.900
1506	39.2	31.6	70.800
1507	38.6	31	69.600
1601	32.7	25.5	58.200
1602	3.7	49.7	53.400
1603	24.4	24.7	49.100
1604	2.6	48.6	51.200
1605	22	17.8	39.800
1606	39.1	31.1	70.200
0603, 0703	9.6	23.1	32.700
1102, 1502	0.3	38.3	38.600
1107, 1207	38.1	32.1	70.200
1306, 1406	38.7	31.5	70.200
All other dwellings	38.7	30.7	69.400

**(c) 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	4 star (> 4.5 but <= 6 L/min)	4 star	5 star	5 star

<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
Lift bank (No. 1)	-	-	light-emitting diode	connected to lift call button	no
Lift bank (No. 2)	-	-	light-emitting diode	connected to lift call button	no
L17 Steam and Sauna	ventilation (supply + exhaust)	time clock or BMS controlled	light-emitting diode	time clocks	no
L17 Gym, Yoga, Lounge	air conditioning system	time clock or BMS controlled	light-emitting diode	time clocks	no
Tower B Services Cabinets	no mechanical ventilation	-	light-emitting diode	manual on / manual off	no
Tower B Chute Rooms	ventilation exhaust only	-	light-emitting diode	motion sensors	no
L17 Lounges	air conditioning system	time clock or BMS controlled	light-emitting diode	time clock and motion sensors	no
L18 Hot Water Plant	ventilation supply only	thermostatically controlled	light-emitting diode	manual on / manual off	no
L18 Mech Plant	ventilation supply only	thermostatically controlled	light-emitting diode	manual on / manual off	no
Tower B VRF Condensers	ventilation (supply + exhaust)	none i.e., continuous	light-emitting diode	manual on / manual off	no
Tower B Lift Motor Room	no mechanical ventilation	-	light-emitting diode	manual on / manual off	no
MEZ Grease Arrestor	ventilation supply only	thermostatically controlled	light-emitting diode	manual on / manual off	no
Tower B Fire Stairs	no mechanical ventilation	-	light-emitting diode	motion sensors	no
L17 WC	ventilation exhaust only	time clock or BMS controlled	light-emitting diode	motion sensors	no
Tower B Lobbies	ventilation supply only	time clock or BMS controlled	light-emitting diode	time clock and motion sensors	no

Central energy systems	Type	Specification
Sauna (No. 1)	Heating source: electric resistance	Efficiency measure: manual on / timer off
Lift bank (No. 2)	gearless traction with V V V F motor and regenerative drive	Number of levels (including basement): 15 number of levels from the bottom of the lift shaft to the top of the lift shaft: 20 number of lifts: 2 lift load capacity: $\geq 1001$ kg but $\leq 1500$ kg
Central hot water system (No. 2)	electric heat pump – air sourced	Piping insulation (ringmain & supply risers): (a) Piping external to building: R1.0 (~38 mm); (b) Piping internal to building: R1.0 (~38 mm) (c) Unit Efficiency: $3.0 < COP \leq 3.5$

### 3. Commitments for multi-dwelling housing

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

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

<b>(iii) Thermal Performance and Materials</b>	<b>Show on DA plans</b>	<b>Show on CC/CDC plans &amp; specs</b>	<b>Certifier check</b>
(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.	✔	✔	✔
(i) The applicant must show on The plans accompanying The development application for The proposed development, The locations of ceiling fans set out in The Assessor Certificate.	✔		
(j) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), the locations of ceiling fans set out in the Assessor Certificate.		✔	

## 4. Commitments for single dwelling houses

### (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.	✓	✓	✓
(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.		✓	✓

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

<b>(iii) Thermal Performance and Materials</b>	<b>Show on DA plans</b>	<b>Show on CC/CDC plans &amp; specs</b>	<b>Certifier check</b>
(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.	✔	✔	✔
(i) The applicant must show on The plans accompanying The development application for The proposed development, The locations of ceiling fans set out in The Assessor Certificate.	✔		
(j) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), the locations of ceiling fans set out in the Assessor Certificate.		✔	

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

### (a) Buildings 'Other'

(i) Materials	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) 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 "Floor types", "External wall types", "Internal wall types", "Ceiling and roof types", "Frames" and "Glazing" tables below.			✓
(b) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all specifications included in the tables below.		✓	
(c) The applicant must construct the floors, walls, roof, ceiling and roof, windows, glazed doors and skylights of the development in accordance with the specifications listed in the tables below. In the case of glazing, a 5% variance from the area values listed in the "Frames" and "Glazing" tables is permitted.	✓	✓	✓
(d) The applicant must show through receipts that the materials purchased for construction are consistent with the specifications listed in the below tables.			✓

#### Floor types

Floor type	Area (m2)	Insulation	Low emissions option
concrete slab on ground, frame:	2762.2	-	none
suspended floor above garage, frame: suspended concrete slab	1946.06	-	-

#### External wall types

External wall type	Construction type	Area (m2)	Low emissions option	Insulation
External wall type 1	concrete block/ plasterboard,frame:light steel frame	8239.45	-	-

#### Internal wall types

Internal wall type	Construction type	Area (m2)	Insulation
Internal wall type 1	75 mm AAC panel, frame:light steel frame	4943.67	-

**Reinforcement concrete frames/columns**

Building has reinforced concrete frame/columns?	Volume (m <sup>3</sup> )	Low emissions option
yes	590.69	-

**Ceiling and roof types**

Ceiling and roof type	Area (m <sup>2</sup> )	Roof Insulation	Ceiling Insulation
-	-	-	

**Glazing types**

**Frame types**

Single glazing (m <sup>2</sup> )	Double glazing (m <sup>2</sup> )	Triple glazing (m <sup>2</sup> )	Aluminium frames (m <sup>2</sup> )	Timber frames (m <sup>2</sup> )	uPVC frames (m <sup>2</sup> )	Steel frames (m <sup>2</sup> )	Composite frames (m <sup>2</sup> )
-	-	-	-	-	-	-	-

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

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

Common area	Showerheads rating	Toilets rating	Taps rating	Clothes washers rating
All common areas	4 star (> 4.5 but <= 6 L/min)	4 star	5 star	5 star

Central systems	Size	Configuration	Connection (to allow for...)
Central water tank - rainwater or stormwater (No. 1)	10000	To collect run-off from at least: - 2476.86 square metres of roof area of buildings in the development - 0 square metres of impervious area in the development - 0 square metres of garden/lawn area in the development - 0 square metres of planter box area in the development (excluding, in each case, any area which drains to, or supplies, any other alternative water supply system).	- irrigation of 660.79 square metres of common landscaped area on the site - car washing in 0 car washing bays on the site
Fire sprinkler system (No. 1)	-	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
B02 Carpark	ventilation (supply + exhaust)	carbon monoxide monitor + VSD fan	light-emitting diode	zoned switching with motion sensor	no
B01 Carpark	ventilation (supply + exhaust)	carbon monoxide monitor + VSD fan	light-emitting diode	zoned switching with motion sensor	no
B02 Services Cabinets	no mechanical ventilation	-	light-emitting diode	manual on / manual off	no
B01 Services Cabinets	no mechanical ventilation	-	light-emitting diode	manual on / manual off	no
B01 Comms	air conditioning system	none i.e., continuous	light-emitting diode	manual on / manual off	no
GF Services Cabinets	ventilation supply only	thermostatically controlled	light-emitting diode	manual on / manual off	no
GF Main Switch Room, Meter, Substation	ventilation supply only	thermostatically controlled	light-emitting diode	manual on / manual off	no
B02 Bulky Waste + Comm/ Retail Bin Room	ventilation exhaust only	-	light-emitting diode	motion sensors	no
B01 Chute Rooms + FOGO	ventilation exhaust only	-	light-emitting diode	motion sensors	no
GF Chute + Garbage	ventilation exhaust only	-	light-emitting diode	motion sensors	no
B02 Fan Rooms	ventilation supply only	thermostatically controlled	light-emitting diode	manual on / manual off	no
B01 Fan Rooms	ventilation supply only	thermostatically controlled	light-emitting diode	manual on / manual off	no
B01 OSD Tank, Rainwater Tank, Cold Water Tank	ventilation supply only	thermostatically controlled	light-emitting diode	manual on / manual off	no
B01 Fire tank Room, Fire Pump Room	ventilation supply only	thermostatically controlled	light-emitting diode	manual on / manual off	no
B01 Grease Arrestor	ventilation supply only	thermostatically controlled	light-emitting diode	manual on / manual off	no
GF FCR	ventilation supply only	thermostatically controlled	light-emitting diode	manual on / manual off	no

Common area	Common area ventilation system		Common area lighting		
	Ventilation system type	Ventilation efficiency measure	Primary type of artificial lighting	Lighting efficiency measure	Lighting control system/ BMS
B02 Storage	no mechanical ventilation	-	light-emitting diode	motion sensors	no
B02 Fire Stairs	no mechanical ventilation	-	light-emitting diode	motion sensors	no
B01 Storage	no mechanical ventilation	-	light-emitting diode	motion sensors	no
B01 Fire Stairs	no mechanical ventilation	-	light-emitting diode	motion sensors	no
B01 BTR Storage	no mechanical ventilation	-	light-emitting diode	motion sensors	no
B01 Corridor	ventilation supply only	time clock or BMS controlled	light-emitting diode	motion sensors	no
GF Fire Stairs	no mechanical ventilation	-	light-emitting diode	motion sensors	no
GF Mail Room	ventilation (supply + exhaust)	time clock or BMS controlled	light-emitting diode	motion sensors	no
GF BTR Manager Office	air conditioning system	time clock or BMS controlled	light-emitting diode	time clock and motion sensors	no
GF WC, Store, Cleaners	ventilation exhaust only	time clock or BMS controlled	light-emitting diode	motion sensors	no
GF Lobby	air conditioning system	time clock or BMS controlled	light-emitting diode	time clock and motion sensors	no

Central energy systems	Type	Specification
Alternative energy supply	Photovoltaic system	Rated electrical output (min): 50 peak kW
Other	Building management system installed?: yes Active power factor correction installed?: yes	-

## 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).