Illoura Place

28 Elizabeth Street, Liverpool

BASIX Report

Prepared for: Altis Bulky Retail Pty Ltd as trustee for Altis ARET Sub Trust 20 ("Altis")

Date: 28/10/2021

Prepared by: Zac Duryea

Ref: 301350263

Stantec Australia Pty Ltd
Level 6, Building B, 207 Pacific Highway, St Leonards NSW 2065
Tel: +61 2 8484 7000 Web: www.stantec.com

\\WGE-SYD-FS-01\PROJECTS\301350263\PROJECT DOCUMENTATION\SUSTAINABILITY\SECTION J\BASIX\SU-RE-BASIX_002.DOCX

Stantec

Revision

Revision	Date	Comment	Prepared By	Approved By
1	16/07/2021	Draft DA Issue	ZDU	MB
2	23/07/2021	DA Issue (Draft Certificates)	ZDU	MB
3	10/08/2021	DA Issue Updated (Draft Certificates)	ZDU	MB
4	28/10/2021	DA Issue	ZDU	MB

Qualifications to this Report

The following qualifications apply to this report:

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

Disclaimer

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

Prepared by:

Zac Duryea

Sustainability Engineer

Stantec Australia Pty Ltd

Approved by:

Mathias Bressan

Sustainability Project Engineer

Stantec Australia Pty Ltd

Contents

1. Executive Summary

In summary, we can confirm the following outcome of the BASIX analysis for the Illoura Place project at 28 Elizabeth Street, Liverpool, NSW, 2170:

- Based on the assumptions & commitments outlined in this report, the proposed residential building component can achieve BASIX Certification with the following scores:
  - Water: 41% (Required target: 40%)
  - Thermal Comfort: pass (Required target: pass)
  - Energy: 28% (Required target: 25%)
- The formal BASIX certificate has been included as a supplementary document in addition to this report (Appendix D).
- Further information regarding the thermal comfort and building fabric specification has been outlined within Section 5 of this report. Note this specification detail forms the basis of BASIX compliance and therefore must be documented within the project design/specification.
- Our assessment works have been conducted based on the Architectural DA Package Issue (dated 20/10/2021) issued by Turner Architects.

2. Introduction

Stantec have completed a Building Sustainability Index (BASIX) assessment for the BCA Class 2 Residential Apartment (and associated areas) of the proposed project Illoura Place located at 28 Elizabeth Street, Liverpool, NSW, 2170.

Based on information provided to date and the inputs & commitments outlined in this report, the following BASIX outcome can be achieved:

- Water: 41% (Required target: 40%)
- Thermal Comfort: pass (Required target: pass)
- Energy: 28% (Required target: 25%)

Design Target

We understand that the residential component of the project is required to demonstrate minimum BASIX compliance consistent with the development application (Class 2 Multi-unit residential dwellings).

	BASIX Target
Energy	25
Water	40

Table 1: BASIX Targets

Building Sustainability Index (BASIX)

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

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

Development Overview

The proposed development includes:

- 312 apartments units
- 4 floors of Class 5 office space
- Shared end of trip facilities
- Ground Floor retail spaces
- Separate residential and commercial lobbies
- Shared residential swimming pool, gym, outdoor kitchen area and communal lounge.
- 6 floors of basement car parking & back of house facilities

3. Design Documentation

The following assessment is based on the below architectural drawing package issued by Turner Architects (Architectural DA Issue dated 20/10/2021) which includes:

Drawing Number	Drawing Name	Date
DA-001-001	Title Sheet	20/10/2021
DA-010-010	Context Plan	20/10/2021
DA-010-011	Site Plan	20/10/2021
DA-010-013	Site Analysis	20/10/2021
DA-110-001	Basement 06	20/10/2021
DA-110-002	Basement 04-05	20/10/2021
DA-110-003	Basement 03	20/10/2021
DA-110-004	Basement 02	20/10/2021
DA-110-005	Basement 01	20/10/2021
DA-110-009	Ground Level	20/10/2021
DA-110-010	Mezzanine	20/10/2021
DA-110-011	Level 01	20/10/2021
DA-110-012	Level 02	20/10/2021
DA-110-013	Level 03	20/10/2021
DA-110-014	Level 04	20/10/2021
DA-110-015	Level 05	20/10/2021
DA-110-016	Typical Level A Lowrise (Level 6/10)	20/10/2021
DA-110-017	Typical Level B Lowrise (Level 7/11)	20/10/2021
DA-110-018	Typical Level C Lowrise (Level 8/12)	20/10/2021
DA-110-019	Typical Level D Lowrise (Level 9/13)	20/10/2021
DA-110-116	Typical Level A Highrise (Level 14/18/22/26/30)	20/10/2021
DA-110-117	Typical Level B Highrise (Level 15/19/23/27/31)	20/10/2021
DA-110-118	Typical Level C Highrise (Level 16/20/24/28/32)	20/10/2021
DA-110-119	Typical Level D Highrise (Level 17/21/25/29)	20/10/2021
DA-110-330	Level 33	20/10/2021
DA-110-340	Roof Level	20/10/2021
DA-210-101	North Elevation - Elizabeth Street	20/10/2021
DA-210-201	East Elevation - Through Site Link	20/10/2021
DA-210-301	South Elevation - Rear laneway	20/10/2021
DA-210-401	West Elevation - George Street	20/10/2021
DA-310-101	Section AA	20/10/2021
DA-310-201	Section BB	20/10/2021

Note:

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

4. Thermal Comfort Design Assessment

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

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

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

Illoura Place	Heating Load (MJ/m2/year)	Cooling Load (MJ/m2/year)
Maximum Average allowed in BASIX	**55.7**	**56.2**
Development Average	**33.6**	**26.8**

Note: Summary of NatHERS Thermal Performance Results is attached in **Appendix B**.

Energy Modelling Software

Thermal comfort compliance has been demonstrated via the simulation method within BASIX. Stantec have conducted energy simulations utilising FirstRate5 software (Version 5.3.1) which is approved under the BASIX Thermal Comfort Protocol (July 2019).

Energy Modelling Limitations

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

5. Design Specification

5.1 BASIX Compliant Design Specification Summary

5.1.1 Design Specification – Building Fabric

Design Specification – BUILDING FABRIC
External Walls: All units are to have a minimum of R2.5 insulation added to walls to give a Total R-Value of R_t2.8. **Walls to Internal Corridors or Non-Conditioned Zones:** Total R-Value of R_t1.8 modelled between apartments and corridors. **Internal Walls to Adjoining Apartment:** As the adjoining apartment is considered a conditioned space there is no thermal insulation requirement for this wall. Therefore, the insulation to this wall shall be as per acoustic requirements or other design requirements. Refer to **Appendix A** for Insulation Mark-up.
Ceilings: Floor to ceiling heights were modelled as indicated on the architectural drawings received.
Roof Type: A minimum of R3.0 roof insulation to be added to all Residential Apartment Units with an exposed roof (Minimum Total R-value R3.2 to be achieved). Roof colour for solar absorptance assumed to be 'Medium'. Apartments that required roof insulation include: 32.01, 32.02, 32.03, 32.04, 33.01, 33.02, 33.03, 33.04, 33.05, 33.06, 33.07. Refer to **Appendix A** for Insulation Mark-up.
Suspended Floor Slabs: Generally: Add R2.0 insulation to the underside of suspended floor slabs for apartment units with exposed floors. Add R1.0 insulation to the underside of suspended floor slabs for apartment units with unconditioned corridor/enclosed room below. Refer to **Appendix A** for Insulation Mark-up.
Floor Coverings: The following design specifications have been included within the NatHERS Assessments: • Ceramic tiles to the wet areas (Bathroom and Laundry) • Carpet to bedrooms and study • Timber to the Living/Kitchen spaces

Windows and Glazed Doors (Fixed and/or Operable):

U-Value of 3.7 W/m²K and SHGC of 0.45 is the minimum requirement to the below apartment units:

(This potentially indicates Double Glazed Low-e Neutral Glazing, to be confirmed by Façade Contractor)

- 32.01
- 33.07

U-Value of 4.5 W/m²K and SHGC of 0.45 is the minimum requirement to all the remaining apartments external windows within the development.

(This potentially indicates Single Glazed Low-e Neutral Glazing, to be confirmed by Façade Contractor)

Refer to **Appendix B** for full list of glazing requirements per individual apartment.

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

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

5.1.2 Design Specification – Water

Design Specification - WATER
Alternative Water Supply 10 kL Rainwater Tank has been specified. To supply Level 05 Landscape irrigation.
Fire Sprinkler System: Fire sprinkler test water system have been included as closed system in BASIX assessment (i.e. fire sprinkler test water to be recirculated back into fire sprinkler tank).
Outdoor Pool An outdoor uncovered pool with a volume of 87.3 kL is located on Level 05.
Fixtures & Fittings: We note that fixtures with the following WELS ratings have been included in the BASIX Assessment: **Common Area (if applicable)** We note that fixtures with the following WELS ratings have been included in the BASIX Assessment: • 4 Star WELS minimum rated Showerheads (> 6 but <= 7.5L/min) • 4 Star WELS minimum rated Toilets • 6 Star WELS minimum rated taps • Nil common clothes washers **All dwellings Water Fixtures & Fittings:** • 4 Star WELS minimum rated Showerheads (> 6 but <= 7.5L/min) • 4 Star WELS minimum rated Toilets • 6 Star WELS minimum rated kitchen and bathroom Taps We note a reduction in the quality of these appliances will affect the water aspect of the BASIX rating.
Dwelling Appliance Specifications We note that appliances with the following WELS ratings have been included in the BASIX Assessment: • 2 Star WELS minimum rated Dishwasher We note a reduction in the quality of these appliances will affect the water aspect of the BASIX rating.
Car Washing Bays 1 residential car wash bay in the basement supplied by rainwater tank

5.1.3 Design Specification - Energy

Design Specification - ENERGY
Solar Photovoltaics 85 kW capacity PV panel has been specified within the BASIX certificate.
Hot Water System A centralised hot water system, of electric heat pump has been specified within the BASIX certificate. Domestic Hot Water pipework is required to have minimum R0.6 insulation. It should be noted that a less efficient hot water system will significantly affect the rating of the BASIX Energy Target
Pool Heating System An outdoor pool with solar heating system only with pumps controlled by timer has been specified within the BASIX certificate.
Mechanical Ventilation Systems **Common Areas:** • Basement Carparks – Mechanical ventilation supply & exhaust with carbon monoxide monitor + VSD fan; • L5 Gym, L5 Community space, Ground floor lobby, concierge and associated support areas, GF FCR – Air conditioning system with time clock or BMS controlled; • Comms Room - Air conditioning system, thermostatically controlled • End of trip facilities, waste rooms – Mechanical ventilation exhaust only with time clock or BMS controlled; • Main switch room, B1 Hot Water Plant Room, B1 Potable cold water – Mechanical ventilation supply with thermostatically controlled; • Fire stairs, residential corridors, DAS room, storage rooms– no mechanical ventilation; • B1 PCA generator room and B1 Fire pump room - Mechanical ventilation supply and exhaust with thermostatically controlled;
Air Leakage Kitchen Exhaust will be via a ducted range-hood to the external façade or roof. All bathrooms and ensuites exhaust to be via a ducted exhaust fan to external façade or roof. Back-draft dampers must be installed to prevent air infiltration.
Dwelling Air-Conditioning Systems: Reverse cycle air-conditioning units (single phase) in each apartment to Living Room and Bedrooms – Min EER3.0-3.5. (zoned)
Dwelling Heating Systems: Reverse cycle air-conditioning units (single phase) in each apartment to Living Room and Bedrooms – Min EER3.5-4.0. (zoned)
Lighting

Common Areas:

Primary lighting system type: Light Emitting Diode.

- Time Clock to L5 Gym
- Zoned switching and motion sensors to basement carpark;
- Connection to lift call button to lifts;
- Motion sensors to all other common areas including waste rooms, fire stairs, all plant rooms , L6 Communal Lounge, GF Lobby and Concierge, EOT facilities, hallways and corridors;

Dwellings:

Dedicated LED Lamps.

Vertical Transportation

Gearless traction lifts with VVVF regenerative drive motor serving a total of 39 RL storeys has been specified within the BASIX certificate.

Appliance Specifications

The following minimum energy performance specifications have been included within the BASIX assessment:

- Induction cooktop and electric oven.
- Min. 3.5 Energy Star rated Dishwashers
- Min. 2.0 Energy Star rated Clothes dryers
- Min. 2.5 Star Refrigerator

We note a reduction in the quality of these appliances will affect the energy aspect of the BASIX rating.

Other

- Outdoor clothes drying line
- Air conditioning day-night zoned between bedrooms and living areas

6. BASIX Certification Detail

Project Summary	
Project Name	Illoura Place
Street Address	28 Elizabeth Street, Liverpool, NSW, 2170
Local Government Area	Liverpool City Council
Plan Type / Number	DP 1261270
Lot No#	1
Section No#	-
No. of Residential Buildings	1
No. of units in Residential Flat Buildings	312
No. of multi-dwelling houses	-
No. of single dwelling houses	-
BASIX Certificate No#	**1224442M**
Project Score	
Water	41%
Thermal Comfort	Pass
Energy	28%

Appendix A Insulation Markup

Legend

- Total R3.2 to Roof/Ceiling
- Total R2.0 to Soffit
- Total R2.8 to External Walls
- Total R1.8 to Internal Walls

Stantec

PROJECT :	28 Elizabeth Street, Liverpool
PROJECT NUMBER :	301350263-SYD-G
SKETCH TITLE :	Insulation Mark-up
AUTHOR :	KPEN
DATE :	28/10/2021

Insulation required for commercial areas are dictated by Section J and are not covered in the BASIX Report.

ELIZABETH STREET

GEORGE STREET

SERVICE LANE WAY

SITE BOUNDARY

8m EASEMENT

2.5m DCP SETBACK (STREET SETBACK + ABOVE PARAPET)

THROUGH-SITE LINK

26 ELIZABETH STREET

TERRACE

COMMERCIAL LEVEL 04

CONDENSER PLANT ROOM

AMENITIES AIRLOCK

FEMALE 9 WC

UNISEX ACC. WC

MALE 5 WC 3 LR

SKYLIGHT TO RESIDENTIAL LOBBY BELOW

CARPARK ENTRY/ EXIT

8,800 | 8,800 | 8,800 | 8,800 | 8,800 | 7,950

5,205 | 8,630 | 8,800 | 8,400 | 8,400

GENERAL ARRANGEMENT PLANS LEGEND

NOTE: WHERE NOMINATED ON DRAWINGS OR SCHEDULES A NUMERICAL SUFFIX INDICATES MULTIPLE TYPES I.E. BAL1=BALUSTRADE TYPE 1, ETC. REFER TO ARCHITECTURAL SCHEDULES FOR FURTHER INFORMATION

AC	AIR CONDITIONING
AHD	AUSTRALIAN HEIGHT DATUM
AH	ACCESS HATCH
AP	ACCESS PANEL
AWN	AWNING
BT	BATHROOM
B1,2...	BEDROOM 1, BEDROOM 2, ETC.
BT	BATHROOM
BAL	BALUSTRADE
BKS	BICYCLE STORAGE
BY	BALCONY
CLD	CLADDING
CLNR	CLEANER STORE
COF	CONCRETE OFF FORM
D	DINING
E	ENTRY
ELEC	ELECTRICAL SERVICES
EN	ENSUITE
EXH	EXHAUST
FCR	FIRE CONTROL ROOM
FHR	FIRE HOSE REEL
FIP	FIRE INDICATOR PANEL
FEP_01,02...	FIRE EGRESS PASSAGE NO.1, 2, ETC.
FS1, 2...	FIRE STAIR NO.1, 2, ETC.
GBR	GARBAGE ROOM
GBC	GARBAGE CHUTE
GC	GLASS CLEAR
GD	GLASS, DECORATIVE
GHR	GARBAGE HOLDING ROOM
H	HYDRAULIC SERVICES
K	KITCHEN
L1, 2...	LIFT NO.1, 2, ETC.
L	LIVING
LY	LAUNDRY
LV	LOUVRE
M	MECHANICAL SERVICES
MV	MECHANICAL VENT
P	PANTRY
PF	PAINT FINISH
RF	REFRIGERATOR
RL	RELATIVE LEVEL TO AHD
S	STORE
SCN	SCREEN
SSL	STRUCTURAL SLAB LEVEL
ST_01	STAIR NO.1, 2, ETC.
TYP.	TYPICAL
WC	WC

NOTES

CLIENT

Altis Bulky Retail Pty Ltd as trustee for Altis ARET Sub Trust 20
14/60 Castlereagh Street,
Sydney, NSW, 2000

ALTIS PROPERTY PARTNERS

ILLOURA PLACE

Rev	Date	Approved by	Revision Notes
S1	20.10.21	JMC	Issued for Development Application

Project Title
Illoura Place
28 Elizabeth Street, Liverpool, NSW 2170, Australia

Drawing Title
GA Plans
Level 04

Scale: 1:150 @A1, 50%@A3
Project No.: 20089
Drawn by: AP
North
Status: Development Application
Dwg No.: DA-110-014
Rev: S1

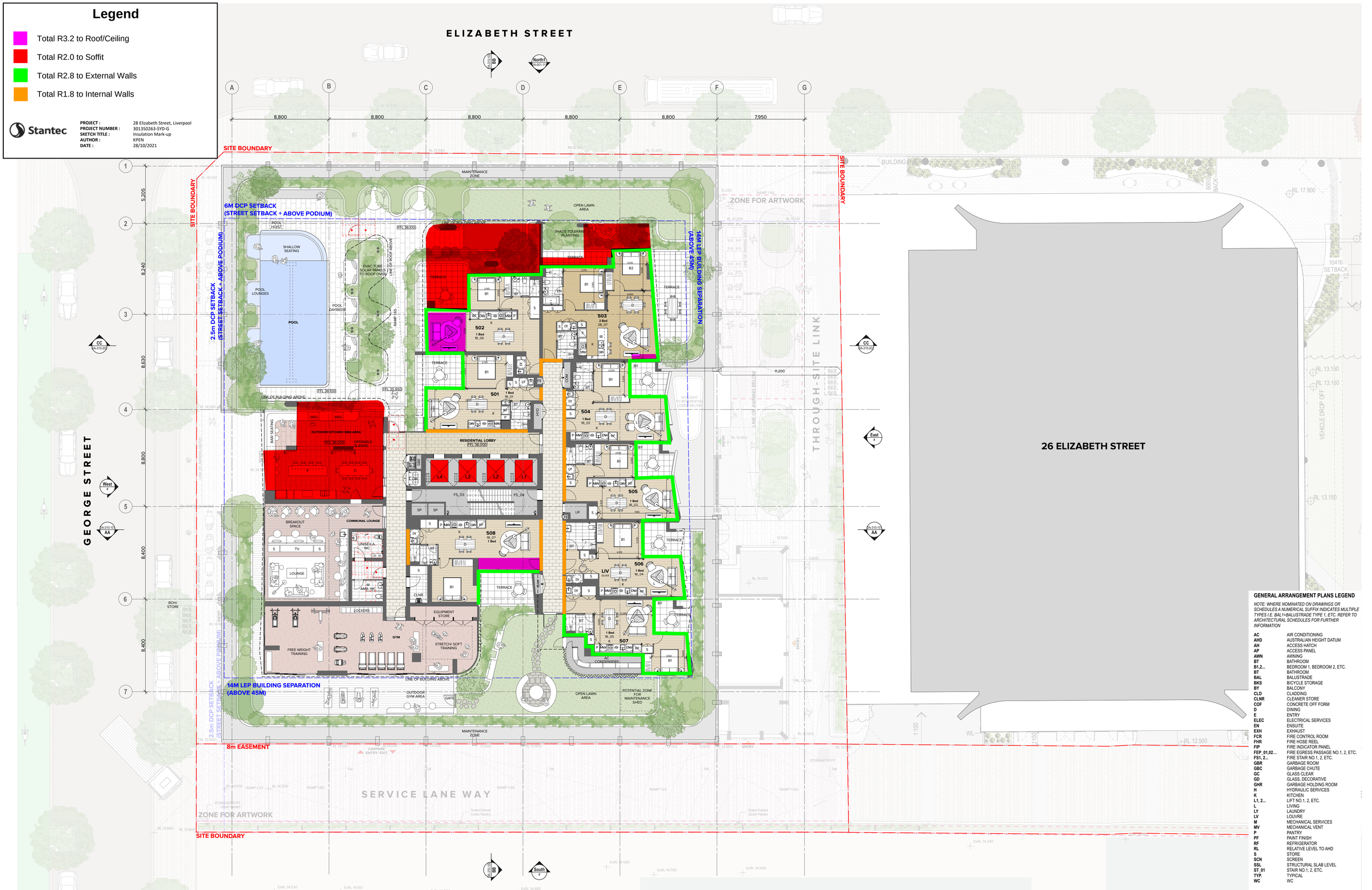
TURNER
Level 7 ONE Oxford Street
Darlinghurst NSW 2010
AUSTRALIA
T +61 2 8668 0000
F +61 2 8668 0088
turnerstudio.com.au

Legend

- Total R3.2 to Roof/Ceiling
- Total R2.0 to Soffit
- Total R2.8 to External Walls
- Total R1.8 to Internal Walls

Stantec

PROJECT :	28 Elizabeth Street, Liverpool
PROJECT NUMBER :	301350263-SYD-G
SKETCH TITLE :	Insulation Mark-up
AUTHOR :	KPEN
DATE :	28/10/2021



GENERAL ARRANGEMENT PLANS LEGEND

NOTE: WHERE NOMINATED ON DRAWINGS OR SCHEDULES A NUMERICAL SUFFIX INDICATES MULTIPLE TYPES I.E. BAL1=BALUSTRADE TYPE 1, ETC. REFER TO ARCHITECTURAL SCHEDULES FOR FURTHER INFORMATION

AC	AIR CONDITIONING
AHD	AUSTRALIAN HEIGHT DATUM
AH	ACCESS HATCH
AP	ACCESS PANEL
AWN	AWNING
BT	BATHROOM
B1,2...	BEDROOM 1, BEDROOM 2, ETC.
BT	BATHROOM
BAL	BALUSTRADE
BKS	BICYCLE STORAGE
BY	BALCONY
CLD	CLADDING
CLNR	CLEANER STORE
COF	CONCRETE OFF FORM
D	DINING
E	ENTRY
ELEC	ELECTRICAL SERVICES
EN	ENSUITE
EXH	EXHAUST
FCR	FIRE CONTROL ROOM
FHR	FIRE HOSE REEL
FIP	FIRE INDICATOR PANEL
FEP_01,02...	FIRE EGRESS PASSAGE NO.1, 2, ETC.
FS1, 2...	FIRE STAIR NO.1, 2, ETC.
GBR	GARBAGE ROOM
GBC	GARBAGE CHUTE
GC	GLASS CLEAR
GD	GLASS, DECORATIVE
GHR	GARBAGE HOLDING ROOM
H	HYDRAULIC SERVICES
K	KITCHEN
L1, 2...	LIFT NO.1, 2, ETC.
L	LIVING
LY	LAUNDRY
LV	LOUVRE
M	MECHANICAL SERVICES
MV	MECHANICAL VENT
P	PANTRY
PF	PAINT FINISH
RF	REFRIGERATOR
RL	RELATIVE LEVEL TO AHD
S	STORE
SCN	SCREEN
SSL	STRUCTURAL SLAB LEVEL
ST_01	STAIR NO.1, 2, ETC.
TYP.	TYPICAL
WC	WC

NOTES

CLIENT

Altis Bulky Retail Pty Ltd as trustee for Altis ARET Sub Trust 20
14/60 Castlereagh Street,
Sydney, NSW, 2000

ALTIS PROPERTY PARTNERS

ILLOURA PLACE

Rev	Date	Approved by	Revision Notes
S1	20.10.21	JMC	Issued for Development Application

Project Title
Illoura Place
28 Elizabeth Street, Liverpool, NSW 2170, Australia

Drawing Title
GA Plans
Level 05

Scale	Project No.	Drawn by	North
1:150 @A1, 50%@A3	20089	AP	
Status	Dwg No.	Rev	
Development Application	DA-110-015	S1	

TURNER

Level 7 ONE Oxford Street
Darlinghurst NSW 2010
AUSTRALIA
T +61 2 8668 0000
F +61 2 8668 0088
turnerstudio.com.au

Legend

- Total R3.2 to Roof/Ceiling
- Total R2.0 to Soffit
- Total R2.8 to External Walls
- Total R1.8 to Internal Walls

Stantec

PROJECT :	28 Elizabeth Street, Liverpool
PROJECT NUMBER :	301350263-SYD-G
SKETCH TITLE :	Insulation Mark-up
AUTHOR :	KPEN
DATE :	28/10/2021

ELIZABETH STREET

GEORGE STREET

SITE BOUNDARY

6M DCP SETBACK (STREET SETBACK + ABOVE PODIUM)

2.5m DCP SETBACK (STREET SETBACK + ABOVE PODIUM)

14M LEP BUILDING SEPARATION (ABOVE 45M)

8m EASEMENT

LINE OF PODIUM BELOW

LINE OF BUILDING ABOVE

MAINTENANCE ZONE

OPEN LAWN AREA

ZONE FOR ARTWORK

POOL LOUNGES

SHALLOW SEATING

POOL

POOL DAYBEDS

EVAC TUBE SOLAR PANELS TO ROOF OVER

LINE OF ROOF ABOVE

RAMP 165

TERRACE

LOBBY

OUTDOOR GYM AREA

GATE

POTENTIAL ZONE FOR MAINTENANCE SHED

CONDENSERS

THROUGH-SITE LINK

SERVICE LANE WAY

CARPARK ENTRY/ EXIT

BOH/ STORE

ENTRY

VEHICLE DROP OFF

26 ELIZABETH STREET

LEVEL 10

LEVEL 06

FACADE SECTION KEY

= REPEATING FACADE DETAIL

GENERAL ARRANGEMENT PLANS LEGEND

NOTE: WHERE NOMINATED ON DRAWINGS OR SCHEDULES A NUMERICAL SUFFIX INDICATES MULTIPLE TYPES I.E. BAL1=BALUSTRADE TYPE 1, ETC. REFER TO ARCHITECTURAL SCHEDULES FOR FURTHER INFORMATION

AC	AIR CONDITIONING
AHD	AUSTRALIAN HEIGHT DATUM
AH	ACCESS HATCH
AP	ACCESS PANEL
AWN	AWNING
BT	BATHROOM
B1,2...	BEDROOM 1, BEDROOM 2, ETC.
BT	BATHROOM
BAL	BALUSTRADE
BKS	BICYCLE STORAGE
BY	BALCONY
CLD	CLADDING
CLNR	CLEANER STORE
COF	CONCRETE OFF FORM
D	DINING
E	ENTRY
ELEC	ELECTRICAL SERVICES
EN	ENSUITE
EXH	EXHAUST
FCR	FIRE CONTROL ROOM
FHR	FIRE HOSE REEL
FIP	FIRE INDICATOR PANEL
FEP_01,02...	FIRE EGRESS PASSAGE NO.1, 2, ETC.
FS1, 2...	FIRE STAIR NO.1, 2, ETC.
GBR	GARBAGE ROOM
GBC	GARBAGE CHUTE
GC	GLASS CLEAR
GD	GLASS, DECORATIVE
GHR	GARBAGE HOLDING ROOM
H	HYDRAULIC SERVICES
K	KITCHEN
L1, 2...	LIFT NO.1, 2, ETC.
L	LIVING
LY	LAUNDRY
LV	LOUVRE
M	MECHANICAL SERVICES
MV	MECHANICAL VENT
P	PANTRY
PF	PAINT FINISH
RF	REFRIGERATOR
RL	RELATIVE LEVEL TO AHD
S	STORE
SCN	SCREEN
SSL	STRUCTURAL SLAB LEVEL
ST_01	STAIR NO.1, 2, ETC.
TYP.	TYPICAL
WC	WC

NOTES

DLCS Quality Endorsed Company ISO 9001:2015, Registration Number 20476
Nominated Architect: Nicholas Turner 6685, ABN 86 094 694 911

CLIENT

Altis Bulky Retail Pty Ltd as trustee for Altis ARET Sub Trust 20
14/60 Castlereagh Street,
Sydney, NSW, 2000

ALTIS PROPERTY PARTNERS

ILLOURA PLACE

Rev	Date	Approved by	Revision Notes
S1	20.10.21	JMC	Issued for Development Application

Project Title
Illoura Place
28 Elizabeth Street, Liverpool, NSW 2170, Australia

Drawing Title
GA Plans
Typical Level A Lowrise (Level 6/10)

Scale	Project No.	Drawn by	North
1:150 @A1, 50%@A3	20089	AP	
Status	Dwg No.	Rev	
Development Application	DA-110-016	S1	

TURNER

Level 7 ONE Oxford Street
Darlinghurst NSW 2010
AUSTRALIA
T +61 2 8668 0000
F +61 2 8668 0088
turnerstudio.com.au

Legend

- Total R3.2 to Roof/Ceiling
- Total R2.0 to Soffit
- Total R2.8 to External Walls
- Total R1.8 to Internal Walls

Stantec

PROJECT :	28 Elizabeth Street, Liverpool
PROJECT NUMBER :	301350263-SYD-G
SKETCH TITLE :	Insulation Mark-up
AUTHOR :	KPEN
DATE :	28/10/2021

GENERAL ARRANGEMENT PLANS LEGEND

NOTE: WHERE NOMINATED ON DRAWINGS OR SCHEDULES A NUMERICAL SUFFIX INDICATES MULTIPLE TYPES I.E. BAL1=BALUSTRADE TYPE 1, ETC. REFER TO ARCHITECTURAL SCHEDULES FOR FURTHER INFORMATION

AC	AIR CONDITIONING
AHD	AUSTRALIAN HEIGHT DATUM
AH	ACCESS HATCH
AP	ACCESS PANEL
AWN	AWNING
BT	BATHROOM
B1,2...	BEDROOM 1, BEDROOM 2, ETC.
BT	BATHROOM
BAL	BALUSTRADE
BKS	BICYCLE STORAGE
BY	BALCONY
CLD	CLADDING
CLNR	CLEANER STORE
COF	CONCRETE OFF FORM
D	DINING
E	ENTRY
ELEC	ELECTRICAL SERVICES
EN	ENSUITE
EXH	EXHAUST
FCR	FIRE CONTROL ROOM
FHR	FIRE HOSE REEL
FIP	FIRE INDICATOR PANEL
FEP_01,02...	FIRE EGRESS PASSAGE NO.1, 2, ETC.
FS1, 2...	FIRE STAIR NO.1, 2, ETC.
GBR	GARBAGE ROOM
GBC	GARBAGE CHUTE
GC	GLASS CLEAR
GD	GLASS, DECORATIVE
GHR	GARBAGE HOLDING ROOM
H	HYDRAULIC SERVICES
K	KITCHEN
L1, 2...	LIFT NO.1, 2, ETC.
L	LIVING
LY	LAUNDRY
LV	LOUVRE
M	MECHANICAL SERVICES
MV	MECHANICAL VENT
P	PANTRY
PF	PAINT FINISH
RF	REFRIGERATOR
RL	RELATIVE LEVEL TO AHD
S	STORE
SCN	SCREEN
SSL	STRUCTURAL SLAB LEVEL
ST_01	STAIR NO.1, 2, ETC.
TYP.	TYPICAL
WC	WC

CLIENT

Altis Bulky Retail Pty Ltd as trustee for Altis ARET Sub Trust 20
14/60 Castlereagh Street,
Sydney, NSW, 2000

ALTIS PROPERTY PARTNERS

ILLOURA PLACE

Rev	Date	Approved by	Revision Notes
S1	20.10.21	JMC	Issued for Development Application

Project Title
Illoura Place
28 Elizabeth Street, Liverpool, NSW 2170, Australia

Drawing Title
GA Plans
Typical Level B Lowrise (Level 7/11)

Scale	1:150 @A1, 50%@A3
Status	Development Application
Project No.	20089
Dwg No.	DA-110-017
Drawn by	AP
Rev	S1
North	

TURNER
Level 7 ONE Oxford Street
Darlinghurst NSW 2010
AUSTRALIA
T +61 2 8668 0000
F +61 2 8668 0088
turnerstudio.com.au

Legend

- Total R3.2 to Roof/Ceiling
- Total R2.0 to Soffit
- Total R2.8 to External Walls
- Total R1.8 to Internal Walls

Stantec

PROJECT :	28 Elizabeth Street, Liverpool
PROJECT NUMBER :	301350263-SYD-G
SKETCH TITLE :	Insulation Mark-up
AUTHOR :	KPEN
DATE :	28/10/2021

ELIZABETH STREET

GEORGE STREET

SITE BOUNDARY

6M DCP SETBACK (STREET SETBACK + ABOVE PODIUM)

2.5m DCP SETBACK (STREET SETBACK + ABOVE PODIUM)

14M LEP BUILDING SEPARATION (ABOVE 45M)

14M LEP BUILDING SEPARATION (ABOVE 45M)

8m EASEMENT

SITE BOUNDARY

THROUGH-SITE LINK

ZONE FOR ARTWORK

SERVICE LANE WAY

LOBBY

MAINTENANCE ZONE

OPEN LAWN AREA

POOL

SHALLOW SEATING

POOL LOUNGES

POOL DAYBEDS

TERRACE

OUTDOOR GYM AREA

POTENTIAL ZONE FOR MAINTENANCE SHED

CONDENSERS

LINE OF BUILDING ABOVE

LINE OF AWNING ABOVE

EVAC TUBE SOLAR PANELS TO ROOF OVER

LINE OF ROOF ABOVE

804 — 2 Bed 2B_06 — LIV

803 — 2 Bed 2B_05

802 — 2 Bed 2B_04

805 — 1 Bed 1B_01

806 — 3 Bed 3B_01

807 — 2 Bed 2B_01

808 — 2 Bed 2B_02

809 — 1 Bed 1B_03

810 — 1 Bed 1B_04 — LIV

811 — 1 Bed 1B_05

801 — 2 Bed 2B_03

L1 L2 L3 L4

FS_01 FS_02 FS_03 FS_04

8,800 | 8,800 | 8,800 | 8,800 | 8,800 | 7,950

5,205 | 8,240 | 8,630 | 8,800 | 8,400 | 8,400

17,000 | 15,400 | 11,200 | 15,000 | 14,450 | 14,000 | 24,650 | 14,090

26 ELIZABETH STREET

LEVEL 12

LEVEL 08

FACADE SECTION KEY

= REPEATING FACADE DETAIL

GENERAL ARRANGEMENT PLANS LEGEND

NOTE: WHERE NOMINATED ON DRAWINGS OR SCHEDULES A NUMERICAL SUFFIX INDICATES MULTIPLE TYPES I.E. BAL1=BALUSTRADE TYPE 1, ETC. REFER TO ARCHITECTURAL SCHEDULES FOR FURTHER INFORMATION

AC	AIR CONDITIONING
AHD	AUSTRALIAN HEIGHT DATUM
AH	ACCESS HATCH
AP	ACCESS PANEL
AWN	AWNING
BT	BATHROOM
B1,2...	BEDROOM 1, BEDROOM 2, ETC.
BT	BATHROOM
BAL	BALUSTRADE
BKS	BICYCLE STORAGE
BY	BALCONY
CLD	CLADDING
CLNR	CLEANER STORE
COF	CONCRETE OFF FORM
D	DINING
E	ENTRY
ELEC	ELECTRICAL SERVICES
EN	ENSUITE
EXH	EXHAUST
FCR	FIRE CONTROL ROOM
FHR	FIRE HOSE REEL
FIP	FIRE INDICATOR PANEL
FEP_01,02...	FIRE EGRESS PASSAGE NO.1, 2, ETC.
FS1, 2...	FIRE STAIR NO.1, 2, ETC.
GBR	GARBAGE ROOM
GBC	GARBAGE CHUTE
GC	GLASS CLEAR
GD	GLASS, DECORATIVE
GHR	GARBAGE HOLDING ROOM
H	HYDRAULIC SERVICES
K	KITCHEN
L1, 2...	LIFT NO.1, 2, ETC.
L	LIVING
LY	LAUNDRY
LV	LOUVRE
M	MECHANICAL SERVICES
MV	MECHANICAL VENT
P	PANTRY
PF	PAINT FINISH
RF	REFRIGERATOR
RL	RELATIVE LEVEL TO AHD
S	STORE
SCN	SCREEN
SSL	STRUCTURAL SLAB LEVEL
ST_01	STAIR NO.1, 2, ETC.
TYP.	TYPICAL
WC	WC

NOTES

THIS DRAWING IS COPYRIGHT © OF TURNER. NO REPRODUCTION WITHOUT PERMISSION. UNLESS NOTED OTHERWISE THIS DRAWING IS NOT FOR CONSTRUCTION. ALL DIMENSIONS AND LEVELS ARE TO BE CHECKED ON SITE PRIOR TO THE COMMENCEMENT OF WORK. INFORM TURNER OF ANY DISCREPANCIES FOR CLARIFICATION BEFORE PROCEEDING WITH WORK. DRAWINGS ARE NOT TO BE SCALED. USE ONLY FIGURED DIMENSIONS. REFER TO CONSULTANT DOCUMENTATION FOR FURTHER INFORMATION.DWG, IFC AND BIMX FILES ARE UNCONTROLLED DOCUMENTS AND ARE ISSUED FOR INFORMATION ONLY.

DLCS Quality Endorsed Company ISO 9001:2015, Registration Number 20476
Nominated Architect: Nicholas Turner 6685, ABN 86 094 694 911

CLIENT

Altis Bulky Retail Pty Ltd as trustee for Altis ARET Sub Trust 20
14/60 Castlereagh Street,
Sydney, NSW, 2000

ALTIS PROPERTY PARTNERS

ILLOURA PLACE

Rev	Date	Approved by	Revision Notes
S1	20.10.21	JMC	Issued for Development Application

Project Title
Illoura Place
28 Elizabeth Street, Liverpool, NSW 2170, Australia

Drawing Title
GA Plans
Typical Level C Lowrise (Level 8/12)

Scale: 1:150 @A1, 50%@A3
Status: Development Application
Project No.: 20089
Dwg No.: DA-110-018
Drawn by: AP
Rev: S1
North

TURNER

Level 7 ONE Oxford Street
Darlinghurst NSW 2010
AUSTRALIA

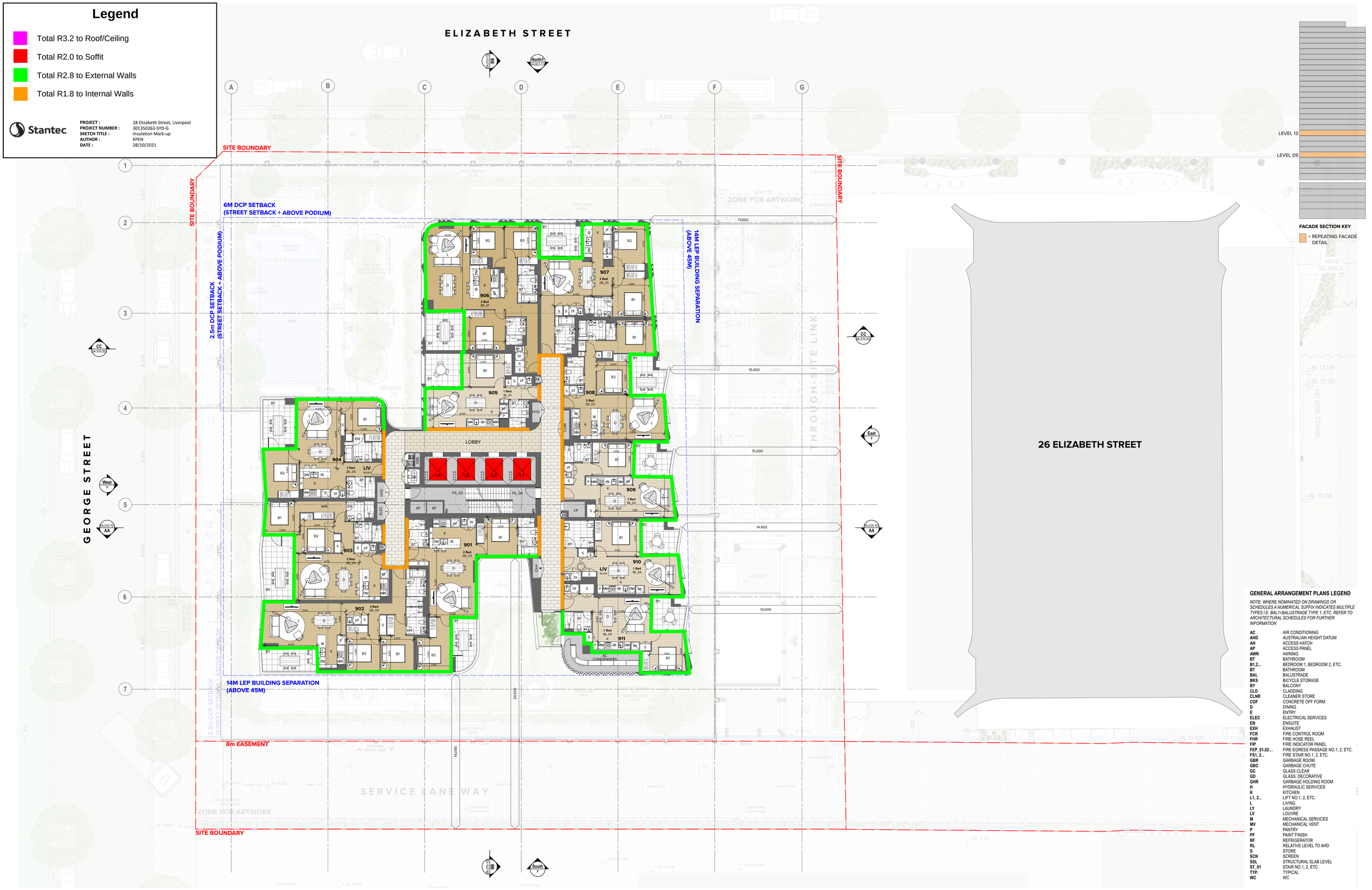
T +61 2 8668 0000
F +61 2 8668 0088
turnerstudio.com.au

Legend

- Total R3.2 to Roof/Ceiling
- Total R2.0 to Soffit
- Total R2.8 to External Walls
- Total R1.8 to Internal Walls

Stantec

PROJECT :	28 Elizabeth Street, Liverpool
PROJECT NUMBER :	301350263-SYD-G
SKETCH TITLE :	Insulation Mark-up
AUTHOR :	KPEN
DATE :	28/10/2021



GENERAL ARRANGEMENT PLANS LEGEND

NOTE: WHERE NOMINATED ON DRAWINGS OR SCHEDULES A NUMERICAL SUFFIX INDICATES MULTIPLE TYPES I.E. BAL1=BALUSTRADE TYPE 1, ETC. REFER TO ARCHITECTURAL SCHEDULES FOR FURTHER INFORMATION

AC	AIR CONDITIONING
AHD	AUSTRALIAN HEIGHT DATUM
AH	ACCESS HATCH
AP	ACCESS PANEL
AWN	AWNING
BT	BATHROOM
B1,2...	BEDROOM 1, BEDROOM 2, ETC.
BT	BATHROOM
BAL	BALUSTRADE
BKS	BICYCLE STORAGE
BY	BALCONY
CLD	CLADDING
CLNR	CLEANER STORE
COF	CONCRETE OFF FORM
D	DINING
E	ENTRY
ELEC	ELECTRICAL SERVICES
EN	ENSUITE
EXH	EXHAUST
FCR	FIRE CONTROL ROOM
FHR	FIRE HOSE REEL
FIP	FIRE INDICATOR PANEL
FEP_01,02...	FIRE EGRESS PASSAGE NO.1, 2, ETC.
FS1, 2...	FIRE STAIR NO.1, 2, ETC.
GBR	GARBAGE ROOM
GBC	GARBAGE CHUTE
GC	GLASS CLEAR
GD	GLASS, DECORATIVE
GHR	GARBAGE HOLDING ROOM
H	HYDRAULIC SERVICES
K	KITCHEN
L1, 2...	LIFT NO.1, 2, ETC.
L	LIVING
LY	LAUNDRY
LV	LOUVRE
M	MECHANICAL SERVICES
MV	MECHANICAL VENT
P	PANTRY
PF	PAINT FINISH
RF	REFRIGERATOR
RL	RELATIVE LEVEL TO AHD
S	STORE
SCN	SCREEN
SSL	STRUCTURAL SLAB LEVEL
ST_01	STAIR NO.1, 2, ETC.
TYP.	TYPICAL
WC	WC

NOTES

DLCS Quality Endorsed Company ISO 9001:2015, Registration Number 20476
Nominated Architect: Nicholas Turner 6685, ABN 88 094 084 911

CLIENT

Altis Bulky Retail Pty Ltd as trustee for Altis ARET Sub Trust 20
14/60 Castlereagh Street,
Sydney, NSW, 2000

ALTIS PROPERTY PARTNERS

ILLOURA PLACE

Rev	Date	Approved by	Revision Notes
S1	20.10.21	JMC	Issued for Development Application

Project Title
Illoura Place
28 Elizabeth Street, Liverpool, NSW 2170, Australia

Drawing Title
GA Plans
Typical Level D Lowrise (Level 9/13)

Scale	Project No.	Drawn by	North
1:150 @A1, 50%@A3	20089	AP	
Status	Dwg No.	Rev	
Development Application	DA-110-019	S1	

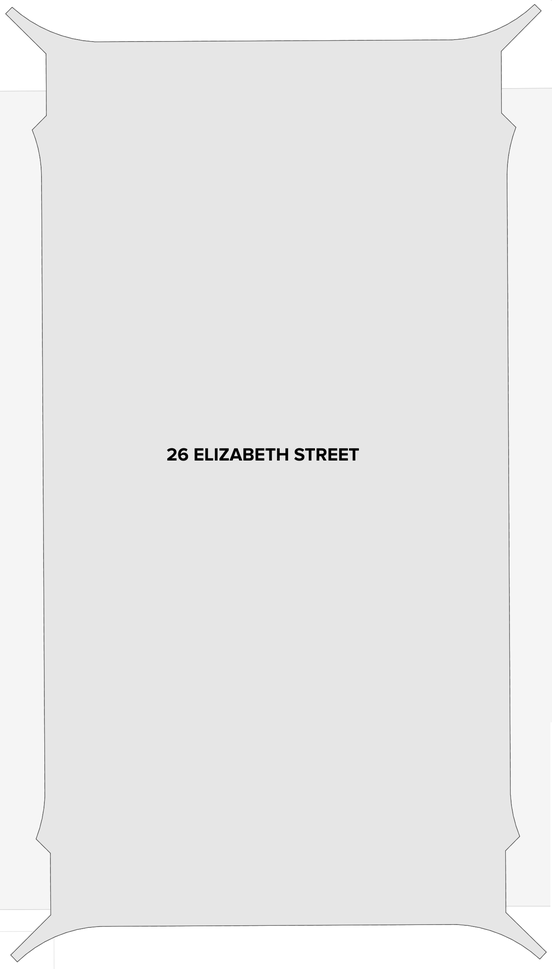
TURNER
Level 7 ONE Oxford Street
Darlinghurst NSW 2010
AUSTRALIA
T +61 2 8668 0000
F +61 2 8668 0088
turnerstudio.com.au

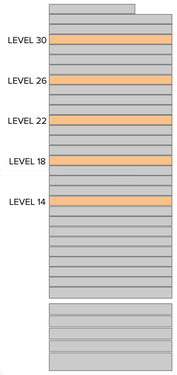
Legend

- Total R3.2 to Roof/Ceiling
- Total R2.0 to Soffit
- Total R2.8 to External Walls
- Total R1.8 to Internal Walls

Stantec

PROJECT :	28 Elizabeth Street, Liverpool
PROJECT NUMBER :	301350263-SYD-G
SKETCH TITLE :	Insulation Mark-up
AUTHOR :	KPEN
DATE :	28/10/2021





FACADE SECTION KEY

= REPEATING FACADE DETAIL

GENERAL ARRANGEMENT PLANS LEGEND

NOTE: WHERE NOMINATED ON DRAWINGS OR SCHEDULES A NUMERICAL SUFFIX INDICATES MULTIPLE TYPES I.E. BAL1=BALUSTRADE TYPE 1, ETC. REFER TO ARCHITECTURAL SCHEDULES FOR FURTHER INFORMATION

AC	AIR CONDITIONING
AHD	AUSTRALIAN HEIGHT DATUM
AH	ACCESS HATCH
AP	ACCESS PANEL
AWN	AWNING
BT	BATHROOM
B1,2...	BEDROOM 1, BEDROOM 2, ETC.
BT	BATHROOM
BAL	BALUSTRADE
BKS	BICYCLE STORAGE
BY	BALCONY
CLD	CLADDING
CLNR	CLEANER STORE
COF	CONCRETE OFF FORM
D	DINING
E	ENTRY
ELEC	ELECTRICAL SERVICES
EN	ENSUITE
EXH	EXHAUST
FCR	FIRE CONTROL ROOM
FHR	FIRE HOSE REEL
FIP	FIRE INDICATOR PANEL
FEP_01,02...	FIRE EGRESS PASSAGE NO.1, 2, ETC.
FS1, 2...	FIRE STAIR NO.1, 2, ETC.
GBR	GARBAGE ROOM
GBC	GARBAGE CHUTE
GC	GLASS CLEAR
GD	GLASS, DECORATIVE
GHR	GARBAGE HOLDING ROOM
H	HYDRAULIC SERVICES
K	KITCHEN
L1, 2...	LIFT NO.1, 2, ETC.
L	LIVING
LY	LAUNDRY
LV	LOUVRE
M	MECHANICAL SERVICES
MV	MECHANICAL VENT
P	PANTRY
PF	PAINT FINISH
RF	REFRIGERATOR
RL	RELATIVE LEVEL TO AHD
S	STORE
SCN	SCREEN
SSL	STRUCTURAL SLAB LEVEL
ST_01	STAIR NO.1, 2, ETC.
TYP.	TYPICAL
WC	WC

NOTES

CLIENT

Altis Bulky Retail Pty Ltd as trustee for Altis ARET Sub Trust 20
14/60 Castlereagh Street,
Sydney, NSW, 2000

ALTIS PROPERTY PARTNERS

ILLOURA PLACE

Rev	Date	Approved by	Revision Notes
S1	20.10.21	JMC	Issued for Development Application

Project Title
Illoura Place
28 Elizabeth Street, Liverpool, NSW 2170, Australia

Drawing Title
GA Plans
Typical Level A Highrise (Level 14/18/22/26/30)

Scale	Project No.	Drawn by	North
1:150 @A1, 50%@A3	20089	AP	
Status	Dwg No.	Rev	
Development Application	DA-110-120	S1	

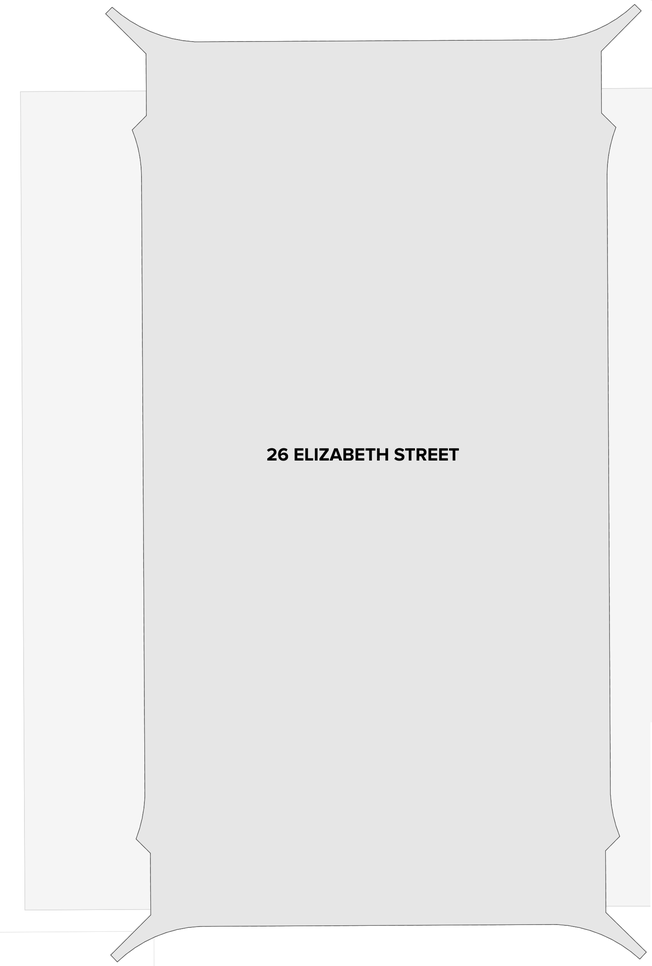
TURNER
Level 7 ONE Oxford Street
Darlinghurst NSW 2010
AUSTRALIA
T +61 2 8668 0000
F +61 2 8668 0088
turnerstudio.com.au

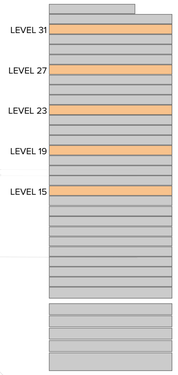
Legend

- Total R3.2 to Roof/Ceiling
- Total R2.0 to Soffit
- Total R2.8 to External Walls
- Total R1.8 to Internal Walls

Stantec

PROJECT :	28 Elizabeth Street, Liverpool
PROJECT NUMBER :	301350263-SYD-G
SKETCH TITLE :	Insulation Mark-up
AUTHOR :	KPEN
DATE :	28/10/2021





FACADE SECTION KEY

= REPEATING FACADE DETAIL

GENERAL ARRANGEMENT PLANS LEGEND

NOTE: WHERE NOMINATED ON DRAWINGS OR SCHEDULES A NUMERICAL SUFFIX INDICATES MULTIPLE TYPES I.E. BAL1=BALUSTRADE TYPE 1, ETC. REFER TO ARCHITECTURAL SCHEDULES FOR FURTHER INFORMATION

AC	AIR CONDITIONING
AHD	AUSTRALIAN HEIGHT DATUM
AH	ACCESS HATCH
AP	ACCESS PANEL
AWN	AWNING
BT	BATHROOM
B1,2...	BEDROOM 1, BEDROOM 2, ETC.
BT	BATHROOM
BAL	BALUSTRADE
BKS	BICYCLE STORAGE
BY	BALCONY
CLD	CLADDING
CLNR	CLEANER STORE
COF	CONCRETE OFF FORM
D	DINING
E	ENTRY
ELEC	ELECTRICAL SERVICES
EN	ENSUITE
EXH	EXHAUST
FCR	FIRE CONTROL ROOM
FHR	FIRE HOSE REEL
FIP	FIRE INDICATOR PANEL
FEP_01,02...	FIRE EGRESS PASSAGE NO.1, 2, ETC.
FS1, 2...	FIRE STAIR NO.1, 2, ETC.
GBR	GARBAGE ROOM
GBC	GARBAGE CHUTE
GC	GLASS CLEAR
GD	GLASS, DECORATIVE
GHR	GARBAGE HOLDING ROOM
H	HYDRAULIC SERVICES
K	KITCHEN
L1, 2...	LIFT NO.1, 2, ETC.
L	LIVING
LY	LAUNDRY
LV	LOUVRE
M	MECHANICAL SERVICES
MV	MECHANICAL VENT
P	PANTRY
PF	PAINT FINISH
RF	REFRIGERATOR
RL	RELATIVE LEVEL TO AHD
S	STORE
SCN	SCREEN
SSL	STRUCTURAL SLAB LEVEL
ST_01	STAIR NO.1, 2, ETC.
TYP.	TYPICAL
WC	WC

NOTES

CLIENT

Altis Bulky Retail Pty Ltd as trustee for Altis ARET Sub Trust 20
14/60 Castlereagh Street,
Sydney, NSW, 2000

ALTIS PROPERTY PARTNERS

ILLOURA PLACE

Rev	Date	Approved by	Revision Notes
S1	20.10.21	JMC	Issued for Development Application

Project Title
Illoura Place
28 Elizabeth Street, Liverpool, NSW 2170, Australia

Drawing Title
GA Plans
Typical Level B Highrise (Level 15/19/23/27/31)

Scale	Project No.	Drawn by	North
1:150 @A1, 50%@A3	20089	AP	
Status	Dwg No.	Rev	
Development Application	DA-110-121	S1	

TURNER

Level 7 ONE Oxford Street
Darlinghurst NSW 2010
AUSTRALIA
T +61 2 8668 0000
F +61 2 8668 0088
turnerstudio.com.au

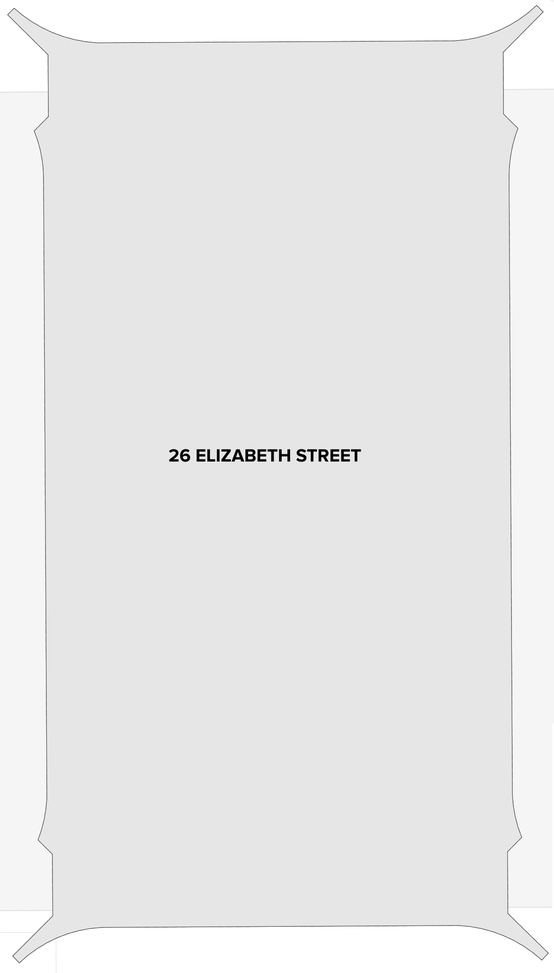
Legend

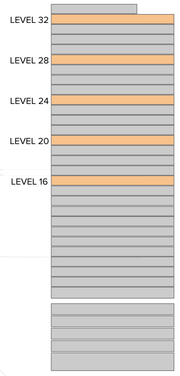
- Total R3.2 to Roof/Ceiling
- Total R2.0 to Soffit
- Total R2.8 to External Walls
- Total R1.8 to Internal Walls

Stantec

PROJECT :	28 Elizabeth Street, Liverpool
PROJECT NUMBER :	301350263-SYD-G
SKETCH TITLE :	Insulation Mark-up
AUTHOR :	KPEN
DATE :	28/10/2021

Roof insulation (as indicated) to be added to L32 only





FACADE SECTION KEY

= REPEATING FACADE DETAIL

GENERAL ARRANGEMENT PLANS LEGEND

NOTE: WHERE NOMINATED ON DRAWINGS OR SCHEDULES A NUMERICAL SUFFIX INDICATES MULTIPLE TYPES I.E. BAL1=BALUSTRADE TYPE 1, ETC. REFER TO ARCHITECTURAL SCHEDULES FOR FURTHER INFORMATION

AC	AIR CONDITIONING
AHD	AUSTRALIAN HEIGHT DATUM
AH	ACCESS HATCH
AP	ACCESS PANEL
AWN	AWNING
BT	BATHROOM
B1,2...	BEDROOM 1, BEDROOM 2, ETC.
BT	BATHROOM
BAL	BALUSTRADE
BKS	BICYCLE STORAGE
BY	BALCONY
CLD	CLADDING
CLNR	CLEANER STORE
COF	CONCRETE OFF FORM
D	DINING
E	ENTRY
ELEC	ELECTRICAL SERVICES
EN	ENSUITE
EXH	EXHAUST
FCR	FIRE CONTROL ROOM
FHR	FIRE HOSE REEL
FIP	FIRE INDICATOR PANEL
FEP_01,02...	FIRE EGRESS PASSAGE NO.1, 2, ETC.
FS1, 2...	FIRE STAIR NO.1, 2, ETC.
GBR	GARBAGE ROOM
GBC	GARBAGE CHUTE
GC	GLASS CLEAR
GD	GLASS, DECORATIVE
GHR	GARBAGE HOLDING ROOM
H	HYDRAULIC SERVICES
K	KITCHEN
L1, 2...	LIFT NO.1, 2, ETC.
L	LIVING
LY	LAUNDRY
LV	LOUVRE
M	MECHANICAL SERVICES
MV	MECHANICAL VENT
P	PANTRY
PF	PAINT FINISH
RF	REFRIGERATOR
RL	RELATIVE LEVEL TO AHD
S	STORE
SCN	SCREEN
SSL	STRUCTURAL SLAB LEVEL
ST_01	STAIR NO.1, 2, ETC.
TYP.	TYPICAL
WC	WC

NOTES

DLCS Quality Endorsed Company ISO 9001:2015, Registration Number 20476
Nominated Architect: Nicholas Turner 6685, ABN 88 094 694 911

CLIENT

Altis Bulky Retail Pty Ltd as trustee for Altis ARET Sub Trust 20
14/60 Castlereagh Street,
Sydney, NSW, 2000

ALTIS PROPERTY PARTNERS

ILLOURA PLACE

Rev	Date	Approved by	Revision Notes
S1	20.10.21	JMC	Issued for Development Application

Project Title
Illoura Place
28 Elizabeth Street, Liverpool, NSW 2170, Australia

Drawing Title
GA Plans
Typical Level C Highrise (Level 16/20/24/28/32)

Scale	Project No.	Drawn by	North
1:150 @A1, 50%@A3	20089	AP	
Status	Dwg No.	Rev	
Development Application	DA-110-122	S1	

TURNER

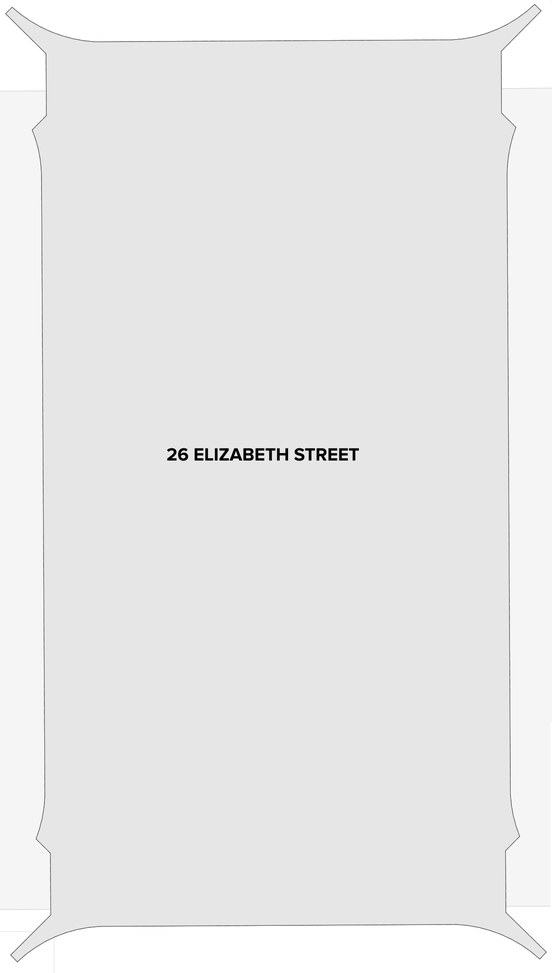
Level 7 ONE Oxford Street
Darlinghurst NSW 2010
AUSTRALIA
T +61 2 8668 0000
F +61 2 8668 0088
turnerstudio.com.au

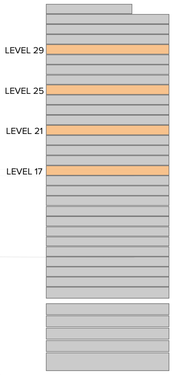
Legend

- Total R3.2 to Roof/Ceiling
- Total R2.0 to Soffit
- Total R2.8 to External Walls
- Total R1.8 to Internal Walls

Stantec

PROJECT :	28 Elizabeth Street, Liverpool
PROJECT NUMBER :	301350263-SYD-G
SKETCH TITLE :	Insulation Mark-up
AUTHOR :	KPEN
DATE :	28/10/2021





FACADE SECTION KEY

= REPEATING FACADE DETAIL

GENERAL ARRANGEMENT PLANS LEGEND

NOTE: WHERE NOMINATED ON DRAWINGS OR SCHEDULES A NUMERICAL SUFFIX INDICATES MULTIPLE TYPES I.E. BAL1=BALUSTRADE TYPE 1, ETC. REFER TO ARCHITECTURAL SCHEDULES FOR FURTHER INFORMATION

AC	AIR CONDITIONING
AHD	AUSTRALIAN HEIGHT DATUM
AH	ACCESS HATCH
AP	ACCESS PANEL
AWN	AWNING
BT	BATHROOM
B1,2...	BEDROOM 1, BEDROOM 2, ETC.
BT	BATHROOM
BAL	BALUSTRADE
BKS	BICYCLE STORAGE
BY	BALCONY
CLD	CLADDING
CLNR	CLEANER STORE
COF	CONCRETE OFF FORM
D	DINING
E	ENTRY
ELEC	ELECTRICAL SERVICES
EN	ENSUITE
EXH	EXHAUST
FCR	FIRE CONTROL ROOM
FHR	FIRE HOSE REEL
FIP	FIRE INDICATOR PANEL
FEP_01,02...	FIRE EGRESS PASSAGE NO.1, 2, ETC.
FS1, 2...	FIRE STAIR NO.1, 2, ETC.
GBR	GARBAGE ROOM
GBC	GARBAGE CHUTE
GC	GLASS CLEAR
GD	GLASS, DECORATIVE
GHR	GARBAGE HOLDING ROOM
H	HYDRAULIC SERVICES
K	KITCHEN
L1, 2...	LIFT NO.1, 2, ETC.
L	LIVING
LY	LAUNDRY
LV	LOUVRE
M	MECHANICAL SERVICES
MV	MECHANICAL VENT
P	PANTRY
PF	PAINT FINISH
RF	REFRIGERATOR
RL	RELATIVE LEVEL TO AHD
S	STORE
SCN	SCREEN
SSL	STRUCTURAL SLAB LEVEL
ST_01	STAIR NO.1, 2, ETC.
TYP.	TYPICAL
WC	WC

NOTES

CLIENT

Altis Bulky Retail Pty Ltd as trustee for Altis ARET Sub Trust 20
14/60 Castlereagh Street,
Sydney, NSW, 2000

ALTIS PROPERTY PARTNERS

ILLOURA PLACE

Rev	Date	Approved by	Revision Notes
S1	20.10.21	JMC	Issued for Development Application

Project Title
Illoura Place
28 Elizabeth Street, Liverpool, NSW 2170, Australia

Drawing Title
GA Plans
Typical Level D Highrise (Level 17/21/25/29)

Scale	Project No.	Drawn by	North
1:150 @A1, 50%@A3	20089	AP	
Status	Dwg No.	Rev	
Development Application	DA-110-123	S1	

TURNER

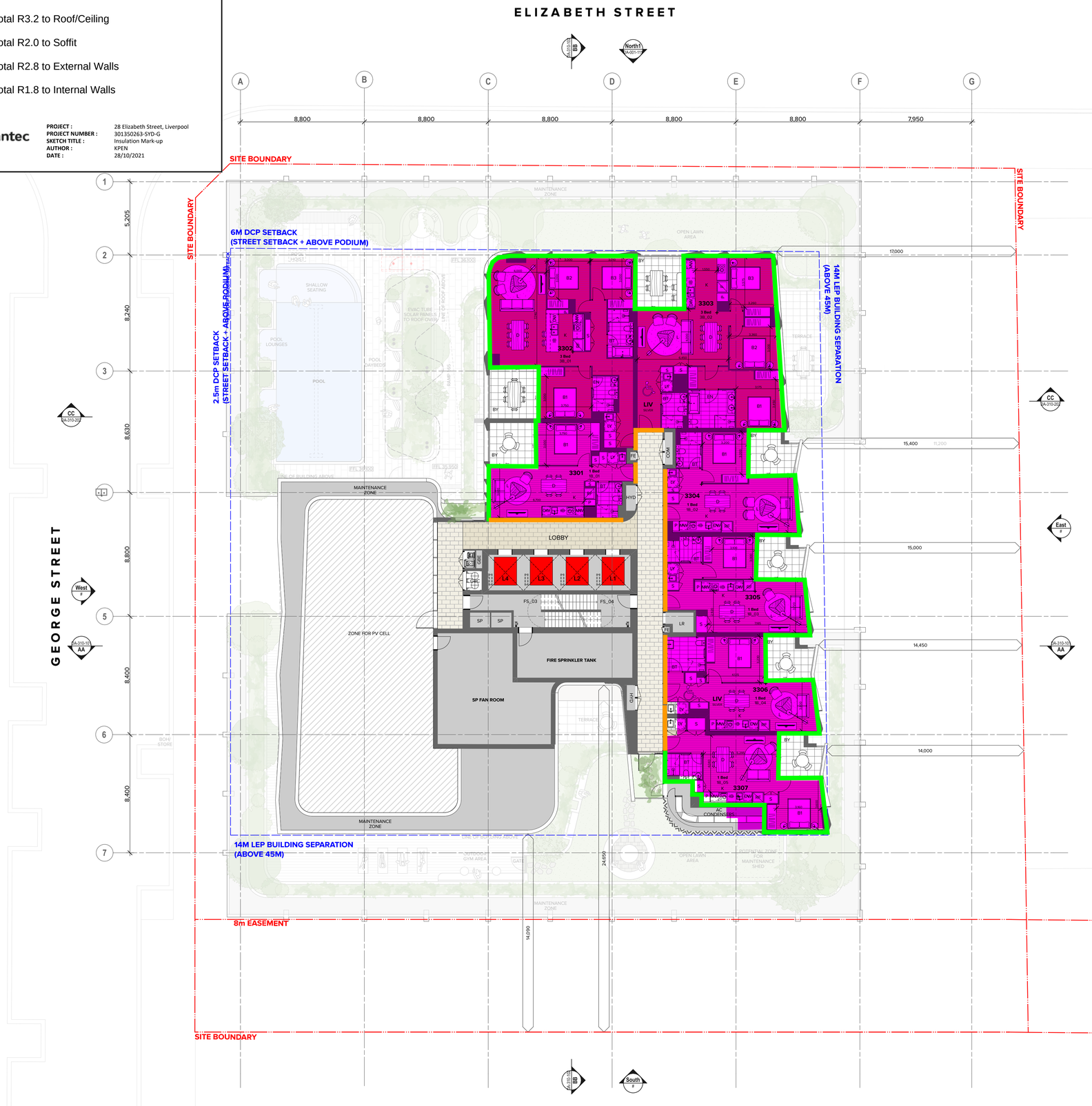
Level 7 ONE Oxford Street
Darlinghurst NSW 2010
AUSTRALIA
T +61 2 8668 0000
F +61 2 8668 0088
turnerstudio.com.au

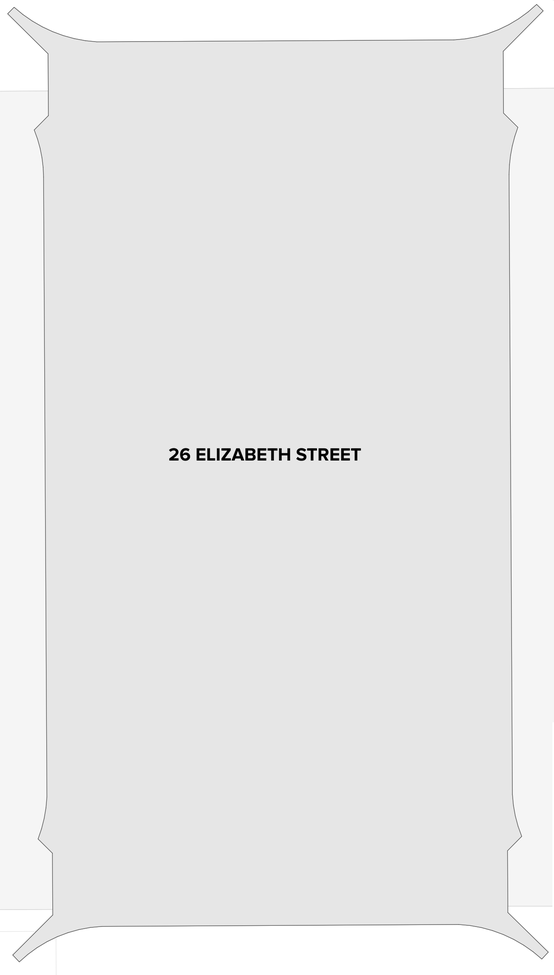
Legend

- Total R3.2 to Roof/Ceiling
- Total R2.0 to Soffit
- Total R2.8 to External Walls
- Total R1.8 to Internal Walls

Stantec

PROJECT :	28 Elizabeth Street, Liverpool
PROJECT NUMBER :	301350263-SYD-G
SKETCH TITLE :	Insulation Mark-up
AUTHOR :	KPEN
DATE :	28/10/2021





GENERAL ARRANGEMENT PLANS LEGEND

NOTE: WHERE NOMINATED ON DRAWINGS OR SCHEDULES A NUMERICAL SUFFIX INDICATES MULTIPLE TYPES I.E. BAL1=BALUSTRADE TYPE 1, ETC. REFER TO ARCHITECTURAL SCHEDULES FOR FURTHER INFORMATION

AC	AIR CONDITIONING
AHD	AUSTRALIAN HEIGHT DATUM
AH	ACCESS HATCH
AP	ACCESS PANEL
AWN	AWNING
BT	BATHROOM
B1,2...	BEDROOM 1, BEDROOM 2, ETC.
BT	BATHROOM
BAL	BALUSTRADE
BKS	BICYCLE STORAGE
BY	BALCONY
CLD	CLADDING
CLNR	CLEANER STORE
COF	CONCRETE OFF FORM
D	DINING
E	ENTRY
ELEC	ELECTRICAL SERVICES
EN	ENSUITE
EXH	EXHAUST
FCR	FIRE CONTROL ROOM
FHR	FIRE HOSE REEL
FIP	FIRE INDICATOR PANEL
FEP_01,02...	FIRE EGRESS PASSAGE NO.1, 2, ETC.
FS1, 2...	FIRE STAIR NO.1, 2, ETC.
GBR	GARBAGE ROOM
GBC	GARBAGE CHUTE
GC	GLASS CLEAR
GD	GLASS, DECORATIVE
GHR	GARBAGE HOLDING ROOM
H	HYDRAULIC SERVICES
K	KITCHEN
L1, 2...	LIFT NO.1, 2, ETC.
L	LIVING
LY	LAUNDRY
LV	LOUVRE
M	MECHANICAL SERVICES
MV	MECHANICAL VENT
P	PANTRY
PF	PAINT FINISH
RF	REFRIGERATOR
RL	RELATIVE LEVEL TO AHD
S	STORE
SCN	SCREEN
SSL	STRUCTURAL SLAB LEVEL
ST_01	STAIR NO.1, 2, ETC.
TYP.	TYPICAL
WC	WC

NOTES

CLIENT

Altis Bulky Retail Pty Ltd as trustee for Altis ARET Sub Trust 20
14/60 Castlereagh Street,
Sydney, NSW, 2000

ALTIS PROPERTY PARTNERS

ILLOURA PLACE

Rev	Date	Approved by	Revision Notes
S1	20.10.21	JMC	Issued for Development Application

Project Title
Illoura Place
28 Elizabeth Street, Liverpool, NSW 2170, Australia

Drawing Title
GA Plans
Level 33

Scale	Project No.	Drawn by	North
1:150 @A1, 50%@A3	20089	JB/JL/AP	
Status	Dwg No.	Rev	
Development Application	DA-110-330	S1	

TURNER

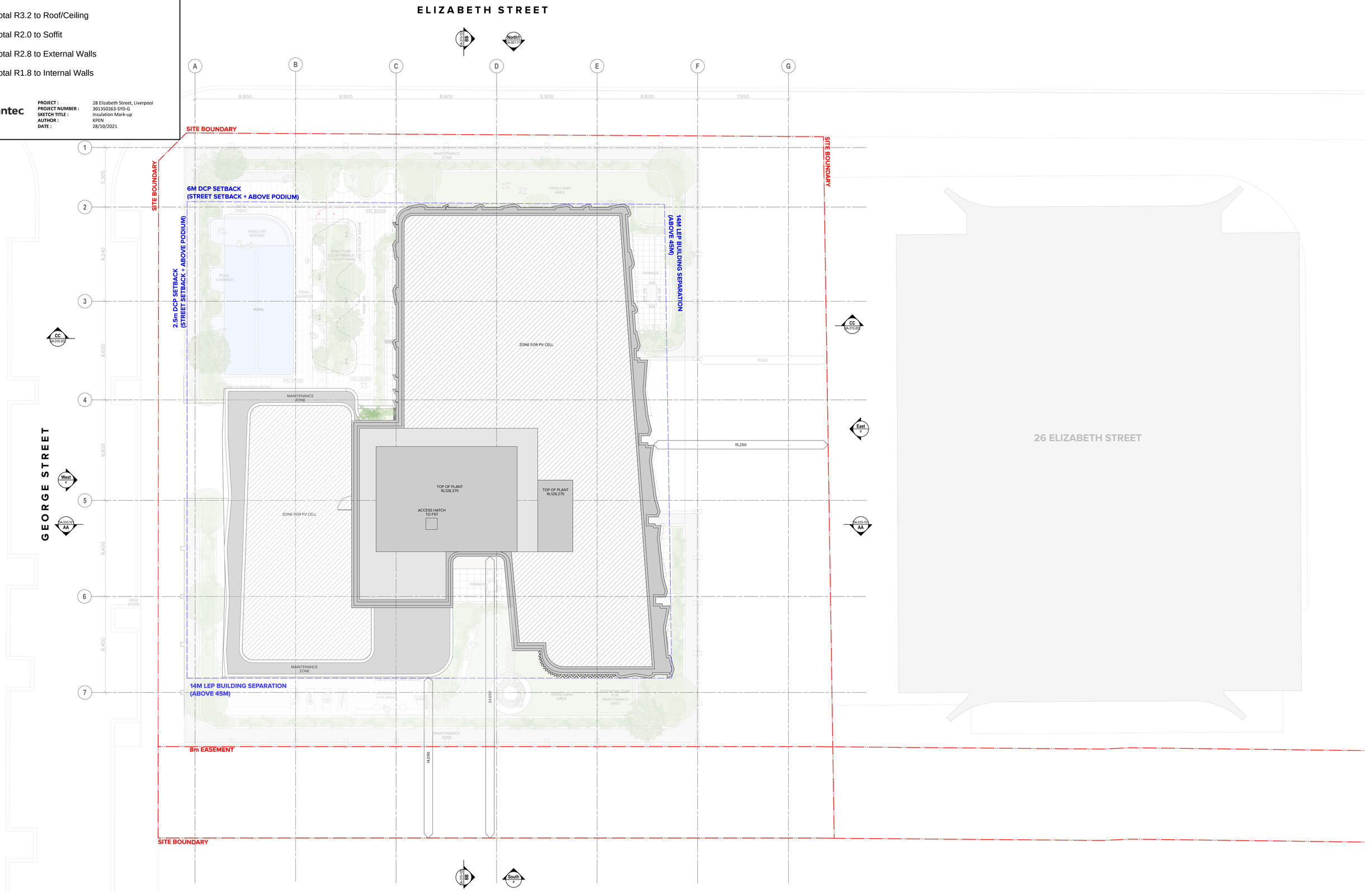
Level 7 ONE Oxford Street
Darlinghurst NSW 2010
AUSTRALIA
T +61 2 8668 0000
F +61 2 8668 0088
turnerstudio.com.au

Legend

- Total R3.2 to Roof/Ceiling
- Total R2.0 to Soffit
- Total R2.8 to External Walls
- Total R1.8 to Internal Walls

Stantec

PROJECT :	28 Elizabeth Street, Liverpool
PROJECT NUMBER :	301350263-SYD-G
SKETCH TITLE :	Insulation Mark-up
AUTHOR :	KPEN
DATE :	28/10/2021



NOTES

CLIENT

Altis Bulky Retail Pty Ltd as trustee for Altis ARET Sub Trust 20
14/60 Castlereagh Street,
Sydney, NSW, 2000

ALTIS PROPERTY PARTNERS

ILLOURA PLACE

Rev	Date	Approved by	Revision Notes
S1	20.10.21	JMC	Issued for Development Application

Project Title
Illoura Place
28 Elizabeth Street, Liverpool, NSW 2170, Australia

Drawing Title
GA Plans
Roof Level

Scale	Project No.	Drawn by	North
1:150 @A1, 50%@A3	20089	JB/JL	
Status	Dwg No.	Rev	
Development Application	DA-110-340	S1	

TURNER

Level 7 **ONE** Oxford Street
Darlinghurst NSW 2010
AUSTRALIA

T +61 2 8668 0000
F +61 2 8668 0088
turnerstudio.com.au

Appendix B NatHERS Modelling Results

Illoura Place

First Rate Energy Rating Assessment

CLIMATE ZONE
28

AVERAGE ENERGY INTENSITY (MJ/m^2)	AVERAGE STAR RATING	MINIMUM STAR RATING	Total Number of Apartments
59.7	7.2	5.8	312

Level	Apt No.	Bedrooms	A/C Area (m^2)	Heating - MJ/m^2	Cooling - MJ/m^2	Star Rating	Total Energy - MJ/m2	Glazing Specification
L5	501	1	50.0	30.4	26.2	7.4	56.60	U4.5 SHGC 0.45
	502	1	61.2	39.9	55.2	5.7	95.10	U4.5 SHGC 0.45
	503	2	87.6	14.8	21.8	8.4	36.60	U4.5 SHGC 0.45
	504	1	52.0	47.2	24.1	6.8	71.30	U4.5 SHGC 0.45
	505	1	52.0	22.9	26.1	7.8	49.00	U4.5 SHGC 0.45
	506	1	55.9	30.9	24.4	7.5	55.30	U4.5 SHGC 0.45
	507	1	50.6	55.3	23	6.4	78.30	U4.5 SHGC 0.45
	508	1	52.6	38.9	23.9	7.1	62.80	U4.5 SHGC 0.45
L6	601	2	77.4	47.5	19.9	6.9	67.40	U4.5 SHGC 0.45
	602	2	86.2	31.8	29.5	7.2	61.30	U4.5 SHGC 0.45
	603	2	78.7	20.3	26	7.9	46.30	U4.5 SHGC 0.45
	604	2	80.6	22.3	35.6	7.4	57.90	U4.5 SHGC 0.45
	605	1	50.0	20	23.8	8.0	43.80	U4.5 SHGC 0.45
	606	3	105.5	17.1	48.6	7.0	65.70	U4.5 SHGC 0.45
	607	2	80.9	16.9	48.7	7.0	65.60	U4.5 SHGC 0.45
	608	2	76.0	21	22.1	8.0	43.10	U4.5 SHGC 0.45
	609	1	52.0	35.8	19.3	7.5	55.10	U4.5 SHGC 0.45
	610	1	56.2	44.7	19.3	7.1	64.00	U4.5 SHGC 0.45
	611	1	50.7	55.7	22.8	6.4	78.50	U4.5 SHGC 0.45
L7	701	2	77.4	47.8	20.4	6.9	68.20	U4.5 SHGC 0.45
	702	2	86.2	32	29.5	7.2	61.50	U4.5 SHGC 0.45
	703	2	78.7	20.5	25.5	7.9	46.00	U4.5 SHGC 0.45
	704	2	80.6	12.7	37.7	7.7	50.40	U4.5 SHGC 0.45
	705	1	50.0	20.2	23.7	8.0	43.90	U4.5 SHGC 0.45
	706	3	105.5	14	49.6	7.1	63.60	U4.5 SHGC 0.45
	707	2	80.9	14.7	48.8	7.1	63.50	U4.5 SHGC 0.45
	708	2	76.0	21.2	22.2	8.0	43.40	U4.5 SHGC 0.45
	709	1	52.0	41.4	18.9	7.3	60.30	U4.5 SHGC 0.45
	710	1	56.2	45.9	19.2	7.0	65.10	U4.5 SHGC 0.45
	711	1	50.7	56	22.6	6.4	78.60	U4.5 SHGC 0.45
L8	801	2	77.4	49.3	18.9	6.9	68.20	U4.5 SHGC 0.45
	802	2	86.2	33.4	27.2	7.2	60.60	U4.5 SHGC 0.45
	803	2	78.7	21.8	24.2	7.9	46.00	U4.5 SHGC 0.45
	804	2	80.6	13.8	34.9	7.8	48.70	U4.5 SHGC 0.45
	805	1	50.0	21.6	23.5	8.0	45.10	U4.5 SHGC 0.45
	806	3	105.5	15.1	43.6	7.3	58.70	U4.5 SHGC 0.45
	807	2	80.9	16.1	45.7	7.2	61.80	U4.5 SHGC 0.45
	808	2	76.0	22.1	21.2	8.0	43.30	U4.5 SHGC 0.45
	809	1	52.0	43	18.3	7.2	61.30	U4.5 SHGC 0.45
	810	1	56.2	47.6	19.1	7.0	66.70	U4.5 SHGC 0.45
	811	1	50.7	57.8	22	6.4	79.80	U4.5 SHGC 0.45
L9	901	2	77.4	49.6	18.8	6.9	68.40	U4.5 SHGC 0.45
	902	2	86.2	33.6	27.1	7.2	60.70	U4.5 SHGC 0.45
	903	2	78.7	22	23.7	7.9	45.70	U4.5 SHGC 0.45
	904	2	80.6	14	34.8	7.8	48.80	U4.5 SHGC 0.45
	905	1	50.0	21.8	23.5	7.9	45.30	U4.5 SHGC 0.45
	906	3	105.5	15.1	42.9	7.4	58.00	U4.5 SHGC 0.45
	907	2	80.9	16.2	45	7.2	61.20	U4.5 SHGC 0.45
	908	2	76.0	22.3	21	8.0	43.30	U4.5 SHGC 0.45
	909	1	52.0	43.2	18.3	7.2	61.50	U4.5 SHGC 0.45
	910	1	56.2	47.8	19.1	7.0	66.90	U4.5 SHGC 0.45
	911	1	50.7	57.9	21.7	6.4	79.60	U4.5 SHGC 0.45
L10	1001	2	77.4	49.7	18.8	6.9	68.50	U4.5 SHGC 0.45
	1002	2	86.2	33.7	26.8	7.3	60.50	U4.5 SHGC 0.45
	1003	2	78.7	22.1	23.7	7.9	45.80	U4.5 SHGC 0.45
	1004	2	80.6	14	34.9	7.8	48.90	U4.5 SHGC 0.45
	1005	1	50.0	21.9	23.7	7.9	45.60	U4.5 SHGC 0.45
	1006	3	105.5	15.2	43.2	7.3	58.40	U4.5 SHGC 0.45
	1007	2	80.9	16.3	44.6	7.2	60.90	U4.5 SHGC 0.45
	1008	2	76.0	22.3	21	8.0	43.30	U4.5 SHGC 0.45
	1009	1	52.0	43.4	18	7.2	61.40	U4.5 SHGC 0.45
	1010	1	56.2	47.9	19.3	6.9	67.20	U4.5 SHGC 0.45
	1011	1	50.7	58.1	21.6	6.4	79.70	U4.5 SHGC 0.45
L11	1101	2	77.4	49.9	18.7	6.9	68.60	U4.5 SHGC 0.45
	1102	2	86.2	33.9	26.8	7.2	60.70	U4.5 SHGC 0.45
	1103	2	78.7	22.3	23.6	7.9	45.90	U4.5 SHGC 0.45
	1104	2	80.6	14.2	34.6	7.8	48.80	U4.5 SHGC 0.45
	1105	1	50.0	22.1	23.5	7.9	45.60	U4.5 SHGC 0.45
	1106	3	105.5	15.4	42.6	7.4	58.00	U4.5 SHGC 0.45
	1107	2	80.9	16.5	44.3	7.2	60.80	U4.5 SHGC 0.45
	1108	2	76.0	22.5	21	8.0	43.50	U4.5 SHGC 0.45
	1109	1	52.0	43.6	17.9	7.2	61.50	U4.5 SHGC 0.45
	1110	1	56.2	48.1	19.2	6.9	67.30	U4.5 SHGC 0.45
	1111	1	50.7	58.3	21.6	6.4	79.90	U4.5 SHGC 0.45
L12	1201	2	77.4	50	18.4	6.9	68.40	U4.5 SHGC 0.45
	1202	2	86.2	34	26.9	7.2	60.90	U4.5 SHGC 0.45
	1203	2	78.7	22.4	23.6	7.9	46.00	U4.5 SHGC 0.45
	1204	2	80.6	14.2	34.5	7.8	48.70	U4.5 SHGC 0.45
	1205	1	50.0	22.2	23.5	7.9	45.70	U4.5 SHGC 0.45
	1206	3	105.5	15.5	42.4	7.4	57.90	U4.5 SHGC 0.45
	1207	2	80.9	16.6	44.2	7.2	60.80	U4.5 SHGC 0.45
	1208	2	76.0	22.6	20.5	8.0	43.10	U4.5 SHGC 0.45
	1209	1	52.0	43.7	17.8	7.2	61.50	U4.5 SHGC 0.45
	1210	1	56.2	48.3	19.1	6.9	67.40	U4.5 SHGC 0.45
	1211	1	50.7	58.4	21.5	6.4	79.90	U4.5 SHGC 0.45
L13	1301	2	77.4	50.2	18.8	6.9	69.00	U4.5 SHGC 0.45
	1302	2	86.2	34.2	26.7	7.2	60.90	U4.5 SHGC 0.45
	1303	2	78.7	22.4	23.5	7.9	45.90	U4.5 SHGC 0.45
	1304	2	80.6	14.3	34.8	7.8	49.10	U4.5 SHGC 0.45
	1305	1	50.0	22.4	23.4	7.9	45.80	U4.5 SHGC 0.45
	1306	3	105.5	15.5	42.4	7.4	57.90	U4.5 SHGC 0.45
	1307	2	80.9	16.6	43.9	7.3	60.50	U4.5 SHGC 0.45
	1308	2	76.0	22.6	20.4	8.1	43.00	U4.5 SHGC 0.45
	1309	1	52.0	43.8	17.8	7.2	61.60	U4.5 SHGC 0.45
	1310	1	56.2	48.4	19.1	6.9	67.50	U4.5 SHGC 0.45

	1311	1	50.7	58.6	21.2	6.4	79.80	**U4.5 SHGC 0.45**
L14	1401	2	77.4	50.3	18.7	6.9	69.00	**U4.5 SHGC 0.45**
	1402	2	86.2	34.3	26.8	7.2	61.10	**U4.5 SHGC 0.45**
	1403	2	78.7	22.5	23.2	7.9	45.70	**U4.5 SHGC 0.45**
	1404	2	80.6	14.3	34.4	7.8	48.70	**U4.5 SHGC 0.45**
	1405	1	50.0	22.4	23.1	7.9	45.50	**U4.5 SHGC 0.45**
	1406	3	105.5	15.6	42.6	7.4	58.20	**U4.5 SHGC 0.45**
	1407	3	106.5	18.8	38.3	7.4	57.10	**U4.5 SHGC 0.45**
	1408	1	52.0	41.4	19.2	7.2	60.60	**U4.5 SHGC 0.45**
	1409	1	52.0	43.9	17.9	7.2	61.80	**U4.5 SHGC 0.45**
	1410	1	56.2	48.5	19	6.9	67.50	**U4.5 SHGC 0.45**
	1411	1	50.7	58.7	21.1	6.4	79.80	**U4.5 SHGC 0.45**
L15	1501	2	77.4	50.5	18.3	6.9	68.80	**U4.5 SHGC 0.45**
	1502	2	86.2	34.5	26.6	7.2	61.10	**U4.5 SHGC 0.45**
	1503	2	78.7	22.7	23.2	7.9	45.90	**U4.5 SHGC 0.45**
	1504	2	80.6	14.5	34.4	7.8	48.90	**U4.5 SHGC 0.45**
	1505	1	50.0	22.7	23.2	7.9	45.90	**U4.5 SHGC 0.45**
	1506	3	105.5	15.6	42.5	7.4	58.10	**U4.5 SHGC 0.45**
	1507	3	106.5	18.7	38.3	7.4	57.00	**U4.5 SHGC 0.45**
	1508	1	52.0	41.6	19.3	7.2	60.90	**U4.5 SHGC 0.45**
	1509	1	52.0	44.1	17.7	7.2	61.80	**U4.5 SHGC 0.45**
	1510	1	56.2	48.7	19	6.9	67.70	**U4.5 SHGC 0.45**
	1511	1	50.7	58.8	21	6.4	79.80	**U4.5 SHGC 0.45**
L16	1601	2	77.4	50.6	18.3	6.9	68.90	**U4.5 SHGC 0.45**
	1602	2	86.2	34.6	26.4	7.2	61.00	**U4.5 SHGC 0.45**
	1603	2	78.7	22.8	23.1	7.9	45.90	**U4.5 SHGC 0.45**
	1604	2	80.6	14.4	34.4	7.8	48.80	**U4.5 SHGC 0.45**
	1605	1	50.0	22.8	23.1	7.9	45.90	**U4.5 SHGC 0.45**
	1606	3	105.5	15.7	42.5	7.4	58.20	**U4.5 SHGC 0.45**
	1607	3	106.5	18.7	38.5	7.4	57.20	**U4.5 SHGC 0.45**
	1608	1	52.0	41.7	19.1	7.2	60.80	**U4.5 SHGC 0.45**
	1609	1	52.0	44.2	17.7	7.2	61.90	**U4.5 SHGC 0.45**
	1610	1	56.2	48.8	18.8	6.9	67.60	**U4.5 SHGC 0.45**
	1611	1	50.7	58.9	20.8	6.4	79.70	**U4.5 SHGC 0.45**
L17	1701	2	77.4	50.7	18.3	6.9	69.00	**U4.5 SHGC 0.45**
	1702	2	86.2	34.7	26.7	7.2	61.40	**U4.5 SHGC 0.45**
	1703	2	78.7	22.9	23.1	7.9	46.00	**U4.5 SHGC 0.45**
	1704	2	80.6	14.5	34.1	7.8	48.60	**U4.5 SHGC 0.45**
	1705	1	50.0	22.9	22.9	7.9	45.80	**U4.5 SHGC 0.45**
	1706	3	105.5	15.8	42.3	7.4	58.10	**U4.5 SHGC 0.45**
	1707	3	106.5	18.8	38.2	7.4	57.00	**U4.5 SHGC 0.45**
	1708	1	52.0	41.8	19	7.2	60.80	**U4.5 SHGC 0.45**
	1709	1	52.0	44.3	17.7	7.2	62.00	**U4.5 SHGC 0.45**
	1710	1	56.2	48.9	18.7	6.9	67.60	**U4.5 SHGC 0.45**
	1711	1	50.7	59	20.9	6.4	79.90	**U4.5 SHGC 0.45**
L18	1801	2	77.4	50.9	18.2	6.9	69.10	**U4.5 SHGC 0.45**
	1802	2	86.2	34.8	26.4	7.2	61.20	**U4.5 SHGC 0.45**
	1803	2	78.7	23	23.1	7.9	46.10	**U4.5 SHGC 0.45**
	1804	2	80.6	14.6	34.2	7.8	48.80	**U4.5 SHGC 0.45**
	1805	1	50.0	23	23	7.9	46.00	**U4.5 SHGC 0.45**
	1806	3	105.5	15.8	42.4	7.4	58.20	**U4.5 SHGC 0.45**
	1807	3	106.5	18.9	37.7	7.4	56.60	**U4.5 SHGC 0.45**
	1808	1	52.0	41.9	19.2	7.2	61.10	**U4.5 SHGC 0.45**
	1809	1	52.0	44.4	17.7	7.2	62.10	**U4.5 SHGC 0.45**
	1810	1	56.2	48.9	18.7	6.9	67.60	**U4.5 SHGC 0.45**
	1811	1	50.7	59.1	20.9	6.4	80.00	**U4.5 SHGC 0.45**
L19	1901	2	77.4	51	18.3	6.9	69.30	**U4.5 SHGC 0.45**
	1902	2	86.2	34.9	26.2	7.2	61.10	**U4.5 SHGC 0.45**
	1903	2	78.7	23.1	22.9	7.9	46.00	**U4.5 SHGC 0.45**
	1904	2	80.6	14.7	34.1	7.8	48.80	**U4.5 SHGC 0.45**
	1905	1	50.0	23.1	22.9	7.9	46.00	**U4.5 SHGC 0.45**
	1906	3	105.5	15.9	42.4	7.4	58.30	**U4.5 SHGC 0.45**
	1907	3	106.5	18.9	37.8	7.4	56.70	**U4.5 SHGC 0.45**
	1908	1	52.0	41.8	19.3	7.2	61.10	**U4.5 SHGC 0.45**
	1909	1	52.0	44.3	17.7	7.2	62.00	**U4.5 SHGC 0.45**
	1910	1	56.2	48.9	19	6.9	67.90	**U4.5 SHGC 0.45**
	1911	1	50.7	59.2	20.9	6.4	80.10	**U4.5 SHGC 0.45**
L20	2001	2	77.4	51	18.2	6.9	69.20	**U4.5 SHGC 0.45**
	2002	2	86.2	34.9	26.1	7.2	61.00	**U4.5 SHGC 0.45**
	2003	2	78.7	23.1	22.9	7.9	46.00	**U4.5 SHGC 0.45**
	2004	2	80.6	14.7	34	7.8	48.70	**U4.5 SHGC 0.45**
	2005	1	50.0	23.1	22.9	7.9	46.00	**U4.5 SHGC 0.45**
	2006	3	105.5	15.9	42.6	7.3	58.50	**U4.5 SHGC 0.45**
	2007	3	106.5	18.9	37.4	7.4	56.30	**U4.5 SHGC 0.45**
	2008	1	52.0	41.9	19.3	7.2	61.20	**U4.5 SHGC 0.45**
	2009	1	52.0	44.4	17.8	7.2	62.20	**U4.5 SHGC 0.45**
	2010	1	56.2	49	19.1	6.9	68.10	**U4.5 SHGC 0.45**
	2011	1	50.7	59.3	20.7	6.4	80.00	**U4.5 SHGC 0.45**
L21	2101	2	77.4	51.1	18	6.9	69.10	**U4.5 SHGC 0.45**
	2102	2	86.2	35	26	7.2	61.00	**U4.5 SHGC 0.45**
	2103	2	78.7	23.2	22.9	7.9	46.10	**U4.5 SHGC 0.45**
	2104	2	80.6	14.8	33.7	7.8	48.50	**U4.5 SHGC 0.45**
	2105	1	50.0	23.3	22.9	7.9	46.20	**U4.5 SHGC 0.45**
	2106	3	105.5	16	42.5	7.3	58.50	**U4.5 SHGC 0.45**
	2107	3	106.5	19	37.4	7.4	56.40	**U4.5 SHGC 0.45**
	2108	1	52.0	41.9	19.7	7.2	61.60	**U4.5 SHGC 0.45**
	2109	1	52.0	44.4	17.8	7.2	62.20	**U4.5 SHGC 0.45**
	2110	1	56.2	49	18.7	6.9	67.70	**U4.5 SHGC 0.45**
	2111	1	50.7	59.4	20.5	6.4	79.90	**U4.5 SHGC 0.45**
L22	2201	2	77.4	51.2	17.8	6.9	69.00	**U4.5 SHGC 0.45**
	2202	2	86.2	35.1	26.2	7.2	61.30	**U4.5 SHGC 0.45**
	2203	2	78.7	23.3	22.8	7.9	46.10	**U4.5 SHGC 0.45**
	2204	2	80.6	14.9	33.1	7.8	48.00	**U4.5 SHGC 0.45**
	2205	1	50.0	23.4	22.6	7.9	46.00	**U4.5 SHGC 0.45**
	2206	3	105.5	16.1	41.7	7.4	57.80	**U4.5 SHGC 0.45**
	2207	3	106.5	19.1	37.4	7.4	56.50	**U4.5 SHGC 0.45**
	2208	1	52.0	41.9	19.7	7.2	61.60	**U4.5 SHGC 0.45**
	2209	1	52.0	44.4	18.1	7.2	62.50	**U4.5 SHGC 0.45**
	2210	1	56.2	49.1	19.1	6.9	68.20	**U4.5 SHGC 0.45**
	2211	1	50.7	59.3	20.5	6.4	79.80	**U4.5 SHGC 0.45**
	2301	2	77.4	51.3	17.6	6.9	68.90	**U4.5 SHGC 0.45**
	2302	2	86.2	35.2	26	7.2	61.20	**U4.5 SHGC 0.45**
	2303	2	78.7	23.4	23	7.9	46.40	**U4.5 SHGC 0.45**
	2304	2	80.6	15	33.4	7.8	48.40	**U4.5 SHGC 0.45**
	2305	1	50.0	23.5	22.8	7.9	46.30	**U4.5 SHGC 0.45**

L23	2306	3	105.5	16.2	41.4	7.4	57.60	**U4.5 SHGC 0.45**
	2307	3	106.5	19.1	37.6	7.4	56.70	**U4.5 SHGC 0.45**
	2308	1	52.0	41.9	19.9	7.2	61.80	**U4.5 SHGC 0.45**
	2309	1	52.0	44.4	18.1	7.2	62.50	**U4.5 SHGC 0.45**
	2310	1	56.2	49.1	19.4	6.9	68.50	**U4.5 SHGC 0.45**
	2311	1	50.7	59.4	20.5	6.4	79.90	**U4.5 SHGC 0.45**
L24	2401	2	77.4	51.4	17.9	6.9	69.30	**U4.5 SHGC 0.45**
	2402	2	86.2	35.3	26.2	7.2	61.50	**U4.5 SHGC 0.45**
	2403	2	78.7	23.4	22.9	7.9	46.30	**U4.5 SHGC 0.45**
	2404	2	80.6	15	33.3	7.8	48.30	**U4.5 SHGC 0.45**
	2405	1	50.0	23.6	22.4	7.9	46.00	**U4.5 SHGC 0.45**
	2406	3	105.5	16.3	41.6	7.4	57.90	**U4.5 SHGC 0.45**
	2407	3	106.5	19.1	37.4	7.4	56.50	**U4.5 SHGC 0.45**
	2408	1	52.0	41.9	20.6	7.2	62.50	**U4.5 SHGC 0.45**
	2409	1	52.0	44.4	18.2	7.2	62.60	**U4.5 SHGC 0.45**
	2410	1	56.2	49	19.9	6.9	68.90	**U4.5 SHGC 0.45**
	2411	1	50.7	59.3	20.6	6.4	79.90	**U4.5 SHGC 0.45**
L25	2501	2	77.4	51.4	17.6	6.9	69.00	**U4.5 SHGC 0.45**
	2502	2	86.2	35.3	26.2	7.2	61.50	**U4.5 SHGC 0.45**
	2503	2	78.7	23.4	22.7	7.9	46.10	**U4.5 SHGC 0.45**
	2504	2	80.6	15	33.2	7.8	48.20	**U4.5 SHGC 0.45**
	2505	1	50.0	23.6	22.4	7.9	46.00	**U4.5 SHGC 0.45**
	2506	3	105.5	16.3	41.5	7.4	57.80	**U4.5 SHGC 0.45**
	2507	3	106.5	19.1	37.5	7.4	56.60	**U4.5 SHGC 0.45**
	2508	1	52.0	41.7	20.2	7.2	61.90	**U4.5 SHGC 0.45**
	2509	1	52.0	44.2	18.5	7.2	62.70	**U4.5 SHGC 0.45**
	2510	1	56.2	48.8	20	6.9	68.80	**U4.5 SHGC 0.45**
	2511	1	50.7	59.2	20.6	6.4	79.80	**U4.5 SHGC 0.45**
L26	2601	2	77.4	51.5	17.6	6.9	69.10	**U4.5 SHGC 0.45**
	2602	2	86.2	35.5	26.2	7.2	61.70	**U4.5 SHGC 0.45**
	2603	2	78.7	23.5	22.8	7.9	46.30	**U4.5 SHGC 0.45**
	2604	2	80.6	15.1	32.9	7.8	48.00	**U4.5 SHGC 0.45**
	2605	1	50.0	23.7	22.4	7.9	46.10	**U4.5 SHGC 0.45**
	2606	3	105.5	16.3	41.2	7.4	57.50	**U4.5 SHGC 0.45**
	2607	3	106.5	19.1	38.2	7.4	57.30	**U4.5 SHGC 0.45**
	2608	1	52.0	41.6	20.2	7.2	61.80	**U4.5 SHGC 0.45**
	2609	1	52.0	44.1	18.8	7.1	62.90	**U4.5 SHGC 0.45**
	2610	1	56.2	48.7	19.7	6.9	68.40	**U4.5 SHGC 0.45**
	2611	1	50.7	59.1	20.6	6.4	79.70	**U4.5 SHGC 0.45**
L27	2701	2	77.4	51.6	17.8	6.8	69.40	**U4.5 SHGC 0.45**
	2702	2	86.2	35.6	26.1	7.2	61.70	**U4.5 SHGC 0.45**
	2703	2	78.7	23.6	22.7	7.9	46.30	**U4.5 SHGC 0.45**
	2704	2	80.6	15.1	32.9	7.8	48.00	**U4.5 SHGC 0.45**
	2705	1	50.0	23.8	22.5	7.9	46.30	**U4.5 SHGC 0.45**
	2706	3	105.5	16.4	41.5	7.4	57.90	**U4.5 SHGC 0.45**
	2707	3	106.5	19	38.9	7.4	57.90	**U4.5 SHGC 0.45**
	2708	1	52.0	41.4	20.6	7.2	62.00	**U4.5 SHGC 0.45**
	2709	1	52.0	43.9	18.7	7.2	62.60	**U4.5 SHGC 0.45**
	2710	1	56.2	48.6	19.4	6.9	68.00	**U4.5 SHGC 0.45**
	2711	1	50.7	58.9	21.1	6.4	80.00	**U4.5 SHGC 0.45**
L28	2801	2	77.4	51.8	17.7	6.8	69.50	**U4.5 SHGC 0.45**
	2802	2	86.2	35.7	25.9	7.2	61.60	**U4.5 SHGC 0.45**
	2803	2	78.7	23.7	22.9	7.9	46.60	**U4.5 SHGC 0.45**
	2804	2	80.6	15.1	32.8	7.8	47.90	**U4.5 SHGC 0.45**
	2805	1	50.0	23.9	22.5	7.9	46.40	**U4.5 SHGC 0.45**
	2806	3	105.5	16.5	41.1	7.4	57.60	**U4.5 SHGC 0.45**
	2807	3	106.5	19	39.7	7.3	58.70	**U4.5 SHGC 0.45**
	2808	1	52.0	41.1	21.9	7.1	63.00	**U4.5 SHGC 0.45**
	2809	1	52.0	43.7	19.3	7.1	63.00	**U4.5 SHGC 0.45**
	2810	1	56.2	48.3	20	6.9	68.30	**U4.5 SHGC 0.45**
	2811	1	50.7	58.5	22.3	6.3	80.80	**U4.5 SHGC 0.45**
L29	2901	2	77.4	51.8	17.8	6.8	69.60	**U4.5 SHGC 0.45**
	2902	2	86.2	35.7	26	7.2	61.70	**U4.5 SHGC 0.45**
	2903	2	78.7	23.7	22.4	7.9	46.10	**U4.5 SHGC 0.45**
	2904	2	80.6	15.1	32.5	7.8	47.60	**U4.5 SHGC 0.45**
	2905	1	50.0	23.9	22.4	7.9	46.30	**U4.5 SHGC 0.45**
	2906	3	105.5	16.5	41.1	7.4	57.60	**U4.5 SHGC 0.45**
	2907	3	106.5	18.8	41	7.3	59.80	**U4.5 SHGC 0.45**
	2908	1	52.0	40.5	22.2	7.2	62.70	**U4.5 SHGC 0.45**
	2909	1	52.0	42.7	20.3	7.1	63.00	**U4.5 SHGC 0.45**
	2910	1	56.2	47.5	20.3	6.9	67.80	**U4.5 SHGC 0.45**
	2911	1	50.7	58.5	22.3	6.3	80.80	**U4.5 SHGC 0.45**
L30	3001	2	77.4	51.9	17.4	6.9	69.30	**U4.5 SHGC 0.45**
	3002	2	86.2	35.8	25.7	7.2	61.50	**U4.5 SHGC 0.45**
	3003	2	78.7	23.8	22.7	7.9	46.50	**U4.5 SHGC 0.45**
	3004	2	80.6	15.2	32.4	7.8	47.60	**U4.5 SHGC 0.45**
	3005	1	50.0	24	22.4	7.9	46.40	**U4.5 SHGC 0.45**
	3006	3	105.5	16.6	41	7.4	57.60	**U4.5 SHGC 0.45**
	3007	3	106.5	18.7	45.3	7.1	64.00	**U4.5 SHGC 0.45**
	3008	1	52.0	40	23.2	7.1	63.20	**U4.5 SHGC 0.45**
	3009	1	52.0	41.6	20.8	7.2	62.40	**U4.5 SHGC 0.45**
	3010	1	56.2	46.1	21.4	6.9	67.50	**U4.5 SHGC 0.45**
	3011	1	50.7	58.2	23.1	6.3	81.30	**U4.5 SHGC 0.45**
L31	3101	2	77.4	51.9	17.4	6.9	69.30	**U4.5 SHGC 0.45**
	3102	2	86.2	35.8	25.8	7.2	61.60	**U4.5 SHGC 0.45**
	3103	2	78.7	23.8	22.7	7.9	46.50	**U4.5 SHGC 0.45**
	3104	2	80.6	15.2	32.4	7.8	47.60	**U4.5 SHGC 0.45**
	3105	1	50.0	24	22.5	7.9	46.50	**U4.5 SHGC 0.45**
	3106	3	105.5	16.6	41	7.4	57.60	**U4.5 SHGC 0.45**
	3107	3	106.5	18.4	47	7.0	65.40	**U4.5 SHGC 0.45**
	3108	1	52.0	38.9	24.7	7.1	63.60	**U4.5 SHGC 0.45**
	3109	1	52.0	40.6	21.9	7.2	62.50	**U4.5 SHGC 0.45**
	3110	1	56.2	42.5	22.7	7.0	65.20	**U4.5 SHGC 0.45**
	3111	1	50.7	56.9	23.9	6.3	80.80	**U4.5 SHGC 0.45**
L32	3201	2	77.4	52	24.9	6.5	76.90	**U3.7 SHGC 0.45**
	3202	2	86.2	53.4	36.9	5.9	90.30	**U4.5 SHGC 0.45**
	3203	2	78.7	43.7	31	6.6	74.70	**U4.5 SHGC 0.45**
	3204	2	80.6	29.7	41.3	6.8	71.00	**U4.5 SHGC 0.45**
	3205	1	50.0	24.2	22.4	7.9	46.60	**U4.5 SHGC 0.45**
	3206	3	105.5	16.7	41	7.4	57.70	**U4.5 SHGC 0.45**
	3207	3	106.5	18.2	50.3	6.9	68.50	**U4.5 SHGC 0.45**
	3208	1	52.0	37.3	24.2	7.2	61.50	**U4.5 SHGC 0.45**
	3209	1	52.0	38.9	22.5	7.2	61.40	**U4.5 SHGC 0.45**
	3210	1	56.2	40.5	23	7.1	63.50	**U4.5 SHGC 0.45**
	3211	1	50.7	55.8	24.4	6.3	80.20	**U4.5 SHGC 0.45**

L33	3301	1	50.0	44.2	30.2	6.6	74.40	**U4.5 SHGC 0.45**
	3302	3	105.5	31.2	51.3	6.2	82.50	**U4.5 SHGC 0.45**
	3303	3	106.5	30.7	60.7	5.8	91.40	**U4.5 SHGC 0.45**
	3304	1	52.0	50.2	35.1	6.1	85.30	**U4.5 SHGC 0.45**
	3305	1	52.0	46.5	32.6	6.4	79.10	**U4.5 SHGC 0.45**
	3306	1	56.2	50.4	32.5	6.2	82.90	**U4.5 SHGC 0.45**
	3307	1	50.7	56.9	29.6	6.0	86.50	**U3.7 SHGC 0.45**

Appendix C NatHERS Group Certificate

Nationwide House Energy Rating Scheme — Class 2 summary

NatHERS Certificate No. NEFDLTTEF1

Generated on 28 Oct 2021 using FirstRate5 v5.3.1a

Property

Address 28 Elizabeth Street, Liverpool, NSW, 2170

Lot/DP

NatHERS climate zone

Accredited assessor

Nicholas Johnson

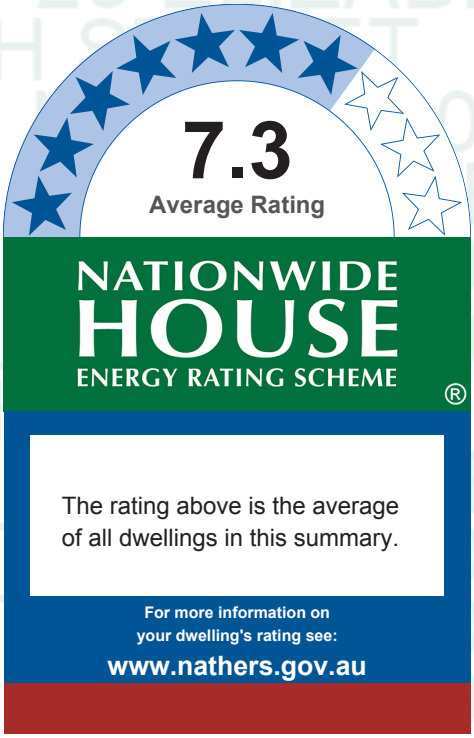
Wood & Grieve Engineers

nicholas.johnson@wge.com.au

0401702351

Accreditation No. DMN/13/1513

Assessor Accrediting Organisation Design Matters National



Verification

To verify this certificate, scan the QR code or visit https://www.fr5.com.au/QRCodeLanding?PublicId=NEFDLTTEF1&GrpCert=1 When using either link, ensure you are visiting www.fr5.com.au.

Summary of all dwellings

Certificate number and link	Unit number	Heating load (MJ/m²/p.a.)	Cooling load (MJ/m²/p.a.)	Total load (MJ/m²/p.a.)	Star rating
S653ELXRGC	1001	49.7	18.8	68.5	6.9
G9GATFPSGX	1002	33.7	26.8	60.5	7.2
NIX5QLZR4E	1003	22.1	23.7	45.8	7.9
0DMWW8JTTM	1004	14	34.9	48.9	7.8
IEJRFBQDWB	1005	21.9	23.7	45.6	7.9
Q7K4BKJAN3	1006	15.2	43.2	58.4	7.3
IY26NQS3LQ	1007	16.3	44.6	60.9	7.2

Continued over

National Construction Code (NCC) requirements

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

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

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

Summary of and links to all dwellings (continued)

Certificate number and link	Unit number	Heating load (MJ/m²/p.a.)	Cooling load (MJ/m²/p.a.)	Total load (MJ/m²/p.a.)	Star rating
F1Y2RP5287	1008	22.3	21	43.3	8
U7GY8M41C3	1009	43.4	18	61.4	7.2
CVK1EZJU2Y	1010	47.9	19.3	67.2	6.9
VY28DHT94U	1011	58.1	21.6	79.7	6.4
RCNW9KSE8A	1101	49.9	18.7	68.6	6.9
W11SNUR7Y1	1102	33.9	26.8	60.7	7.2
FK9JL6EHU0	1103	22.3	23.6	45.9	7.9
257RM9IY13	1104	14.2	34.6	48.8	7.8
HFW2C47KUT	1105	22.1	23.5	45.6	7.9
0WKCPGDDKD	1106	15.4	42.6	58	7.4
FKTHI04JGO	1107	16.5	44.3	60.8	7.2
L3G4U9XGHQ	1108	22.5	21	43.5	8
94XBAGU4CF	1109	43.6	17.9	61.5	7.2
5FNXX6WPTL	1110	48.1	19.2	67.3	6.9
AXEFH6QQSP	1111	58.3	21.6	79.9	6.4
J7E2DAZXM9	1201	50	18.4	68.4	6.9
UYFTZOV1BY	1202	34	26.9	60.9	7.2
L2TIPPH55C	1203	22.4	23.6	46	7.9
UBQYL7H18M	1204	14.2	34.5	48.7	7.8
AUTDZXRYQP	1205	22.2	23.5	45.7	7.9
342JPTHQI1	1206	15.5	42.4	57.9	7.4
WN85XLJIWK	1207	16.6	44.2	60.8	7.2
77M5ZBKRIM	1208	22.6	20.5	43.1	8
Z6OK5SGLHF	1209	43.7	17.8	61.5	7.2
N9WNB9L874	1210	48.3	19.1	67.4	6.9
HG7YLZ8X9F	1211	58.4	21.5	79.9	6.4
F8ARFISZPH	1301	50.2	18.8	69	6.9
9CKV8ZKBI6	1302	34.2	26.7	60.9	7.2
GHNN7810L1	1303	22.4	23.5	45.9	7.9
TOIBRP8EI3	1304	14.3	34.8	49.1	7.8
RWT04F6MZV	1305	22.4	23.4	45.8	7.9
P6OD87UXUG	1306	15.5	42.4	57.9	7.4
Q1NYXU3IDT	1307	16.6	43.9	60.5	7.3
0F3POUYXS1	1308	22.6	20.4	43	8.1
CPB0LXAFDU	1309	43.8	17.8	61.6	7.2
4LUBN0I5DK	1310	48.4	19.1	67.5	6.9
MXIF4JC9YO	1311	58.6	21.2	79.8	6.4

Continued over

Summary of and links to all dwellings (continued)

Certificate number and link	Unit number	Heating load (MJ/m²/p.a.)	Cooling load (MJ/m²/p.a.)	Total load (MJ/m²/p.a.)	Star rating
SY5CB45FCV	1401	50.3	18.7	69	6.9
4IOV4LI2YM	1402	34.3	26.8	61.1	7.2
4VT22IX3H8	1403	22.5	23.2	45.7	7.9
7AN981QIY3	1404	14.3	34.4	48.7	7.8
COMH87FCK2	1405	22.4	23.1	45.5	7.9
GB7EX45PXC	1406	15.6	42.6	58.2	7.4
5AE48WIIX9	1407	18.8	38.3	57.1	7.4
VGXCMCXUOU	1408	41.4	19.2	60.6	7.2
6694OJ9FZP	1409	43.9	17.9	61.8	7.2
4W42X23RUL	1410	48.5	19	67.5	6.9
YJFZ0CQGFD	1411	58.7	21.1	79.8	6.4
LEK889L5PT	1501	50.5	18.3	68.8	6.9
IG9C6W0JDL	1502	34.5	26.6	61.1	7.2
22AWB762WD	1503	22.7	23.2	45.9	7.9
3NA2AU9H11	1504	14.5	34.4	48.9	7.8
1V1V4H7XFT	1505	22.7	23.2	45.9	7.9
3ZMEATDX6B	1506	15.6	42.5	58.1	7.4
DSIMZ5FGCL	1507	18.7	38.3	57	7.4
XTSMUGAO24	1508	41.6	19.3	60.9	7.2
9IXDJEA62Q	1509	44.1	17.7	61.8	7.2
QLKZXIMP59	1510	48.7	19	67.7	6.9
B0V36KHAT3	1511	58.8	21	79.8	6.4
K9GAIQFJSX	1601	50.6	18.3	68.9	6.9
RFR0R32OS4	1602	34.6	26.4	61	7.2
ZKIUR22FQZ	1603	22.8	23.1	45.9	7.9
24DQ17N1RW	1604	14.4	34.4	48.8	7.8
MITI6V4I4S	1605	22.8	23.1	45.9	7.9
VQOXV90VSQ	1606	15.7	42.5	58.2	7.4
X9234XBB8T	1607	18.7	38.5	57.2	7.4
4J77XYC7AI	1608	41.7	19.1	60.8	7.2
HSQC6TB9EU	1609	44.2	17.7	61.9	7.2
9CWAIFF3CN	1610	48.8	18.8	67.6	6.9
XC3QA29UNC	1611	58.9	20.8	79.7	6.4
PNBJ0OFC73	1701	50.7	18.3	69	6.9
60POW336TP	1702	34.7	26.7	61.4	7.2
OR9GADHLDJ	1703	22.9	23.1	46	7.9

Continued over

Summary of and links to all dwellings (continued)

Certificate number and link	Unit number	Heating load (MJ/m²/p.a.)	Cooling load (MJ/m²/p.a.)	Total load (MJ/m²/p.a.)	Star rating
ZO28DZ7WX7	1704	14.5	34.1	48.6	7.8
1BKXZ0RJUB	1705	22.9	22.9	45.8	7.9
FUYGYRW010	1706	15.8	42.3	58.1	7.4
HXCVKJ1J2O	1707	18.8	38.2	57	7.4
NUEWNGNE9I	1708	41.8	19	60.8	7.2
E1S3CX1W1C	1709	44.3	17.7	62	7.2
6U2ZDSRC5O	1710	48.9	18.7	67.6	6.9
0M8MMN47SL	1711	59	20.9	79.9	6.4
2G5SJEC4X1	1801	50.9	18.2	69.1	6.9
DJJ4HRA3C0	1802	34.8	26.4	61.2	7.2
AGU5YIHL97	1803	23	23.1	46.1	7.9
JTUTYHJB1H	1804	14.6	34.2	48.8	7.8
M930ZT6KHI	1805	23	23	46	7.9
6KK8HVV93A	1806	15.8	42.4	58.2	7.4
7150SUZZG9	1807	18.9	37.7	56.6	7.4
EQTMFGTW83	1808	41.9	19.2	61.1	7.2
UR7Z81WPB9	1809	44.4	17.7	62.1	7.2
Q2M9E0858Q	1810	48.9	18.7	67.6	6.9
A9YHYVR8KI	1811	59.1	20.9	80	6.3
D4C2JLSV5N	1901	51	18.3	69.3	6.9
XY2HHMEUHO	1902	34.9	26.2	61.1	7.2
HXXS3V30BM	1903	23.1	22.9	46	7.9
JXF26VZTZ3	1904	14.7	34.1	48.8	7.8
INAV3MGQAM	1905	23.1	22.9	46	7.9
R715BPHU9Y	1906	15.9	42.4	58.3	7.3
R2TSD9TALV	1907	18.9	37.8	56.7	7.4
WU4OG3XBZR	1908	41.8	19.3	61.1	7.2
OMZZ4M6J1Q	1909	44.3	17.7	62	7.2
NFUBMP3RR3	1910	48.9	19	67.9	6.9
2FFOZ7DMZH	1911	59.2	20.9	80.1	6.3
274PX74937	2001	51	18.2	69.2	6.9
GJYEZE3543	2002	34.9	26.1	61	7.2
CBLPOXQBW4	2003	23.1	22.9	46	7.9
3PK3FJE3HX	2004	14.7	34	48.7	7.8
75Y1IYAMI9	2005	23.1	22.9	46	7.9
91OO54QE1P	2006	15.9	42.6	58.5	7.3

Continued over

Summary of and links to all dwellings (continued)

Certificate number and link	Unit number	Heating load (MJ/m²/p.a.)	Cooling load (MJ/m²/p.a.)	Total load (MJ/m²/p.a.)	Star rating
HRVT6X8ML9	2007	18.9	37.4	56.3	7.4
K5UB1365BE	2008	41.9	19.3	61.2	7.2
KCVN3R30QD	2009	44.4	17.8	62.2	7.2
LWHR5QJE4U	2010	49	19.1	68.1	6.9
0XBJZEGNWC	2011	59.3	20.7	80	6.4
8UCXEF6I0P	2101	51.1	18	69.1	6.9
4H6HXXXCFL	2102	35	26	61	7.2
T1BRNWALXZ	2103	23.2	22.9	46.1	7.9
KPENF0UUMZ	2104	14.8	33.7	48.5	7.8
TBNP0S13VC	2105	23.3	22.9	46.2	7.9
RDHKTGTVKS	2106	16	42.5	58.5	7.3
EUUBEODTC7	2107	19	37.4	56.4	7.4
DD0P2SNV04	2108	41.9	19.7	61.6	7.2
5H0VIGH348	2109	44.4	17.8	62.2	7.2
H8J4V9QMKL	2110	49	18.7	67.7	6.9
PI0Y8NN2SA	2111	59.4	20.5	79.9	6.4
2ZWAB4ITDU	2201	51.2	17.8	69	6.9
PDPU0WL9NE	2202	35.1	26.2	61.3	7.2
5DYJ1B4REZ	2203	23.3	22.8	46.1	7.9
YUWK2KP4N3	2204	14.9	33.1	48	7.8
IIFM81196D	2205	23.4	22.6	46	7.9
QA65RR09Y6	2206	16.1	41.7	57.8	7.4
7UL7DMPQ41	2207	19.1	37.4	56.5	7.4
G2IB9NP0NJ	2208	41.9	19.7	61.6	7.2
T3JKCUTSFE	2209	44.4	18.1	62.5	7.2
HVGHMY256E	2210	49.1	19.1	68.2	6.9
BAVPNDLA5T	2211	59.3	20.5	79.8	6.4
26KZSP4WS6	2301	51.3	17.6	68.9	6.9
ZUA5B8XC7O	2302	35.2	26	61.2	7.2
2YWBDIFSJP	2303	23.4	23	46.4	7.9
1Y9GZKKQY7	2304	15	33.4	48.4	7.8
3FMAOQA0NO	2305	23.5	22.8	46.3	7.9
QICQ1EKJWJ	2306	16.2	41.4	57.6	7.4
JMNDEBV3F0	2307	19.1	37.6	56.7	7.4
YGNAVXMVWW	2308	41.9	19.9	61.8	7.2
IPE49TWSOV	2309	44.4	18.1	62.5	7.2

Continued over

Summary of and links to all dwellings (continued)

Certificate number and link	Unit number	Heating load (MJ/m²/p.a.)	Cooling load (MJ/m²/p.a.)	Total load (MJ/m²/p.a.)	Star rating
AB4OXQ1I6N	2310	49.1	19.4	68.5	6.9
5GUX0J4B5E	2311	59.4	20.5	79.9	6.4
X9XF7HL6RS	2401	51.4	17.9	69.3	6.8
N8A6LP60XR	2402	35.3	26.2	61.5	7.2
4UOY5YL5Q7	2403	23.4	22.9	46.3	7.9
W0EOCXX37J	2404	15	33.3	48.3	7.8
AU23Y7J8C4	2405	23.6	22.4	46	7.9
JKP7WCV9JJ	2406	16.3	41.6	57.9	7.4
5QPU5W3W4Y	2407	19.1	37.4	56.5	7.4
1C3OQK2UA7	2408	41.9	20.6	62.5	7.2
OM3VXMLH29	2409	44.4	18.2	62.6	7.2
K9726DOW7Q	2410	49	19.9	68.9	6.9
Z0MXN17G9G	2411	59.3	20.6	79.9	6.4
K8LCBCGL0P	2501	51.4	17.6	69	6.9
IKT4LO0L80	2502	35.3	26.2	61.5	7.2
O1I8FFYVZE	2503	23.4	22.7	46.1	7.9
JB2XIMY504	2504	15	33.2	48.2	7.8
7C6SIOGRM9	2505	23.6	22.4	46	7.9
AVHI1SZN66	2506	16.3	41.5	57.8	7.4
OUWVGGS6W8	2507	19.1	37.5	56.6	7.4
Z4VE3L50Z1	2508	41.7	20.2	61.9	7.2
8GJZDX3T5Z	2509	44.2	18.5	62.7	7.2
WK84QMQKMB	2510	48.8	20	68.8	6.9
6K5NJGADOQ	2511	59.2	20.6	79.8	6.4
Y9RUUW08EC	2601	51.5	17.6	69.1	6.9
MHES2TI5G8	2602	35.5	26.2	61.7	7.2
KUFEG0CQVO	2603	23.5	22.8	46.3	7.9
2FQGBOQWOK	2604	15.1	32.9	48	7.8
VFD08BLEDO	2605	23.7	22.4	46.1	7.9
KNKGM7XQRT	2606	16.3	41.2	57.5	7.4
XVJV8CCC50	2607	19.1	38.2	57.3	7.4
6PJVQP9NE8	2608	41.6	20.2	61.8	7.2
1IRSSEX7TP	2609	44.1	18.8	62.9	7.1
W882BBXEIX	2610	48.7	19.7	68.4	6.9
QOW4G4DZZ7	2611	59.1	20.6	79.7	6.4
7KMT2PE0C4	2701	51.6	17.8	69.4	6.8

Continued over

Summary of and links to all dwellings (continued)

Certificate number and link	Unit number	Heating load (MJ/m²/p.a.)	Cooling load (MJ/m²/p.a.)	Total load (MJ/m²/p.a.)	Star rating
PFTQD7RRTO	2702	35.6	26.1	61.7	7.2
15EQRMVWLX	2703	23.6	22.7	46.3	7.9
A8IVRMVO9W	2704	15.1	32.9	48	7.8
76BOHL5G1I	2705	23.8	22.5	46.3	7.9
3RPP3R7791	2706	16.4	41.5	57.9	7.4
MCR7R43ZIG	2707	19	38.9	57.9	7.4
RP5CJO27PO	2708	41.4	20.6	62	7.2
GZMT2PRWV0	2709	43.9	18.7	62.6	7.2
N7G96LEI2L	2710	48.6	19.4	68	6.9
IQX58OWMFO	2711	58.9	21.1	80	6.4
TC4SUPX0L1	2801	51.8	17.7	69.5	6.8
VCT02JKF5E	2802	35.7	25.9	61.6	7.2
4VAEJYVCFA	2803	23.7	22.9	46.6	7.9
N5AO4KM2G8	2804	15.1	32.8	47.9	7.8
3IUOFA6AJL	2805	23.9	22.5	46.4	7.9
OA1YF7C0J6	2806	16.5	41.1	57.6	7.4
4UVKO0BE5S	2807	19	39.7	58.7	7.3
7S97KWBV8I	2808	41.1	21.9	63	7.1
F0FGED4MO4	2809	43.7	19.3	63	7.1
TJNZJH07QO	2810	48.3	20	68.3	6.9
DWR6NEROFE	2811	58.8	21.8	80.6	6.3
O7NGIC9KB8	2901	51.8	17.8	69.6	6.8
TDHU0L2NR1	2902	35.7	26	61.7	7.2
KNYYLTJJ2A	2903	23.7	22.4	46.1	7.9
WPHJPV5GQH	2904	15.1	32.5	47.6	7.8
HQ6S49O6FB	2905	23.9	22.4	46.3	7.9
LD7N4AJY4Z	2906	16.5	41.1	57.6	7.4
20RALD68FE	2907	18.8	41	59.8	7.3
QW7KU3RG4M	2908	40.5	22.2	62.7	7.2
END0ZTS3PO	2909	42.7	20.3	63	7.1
MGL1OQ95G0	2910	47.5	20.3	67.8	6.9
DQ1BVYGX2A	2911	58.5	22.3	80.8	6.3
U7EOUA5PQD	3001	51.9	17.4	69.3	6.9
5RI160W7PU	3002	35.8	25.7	61.5	7.2
2XQKY4YO3D	3003	23.8	22.7	46.5	7.9
FT1UJX3IT4	3004	15.2	32.4	47.6	7.8

Continued over

Summary of and links to all dwellings (continued)

Certificate number and link	Unit number	Heating load (MJ/m²/p.a.)	Cooling load (MJ/m²/p.a.)	Total load (MJ/m²/p.a.)	Star rating
BVU1SV6SHU	3005	24	22.4	46.4	7.9
7EGDL7Q3ZZ	3006	16.6	41	57.6	7.4
LQVN8M0XRJ	3007	18.7	45.3	64	7.1
6NNUTHCZ1D	3008	40	23.2	63.2	7.1
YMBWNHFS6H	3009	41.6	20.8	62.4	7.2
U02MX4K13V	3010	46.1	21.4	67.5	6.9
SVS6Q66C8K	3011	58.2	23.1	81.3	6.3
E198X2TZUW	3101	51.9	17.4	69.3	6.9
ESTYKQD1F2	3102	35.8	25.8	61.6	7.2
N5SF2C3EFQ	3103	23.8	22.7	46.5	7.9
LCUWD314Z4	3104	15.2	32.4	47.6	7.8
LUGGQAC4VA	3105	24	22.5	46.5	7.9
3E7F7JJ3GU	3106	16.6	41	57.6	7.4
9OUELB77UR	3107	18.4	47	65.4	7
ZJCKR2YLZ1	3108	38.9	24.7	63.6	7.1
98TEXHFPY3	3109	40.6	21.9	62.5	7.2
U8XE56AB5O	3110	42.5	22.7	65.2	7
CFJELTBWXE	3111	56.9	23.9	80.8	6.3
QNMNGFI13J	3201	52	24.9	76.9	6.5
297ZLN4BGX	3202	53.4	36.9	90.3	5.9
INAJ6B3694	3203	43.7	31	74.7	6.6
87EP4FNSWP	3204	29.7	41.3	71	6.8
VLIKSITQ6B	3205	24.2	22.4	46.6	7.9
0Y285L8ERQ	3206	16.7	41	57.7	7.4
GHDLPO7VDD	3207	18.2	50.3	68.5	6.9
03WK0KEWCD	3208	37.3	24.2	61.5	7.2
XEWC2JFGTT	3209	38.9	22.5	61.4	7.2
GIAGJOH74E	3210	40.5	23	63.5	7.1
L8M2N027UM	3211	55.8	24.4	80.2	6.3
1ZKO2CUBTG	3301	44.2	30.2	74.4	6.6
806LHPZMFG	3302	31.2	51.3	82.5	6.2
RIZBECLYBC	3303	30.7	60.7	91.4	5.8
KJO70I8L7F	3304	50.2	35.1	85.3	6.1
SEBWON9Q7U	3305	46.5	32.6	79.1	6.4
4MMU2GNCHV	3306	50.4	32.5	82.9	6.2
K1MRYBG31O	3307	56.9	29.6	86.5	6

Continued over

Summary of and links to all dwellings (continued)

Certificate number and link	Unit number	Heating load (MJ/m²/p.a.)	Cooling load (MJ/m²/p.a.)	Total load (MJ/m²/p.a.)	Star rating
46BJS32UOG	501	30.4	26.2	56.6	7.4
14GJOOONVA	502	39.9	55.2	95.1	5.7
Q423ZUZHLU	503	14.8	21.8	36.6	8.4
ISNNKF6EJ8	504	47.2	24.1	71.3	6.8
UHM0D20G59	505	22.9	26.1	49	7.8
21Y8QTSPGW	506	30.9	24.4	55.3	7.4
77K4EBA3HU	507	55.3	23	78.3	6.4
FIEX95FLYA	508	38.9	23.9	62.8	7.1
8NSQ6PXRDT	601	47.5	19.9	67.4	6.9
Z0BDH2E2ZZ	602	31.8	29.5	61.3	7.2
C4ENQI8QY0	603	20.3	26	46.3	7.9
OSBWV8F6A6	604	22.3	35.6	57.9	7.4
VPTAGATXWM	605	20	23.8	43.8	8
LFTU75IBAL	606	17.1	48.6	65.7	7
5MW5JEGHOM	607	16.9	48.7	65.6	7
C4C0O50Z6W	608	21	22.1	43.1	8
DZQ6YH0QEU	609	35.8	19.3	55.1	7.4
E51F9TZR1C	610	44.7	19.3	64	7.1
JDTLCNFXIW	611	55.7	22.8	78.5	6.4
ECXZID8GX0	701	47.8	20.4	68.2	6.9
89X4KVN1NL	702	32	29.5	61.5	7.2
JCTQNQB39Z	703	20.5	25.5	46	7.9
0RKS9VF88Y	704	12.7	37.7	50.4	7.7
29L6FD7ZSP	705	20.2	23.7	43.9	8
OVDQQ3KVL4	706	14	49.6	63.6	7.1
653L1QYE5Z	707	14.7	48.8	63.5	7.1
QO2YTK0WLJ	708	21.2	22.2	43.4	8
SLLULFO4CF	709	41.4	18.9	60.3	7.3
KUXD26FAEY	710	45.9	19.2	65.1	7
P2429A2P7G	711	56	22.6	78.6	6.4
TES58SUXD8	801	49.3	18.9	68.2	6.9
XJKFAEHC87	802	33.4	27.2	60.6	7.2
5UH7H0LJL5	803	21.8	24.2	46	7.9
GN5UDHUPTR	804	13.8	34.9	48.7	7.8
165ON1KX7V	805	21.6	23.5	45.1	7.9
0G2PCDCM7K	806	15.1	43.6	58.7	7.3

Continued over

Summary of and links to all dwellings (continued)

Certificate number and link	Unit number	Heating load (MJ/m²/p.a.)	Cooling load (MJ/m²/p.a.)	Total load (MJ/m²/p.a.)	Star rating
270D0O6J10	807	16.1	45.7	61.8	7.2
2M5N69Z2UP	808	22.1	21.2	43.3	8
QXMZEAUPRA	809	43	18.3	61.3	7.2
FHSIY3F2Y8	810	47.6	19.1	66.7	6.9
SXNECKJLKS	811	57.8	22	79.8	6.4
VTQYSDE3B4	901	49.6	18.8	68.4	6.9
XGX8W18EX8	902	36.3	27.6	63.9	7.1
YMM8I823XA	903	22	23.7	45.7	7.9
7NYRXP5PA7	904	14	34.8	48.8	7.8
LFXL4JHSQT	905	21.8	23.5	45.3	7.9
LKGB7JRFKH	906	15.1	42.9	58	7.4
6TEZ2C2M75	907	16.2	45	61.2	7.2
8MMMY20MWO	908	22.3	21	43.3	8
IN8QW4OTC1	909	43.2	18.3	61.5	7.2
44FKO1A8S1	910	47.8	19.1	66.9	6.9
Q4VUV884ME	911	57.9	21.7	79.6	6.4
Average		33.6	26.8	60.4	7.3

Explanatory notes

About this report

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

Accredited Assessors

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

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

Disclaimer

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

Appendix D BASIX Certificate

BASIX® Certificate

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

Multi Dwelling

Certificate number: 1224442M

This certificate confirms that the proposed development will meet the NSW government's requirements for sustainability, if it is built in accordance with the commitments set out below. Terms used in this certificate, or in the commitments, have the meaning given by the document entitled "BASIX Definitions" dated 10/09/2020 published by the Department. This document is available at www.basix.nsw.gov.au

Secretary
Date of issue: Thursday, 28 October 2021
To be valid, this certificate must be lodged within 3 months of the date of issue.

NSW GOVERNMENT | Planning, Industry & Environment

Project summary	
Project name	Illoura Place, Liverpool
Street address	28 Elizabeth Street Liverpool 2170
Local Government Area	Liverpool City Council
Plan type and plan number	deposited 1261270
Lot no.	1
Section no.	-
No. of residential flat buildings	1
No. of units in residential flat buildings	312
No. of multi-dwelling houses	0
No. of single dwelling houses	0

Project score		
Water	✔ 41	Target 40
Thermal Comfort	✔ Pass	Target Pass
Energy	✔ 28	Target 25

Certificate Prepared by
Name / Company Name: Stantec Australia Pty Ltd
ABN (if applicable): 17007820322

Description of project

Project address	
Project name	Illoura Place, Liverpool
Street address	28 Elizabeth Street Liverpool 2170
Local Government Area	Liverpool City Council
Plan type and plan number	deposited 1261270
Lot no.	1
Section no.	-

Project type	
No. of residential flat buildings	1
No. of units in residential flat buildings	312
No. of multi-dwelling houses	0
No. of single dwelling houses	0

Site details	
Site area (m²)	3609
Roof area (m²)	1134.7
Non-residential floor area (m²)	14177.9
Residential car spaces	411
Non-residential car spaces	131

Common area landscape	
Common area lawn (m²)	190.0
Common area garden (m²)	645.0
Area of indigenous or low water use species (m²)	0.0

Assessor details	
Assessor number	DMN/21/2042
Certificate number	NEFDLTTEF1
Climate zone	28
Ceiling fan in at least one bedroom	No
Ceiling fan in at least one living room or other conditioned area	No

Project score		
Water	✔ 41	Target 40
Thermal Comfort	✔ Pass	Target Pass
Energy	✔ 28	Target 25

Description of project

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

Residential flat buildings - Building1, 312 dwellings, 33 storeys above ground

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
501	1	50.0	0.0	0.0	0.0
506	1	55.9	0.0	0.0	0.0
603	2	78.7	0.0	0.0	0.0
608	2	76.0	0.0	0.0	0.0
702	2	86.2	0.0	0.0	0.0
707	2	80.9	0.0	0.0	0.0
801	2	77.4	0.0	0.0	0.0
806	3	105.5	0.0	0.0	0.0
811	1	50.7	0.0	0.0	0.0
905	1	50.0	0.0	0.0	0.0
910	1	56.2	0.0	0.0	0.0
1004	2	80.6	0.0	0.0	0.0
1009	1	52.0	0.0	0.0	0.0
1103	2	78.7	0.0	0.0	0.0
1108	2	76.0	0.0	0.0	0.0
1202	2	86.2	0.0	0.0	0.0
1207	2	80.9	0.0	0.0	0.0
1301	2	77.4	0.0	0.0	0.0
502	1	61.2	0.0	0.0	0.0
507	1	50.6	0.0	0.0	0.0
604	2	80.6	0.0	0.0	0.0
609	1	52.0	0.0	0.0	0.0
703	2	78.7	0.0	0.0	0.0
708	2	76.0	0.0	0.0	0.0
802	2	86.2	0.0	0.0	0.0
807	2	80.9	0.0	0.0	0.0
901	2	77.4	0.0	0.0	0.0
906	3	105.5	0.0	0.0	0.0
911	1	50.7	0.0	0.0	0.0
1005	1	50.0	0.0	0.0	0.0
1010	1	56.2	0.0	0.0	0.0
1104	2	80.6	0.0	0.0	0.0
1109	1	52.0	0.0	0.0	0.0
1203	2	78.7	0.0	0.0	0.0
1208	2	76.0	0.0	0.0	0.0
1302	2	86.2	0.0	0.0	0.0
503	2	87.6	0.0	0.0	0.0
508	1	52.6	0.0	0.0	0.0
605	1	50.0	0.0	0.0	0.0
610	1	56.2	0.0	0.0	0.0
704	2	80.6	0.0	0.0	0.0
709	1	52.0	0.0	0.0	0.0
803	2	78.7	0.0	0.0	0.0
808	2	76.0	0.0	0.0	0.0
902	2	86.2	0.0	0.0	0.0
907	2	80.9	0.0	0.0	0.0
1001	2	77.4	0.0	0.0	0.0
1006	3	105.5	0.0	0.0	0.0
1011	1	50.7	0.0	0.0	0.0
1105	1	50.0	0.0	0.0	0.0
1110	1	56.2	0.0	0.0	0.0
1204	2	80.6	0.0	0.0	0.0
1209	1	52.0	0.0	0.0	0.0
1303	2	78.7	0.0	0.0	0.0
504	1	52.0	0.0	0.0	0.0
601	2	77.4	0.0	0.0	0.0
606	3	105.5	0.0	0.0	0.0
611	1	50.7	0.0	0.0	0.0
705	1	50.0	0.0	0.0	0.0
710	1	56.2	0.0	0.0	0.0
804	2	80.6	0.0	0.0	0.0
809	1	52.0	0.0	0.0	0.0
903	2	78.7	0.0	0.0	0.0
908	2	76.0	0.0	0.0	0.0
1002	2	86.2	0.0	0.0	0.0
1007	2	80.9	0.0	0.0	0.0
1101	2	77.4	0.0	0.0	0.0
1106	3	105.5	0.0	0.0	0.0
1111	1	50.7	0.0	0.0	0.0
1205	1	50.0	0.0	0.0	0.0
1210	1	56.2	0.0	0.0	0.0
1304	2	80.6	0.0	0.0	0.0
505	1	52.0	0.0	0.0	0.0
602	2	86.2	0.0	0.0	0.0
607	2	80.9	0.0	0.0	0.0
701	2	77.4	0.0	0.0	0.0
706	3	105.5	0.0	0.0	0.0
711	1	50.7	0.0	0.0	0.0
805	1	50.0	0.0	0.0	0.0
810	1	56.2	0.0	0.0	0.0
904	2	80.6	0.0	0.0	0.0
909	1	52.0	0.0	0.0	0.0
1003	2	78.7	0.0	0.0	0.0
1008	2	76.0	0.0	0.0	0.0
1102	2	86.2	0.0	0.0	0.0
1107	2	80.9	0.0	0.0	0.0
1201	2	77.4	0.0	0.0	0.0
1206	3	105.5	0.0	0.0	0.0
1211	1	50.7	0.0	0.0	0.0
1305	1	50.0	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
1306	3	105.5	0.0	0.0	0.0
1311	1	50.7	0.0	0.0	0.0
1405	1	50.0	0.0	0.0	0.0
1410	1	56.2	0.0	0.0	0.0
1504	2	80.6	0.0	0.0	0.0
1509	1	52.0	0.0	0.0	0.0
1603	2	78.7	0.0	0.0	0.0
1608	1	52.0	0.0	0.0	0.0
1702	2	86.2	0.0	0.0	0.0
1707	3	106.5	0.0	0.0	0.0
1801	2	77.4	0.0	0.0	0.0
1806	3	105.5	0.0	0.0	0.0
1811	1	50.7	0.0	0.0	0.0
1905	1	50.0	0.0	0.0	0.0
1910	1	56.2	0.0	0.0	0.0
2004	2	80.6	0.0	0.0	0.0
2009	1	52.0	0.0	0.0	0.0
2103	2	78.7	0.0	0.0	0.0
2108	1	52.0	0.0	0.0	0.0
2202	2	86.2	0.0	0.0	0.0
2207	3	106.5	0.0	0.0	0.0
2301	2	77.4	0.0	0.0	0.0
2306	3	105.5	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
1307	2	80.9	0.0	0.0	0.0
1401	2	77.4	0.0	0.0	0.0
1406	3	105.5	0.0	0.0	0.0
1411	1	50.7	0.0	0.0	0.0
1505	1	50.0	0.0	0.0	0.0
1510	1	56.2	0.0	0.0	0.0
1604	2	80.6	0.0	0.0	0.0
1609	1	52.0	0.0	0.0	0.0
1703	2	78.7	0.0	0.0	0.0
1708	1	52.0	0.0	0.0	0.0
1802	2	86.2	0.0	0.0	0.0
1807	3	106.5	0.0	0.0	0.0
1901	2	77.4	0.0	0.0	0.0
1906	3	105.5	0.0	0.0	0.0
1911	1	50.7	0.0	0.0	0.0
2005	1	50.0	0.0	0.0	0.0
2010	1	56.2	0.0	0.0	0.0
2104	2	80.6	0.0	0.0	0.0
2109	1	52.0	0.0	0.0	0.0
2203	2	78.7	0.0	0.0	0.0
2208	1	52.0	0.0	0.0	0.0
2302	2	86.2	0.0	0.0	0.0
2307	3	106.5	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
1308	2	76.0	0.0	0.0	0.0
1402	2	86.2	0.0	0.0	0.0
1407	3	106.5	0.0	0.0	0.0
1501	2	77.4	0.0	0.0	0.0
1506	3	105.5	0.0	0.0	0.0
1511	1	50.7	0.0	0.0	0.0
1605	1	50.0	0.0	0.0	0.0
1610	1	56.2	0.0	0.0	0.0
1704	2	80.6	0.0	0.0	0.0
1709	1	52.0	0.0	0.0	0.0
1803	2	78.7	0.0	0.0	0.0
1808	1	52.0	0.0	0.0	0.0
1902	2	86.2	0.0	0.0	0.0
1907	3	106.5	0.0	0.0	0.0
2001	2	77.4	0.0	0.0	0.0
2006	3	105.5	0.0	0.0	0.0
2011	1	50.7	0.0	0.0	0.0
2105	1	50.0	0.0	0.0	0.0
2110	1	56.2	0.0	0.0	0.0
2204	2	80.6	0.0	0.0	0.0
2209	1	52.0	0.0	0.0	0.0
2303	2	78.7	0.0	0.0	0.0
2308	1	52.0	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
1309	1	52.0	0.0	0.0	0.0
1403	2	78.7	0.0	0.0	0.0
1408	1	52.0	0.0	0.0	0.0
1502	2	86.2	0.0	0.0	0.0
1507	3	106.5	0.0	0.0	0.0
1601	2	77.4	0.0	0.0	0.0
1606	3	105.5	0.0	0.0	0.0
1611	1	50.7	0.0	0.0	0.0
1705	1	50.0	0.0	0.0	0.0
1710	1	56.2	0.0	0.0	0.0
1804	2	80.6	0.0	0.0	0.0
1809	1	52.0	0.0	0.0	0.0
1903	2	78.7	0.0	0.0	0.0
1908	1	52.0	0.0	0.0	0.0
2002	2	86.2	0.0	0.0	0.0
2007	3	106.5	0.0	0.0	0.0
2101	2	77.4	0.0	0.0	0.0
2106	3	105.5	0.0	0.0	0.0
2111	1	50.7	0.0	0.0	0.0
2205	1	50.0	0.0	0.0	0.0
2210	1	56.2	0.0	0.0	0.0
2304	2	80.6	0.0	0.0	0.0
2309	1	52.0	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
1310	1	56.2	0.0	0.0	0.0
1404	2	80.6	0.0	0.0	0.0
1409	1	52.0	0.0	0.0	0.0
1503	2	78.7	0.0	0.0	0.0
1508	1	52.0	0.0	0.0	0.0
1602	2	86.2	0.0	0.0	0.0
1607	3	106.5	0.0	0.0	0.0
1701	2	77.4	0.0	0.0	0.0
1706	3	105.5	0.0	0.0	0.0
1711	1	50.7	0.0	0.0	0.0
1805	1	50.0	0.0	0.0	0.0
1810	1	56.2	0.0	0.0	0.0
1904	2	80.6	0.0	0.0	0.0
1909	1	52.0	0.0	0.0	0.0
2003	2	78.7	0.0	0.0	0.0
2008	1	52.0	0.0	0.0	0.0
2102	2	86.2	0.0	0.0	0.0
2107	3	106.5	0.0	0.0	0.0
2201	2	77.4	0.0	0.0	0.0
2206	3	105.5	0.0	0.0	0.0
2211	1	50.7	0.0	0.0	0.0
2305	1	50.0	0.0	0.0	0.0
2310	1	56.2	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
2311	1	50.7	0.0	0.0	0.0
2405	1	50.0	0.0	0.0	0.0
2410	1	56.2	0.0	0.0	0.0
2504	2	80.6	0.0	0.0	0.0
2509	1	52.0	0.0	0.0	0.0
2603	2	78.7	0.0	0.0	0.0
2608	1	52.0	0.0	0.0	0.0
2702	2	86.2	0.0	0.0	0.0
2707	3	106.5	0.0	0.0	0.0
2801	2	77.4	0.0	0.0	0.0
2806	3	105.5	0.0	0.0	0.0
2811	1	50.7	0.0	0.0	0.0
2905	1	50.0	0.0	0.0	0.0
2910	1	56.2	0.0	0.0	0.0
3004	2	80.6	0.0	0.0	0.0
3009	1	52.0	0.0	0.0	0.0
3103	2	78.7	0.0	0.0	0.0
3108	1	52.0	0.0	0.0	0.0
3202	2	86.2	0.0	0.0	0.0
3207	3	106.5	0.0	0.0	0.0
3301	1	50.0	0.0	0.0	0.0
3306	1	56.2	0.0	0.0	0.0
2401	2	77.4	0.0	0.0	0.0
2406	3	105.5	0.0	0.0	0.0
2411	1	50.7	0.0	0.0	0.0
2505	1	50.0	0.0	0.0	0.0
2510	1	56.2	0.0	0.0	0.0
2604	2	80.6	0.0	0.0	0.0
2609	1	52.0	0.0	0.0	0.0
2703	2	78.7	0.0	0.0	0.0
2708	1	52.0	0.0	0.0	0.0
2802	2	86.2	0.0	0.0	0.0
2807	3	106.5	0.0	0.0	0.0
2901	2	77.4	0.0	0.0	0.0
2906	3	105.5	0.0	0.0	0.0
2911	1	50.7	0.0	0.0	0.0
3005	1	50.0	0.0	0.0	0.0
3010	1	56.2	0.0	0.0	0.0
3104	2	80.6	0.0	0.0	0.0
3109	1	52.0	0.0	0.0	0.0
3203	2	78.7	0.0	0.0	0.0
3208	1	52.0	0.0	0.0	0.0
3302	3	105.5	0.0	0.0	0.0
3307	1	50.7	0.0	0.0	0.0
2402	2	86.2	0.0	0.0	0.0
2407	3	106.5	0.0	0.0	0.0
2501	2	77.4	0.0	0.0	0.0
2506	3	105.5	0.0	0.0	0.0
2511	1	50.7	0.0	0.0	0.0
2605	1	50.0	0.0	0.0	0.0
2610	1	56.2	0.0	0.0	0.0
2704	2	80.6	0.0	0.0	0.0
2709	1	52.0	0.0	0.0	0.0
2803	2	78.7	0.0	0.0	0.0
2808	1	52.0	0.0	0.0	0.0
2902	2	86.2	0.0	0.0	0.0
2907	3	106.5	0.0	0.0	0.0
3001	2	77.4	0.0	0.0	0.0
3006	3	105.5	0.0	0.0	0.0
3011	1	50.7	0.0	0.0	0.0
3105	1	50.0	0.0	0.0	0.0
3110	1	56.2	0.0	0.0	0.0
3204	2	80.6	0.0	0.0	0.0
3209	1	52.0	0.0	0.0	0.0
3303	3	106.5	0.0	0.0	0.0
2403	2	78.7	0.0	0.0	0.0
2408	1	52.0	0.0	0.0	0.0
2502	2	86.2	0.0	0.0	0.0
2507	3	106.5	0.0	0.0	0.0
2601	2	77.4	0.0	0.0	0.0
2606	3	105.5	0.0	0.0	0.0
2611	1	50.7	0.0	0.0	0.0
2705	1	50.0	0.0	0.0	0.0
2710	1	56.2	0.0	0.0	0.0
2804	2	80.6	0.0	0.0	0.0
2809	1	52.0	0.0	0.0	0.0
2903	2	78.7	0.0	0.0	0.0
2908	1	52.0	0.0	0.0	0.0
3002	2	86.2	0.0	0.0	0.0
3007	3	106.5	0.0	0.0	0.0
3101	2	77.4	0.0	0.0	0.0
3106	3	105.5	0.0	0.0	0.0
3111	1	50.7	0.0	0.0	0.0
3205	1	50.0	0.0	0.0	0.0
3210	1	56.2	0.0	0.0	0.0
3304	1	52.0	0.0	0.0	0.0
2404	2	80.6	0.0	0.0	0.0
2409	1	52.0	0.0	0.0	0.0
2503	2	78.7	0.0	0.0	0.0
2508	1	52.0	0.0	0.0	0.0
2602	2	86.2	0.0	0.0	0.0
2607	3	106.5	0.0	0.0	0.0
2701	2	77.4	0.0	0.0	0.0
2706	3	105.5	0.0	0.0	0.0
2711	1	50.7	0.0	0.0	0.0
2805	1	50.0	0.0	0.0	0.0
2810	1	56.2	0.0	0.0	0.0
2904	2	80.6	0.0	0.0	0.0
2909	1	52.0	0.0	0.0	0.0
3003	2	78.7	0.0	0.0	0.0
3008	1	52.0	0.0	0.0	0.0
3102	2	86.2	0.0	0.0	0.0
3107	3	106.5	0.0	0.0	0.0
3201	2	77.4	0.0	0.0	0.0
3206	3	105.5	0.0	0.0	0.0
3211	1	50.7	0.0	0.0	0.0
3305	1	52.0	0.0	0.0	0.0

Description of project

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

Common areas of unit building - Building1

Common area	Floor area (m²)
L5 Gym	108.84
Lift car (No.2)	-
B1 Main Switch Room	90.35
GF Resi Bulk Goods	18.82
B1 Supply Air Plant	112.89
B1 Comms Room	20.57
B1 DAS Room	52.8
GF FCR	14.42
GF Admin/Concierge	62.72

Common area	Floor area (m²)
Car park area (No. 1)	19257.8
Lift car (No.3)	-
B1 Garbage Room (30 Bins)	85.06
GF resi garbage hoklding	79.7
B1 PCA Generator room	90.2
B1 Hot Water Plant Room	72.8
B1 Exhaust Air	39.88
GF EOT facilities	75.06
GF Resi Lobby	169.03

Common area	Floor area (m²)
Lift car (No.1)	-
Lift car (No.4)	-
Bin rooms (I5-33)	97.16
L5 Communal Amenities	81.66
B1 Fire pump room	60.38
B1 Potable Cold Water	17.76
Fire Stairs	872.4
GF Mezzanine EOT facilities	139.01
Resi Corridors	2470.8

Schedule of BASIX commitments

1. Commitments for Residential flat buildings - Building1
    (a) Dwellings
        (i) Water
        (ii) Energy
        (iii) Thermal Comfort
    (b) Common areas and central systems/facilities
        (i) Water
        (ii) Energy

2. Commitments for multi-dwelling houses

3. Commitments for single dwelling houses

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

Schedule of BASIX commitments

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

1. Commitments for Residential flat buildings - Building1

(a) Dwellings

(i) Water	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must comply with the commitments listed below in carrying out the development of a dwelling listed in a table below.			
(b) The applicant must plant indigenous or low water use species of vegetation throughout the area of land specified for the dwelling in the "Indigenous species" column of the table below, as private landscaping for that dwelling. (This area of indigenous vegetation is to be contained within the "Area of garden and lawn" for the dwelling specified in the "Description of Project" table).	✔	✔	
(c) If a rating is specified in the table below for a fixture or appliance to be installed in the dwelling, the applicant must ensure that each such fixture and appliance meets the rating specified for it.		✔	✔
(d) The applicant must install an on demand hot water recirculation system which regulates all hot water use throughout the dwelling, where indicated for a dwelling in the "HW recirculation or diversion" column of the table below.		✔	✔
(e) The applicant must install: (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	4 star (> 6 but <= 7.5 L/min)	4 star	6 star	6 star	no	-	2 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
None	-	-	-	-	-	-	-	-

(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.		✔	✔

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(f) This commitment applies to each room or area of the dwelling which is referred to in a heading to the "Natural lighting" column of the table below (but only to the extent specified for that room or area). The applicant must ensure that each such room or area is fitted with a window and/or skylight.	✔	✔	✔
(g) This commitment applies if the applicant installs a water heating system for the dwelling's pool or spa. The applicant must: (aa) install the system specified for the pool in the "Individual Pool" column of the table below (or alternatively must not install any system for the pool). If specified, the applicant must install a timer, to control the pool's pump; and (bb) install the system specified for the spa in the "Individual Spa" column of the table below (or alternatively must not install any system for the spa). If specified, the applicant must install a timer to control the spa's pump.		✔ ✔	
(h) The applicant must install in the dwelling: (aa) the kitchen cook-top and oven specified for that dwelling in the "Appliances & other efficiency measures" column of the table below; (bb) each appliance for which a rating is specified for that dwelling in the "Appliances & other efficiency measures" column of the table, and ensure that the appliance has that minimum rating; and (cc) any clothes drying line specified for the dwelling in the "Appliances & other efficiency measures" column of the table.		✔ ✔ ✔	✔
(i) If specified in the table, the applicant must carry out the development so that each refrigerator space in the dwelling is "well ventilated".		✔	

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

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

	Individual pool		Individual spa		Appliances & other efficiency measures							
Dwelling no.	Pool heating system	Timer	Spa heating system	Timer	Kitchen cooktop/oven	Refrigerator	Well ventilated fridge space	Dishwasher	Clothes washer	Clothes dryer	Indoor or sheltered clothes drying line	Private outdoor or unsheltered clothes drying line
All dwellings	-	-	-	-	induction cooktop & electric oven	2.5 star	yes	4.5 star	-	2 star	no	yes

(iii) Thermal Comfort	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must attach the certificate referred to under "Assessor details" on the front page of this BASIX certificate (the "Assessor Certificate") to the development application and construction certificate application for the proposed development (or, if the applicant is applying for a complying development certificate for the proposed development, to that application). The applicant must also attach the Assessor Certificate to the application for a final occupation certificate for the proposed development.			
(b) The Assessor Certificate must have been issued by an Accredited Assessor in accordance with the Thermal Comfort Protocol.			
(c) The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX Certificate, including the details shown in the "Thermal Loads" table below.			
(d) The applicant must show on the plans accompanying the development application for the proposed development, all matters which the Thermal Comfort Protocol requires to be shown on those plans. Those plans must bear a stamp of endorsement from the Accredited Assessor, to certify that this is the case.	✔		
(e) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all thermal performance specifications set out in the Assessor Certificate, and all aspects of the proposed development which were used to calculate those specifications.		✔	

(iii) Thermal Comfort	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(f) The applicant must construct the development in accordance with all thermal performance specifications set out in the Assessor Certificate, and in accordance with those aspects of the development application or application for a complying development certificate which were used to calculate those specifications.		✔	✔
(g) Where there is an in-slab heating or cooling system, the applicant must: (aa) Install insulation with an R-value of not less than 1.0 around the vertical edges of the perimeter of the slab; or (bb) On a suspended floor, install insulation with an R-value of not less than 1.0 underneath the slab and around the vertical edges of the perimeter of the slab.	✔	✔	✔
(h) The applicant must construct the floors and walls of the development in accordance with the specifications listed in the table below.	✔	✔	✔

	Thermal loads	
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)
501	30.4	26.2
502	39.9	55.2
503	14.8	21.8
504	47.2	24.1
505	22.9	26.1
506	30.9	24.4
507	55.3	23.0
508	38.9	23.9
601	47.5	19.9
602	31.8	29.5
603	20.3	26.0
604	22.3	35.6
605	20.0	23.8
606	17.1	48.6

	Thermal loads	
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)
607	16.9	48.7
608	21.0	22.1
609	35.8	19.3
610	44.7	19.3
611	55.7	22.8
701	47.8	20.4
702	32.0	29.5
703	20.5	25.5
704	12.7	37.7
705	20.2	23.7
706	14.0	49.6
707	14.7	48.8
708	21.2	22.2
709	41.4	18.9
710	45.9	19.2
711	56.0	22.6
801	49.3	18.9
802	33.4	27.2
803	21.8	24.2
804	13.8	34.9
805	21.6	23.5
806	15.1	43.6
807	16.1	45.7
808	22.1	21.2
809	43.0	18.3
810	47.6	19.1
811	57.8	22.0

	Thermal loads	
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)
901	49.6	18.8
902	33.6	27.1
903	22.0	23.7
904	14.0	34.8
905	21.8	23.5
906	15.1	42.9
907	16.2	45.0
909	43.2	18.3
910	47.8	19.1
911	57.9	21.7
1001	49.7	18.8
1002	33.7	26.8
1003	22.1	23.7
1004	14.0	34.9
1005	21.9	23.7
1006	15.2	43.2
1007	16.3	44.6
1009	43.4	18.0
1010	47.9	19.3
1011	58.1	21.6
1101	49.9	18.7
1102	33.9	26.8
1103	22.3	23.6
1104	14.2	34.6
1105	22.1	23.5
1106	15.4	42.6
1107	16.5	44.3

	Thermal loads	
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)
1108	22.5	21.0
1109	43.6	17.9
1110	48.1	19.2
1111	58.3	21.6
1201	50.0	18.4
1202	34.0	26.9
1203	22.4	23.6
1204	14.2	34.5
1205	22.2	23.5
1207	16.6	44.2
1208	22.6	20.5
1209	43.7	17.8
1210	48.3	19.1
1211	58.4	21.5
1301	50.2	18.8
1302	34.2	26.7
1303	22.4	23.5
1304	14.3	34.8
1305	22.4	23.4
1307	16.6	43.9
1308	22.6	20.4
1309	43.8	17.8
1310	48.4	19.1
1311	58.6	21.2
1401	50.3	18.7
1402	34.3	26.8
1403	22.5	23.2

	Thermal loads	
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)
1404	14.3	34.4
1405	22.4	23.1
1406	15.6	42.6
1407	18.8	38.3
1408	41.4	19.2
1409	43.9	17.9
1410	48.5	19.0
1411	58.7	21.1
1501	50.5	18.3
1502	34.5	26.6
1504	14.5	34.4
1506	15.6	42.5
1507	18.7	38.3
1508	41.6	19.3
1509	44.1	17.7
1510	48.7	19.0
1511	58.8	21.0
1601	50.6	18.3
1602	34.6	26.4
1604	14.4	34.4
1606	15.7	42.5
1607	18.7	38.5
1608	41.7	19.1
1609	44.2	17.7
1610	48.8	18.8
1611	58.9	20.8
1701	50.7	18.3

	Thermal loads	
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)
1702	34.7	26.7
1703	22.9	23.1
1704	14.5	34.1
1705	22.9	22.9
1706	15.8	42.3
1707	18.8	38.2
1708	41.8	19.0
1711	59.0	20.9
1801	50.9	18.2
1802	34.8	26.4
1803	23.0	23.1
1804	14.6	34.2
1805	23.0	23.0
1806	15.8	42.4
1807	18.9	37.7
1808	41.9	19.2
1809	44.4	17.7
1811	59.1	20.9
1901	51.0	18.3
1902	34.9	26.2
1904	14.7	34.1
1906	15.9	42.4
1907	18.9	37.8
1908	41.8	19.3
1910	48.9	19.0
1911	59.2	20.9
2001	51.0	18.2

	Thermal loads	
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)
2002	34.9	26.1
2004	14.7	34.0
2006	15.9	42.6
2007	18.9	37.4
2008	41.9	19.3
2010	49.0	19.1
2011	59.3	20.7
2101	51.1	18.0
2102	35.0	26.0
2103	23.2	22.9
2104	14.8	33.7
2105	23.3	22.9
2106	16.0	42.5
2107	19.0	37.4
2110	49.0	18.7
2201	51.2	17.8
2202	35.1	26.2
2203	23.3	22.8
2204	14.9	33.1
2205	23.4	22.6
2206	16.1	41.7
2210	49.1	19.1
2211	59.3	20.5
2301	51.3	17.6
2302	35.2	26.0
2303	23.4	23.0
2304	15.0	33.4

	Thermal loads	
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)
2306	16.2	41.4
2307	19.1	37.6
2308	41.9	19.9
2310	49.1	19.4
2401	51.4	17.9
2403	23.4	22.9
2404	15.0	33.3
2406	16.3	41.6
2408	41.9	20.6
2409	44.4	18.2
2410	49.0	19.9
2411	59.3	20.6
2501	51.4	17.6
2503	23.4	22.7
2504	15.0	33.2
2506	16.3	41.5
2507	19.1	37.5
2508	41.7	20.2
2509	44.2	18.5
2510	48.8	20.0
2511	59.2	20.6
2601	51.5	17.6
2602	35.5	26.2
2606	16.3	41.2
2607	19.1	38.2
2608	41.6	20.2
2609	44.1	18.8

	Thermal loads	
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)
2610	48.7	19.7
2611	59.1	20.6
2701	51.6	17.8
2702	35.6	26.1
2703	23.6	22.7
2705	23.8	22.5
2706	16.4	41.5
2707	19.0	38.9
2708	41.4	20.6
2709	43.9	18.7
2710	48.6	19.4
2711	58.9	21.1
2801	51.8	17.7
2802	35.7	25.9
2803	23.7	22.9
2804	15.1	32.8
2805	23.9	22.5
2807	19.0	39.7
2808	41.1	21.9
2809	43.7	19.3
2810	48.3	20.0
2901	51.8	17.8
2902	35.7	26.0
2904	15.1	32.5
2905	23.9	22.4
2907	18.8	41.0
2908	40.5	22.2

	Thermal loads	
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)
2909	42.7	20.3
2910	47.5	20.3
3002	35.8	25.7
3005	24.0	22.4
3007	18.7	45.3
3008	40.0	23.2
3009	41.6	20.8
3010	46.1	21.4
3011	58.2	23.1
3102	35.8	25.8
3105	24.0	22.5
3107	18.4	47.0
3108	38.9	24.7
3109	40.6	21.9
3110	42.5	22.7
3111	56.9	23.9
3201	52.0	24.9
3202	53.4	36.9
3203	43.7	31.0
3204	29.7	41.3
3205	24.2	22.4
3206	16.7	41.0
3207	18.2	50.3
3208	37.3	24.2
3209	38.9	22.5
3210	40.5	23.0
3211	55.8	24.4

	Thermal loads	
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)
3301	44.2	30.2
3302	31.2	51.3
3303	30.7	60.7
3304	50.2	35.1
3305	46.5	32.6
3306	50.4	32.5
3307	56.9	29.6
908, 1008	22.3	21.0
1206, 1306	15.5	42.4
1503, 1505	22.7	23.2
1603, 1605	22.8	23.1
1709, 1909	44.3	17.7
1710, 1810	48.9	18.7
2009, 2109	44.4	17.8
2108, 2208	41.9	19.7
2111, 2311	59.4	20.5
2207, 2407	19.1	37.4
2209, 2309	44.4	18.1
2305, 2603	23.5	22.8
2402, 2502	35.3	26.2
2405, 2505	23.6	22.4
2604, 2704	15.1	32.9
2605, 2903	23.7	22.4
2806, 2906	16.5	41.1
2811, 2911	58.5	22.3
3001, 3101	51.9	17.4
3003, 3103	23.8	22.7

	Thermal loads	
Dwelling no.	**Area adjusted heating load (in mJ/m²/yr)**	**Area adjusted cooling load (in mJ/m²/yr)**
3004, 3104	15.2	32.4
3006, 3106	16.6	41.0
All other dwellings	23.1	22.9

(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 (> 6 but <= 7.5 L/min)	4 star	6 star	no common laundry facility

Central systems	Size	Configuration	Connection (to allow for...)
Central water tank - rainwater or stormwater (No. 1)	10000.0	To collect run-off from at least: - 500.0 square metres of roof area of buildings in the development - 0.0 square metres of impervious area in the development - 0.0 square metres of garden/lawn area in the development - 0.0 square metres of planter box area in the development (excluding, in each case, any area which drains to, or supplies, any other alternative water supply system).	- irrigation of 475.0 square metres of common landscaped area on the site - car washing in 1 car washing bays on the site
Pool (No. 1)	Volume: 87.3 kLs	Location: Building1 Pool shaded: no	-

Central systems	Size	Configuration	Connection (to allow for...)
Fire sprinkler system (No. 1)	-	So that fire sprinkler test water is contained within the fire sprinkler system for re-use, rather than disposed.	-
Fire sprinkler system (No. 2)	-	So that fire sprinkler test water is contained within the fire sprinkler system for re-use, rather than disposed.	-

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

	Common area ventilation system		Common area lighting		
Common area	Ventilation system type	Ventilation efficiency measure	Primary type of artificial lighting	Lighting efficiency measure	Lighting control system/BMS
L5 Gym	air conditioning system	time clock or BMS controlled	light-emitting diode	time clocks	Yes
Car park area (No. 1)	ventilation (supply + exhaust)	carbon monoxide monitor + VSD fan	light-emitting diode	zoned switching with motion sensor	Yes
Lift car (No.1)	-	-	light-emitting diode	connected to lift call button	Yes
Lift car (No.2)	-	-	light-emitting diode	connected to lift call button	Yes
Lift car (No.3)	-	-	light-emitting diode	connected to lift call button	Yes
Lift car (No.4)	-	-	light-emitting diode	connected to lift call button	Yes
B1 Main Switch Room	ventilation supply only	thermostatically controlled	light-emitting diode	motion sensors	Yes
B1 Garbage Room (30 Bins)	ventilation exhaust only	-	light-emitting diode	motion sensors	Yes
Bin rooms (I5-33)	ventilation exhaust only	-	light-emitting diode	motion sensors	Yes
GF Resi Bulk Goods	ventilation exhaust only	-	light-emitting diode	motion sensors	Yes

	Common area ventilation system		Common area lighting		
Common area	Ventilation system type	Ventilation efficiency measure	Primary type of artificial lighting	Lighting efficiency measure	Lighting control system/BMS
GF resi garbage hoklding	ventilation exhaust only	-	light-emitting diode	motion sensors	Yes
L5 Communal Amenities	air conditioning system	time clock or BMS controlled	light-emitting diode	motion sensors	Yes
B1 Supply Air Plant	ventilation supply only	none ie. continuous	light-emitting diode	motion sensors	Yes
B1 PCA Generator room	ventilation (supply + exhaust)	thermostatically controlled	light-emitting diode	motion sensors	Yes
B1 Fire pump room	ventilation (supply + exhaust)	thermostatically controlled	light-emitting diode	motion sensors	Yes
B1 Comms Room	air conditioning system	thermostatically controlled	light-emitting diode	motion sensors	Yes
B1 Hot Water Plant Room	ventilation supply only	thermostatically controlled	light-emitting diode	motion sensors	Yes
B1 Potable Cold Water	ventilation supply only	thermostatically controlled	light-emitting diode	motion sensors	Yes
B1 DAS Room	no mechanical ventilation	-	light-emitting diode	motion sensors	Yes
B1 Exhaust Air	ventilation exhaust only	none ie. continuous	light-emitting diode	motion sensors	Yes
Fire Stairs	no mechanical ventilation	-	light-emitting diode	motion sensors	Yes
GF FCR	air conditioning system	time clock or BMS controlled	light-emitting diode	motion sensors	Yes
GF EOT facilities	ventilation exhaust only	time clock or BMS controlled	light-emitting diode	motion sensors	Yes
GF Mezzanine EOT facilities	ventilation exhaust only	time clock or BMS controlled	light-emitting diode	motion sensors	Yes
GF Admin/Concierge	air conditioning system	time clock or BMS controlled	light-emitting diode	motion sensors	Yes
GF Resi Lobby	air conditioning system	time clock or BMS controlled	light-emitting diode	motion sensors	Yes
Resi Corridors	no mechanical ventilation	-	light-emitting diode	motion sensors	Yes

Central energy systems	Type	Specification
Central hot water system (No. 1)	electric heat pump - air sourced	Piping insulation (ringmain & supply risers): (a) Piping external to building: R0.6 (~25 mm); (b) Piping internal to building: R0.6 (~25 mm)
Lift (No. 1)	gearless traction with V V V F motor and regenerative drive	Number of levels (including basement): 39

Central energy systems	Type	Specification
Lift (No. 2)	gearless traction with V V V F motor and regenerative drive	Number of levels (including basement): 39
Lift (No. 3)	gearless traction with V V V F motor and regenerative drive	Number of levels (including basement): 39
Lift (No. 4)	gearless traction with V V V F motor and regenerative drive	Number of levels (including basement): 39
Pool (No. 1)	Heating source: no heating	Pump controlled by timer: yes

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

(b) Common areas and central systems/facilities

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

Common area	Showerheads rating	Toilets rating	Taps rating	Clothes washers rating
All common areas	4 star (> 6 but <= 7.5 L/min)	4 star	6 star	no common laundry facility

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

Central energy systems	Type	Specification
Alternative energy supply	Photovoltaic system	Rated electrical output (min): 85.0 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).

Design with
community in mind

Level 6, Building B
207 Pacific Highway
St Leonards NSW 2065
Tel +61 +61 2 8484 7000
E sydney@wge.com.au

For more information please visit
www.stantec.com

Stantec