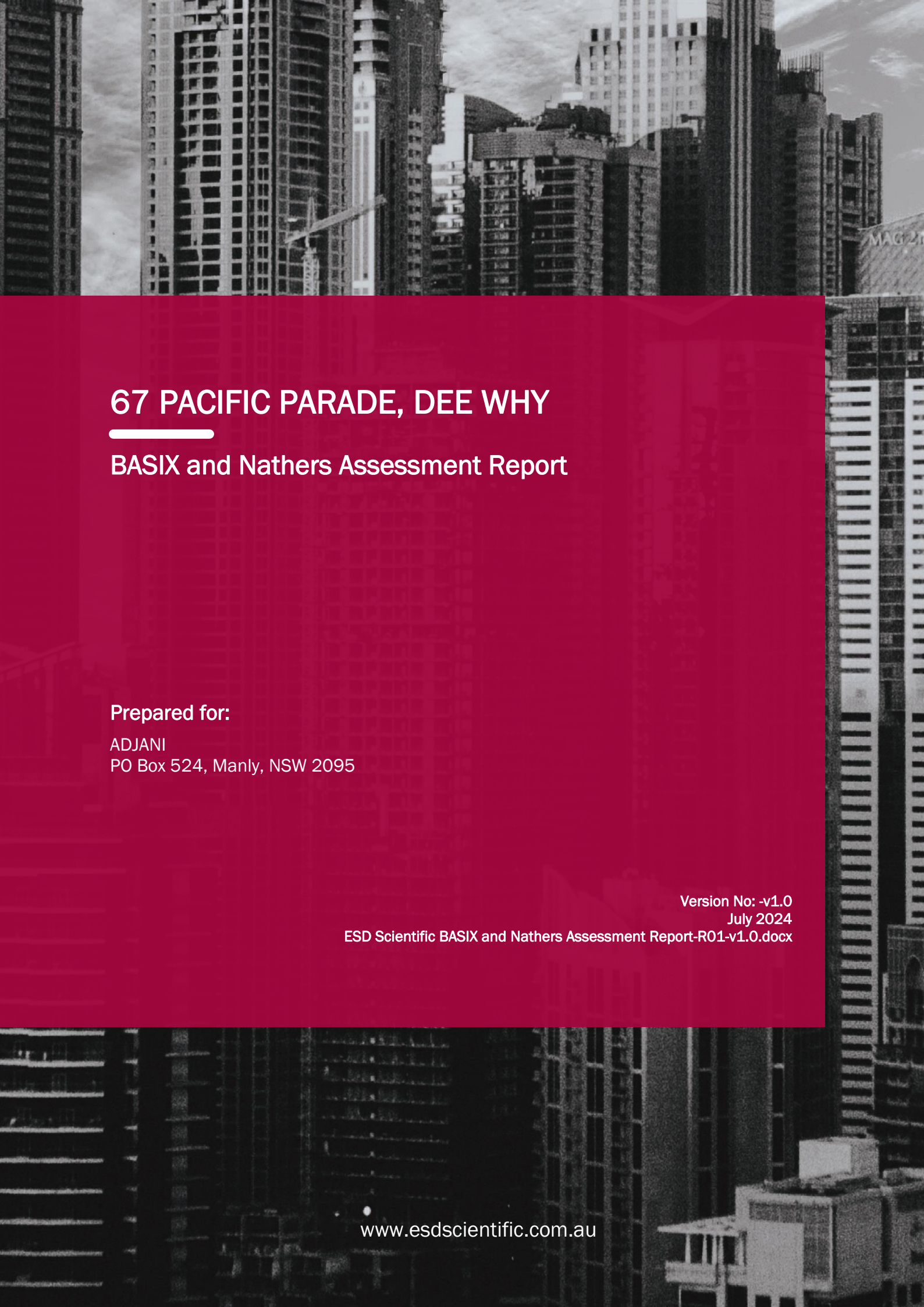


67 PACIFIC PARADE, DEE WHY

BASIX and Nathers Assessment Report

Prepared for:

ADJANI
PO Box 524, Manly, NSW 2095

Version No: -v1.0
July 2024
ESD Scientific BASIX and Nathers Assessment Report-R01-v1.0.docx

www.esdscientific.com.au

Revision History

Reference	Date	Details	Prepared	Authorised
-R01-v1.0	19 July 2024	DA Final	DS	HC

EXECUTIVE SUMMARY

ESD Scientific has been commissioned by ADJANI to carry out the BASIX assessment and certification for the proposed residential development at 67 Pacific Parade, Dee Why.

This report has been prepared in accordance with the Environmental Planning and Assessment Regulation 2021 (EP&A Regulation) and State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004.

The proposed development will comprise one apartment building, inclusive of the following:

- a total of 9 dwellings;
- three levels of car parking with entry on B01;

There are three sections within the BASIX system, Water, Energy and Thermal Comfort. Each section measures the efficiency of the development in these areas. This report has provided advice about each section under the BASIX and identified how compliance can be achieved for the proposed development. The current calculated project scores are listed in the table below.

BASIX	Target	Project Score
Water	40%	**41%**
Energy	60%	**62%**
Thermal Comfort	Pass	**Pass**

The assessment forms part of the Development Application to the Northern Beaches Council. The BASIX Certificate, Nathers Summary Certificate and Certified Stamped Drawings are appended in Appendix A to C.

CONTENTS

DOCUMENT REFERENCES

TABLES

APPENDICES

1 Introduction

ESD Scientific has been commissioned by ADJANI to carry out the BASIX and Nathers assessment and certification for the proposed residential development at 67 Pacific Parade, Dee Why.

1.1 Documentation

This report has been prepared based on the documentation provided by the project team and listed in Table 1 below.

Table 1 Project documentation Sources

Type	Document	Issue Date
Architectural drawing	Architectural Drawing DA Set S4.55	17/07/2024
Questionnaire	BASIX Service Questionnaire	13/06/2024
Landscape	Landscape Area calculation	25/06/2024

2 Assessment

2.1 The Building Sustainability Index (BASIX)

The Building Sustainability Index (BASIX) is a state government initiative to reduce the carbon footprint of new buildings and renovations. A BASIX certificate is a mandatory document that demonstrates the energy, water and thermal efficiency of new homes and renovations in New South Wales.

The building design must meet minimum sustainability standards outlined in the NSW government's BASIX guidelines to obtain a BASIX certificate. This includes water and energy reduction targets and the thermal comfort requirements under the Nationwide House Energy Rating Scheme (NatHERS) protocol.

The BASIX certificate is issued after submitting a BASIX assessment, which evaluates the proposed building's design and construction methods against a set of sustainability criteria. The assessment considers factors such as water and energy efficiency, renewable energy use, building fabric performance and thermal comfort.

BASIX sets water and energy reduction targets relative to the NSW average benchmark in the residential sector.

The Thermal comfort section of BASIX aims to:

- ensure thermal comfort for a dwelling's occupants, appropriate to the climate and season;
- reduce greenhouse gas emissions from artificial cooling and heating through good building design and use of appropriate construction materials; and
- reduce the demand for new, or upgraded, energy infrastructure by managing peak demand for energy required for cooling and heating.

BASIX outlines the minimum performance levels for thermal comfort of the dwelling and replaces the National Construction Code (NCC) Section J Energy Efficiency benchmarks within NSW. Thermal comfort levels are assessed on an individual dwelling basis via a simulation method in accordance with the Nationwide House Energy Rating Scheme (NatHERS) protocol.

The minimum improvement benchmark for each index is based on the project development's location, size, height, and dwelling density.

The full list of requirements relating to BASIX compliance is appended to this report. It should be read in full to ensure all provisions and documentation requirements relating to compliance with BASIX are incorporated into design documentation.

2.2 Water Strategies

The following tables in this section provide a summary of key BASIX requirements and outline the current water-saving strategies below. The proposed development has achieved a 41% reduction on the NSW average benchmark, and the target is based on a minimum 40% compliance score.

Table 2 Summary of Water Commitments

Measures	Water Saving Commitments
Water Fixtures (Including units and common area if applicable)	• Showerheads: 4-star (4.5- 6 L/min) • Toilets: 4-star • Kitchen and bathroom taps: 5-star
Appliances	• Clothes washer – not specified • Dishwasher – Min 5 star WELS
Central System	• 10 kL rain/recycled water tank for irrigation of common landscaping and private gardens • Fire sprinkler test water contained in a closed system for re-use
BASIX Water Reduction Target	**40%**
Project Score	**41%**

Refer BASIX certificate in Appendix A for all details.

2.3 Energy Strategies

Table 3 outlines the current energy-saving strategies. The proposed development has achieved a 62% reduction on the NSW average benchmark, and the target is based on a minimum 60% compliance score.

Table 3 Summary of Energy Commitments

Measures	Energy Saving Commitments
Individual Units	• Dedicated LED light fittings to all units • All bathroom, kitchen and laundry exhaust to have individual fans ducted to faced or roof
Appliances	• Electric cooktop & electric oven • Dishwasher: not specified • Clothes washer: not specified • Clothes dryer: not specified
Central/individual System	• Hot water system: Individual electric instantaneous • Central cooling system: Air-cooled VRV with COP 3.5-5.5 • Central heating system: Air-cooled VRV with COP 3.5-5.5 • Gearless traction lift with VVVF motor
Pool and Spa	• N/A
Common area ventilation	• Car park: supply + exhaust with CO monitors and VSD fans • Garbage rooms: ventilation exhaust only with continuous operation • Plant and services rooms – ventilation supply only with thermostatic controls • Lobbies/hallways – air conditioning with time clock or BMS control
Common area lighting	• Car park: LED with zoned switch and motion sensor • Garbage rooms: LED with motion sensors • Plant and services rooms: LED with manual on/off • Lobbies/hallways: LED with time clock and motion sensors
Photovoltaic system	10 kW
BASIX Energy Reduction Target	**60%**
Project Score	**62%**

Refer BASIX certificate in Appendix A for all details.

2.4 Thermal Comfort Strategies

The thermal comfort modelling for each dwelling has been conducted in accordance with the requirements of the Nationwide House Energy Rating Scheme (NatHERS) scheme as stated in the BASIX Thermal Comfort Protocol.

This calculates the expected level of energy required to heat and cool each dwelling per annum per square metre of floor area in (MJ/m^2).

The following objectives must be achieved to satisfy the BASIX thermal comfort requirements.

- The heating and cooling loads for each dwelling must not exceed the limit specified in the BASIX protocol.
- The average area-adjusted heating and cooling loads of all dwellings in development are below or equal to the average area-adjusted heating and cooling loads calculated by BASIX.

The full summary of NatHERS Thermal Performance Results is attached to Appendix B.

Table 4 Building Fabric Requirements

Element	Material Type	Details
External walls	Brick + R2.5 Insulation + PB Spandrel panels with R2.5 insulation	As per plan, thermal break to steel frame
Internal walls	Plasterboard on stud Hebel + R2.0 Insulation + PB	As per plan As per plan
Windows	Aluminium frame, double glazed, High solar gain low e Throughout	NFRC Glazing System (Glass+Frame) values: U ≤ 4.30 and SHGC = 0.53 (Fixed, Sliding, double hung windows) U ≤ 4.30 and SHGC = 0.47 (Awning windows)
	Note. • Substitute windows are permissible provided U-value is not greater than specified and SHGC is within +/- 5% of specified. • All gaps between windows frames, doors, plumbing fixtures and penetrations to be sealed. • All openable windows to be fitted with weather seals to create a tight seal when closed. • Entry doors to be fitted with weather stripping and be suitably weather sealed to create a tight seal when closed.	
Skylights	-	-

Element	Material Type	Details
Floor	Concrete floor	Timber (Living) Carpet (Bedrooms) Tile (Wet area)
	Suspended concrete floor with R2.0 floor insulation	To floor above basement 01 and outside
Roof	Concrete + R4.0 Insulation + PB	Medium colour
Downlights	All LED downlights	All downlights comply with AS60598 IC-F Rating.
Exhaust fans	• All exhaust fans to have draft stoppers attached (self-closing device when not in use. • In the installation of exhaust fans, penetration or removal of insulation is not to exceed an area of 300mm x 300mm.	
Installation of Insulation	Where required, insulation must comply with AS/NZS 4859.1 and be installed so that it: • Abuts or overlaps adjoining insulation other than at supporting members such as studs, noggins, joists, furring channels and the like where the insulation must be against the member; • Forms a continuous barrier with ceilings, walls, bulkheads, floors or the like that inherently contribute to the thermal barriers; and • Does not affect the safe or effective operation of a service or fitting.	
	Where required, bulk insulation must be installed so that: • Maintains its position and thickness, other than where it is compressed between cladding and supporting members, water pipes, electrical cabling or the like; and • In a ceiling, where there is no bulk insulation or reflective insulation in the wall beneath, it overlaps the wall by not less than 50mm.	
	Where required, reflective insulation and vapour permeable construction fabric is to be installed: • In accordance to manufacture recommendations; • Run continuously from bottom plate to top plate with all gaps taped; and • With all rips and penetrations re-taped.	

APPENDIX A

BASIX Certificate

BASIX® Certificate

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

Multi Dwelling

Certificate number: 1756473M

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: Friday, 19 July 2024
To be valid, this certificate must be submitted with a development application or lodged with a complying development certificate application within 3 months of the date of issue.

Project summary	
Project name	67 Pacific Parade,Dee Why
Street address	67 PACIFIC PARADE DEE WHY 2099
Local Government Area	NORTHERN BEACHES
Plan type and plan number	Deposited Plan 7002
Lot No.	25
Section no.	-
No. of residential flat buildings	1
Residential flat buildings: no. of dwellings	9
Multi-dwelling housing: no. of dwellings	0
No. of single dwelling houses	0

Project score		
Water	✔ 41	Target 40
Thermal Performance	✔ Pass	Target Pass
Energy	✔ 62	Target 60
Materials	✔ -100	Target n/a

Certificate Prepared by
Name / Company Name: ESD Scientific Pty Ltd
ABN (if applicable): 16614715712

Description of project

Project address	
Project name	67 Pacific Parade,Dee Why
Street address	67 PACIFIC PARADE DEE WHY 2099
Local Government Area	NORTHERN BEACHES
Plan type and plan number	Deposited Plan 7002
Lot No.	25
Section no.	-

Project type	
No. of residential flat buildings	1
Residential flat buildings: no. of dwellings	9
Multi-dwelling housing: no. of dwellings	0
No. of single dwelling houses	0

Site details	
Site area (m²)	695.6
Roof area (m²)	290
Non-residential floor area (m²)	-
Residential car spaces	15
Non-residential car spaces	-

Common area landscape	
Common area lawn (m²)	0
Common area garden (m²)	113.6
Area of indigenous or low water use species (m²)	0

Assessor details and thermal loads	
Assessor number	DMN/18/1849
Certificate number	HR-N8XSZ8-01
Climate zone	56

Project score			
Water	✔	41	Target 40
Thermal Performance	✔	Pass	Target Pass
Energy	✔	62	Target 60
Materials	✔	-100	Target n/a

Description of project

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

Residential flat buildings - Building1, 9 dwellings, 6 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)
1	2	99	0	26	0
5	3	123	0	0	0
9	3	115	0	25	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
2	3	106	0	0	0
6	3	116	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)
3	3	123	0	0	0
7	2	91	0	7	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
4	3	116	0	93	37
8	3	116	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)
Undercover car park area (Basement)	151
Garbage room (No. 1)	11.8
Lobby	15
Lift bank (No. 2)	-

Common area	Floor area (m²)
Undercover car park area (Ground +L1)	374
Plant or service rooms	13
Common Corridors	55

Common area	Floor area (m²)
Switch room (No. 1)	8.2
Stairs	100
Lift bank (No. 1)	-

Schedule of BASIX commitments

1. Commitments for Residential flat buildings - Building1

(a) Buildings

(i) Materials

(b) Dwellings

(i) Water

(ii) Energy

(iii) Thermal Performance

(c) Common areas and central systems/facilities

(i) Water

(ii) Energy

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

(b) Common areas and central systems/facilities

(i) Water

(ii) Energy

Schedule of BASIX commitments

The commitments set out below regulate how the proposed development is to be carriedout. 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) Buildings

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

Floor types			
Floor type	**Area (m2)**	**Insulation**	**Low emissions option**
concrete slab on ground, frame:	380	-	none
suspended floor above garage, frame: suspended concrete slab	286	-	-
floors above habitable rooms, frame: suspended concrete slab	906	-	-

External wall types				
External wall type	**Construction type**	**Area (m2)**	**Low emissions option**	**Insulation**
External wall type 1	brick veneer,frame:light steel frame	1166	-	-
External wall type 2	framed (metal clad),frame:light steel frame	157	-	-

Internal wall types			
Internal wall type	**Construction type**	**Area (m2)**	**Insulation**
Internal wall type 1	plasterboard, frame:light steel frame	845	-
Internal wall type 2	75 mm AAC panel, frame:light steel frame	198	-

Reinforcement concrete frames/columns		
Building has reinforced concrete frame/columns?	**Volume (m³)**	**Low emissions option**
-	-	-

Ceiling and roof types			
Ceiling and roof type	**Area (m²)**	**Roof Insulation**	**Ceiling Insulation**
concrete - plasterboard internal, frame: no frame	1153	-	-

Glazing types			Frame types				
Single glazing (m²)	**Double glazing (m²)**	**Triple glazing (m²)**	**Aluminium frames (m²)**	**Timber frames (m²)**	**uPVC frames (m²)**	**Steel frames (m²)**	**Composite frames (m²)**
-	300	-	300	-	-	-	-

(b) Dwellings

(i) Water	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must comply with the commitments listed below in carrying out the development of a dwelling listed in a table below.			
(b) The applicant must plant indigenous or low water use species of vegetation throughout the area of land specified for the dwelling in the "Indigenous species" column of the table below, as private landscaping for that dwelling. (This area of indigenous vegetation is to be contained within the "Area of garden and lawn" for the dwelling specified in the "Description of Project" table).	✔	✔	
(c) If a rating is specified in the table below for a fixture or appliance to be installed in the dwelling, the applicant must ensure that each such fixture and appliance meets the rating specified for it.		✔	✔
(d) The applicant must install an on demand hot water recirculation system which regulates all hot water use throughout the dwelling, where indicated for a dwelling in the "HW recirculation or diversion" column of the table below.		✔	✔
(e) The applicant must install:			
(aa) a hot water diversion system to all showers, kitchen sinks and all basins in the dwelling, where indicated for a dwelling in the "HW recirculation or diversion" column of the table below; and		✔	✔
(bb) a separate diversion tank (or tanks) connected to the hot water diversion systems of at least 100 litres. The applicant must connect the hot water diversion tank to all toilets in the dwelling.		✔	✔
(e) The applicant must not install a private swimming pool or spa for the dwelling, with a volume exceeding that specified for it in the table below.	✔	✔	
(f) If specified in the table, that pool or spa (or both) must have a pool cover or shading (or both).		✔	
(g) The pool or spa must be located as specified in the table.	✔	✔	
(h) The applicant must install, for the dwelling, each alternative water supply system, with the specified size, listed for that dwelling in the table below. Each system must be configured to collect run-off from the areas specified (excluding any area which supplies any other alternative water supply system), and to divert overflow as specified. Each system must be connected as specified.	✔	✔	✔

	Fixtures					Appliances		Individual pool				Individual spa		
Dwelling no.	All shower-heads	All toilet flushing systems	All kitchen taps	All bathroom taps	HW recirculation or diversion	All clothes washers	All dish-washers	Volume (max volume)	Pool cover	Pool location	Pool shaded	Volume (max volume)	Spa cover	Spa shaded
All dwellings	4 star (> 4.5 but <= 6 L/min)	4 star	5 star	5 star	-	not specified	5 star	-	-	-	-	-	-	-

	Alternative water source							
Dwelling no.	**Alternative water supply systems**	**Size**	**Configuration**	**Landscape connection**	**Toilet connection (s)**	**Laundry connection**	**Pool top-up**	**Spa top-up**
1, 4, 7, 9	Central water tank (No. 1)	See central systems	See central systems	yes	-	-	-	-
All other dwellings	No alternative water supply	-	-	-	-	-	-	-

(ii) Energy	**Show on DA plans**	**Show on CC/CDC plans & specs**	**Certifier check**
(a) The applicant must comply with the commitments listed below in carrying out the development of a dwelling listed in a table below.			
(b) The applicant must install each hot water system specified for the dwelling in the table below, so that the dwelling's hot water is supplied by that system. If the table specifies a central hot water system for the dwelling, then the applicant must connect that central system to the dwelling, so that the dwelling's hot water is supplied by that central system.	✔	✔	✔
(c) The applicant must install, in each bathroom, kitchen and laundry of the dwelling, the ventilation system specified for that room in the table below. Each such ventilation system must have the operation control specified for it in the table.		✔	✔
(d) The applicant must install the cooling and heating system/s specified for the dwelling under the "Living areas" and "Bedroom areas" headings of the "Cooling" and "Heating" columns in the table below, in/for at least 1 living/bedroom area of the dwelling. If no cooling or heating system is specified in the table for "Living areas" or "Bedroom areas", then no systems may be installed in any such areas. If the term "zoned" is specified beside an air conditioning system, then the system must provide for day/night zoning between living areas and bedrooms.		✔	✔
(e) This commitment applies to each room or area of the dwelling which is referred to in a heading to the "Artificial lighting" column of the table below (but only to the extent specified for that room or area). The applicant must ensure that the "primary type of artificial lighting" for each such room in the dwelling is fluorescent lighting or light emitting diode (LED) lighting. If the term "dedicated" is specified for a particular room or area, then the light fittings in that room or area must only be capable of being used for fluorescent lighting or light emitting diode (LED) lighting.		✔	✔
(f) This commitment applies to each room or area of the dwelling which is referred to in a heading to the "Natural lighting" column of the table below (but only to the extent specified for that room or area). The applicant must ensure that each such room or area is fitted with a window and/or skylight.	✔	✔	✔
(g) This commitment applies if the applicant installs a water heating system for the dwelling's pool or spa. The applicant must:			
(aa) install the system specified for the pool in the "Individual Pool" column of the table below (or alternatively must not install any system for the pool). If specified, the applicant must install a timer, to control the pool's pump; and		✔	
(bb) install the system specified for the spa in the "Individual Spa" column of the table below (or alternatively must not install any system for the spa). If specified, the applicant must install a timer to control the spa's pump.		✔	
(h) The applicant must install in the dwelling:			

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(aa) the kitchen cook-top and oven specified for that dwelling in the "Appliances & other efficiency measures" column of the table below;		✔	
(bb) each appliance for which a rating is specified for that dwelling in the "Appliances & other efficiency measures" column of the table, and ensure that the appliance has that minimum rating; and		✔	✔
(cc) any clothes drying line specified for the dwelling in the "Appliances & other efficiency measures" column of the table.		✔	
(i) If specified in the table, the applicant must carry out the development so that each refrigerator space in the dwelling is "well ventilated".		✔	

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

	Cooling		Heating		Natural lighting	
Dwelling no.	living areas	bedroom areas	living areas	bedroom areas	No. of bathrooms or toilets	Main kitchen
1, 2, 9	Central cooling system (No. 1)	Central cooling system (No. 1)	Central heating system (No. 1)	Central heating system (No. 1)	1	yes
All other dwellings	Central cooling system (No. 1)	Central cooling system (No. 1)	Central heating system (No. 1)	Central heating system (No. 1)	2	yes

	Individual pool			Individual spa		Appliances other efficiency measures				
Dwelling no.	Pool heating system	Pool Pump	Timer	Spa heating system	Timer	Kitchen cooktop/oven	Dishwasher	Clothes dryer	Indoor or sheltered clothes drying line	Private outdoor or unsheltered clothes drying line
All dwellings	-	-	-	-	-	electric cooktop & electric oven	not specified	not specified	-	-

(iii) Thermal Performance	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must attach the certificate referred to under "Assessor details" on the front page of this BASIX certificate (the "Assessor Certificate") to the development application and construction certificate application for the proposed development (or, if the applicant is applying for a complying development certificate for the proposed development, to that application). The applicant must also attach the Assessor Certificate to the application for a final occupation certificate for the proposed development.			
(b) The Assessor Certificate must have been issued by an Accredited Assessor in accordance with the Thermal Comfort Protocol.			
(c) The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX Certificate, including the details shown in the "Thermal Loads" table below.			
(d) The applicant must show on the plans accompanying the development application for the proposed development, all matters which the Thermal Comfort Protocol requires to be shown on those plans. Those plans must bear a stamp of endorsement from the Accredited Assessor, to certify that this is the case.	✔		
(e) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all thermal performance specifications set out in the Assessor Certificate, and all aspects of the proposed development which were used to calculate those specifications.		✔	
(f) The applicant must construct the development in accordance with all thermal performance specifications set out in the Assessor Certificate, and in accordance with those aspects of the development application or application for a complying development certificate which were used to calculate those specifications.		✔	✔
(g) Where there is an in-slab heating or cooling system, the applicant must: (aa) Install insulation with an R-value of not less than 1.0 around the vertical edges of the perimeter of the slab; or (bb) On a suspended floor, install insulation with an R-value of not less than 1.0 underneath the slab and around the vertical edges of the perimeter of the slab.	✔	✔	✔
(h) The applicant must construct the floors and walls of the development in accordance with the specifications listed in the table below.	✔	✔	✔
(i) The applicant must show on The plans accompanying The development application for The proposed development, The locations of ceiling fans set out in The Assessor Certificate.	✔		
(j) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), the locations of ceiling fans set out in the Assessor Certificate.		✔	

	Thermal loads		
Dwelling no.	Area adjusted heating load (in MJ/m²/yr)	Area adjusted cooling load (in MJ/m²/yr)	Area adjusted total load (in MJ/m²/yr)
1	16.9	15.29	32.190
2	9.3	12.3	21.600
3	13.5	9.7	23.200
4	18.60	13.2	31.800

	Thermal loads		
Dwelling no.	Area adjusted heating load (in MJ/m²/yr)	Area adjusted cooling load (in MJ/m²/yr)	Area adjusted total load (in MJ/m²/yr)
5	13.8	12.2	26.000
6	17.1	10.9	28.000
7	16.5	13.9	30.400
8	13.7	12.7	26.400
All other dwellings	19.7	15.2	34.900

(c) Common areas and central systems/facilities

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

Common area	Showerheads rating	Toilets rating	Taps rating	Clothes washers rating
All common areas	no common facility	no common facility	5 star	no common laundry facility

Central systems	Size	Configuration	Connection (to allow for...)
Central water tank - rainwater or stormwater (No. 1)	10000	To collect run-off from at least: - 140 square metres of roof area of buildings in the development - 0 square metres of impervious area in the development - 0 square metres of garden/lawn area in the development - 0 square metres of planter box area in the development (excluding, in each case, any area which drains to, or supplies, any other alternative water supply system).	- irrigation of 113.6 square metres of common landscaped area on the site
Fire sprinkler system (No. 1)	-	So that fire sprinkler test water is contained within the fire sprinkler system for re-use, rather than disposed.	-
Fire sprinkler system (No. 2)	-	So that fire sprinkler test water is contained within the fire sprinkler system for re-use, rather than disposed.	-
Fire sprinkler system (No. 3)	-	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
Undercover car park area (Basement)	no mechanical ventilation	-	light-emitting diode	zoned switching with motion sensor	-
Undercover car park area (Ground +L1)	ventilation (supply + exhaust)	carbon monoxide monitor + VSD fan	light-emitting diode	zoned switching with motion sensor	-
Switch room (No. 1)	tempered supply air only	thermostatically controlled	light-emitting diode	manual on / manual off	-
Garbage room (No. 1)	ventilation exhaust only	-	light-emitting diode	motion sensors	-
Plant or service rooms	ventilation supply only	thermostatically controlled	light-emitting diode	manual on / manual off	-
Stairs	no mechanical ventilation	-	light-emitting diode	zoned switching with motion sensor	-
Lobby	air conditioning system	time clock or BMS controlled	light-emitting diode	time clock and motion sensors	-
Common Corridors	air conditioning system	time clock or BMS controlled	light-emitting diode	time clock and motion sensors	-
Lift bank (No. 1)	-	-	light-emitting diode	connected to lift call button	-
Lift bank (No. 2)	-	-	light-emitting diode	connected to lift call button	-

Central energy systems	Type	Specification
Lift bank (No. 1)	gearless traction with V V V F motor	Number of levels (including basement): 7 number of levels from the bottom of the lift shaft to the top of the lift shaft: 7 number of lifts: 1 lift load capacity: <1001 kg

Central energy systems	Type	Specification
Lift bank (No. 2)	gearless traction with V V V F motor	Number of levels (including basement): 3 number of levels from the bottom of the lift shaft to the top of the lift shaft: 3 number of lifts: 1 lift load capacity: >1500kg
Central cooling system (No. 1)	variable refrigerant volume units	Energy source: electric driven compressor Heat rejection method: air cooled condenser Unit efficiency (min): medium – COP 3.5 – 5.5
Central heating system (No. 1)	variable refrigerant volume units	Energy source: electric driven compressor + air sourced evaporator Unit efficiency medium – COP 3.5 – 5.5

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

(b) Common areas and central systems/facilities

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

Common area	Showerheads rating	Toilets rating	Taps rating	Clothes washers rating
All common areas	no common facility	no common facility	5 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): 10 peak kW
Other	-	-

Notes

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

Legend

1. Commitments identified with a "✔" in the "Show on DA plans" column must be shown on the plans accompanying the development application for the proposed development (if a development application is to be lodged for the proposed development).
2. Commitments identified with a "✔" in the "Show on CC/CDC plans and specs" column must be shown in the plans and specifications accompanying the application for a construction certificate / complying development certificate for the proposed development.
3. Commitments identified with a "✔" in the "Certifier check" column must be certified by a certifying authority as having been fulfilled. (Note: a certifying authority must not issue an occupation certificate (either interim or final) for a building listed in this certificate, or for any part of such a building, unless it is satisfied that each of the commitments whose fulfilment it is required to monitor in relation to the building or part, has been fulfilled).

APPENDIX B

Nathers Certificate

Nationwide House Energy Rating Scheme®
Class 2 Summary
NatHERS® Certificate No. #HR-N8XSZ8-01

Generated on 19 Jul 2024 using Hero 4.0

Property

Address	67 Pacific Parade, Dee Why, NSW, 2099
Lot/DP	7002
NatHERS climate zone	56 - Mascot AMO

Accredited assessor

Name	Horatio Cai
Business name	ESD Scientific Pty Ltd
Email	horatio_cai@outlook.com
Phone	+61 433692251
Accreditation No.	DMN/18/1849
Assessor Accrediting Organisation	DMN

Verification

To verify this certificate, scan the QR code or visit http://www.hero-software.com.au/pdf/HR-N8XSZ8-01. When using either link, ensure you are visiting http://www.hero-software.com.au

National Construction Code (NCC) requirements

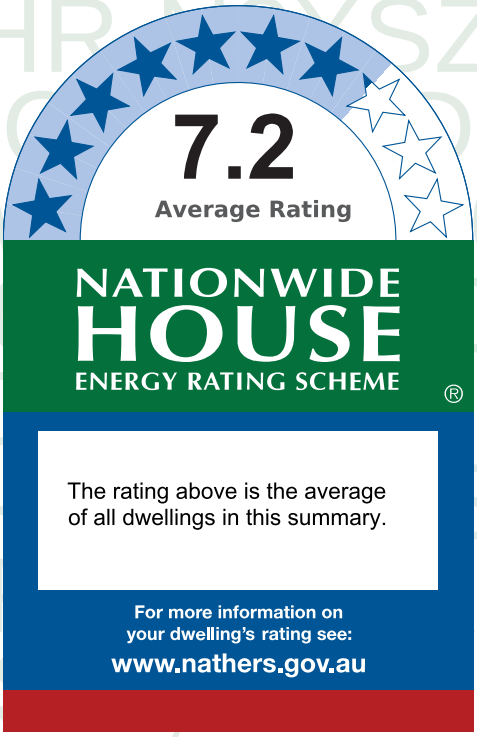
The NCC allows the use of NatHERS accredited software to comply with the energy efficiency requirements for houses (Class 1 buildings) and apartments (Class 2 sole-occupancy units and Class 4 parts of buildings). The applicable requirements for houses are detailed in Specification 42 of NCC Volume Two.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

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

The NCC, and associated ABCB Standards and support material, can be accessed at www.abcb.gov.au.

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

Thermal performance Star rating



NCC heating and cooling maximum loads MJ/m².yr

Limits taken from ABCB Standard 2022

	Heating	Cooling
Average load	15.5	12.2
Maximum load	19.7	15.2
Average limit	28.1	20.0
Maximum limit	34.4	21.4

Whole of Home performance rating

No Whole of Home performance rating generated for this certificate or not completed for all dwellings.

Summary of all dwellings

Certificate number and link	Unit Number	Heating load (load limit) (MJ/m².yr)	Cooling load (load limit) (MJ/m².yr)	Total load (MJ/m².yr)	Star Rating	Whole of Home Rating
HR-BXZVR5-01	Unit 01	16.9 (34)	9.2 (21)	26.1	7.4	n/a
HR-YQAKN2-01	Unit 02	9.3 (34)	12.3 (21)	21.7	7.9	n/a
HR-FYZPXK-01	Unit 03	13.5 (34)	9.7 (21)	23.3	7.7	n/a

Summary of all dwellings

Certificate number and link	Unit Number	Heating load (load limit) (MJ/m².yr)	Cooling load (load limit) (MJ/m².yr)	Total load (MJ/m².yr)	Star Rating	Whole of Home Rating
HR-PY8FJF-01	Unit 04	18.6 (34)	13.2 (21)	31.8	6.8	n/a
HR-M7A3BS-01	Unit 05	13.8 (34)	12.2 (21)	26.0	7.4	n/a
HR-A0PLD1-01	Unit 06	17.1 (34)	10.9 (21)	28.0	7.2	n/a
HR-0SILOA-01	Unit 07	16.5 (34)	13.9 (21)	30.4	6.9	n/a
HR-EB6XCY-01	Unit 08	13.7 (34)	12.7 (21)	26.4	7.4	n/a
HR-VDPFUK-01	Unit 09	19.7 (34)	15.2 (21)	35.0	6.4	n/a
Averages	9x (Total)	15.5	12.2	27.6	7.2	n/a
Maximum Loads and Minimum Ratings		19.7	15.2	35.0	6.4	n/a

Explanatory notes

About the ratings

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

NatHERS ratings use computer modelling to evaluate a home's energy efficiency and performance. They use localised climate data and standard assumptions on how people use their home to predict the energy loads and societal cost. The thermal performance star rating uses the home's building specifications, layout, orientation and fabric (i.e. walls, windows, floors, roofs and ceilings) to predict the heating and cooling energy loads. The Whole of Home performance rating uses information about the home's appliances and onsite energy production and storage to estimate the homes societal cost.
For more details about an individual dwelling's assessment, refer to the individual dwelling's NatHERS Certificate (accessible via link).

Accredited Assessors

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

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

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

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

Disclaimer

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

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

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

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

APPENDIX C

Certified Stamped Drawings

67 Pacific Parade, Dee Why 2099

Development Application

Subset Name	Layout ID	Layout Name	Revision
Cover Pages			
	DA000	Cover Page	A
Site			
	DA100	Site Analysis	A
	DA101	Site Plan	A
Plans			
	DA200	Basement Level	A
	DA201	Ground Floor Plan	A
	DA202	Level 1 Plan	A
	DA203	Level 2 Plan	A
	DA204	Level 3 Plan	A
	DA205	Level 4 Plan	A
	DA206	Level 5 Plan	A
	DA207	Roof Plan	A
Elevations & Sections			
	DA300	N & E Elevations	A
	DA301	S & W Elevations	A
	DA302	Section North-South	A
	DA303	Section East-West	A
	DA304	Materials & Finishes	A
Shadows			
	DA400	Shadow Diagrams	A
	DA401	Eye of the Sun	A
Additional Information			
	DA500	GFA	A
	DA501	Solar Analysis	A
	DA502	Cross Ventilation	A
	DA503	Unit Mix	A
	DA504	Affordable Housing Dedication	A
	DA505	Deep Soil	A
	DA506	Landscape Calculations	A
	DA507	Adaptable Units	A
	DA508	Adaptable Unit Layouts	A
	DA509	Livable Unit	A
	DA510	Livable Unit Layout	A
	DA511	Height Plane Diagram	A
Notification Plans			
	DA600	Notification Plan	A

Certificate No. #HR-N8XSZ8-01
Scan QR code or follow website link for rating details.
Assessor name: Horatio Cai
Accreditation No.: DMN/18/1849
Property Address: 67 Pacific Parade, Dee Why, NSW, 2099
http://www.hero-software.com.au/pdf/HR-N8XSZ8-01

Rev	Date	By	Chk	Description
A	17/07/2024	OD	MW XD	DA ISSUE

DKO Architecture (NSW) Pty Ltd
42 Davies Street
Surry Hills, NSW 2010
T +61 2 8346 4500
info@DKO.com.au
www.DKO.com.au
ABN: 81956706590
NSW: Nominated Architects
Koos de Keijzer 5767
David Randerson 8542

Project Name	67 Pacific Parade, Dee Why	Project Number	00013395
Project Address	67 Pacific Parade, Dee Why, NSW 2099	Drawing Name	Cover Page
		Scale	1:0.70, 1:0.86@A3
		Date	17/07/2024
Client	Adjani	Drawing Number	DA000
		Revision	A

Certificate No. #HR-N8XSZ8-01
Scan QR code or follow website link for rating details.
Assessor name: Horatio Cai
Accreditation No. DMN/18/1849
Property Address: 67 Pacific Parade, Dee Why, NSW, 2099
http://www.hero-software.com.au/pdf/HR-N8XSZ8-01

Rev	Date	By	Chk	Description
A	17/07/2024	OD	MW XD	DA ISSUE

DKO Architecture (NSW) Pty Ltd
42 Davies Street
Surry Hills, NSW 2010
T +61 2 8346 4500
info@DKO.com.au
www.DKO.com.au
ABN: 81956706590
NSW: Nominated Architects
Koos de Keijzer 5767
David Randerson 8542

DKO

Project Name	67 Pacific Parade, Dee Why
Project Address	67 Pacific Parade, Dee Why, NSW 2099
Client	Adjani
Project Number	00013395
Drawing Name	Site Analysis
Scale	2:1@A3
Date	17/07/2024
Drawing Number	DA100
Revision	A

Adjacent Site
No. 65
Pacific Parade

8°18'50"

45.73

6.5 m Setback

SETBACK 1.66

4.5 m Setback

278°19'20"
15.24

8,396

2,400

15 m²

1,377

1,377

1,960

12 m²

+31.55

33.40

30.63

2,400

2,846

22 m²

15 m²

AWNING ABOVE

1:20

1:20

1:20

98°17'30"
15.24

+51.55

0

4.5 m Setback

4.5 m Setback

+31.55

1:14

1:200

1:14

+31.19

45.735
188°18'50"

SETBACK 4.5

SETBACK 4.47

SETBACK 4.48

SETBACK 4.5

SETBACK 4.5

Adjacent Site
No. 1
The Crescent

PACIFIC PARADE

BENCH MARK
CUT IN KERB
RL 29.49 AHD

DIAL 1100 DBYD
BEFORE YOU DIG

SILL 43.88
HEAD 45.99
SILL 46.90
HEAD 49.01

LEVEL 2 BALCONY RL 43.56
LEVEL 3 BALCONY RL 46.60
LEVEL 1 SOFFIT RL 43.27
LEVEL 2 SOFFIT RL 46.27
LEVEL 3 SOFFIT RL 49.40

SILL 39.64
HEAD 41.80
SILL 42.74
HEAD 44.84

LEVEL 1 BALCONY RL 39.36
LEVEL 2 BALCONY RL 42.37
GROUND SOFFIT RL 39.08
LEVEL 1 SOFFIT RL 42.08
LEVEL 2 SOFFIT RL 45.25

SILL 40.64
HEAD 42.97
SILL 43.59
HEAD 45.92
SILL 46.64
HEAD 48.96

SILL 40.22
HEAD 42.30
SILL 43.36
HEAD 45.46
SILL 46.51
HEAD 48.61

LEVEL 1 TERRACE RL 39.94
LEVEL 2 BALCONY RL 43.01
LEVEL 3 BALCONY RL 46.10
LEVEL 3 SOFFIT RL 49.01

TERRACE GROUND RL 36.98
LEVEL 1 BALCONY RL 40.04
LEVEL 2 BALCONY RL 43.00
TERRACE GROUND SOFFIT RL 39.74
LEVEL 1 SOFFIT RL 42.70
LEVEL 2 SOFFIT RL 45.86

SILL 40.27
HEAD 42.34
SILL 43.38
HEAD 45.46

SILL 39.36
HEAD 41.68
SILL 42.50
HEAD 44.82

SILL 40.02
HEAD 42.35
SILL 43.13
HEAD 45.46
SILL 46.24
HEAD 48.57

SILL 40.07
HEAD 42.34
SILL 43.02
HEAD 45.29

Certificate No. #HR-N8XSZ8-01
Scan QR code or follow website link for rating details.
Assessor name: Horatio Cai
Accreditation No.: DMN/18/1849
Property Address: 67 Pacific Parade, Dee Why, NSW, 2099
http://www.hero-software.com.au/pdf/HR-N8XSZ8-01

Rev	Date	By	Chk	Description
A	17/07/2024	OD	MW XD	DA ISSUE

DKO Architecture (NSW) Pty Ltd
42 Davies Street
Surry Hills, NSW 2010
T +61 2 8346 4500
info@DKO.com.au
www.DKO.com.au
ABN: 81956706590
NSW: Nominated Architects
Koos de Keijzer 5767
David Randerson 8542

DKO

Project Name	67 Pacific Parade, Dee Why	Project Number	00013395
Project Address	67 Pacific Parade, Dee Why, NSW 2099	Drawing Name	Site Plan
		Scale	1:75@A3
		Date	17/07/2024
Client	Adjani	Drawing Number	DA101
		Revision	A

Table 4 Building Fabric Requirements

Element	Material Type	Details
External walls	Brick + R2.5 Insulation + PB Spandrel panels with R2.5 insulation	As per plan, thermal break to steel frame
Internal walls	Plasterboard on stud Hebel + R2.0 Insulation + PB	As per plan As per plan
Windows	Aluminium frame, double glazed, High solar gain low e Throughout	NFRC Glazing System (Glass+Frame) values: U ≤ 4.30 and SHGC = 0.53 (Fixed, Sliding, double hung windows) U ≤ 4.30 and SHGC = 0.47 (Awning windows)
	Note. • Substitute windows are permissible provided U-value is not greater than specified and SHGC is within +/- 5% of specified. • All gaps between windows frames, doors, plumbing fixtures and penetrations to be sealed. • All openable windows to be fitted with weather seals to create a tight seal when closed. • Entry doors to be fitted with weather stripping and be suitably weather sealed to create a tight seal when closed.	
Skylights	-	-
Floor	Concrete floor	Timber (Living) Carpet (Bedrooms) Tile (Wet area)
	Suspended concrete floor with R2.0 floor insulation	To floor above basement 01 and outside
Roof	Concrete + R4.0 Insulation + PB	Medium colour
Downlights	All LED downlights	All downlights comply with AS60598 IC-F Rating.
Exhaust fans	• All exhaust fans to have draft stoppers attached (self-closing device when not in use. • In the installation of exhaust fans, penetration or removal of insulation is not to exceed an area of 300mm x 300mm.	
Installation of Insulation	Where required, insulation must comply with AS/NZS 4859.1 and be installed so that it: • Abuts or overlaps adjoining insulation other than at supporting members such as studs, noggins, joists, furring channels and the like where the insulation must be against the member; • Forms a continuous barrier with ceilings, walls, bulkheads, floors or the like that inherently contribute to the thermal barriers; and • Does not affect the safe or effective operation of a service or fitting.	
	Where required, bulk insulation must be installed so that: • Maintains its position and thickness, other than where it is compressed between cladding and supporting members, water pipes, electrical cabling or the like; and • In a ceiling, where there is no bulk insulation or reflective insulation in the wall beneath, it overlaps the wall by not less than 50mm.	
	Where required, reflective insulation and vapour permeable construction fabric is to be installed: • In accordance to manufacture recommendations; • Run continuously from bottom plate to top plate with all gaps taped; and • With all rips and penetrations re-taped.	

Certificate No. #HR-N8XSZ8-01
Scan QR code or follow website link for rating details.
Assessor name Horatio Cai
Accreditation No. DMN/18/1849
Property Address 67 Pacific Parade, Dee Why, NSW, 2099
http://www.hero-software.com.au/pdf/HR-N8XSZ8-01

S30 DA303 S02 DA303

Adjacent Site
No. 65
Pacific Parade

Red dashed line denotes the LEC approved Building Envelope

Perimeter wall to be cut rock face wall

6 m Setback

4.5 m Setback

HYDRAULIC CAR LIFT

6 BICYCLES

Basement
3 Spaces
Total: 15 Car parking spaces

CPE

FHR

MSB

SWGO / GNGN

SERVICES

SEC HOUSE METER

Lift

S

Unit 2 3.24m3

10,000L RWT

Unit 4 1.70 m3 | Unit 6 1.70 m3 | Unit 8 1.70 m3 | Unit 7 2.56m3 | Unit 9 2.56m3

EV/VIS EV/VIS RES DDA

+28.55

5,800 6,100

SECURITY ENTRY DOOR

1:5.7

6.5 m Setback

1:20 1:20 1:20

+29.15 +29.29 +29.35 +29.55 +29.78

Intercom Swipe

2,500 SIGHT TRIANGLE

2,000

WATER METER

SPRINKLER VALVE CUPBOARD

FIRE & SPRINKLER BOOSTER

P R

BIN STORE AND COLLECTION ZONE 9 BINS

SEWER

NON-POTABLE WATER SERVICE

S01 DA302

SIGHT TRIANGLE 2,500 2,000

+29.09

BENCH MARK
CUT/N KERB
RL 29.49 AHD

PACIFIC PARADE

Adjacent Site
No. 1
The Crescent

Rev	Date	By	Chk	Description
A	17/07/2024	OD	MW XD	DA ISSUE

DKO Architecture (NSW) Pty Ltd
42 Davies Street
Surry Hills, NSW 2010
T +61 2 8346 4500
info@DKO.com.au
www.DKO.com.au
ABN: 81956706590
NSW: Nominated Architects
Koos de Keijzer 5767
David Randerson 8542

Project Name	67 Pacific Parade, Dee Why	Project Number	00013395
Project Address	67 Pacific Parade, Dee Why, NSW 2099	Drawing Name	Basement Level
		Scale	1:75@A3
		Date	17/07/2024
Client	Adjani	Drawing Number	DA200
		Revision	A

Adjacent Site
No. 65
Pacific Parade

Adjacent Site
No. 1
The Crescent

S30 DA303
S02 DA303
S01 DA302

6 m Setback
4.5 m Setback
Red dashed line denotes the LEC approved Building Envelope
Perimeter wall to be cut rock face wall
RES
EV/RES
Ground
6 Spaces
Total: 15 Car spaces
6,800
1,000
1,377
1,960
HYDRAULIC CAR LIFT
1 BICYCLE
3 BICYCLES
PLANTER BOX
12 m²
COURTYARD
+31.55
EXISTING NATURAL LEVELS TO BE RETAINED
Unit 1
2 BED
A: 99 m²
LOBBY
Lift
CPE
ELEC
FHR
HYD
FIP
SUP
GAS
+31.19
+30.83
1:14
1,200
FIRE EGRESS & DDA PATH
MAILBOXES
1:20
BENCH MARK
CUT IN KERB
RL 29.49 AHD
PACIFIC PARADE
LINTEL
PIT
SETBACK 4.5
45.82 ROOF
45.82 ROOF LINE
35.85 TOP WALL
45.79 ROOF
45.79 ROOF LINE
DRAIN
SMH 600DIA NOT OPEN INV 1.5m BELOW BY DIAL BEFORE YOU DIG

Certificate No. #HR-N8XSZ8-01
Scan QR code or follow website link for rating details.
Assessor name Horatio Cai
Accreditation No. DMN/18/1849
Property Address 67 Pacific Parade, Dee Why, NSW, 2099
http://www.hero-software.com.au/pdf/HR-N8XSZ8-01

Rev	Date	By	Chk	Description
A	17/07/2024	OD	MW XD	DA ISSUE

DKO Architecture (NSW) Pty Ltd
42 Davies Street
Surry Hills, NSW 2010
T +61 2 8946 4500
info@DKO.com.au
www.DKO.com.au
ABN: 81956706590
NSW: Nominated Architects
Koos de Keijzer 5767
David Randerson 8542

DKO

Project Name	67 Pacific Parade, Dee Why	Project Number	00013395
Project Address	67 Pacific Parade, Dee Why, NSW 2099	Drawing Name	Ground Floor Plan
		Scale	1:75@A3
		Date	17/07/2024
Client	Adjani	Drawing Number	DA201
		Revision	A

Adjacent Site
No. 65
Pacific Parade

S30 DA303

S02 DA303

8°18'50"

1,377

Red dashed line denotes the LEC approved Building Envelope

6 m Setback

6.5 m Setback

4.5 m Setback

3,075

1,000

RES

RES

Level 1
6 Spaces
Total: 15 Car spaces

HYDRAULIC CAR LIFT

FHR

CPE

ELEC

CPE

+34.65

6,800

+34.65

RES

RES

EV/RES

RES

Lift

F

FS

HYD

Unit 2

3 BED
A: 106 m²

0.44m3

2,400

15 m²

2.94m3

HWU

1.68m3

1.09 m3

98°17'30"
15.24

45.735
188°18'50"

2,000

1,000

S01 DA302

SETBACK 4.5

SETBACK 4.47

SETBACK 4.48

SETBACK 4.5

SETBACK 4.5

0.3/37

SILL 43.88
HEAD 45.99
SILL 46.90
HEAD 49.01

LEVEL 2 BALCONY RL 43.56
LEVEL 3 BALCONY RL 46.60
LEVEL 1 SOFFIT RL 43.27
LEVEL 2 SOFFIT RL 46.27
LEVEL 3 SOFFIT RL 49.40

SILL 40.64
HEAD 42.97
SILL 43.59
HEAD 45.92
SILL 46.64
HEAD 48.96

SILL 40.22
HEAD 42.30
SILL 43.36
HEAD 45.46
SILL 46.51
HEAD 48.61

LEVEL 1 TERRACE RL 39.94
LEVEL 2 BALCONY RL 43.01
LEVEL 3 BALCONY RL 46.10
LEVEL 3 SOFFIT RL 49.01

SILL 40.02
HEAD 42.35
SILL 43.13
HEAD 45.46
SILL 46.24
HEAD 48.57

TERRACE GROUND RL 36.98
LEVEL 1 BALCONY RL 40.04
LEVEL 2 BALCONY RL 43.00
TERRACE GROUND SOFFIT RL 39.74
LEVEL 1 SOFFIT RL 42.70
LEVEL 2 SOFFIT RL 45.86

SILL 40.07
HEAD 42.34
SILL 43.02
HEAD 45.29

SILL 40.27
HEAD 42.34
SILL 43.38
HEAD 45.46

SILL 39.64
HEAD 41.80
SILL 42.74
HEAD 44.84

LEVEL 1 BALCONY RL 39.36
LEVEL 2 BALCONY RL 42.37
GROUND SOFFIT RL 39.08
LEVEL 1 SOFFIT RL 42.08
LEVEL 2 SOFFIT RL 45.25

SILL 39.36
HEAD 41.68
SILL 42.50
HEAD 44.82

Adjacent Site
No. 1
The Crescent

S30 DA303

S02 DA303

S01 DA302

PACIFIC PARADE

BENCH MARK
CUT IN KERB
RL 29.49 AHD

LINTEL

HYDRO

GAS PIT

DRAIN

PIT

SMH

TOP ROCK

TOP BRICK WALL

TOP WALL

LEVEL 1 BALC TILE RL 31.69
LEVEL 2 BALC TILE RL 34.63/HOB RL 34.66
LEVEL 3 BALC HOB RL 37.56

LEVEL 1 SOFFIT RL 34.28
LEVEL 2 SOFFIT RL 37.26
LEVEL 3 SOFFIT RL 40.16

HEAD 33.10
SILL 35.58
HEAD 36.07
SILL 38.50
HEAD 38.97

SILL 41.58
HEAD 42.88
SILL 38.52
HEAD 40.00
SILL 41.61
HEAD 42.88
SILL 41.71
HEAD 42.90
SILL 35.63
HEAD 36.43
SILL 38.54
HEAD 39.98
SILL 35.61
HEAD 36.43
SILL 34.94
HEAD 40.13
SILL 34.75
HEAD 40.14
SILL 40.98
HEAD 42.90

SETBACK 1.55

LIFT OVERRUN

PERGOLA

TIMBER PERGOLA

PALM 0.7/3M

Certificate No. #HR-N8XSZ8-01
Scan QR code or follow website link for rating details.
Assessor name Horatio Cai
Accreditation No. DMN/18/1849
Property Address 67 Pacific Parade, Dee Why, NSW, 2099
http://www.hero-software.com.au/pdf/HR-N8XSZ8-01

Rev	Date	By	Chk	Description
A	17/07/2024	OD	MW XD	DA ISSUE

DKO Architecture (NSW) Pty Ltd
42 Davies Street
Surry Hills, NSW 2010
T +61 2 8346 4500
info@DKO.com.au
www.DKO.com.au
ABN: 81956706590
NSW: Nominated Architects
Koos de Keijzer 5767
David Randerson 8542

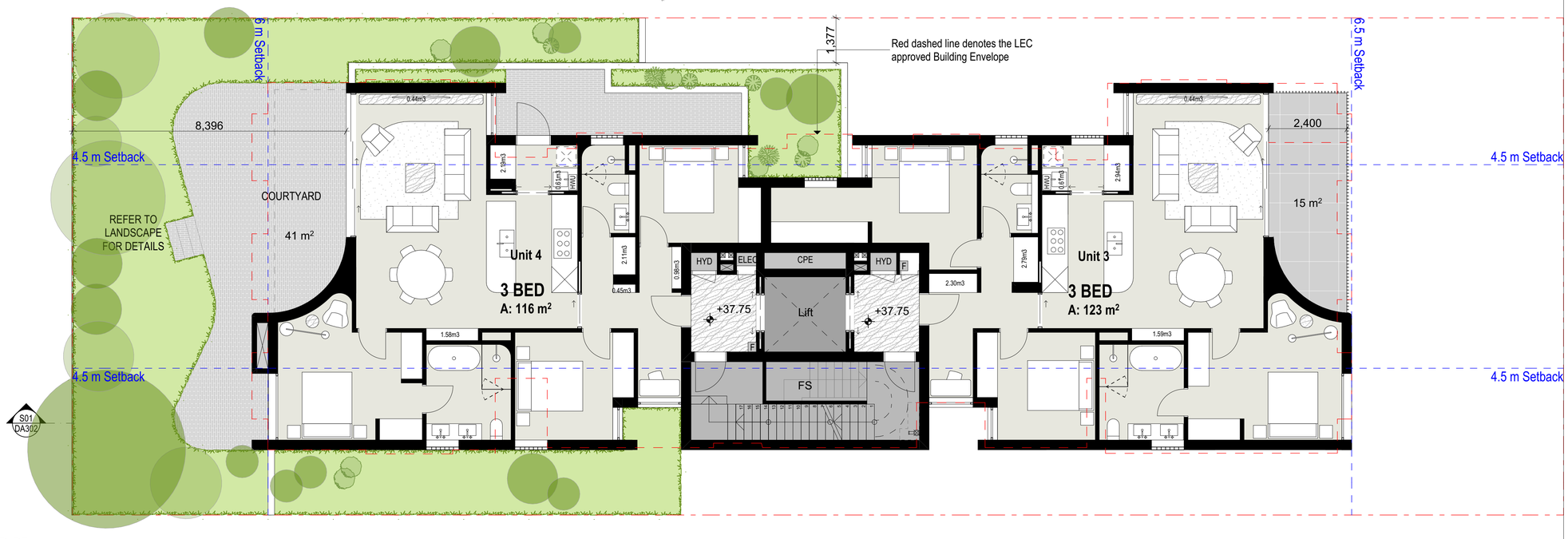
DKO

Project Name	67 Pacific Parade, Dee Why	Project Number	00013395
Project Address	67 Pacific Parade, Dee Why, NSW 2099	Drawing Name	Level 1 Plan
		Scale	1:75@A3
		Date	17/07/2024
Client	Adjani	Drawing Number	DA202
		Revision	A

S30 DA303

S02 DA303

Adjacent Site
No. 65
Pacific Parade



#toPZvalue

S30 DA303

S02 DA303

Adjacent Site
No. 1
The Crescent

PACIFIC PARADE

S01 DA302

Certificate No. #HR-N8XSZ8-01
Scan QR code or follow website link for rating details.
Assessor name Horatio Cai
Accreditation No. DMN/18/1849
Property Address 67 Pacific Parade, Dee Why, NSW, 2099
http://www.hero-software.com.au/pdf/HR-N8XSZ8-01

Rev	Date	By	Chk	Description
A	17/07/2024	OD	MW XD	DA ISSUE

DKO Architecture (NSW) Pty Ltd
42 Davies Street
Surry Hills, NSW 2010
T +61 2 8346 4500
info@DKO.com.au
www.DKO.com.au
ABN: 81956706590
NSW: Nominated Architects
Koos de Keijzer 5767
David Randerson 8542

Project Name	67 Pacific Parade, Dee Why	Project Number	00013395
Project Address	67 Pacific Parade, Dee Why, NSW 2099	Drawing Name	Level 2 Plan
		Scale	1:75@A3
		Date	17/07/2024
Client	Adjani	Drawing Number	DA203
		Revision	A

S30
DA303

S02
DA303

Adjacent Site
No. 65
Pacific Parade

6 m Setback

6.5 m Setback

4.5 m Setback

4.5 m Setback

Red dashed line denotes the LEC approved Building Envelope

2,400

15 m²

0.44m3

2.09m3

0.61m3

HWD

Unit 6

3 BED

A: 116 m²

2.11m3

0.45m3

0.98m3

HYD

ELEC

CPE

HYD

F

+40.85

Lift

+40.85

F

FS

2.30m3

1.58m3

2.79m3

Unit 5

3 BED

A: 123 m²

1.59m3

2.94m3

0.61m3

HWD

2,400

15 m²

AWNING ABOVE

4.5 m Setback

4.5 m Setback

S01
DA302

S30
DA303

S02
DA303

Adjacent Site
No. 1
The Crescent

S01
DA302

PACIFIC PARADE

Certificate No. #HR-N8XSZ8-01

Scan QR code or follow website link for rating details.

Assessor name	Horatio Cai
Accreditation No.	DMN/18/1849
Property Address	67 Pacific Parade, Dee Why, NSW, 2099

http://www.hero-software.com.au/pdf/HR-N8XSZ8-01

Rev	Date	By	Chk	Description
A	17/07/2024	OD	MW XD	DA ISSUE

DKO Architecture (NSW) Pty Ltd
42 Davies Street
Surry Hills, NSW 2010
T +61 2 8346 4500
info@DKO.com.au
www.DKO.com.au
ABN: 81956706590
NSW: Nominated Architects
Koos de Keijzer 5767
David Randerson 8542

DKO

Project Name	67 Pacific Parade, Dee Why	Project Number	00013395
Project Address	67 Pacific Parade, Dee Why, NSW 2099	Drawing Name	Level 3 Plan
		Scale	1:75@A3
		Date	17/07/2024
Client	Adjani	Drawing Number	DA204
		Revision	A

Adjacent Site
No. 65
Pacific Parade

Adjacent Site
No. 1
The Crescent

PACIFIC PARADE

8°18'50"
45.73

45.735
188°18'50"

278°19'20"
15.24

98°17'30"
15.24

6.5 m Setback
4.5 m Setback
SETBACK 1.66
SETBACK 4.5
SETBACK 4.47
SETBACK 4.48

Unit 8
3 BED
A: 116 m²

Unit 7
2 BED
A: 91 m²

2,400
15 m²
2,846
22 m²
Lift
HYD
ELEC
CPE
FS
+43.95
AWNING ABOVE

S30 DA303
S02 DA303
S01 DA302

#toPZvalue

BENCH MARK
CUT IN KERB
RL 29.49 AHD

Certificate No. #HR-N8XSZ8-01
Scan QR code or follow website link for rating details.
Assessor name Horatio Cai
Accreditation No. DMN/18/1849
Property Address 67 Pacific Parade, Dee Why, NSW, 2099
http://www.hero-software.com.au/pdf/HR-N8XSZ8-01

Rev	Date	By	Chk	Description
A	17/07/2024	OD	MW XD	DA ISSUE

DKO Architecture (NSW) Pty Ltd
42 Davies Street
Surry Hills, NSW 2010
T +61 2 8346 4500
info@DKO.com.au
www.DKO.com.au
ABN: 81956706590
NSW: Nominated Architects
Koos de Keijzer 5767
David Randerson 8542

Project Name	67 Pacific Parade, Dee Why	Project Number	00013395
Project Address	67 Pacific Parade, Dee Why, NSW 2099	Drawing Name	Level 4 Plan
		Scale	1:75@A3
		Date	17/07/2024
Client	Adjani	Drawing Number	DA205
		Revision	A

Adjacent Site
No. 65
Pacific Parade

S30 DA303

S02 DA303

8°18'50"
45.73

SETBACK 1.66

SETBACK 1.55

6.5 m Setback

6 m Setback

4.5 m Setback

4.5 m Setback

98°17'30"
15.24

278°19'20"
15.24

4.5 m Setback

4.5 m Setback

Unit 9

3 BED
A: 115 m²

15 m²

2,400

3,600

24 m²

CPE

Lift

HYD

FS

+47.05

1.90m3

1.72m3

1.41m3

0.44m3

0.6m3

1.32m3

ELEC

F

S01 DA302

S01 DA302

45.735
188°18'50"

#toPZvalue

SETBACK 4.5

SETBACK 4.47

SETBACK 4.48

SETBACK 4.5

SETBACK 4.5

S30 DA303

S02 DA303

Adjacent Site
No. 1
The Crescent

PACIFIC PARADE

BENCH MARK
CUT IN KERB
RL 29.49 AHD

DIAL 1100 BEFORE YOU DIG

Certificate No. #HR-N8XSZ8-01
Scan QR code or follow website link for rating details.
Assessor name: Horatio Cai
Accreditation No.: DMN/18/1849
Property Address: 67 Pacific Parade, Dee Why, NSW, 2099
http://www.hero-software.com.au/pdf/HR-N8XSZ8-01

Rev	Date	By	Chk	Description
A	17/07/2024	OD	MW XD	DA ISSUE

DKO Architecture (NSW) Pty Ltd
42 Davies Street
Surry Hills, NSW 2010
T +61 2 8346 4500
info@DKO.com.au
www.DKO.com.au
ABN: 81956706590
NSW: Nominated Architects
Koos de Keijzer 5767
David Randerson 8542

DKO

Project Name	67 Pacific Parade, Dee Why	Project Number	00013395
Project Address	67 Pacific Parade, Dee Why, NSW 2099	Drawing Name	Level 5 Plan
		Scale	1:75@A3
		Date	17/07/2024
Client	Adjani	Drawing Number	DA206
		Revision	A

Adjacent Site
No. 65
Pacific Parade

Adjacent Site
No. 1
The Crescent

PACIFIC PARADE

8°18'50"
45.73

278°19'20"
15.24

98°17'30"
15.24

45.735
188°18'50"

SETBACK 1.66

SETBACK 1.55

SETBACK 4.5

SETBACK 4.47

SETBACK 4.48

Provision of PV Panels asper Basix's Requirements

A/C PLANT

Access Hatch

+51.55

S30 DA303

S02 DA303

S01 DA302

BENCH MARK
CUT IN KERB
RL 29.49 AHD

Certificate No. #HR-N8XSZ8-01
Scan QR code or follow website link for rating details.
Assessor name Horatio Cai
Accreditation No. DMN/18/1849
Property Address 67 Pacific Parade, Dee Why, NSW, 2099
http://www.hero-software.com.au/pdf/HR-N8XSZ8-01

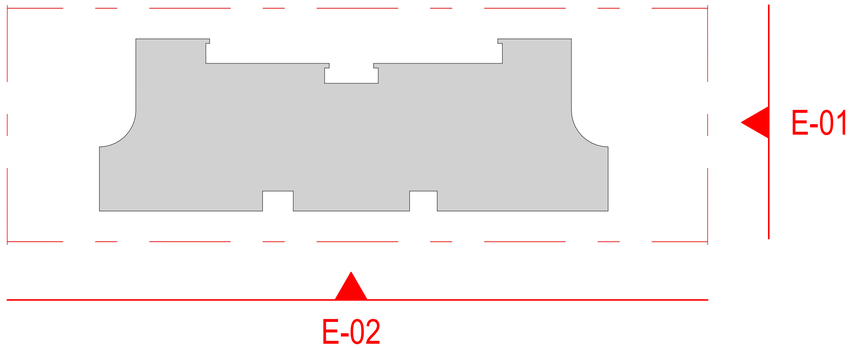
Rev	Date	By	Chk	Description
A	17/07/2024	OD	MW XD	DA ISSUE

DKO Architecture (NSW) Pty Ltd
42 Davies Street
Surry Hills, NSW 2010
T +61 2 8346 4500
info@DKO.com.au
www.DKO.com.au
ABN: 81956706590
NSW: Nominated Architects
Koos de Keijzer 5767
David Randerson 8542

Project Name	67 Pacific Parade, Dee Why
Project Address	67 Pacific Parade, Dee Why, NSW 2099
Client	Adjani
Project Number	00013395
Drawing Name	Roof Plan
Scale	1:75@A3
Date	17/07/2024
Drawing Number	DA207
Revision	A

01 North Elevation 1:100

Key Plan



EF01 LIGHT BRICK

EF02 BRONZE METAL CLADDING

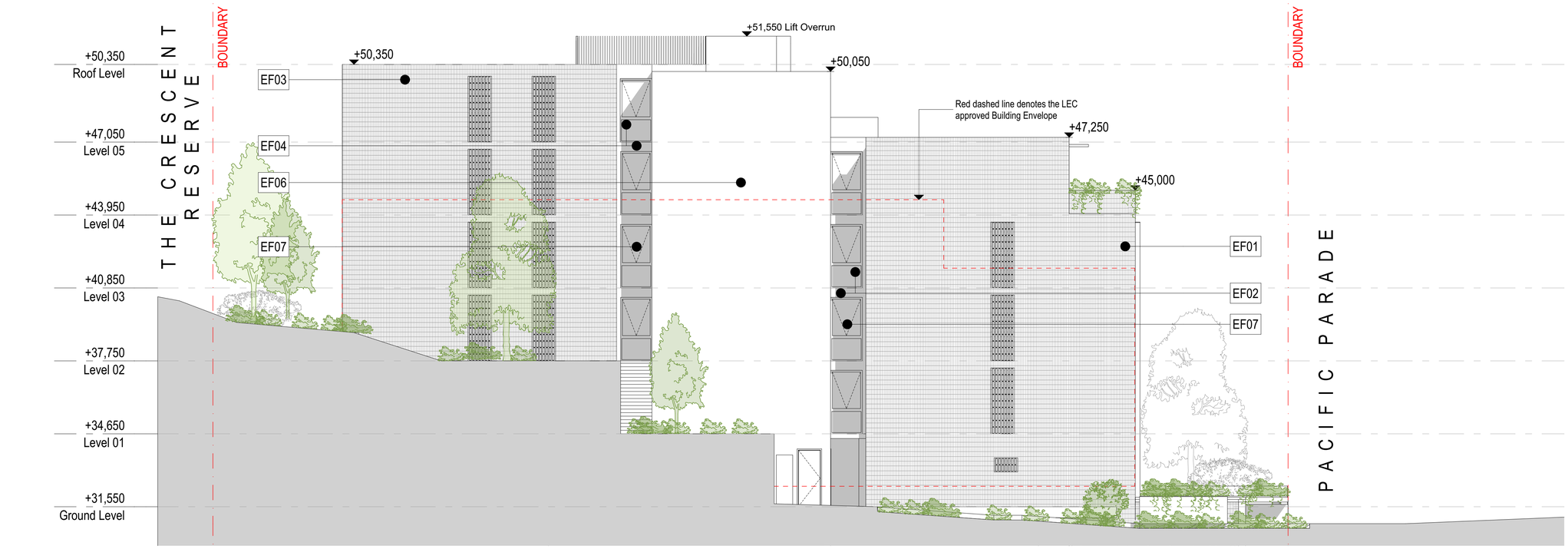
EF03 MEDIUM BRICK

EF04 DARKER BRONZE METAL CLADDING

EF05 BRONZE METAL BALUSTRADE

EF06 CONCRETE

EF07 GLASS



02 East Elevation 1:100

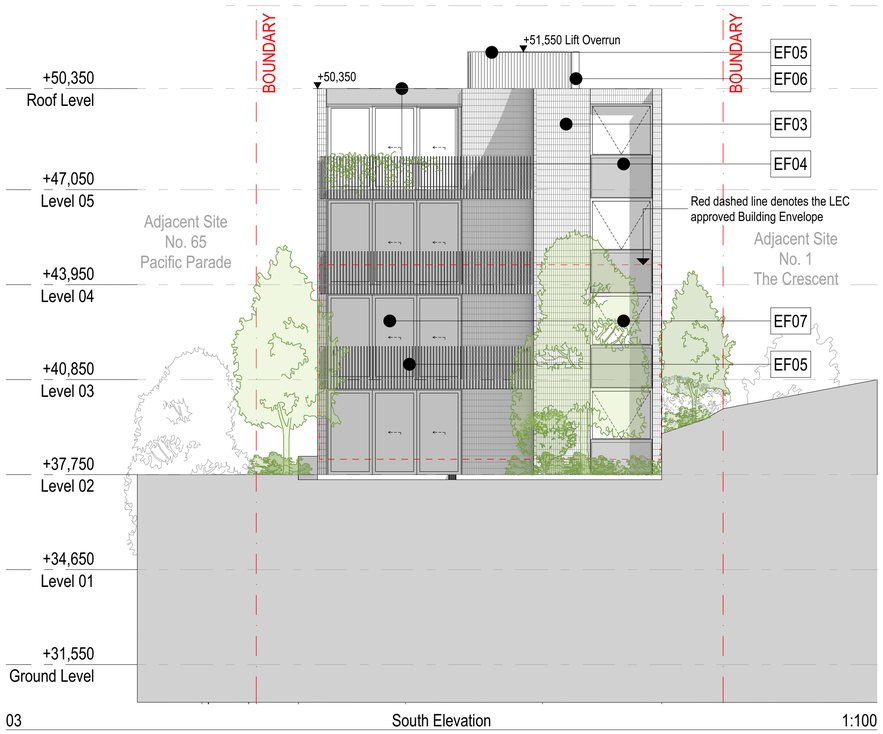
Certificate No. #HR-N8XSZ8-01
Scan QR code or follow website link for rating details.
Assessor name Horatio Cai
Accreditation No. DMN/18/1849
Property Address 67 Pacific Parade, Dee Why, NSW, 2099
http://www.hero-software.com.au/pdf/HR-N8XSZ8-01

Rev	Date	By	Chk	Description
A	17/07/2024	OD	MW XD	DA ISSUE

DKO Architecture (NSW) Pty Ltd
42 Davies Street
Surry Hills, NSW 2010
T +61 2 8346 4500
info@DKO.com.au
www.DKO.com.au
ABN: 81956706590
NSW: Nominated Architects
Koos de Keijzer 5767
David Randerson 8542

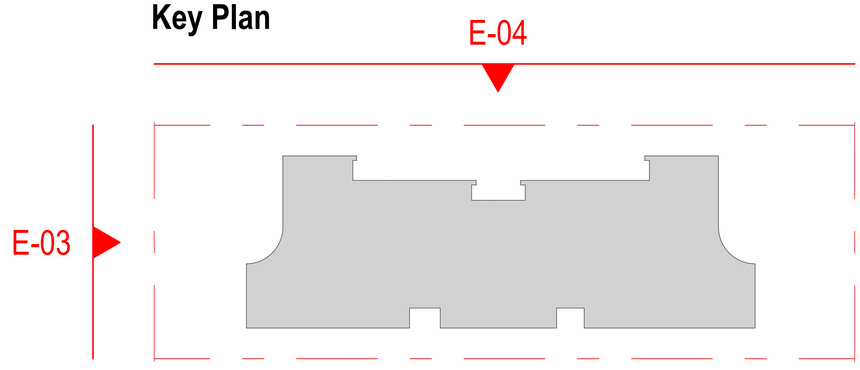
DKO

Project Name	67 Pacific Parade, Dee Why	Project Number	00013395
Project Address	67 Pacific Parade, Dee Why, NSW 2099	Drawing Name	N & E Elevations
		Scale	1:100, 1:8.33, 1:2.86, 1:1.25, 1
		Date	17/07/2024
Client	Adjani	Drawing Number	DA300
		Revision	A



03 South Elevation 1:100

Key Plan



EF01 LIGHT BRICK

EF02 BRONZE METAL CLADDING

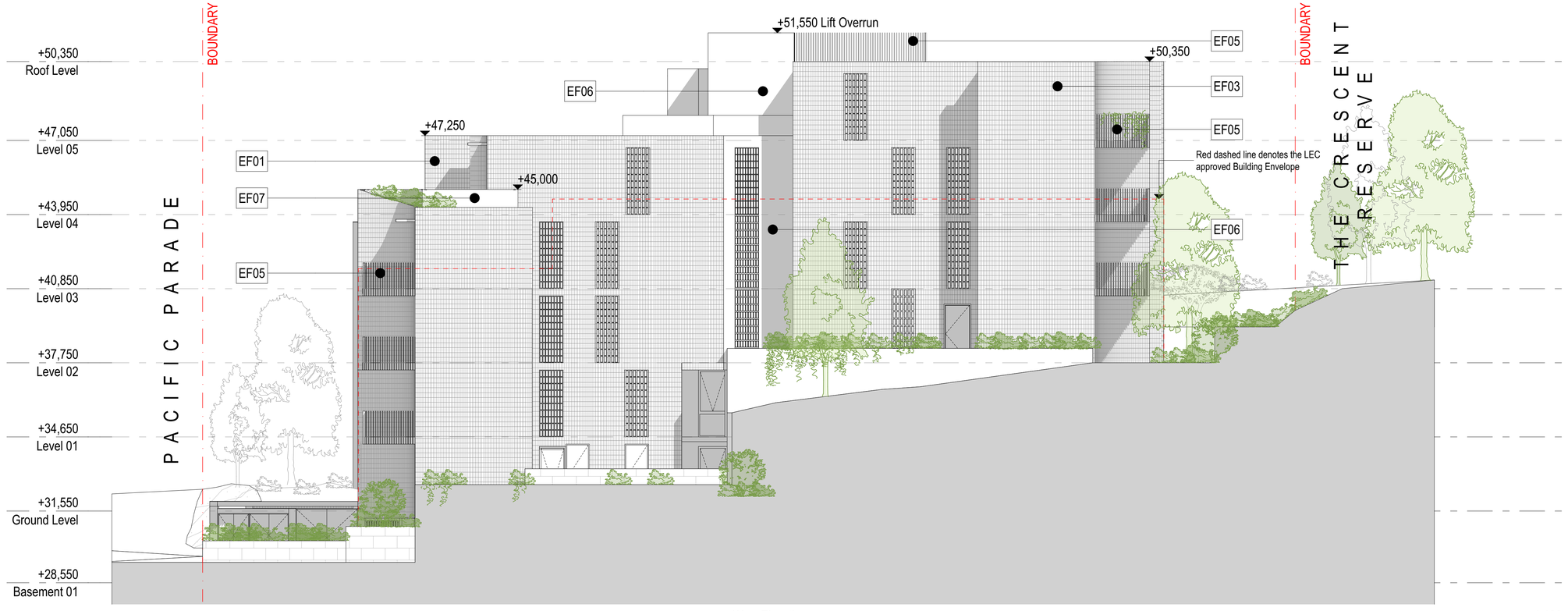
EF03 MEDIUM BRICK

EF04 DARKER BRONZE METAL CLADDING

EF05 BRONZE METAL PALISADE

EF06 TINTED CONCRETE

EF07 GLASS



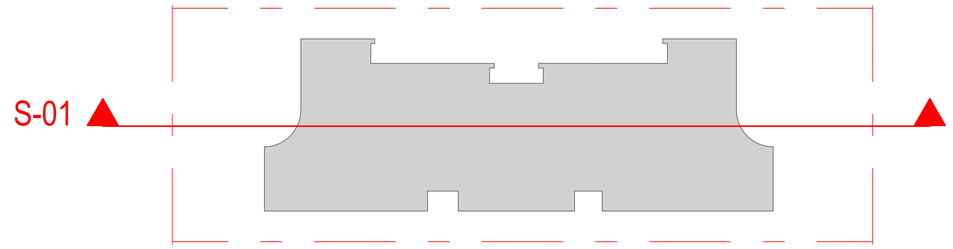
04 West Elevation 1:100

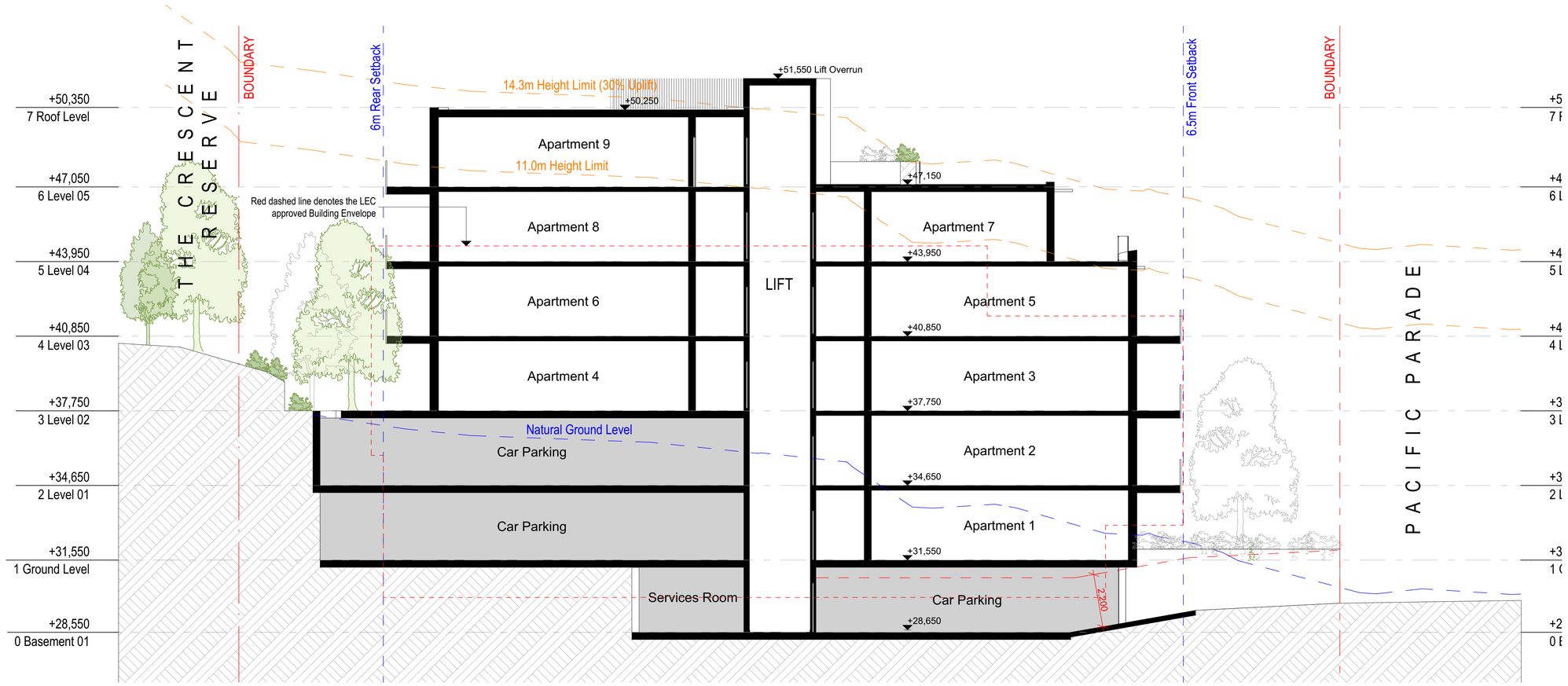
Rev	Date	By	Chk	Description
A	17/07/2024	OD	MW XD	DA ISSUE

DKO Architecture (NSW) Pty Ltd
42 Davies Street
Surry Hills, NSW 2010
T +61 2 8346 4500
info@DKO.com.au
www.DKO.com.au
ABN: 81956706590
NSW: Nominated Architects
Koos de Keijzer 5767
David Randerson 8542

Project Name	67 Pacific Parade, Dee Why	Project Number	00013395
Project Address	67 Pacific Parade, Dee Why, NSW 2099	Drawing Name	S & W Elevations
		Scale	1:100, 1:200, 1:8.33, 1:2.86, 1
		Date	17/07/2024
Client	Adjani	Drawing Number	DA301
		Revision	A

Key Plan





S01 SECTION 01 1:100

Certificate No. #HR-N8XSZ8-01
Scan QR code or follow website link for rating details.
Assessor name Horatio Cai
Accreditation No. DMN/18/1849
Property Address 67 Pacific Parade, Dee Why, NSW, 2099
http://www.hero-software.com.au/pdf/HR-N8XSZ8-01

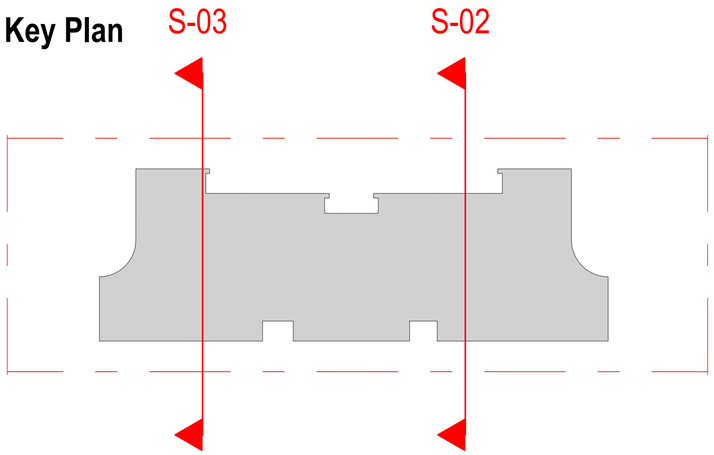
Rev	Date	By	Chk	Description
A	17/07/2024	OD	MW XD	DA ISSUE

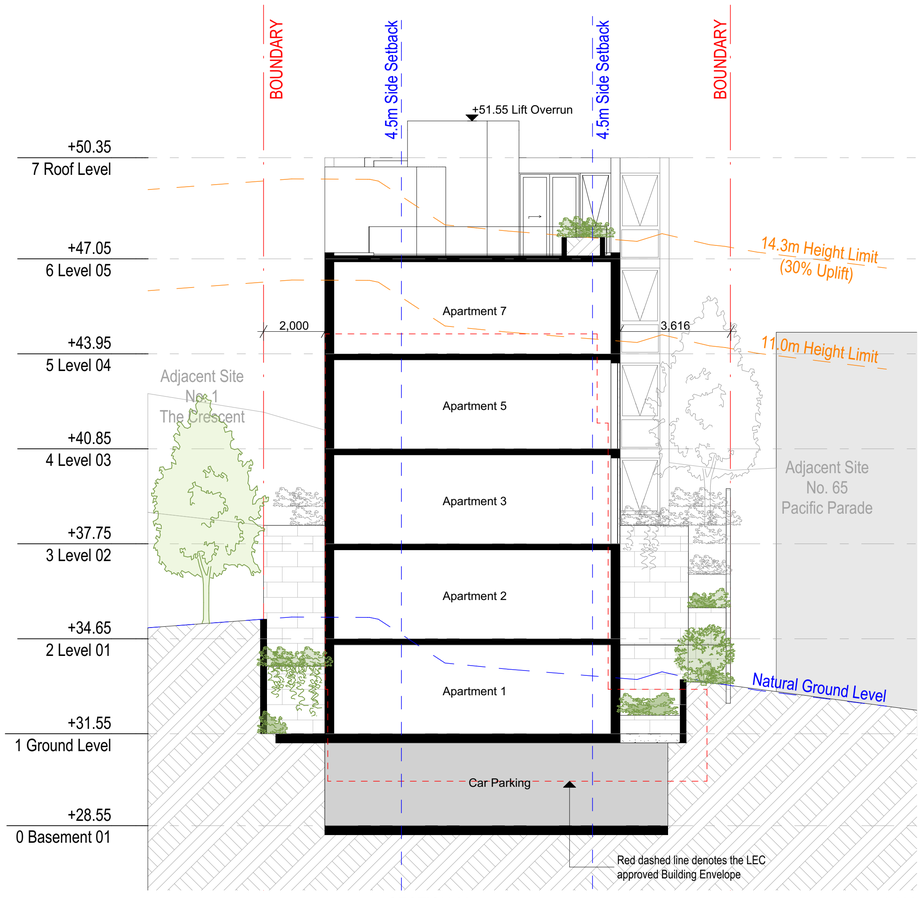
DKO Architecture (NSW) Pty Ltd
42 Davies Street
Surry Hills, NSW 2010
T +61 2 8346 4500
info@DKO.com.au
www.DKO.com.au
ABN: 81956706590
NSW: Nominated Architects
Koos de Keijzer 5767
David Randerson 8542

DKO

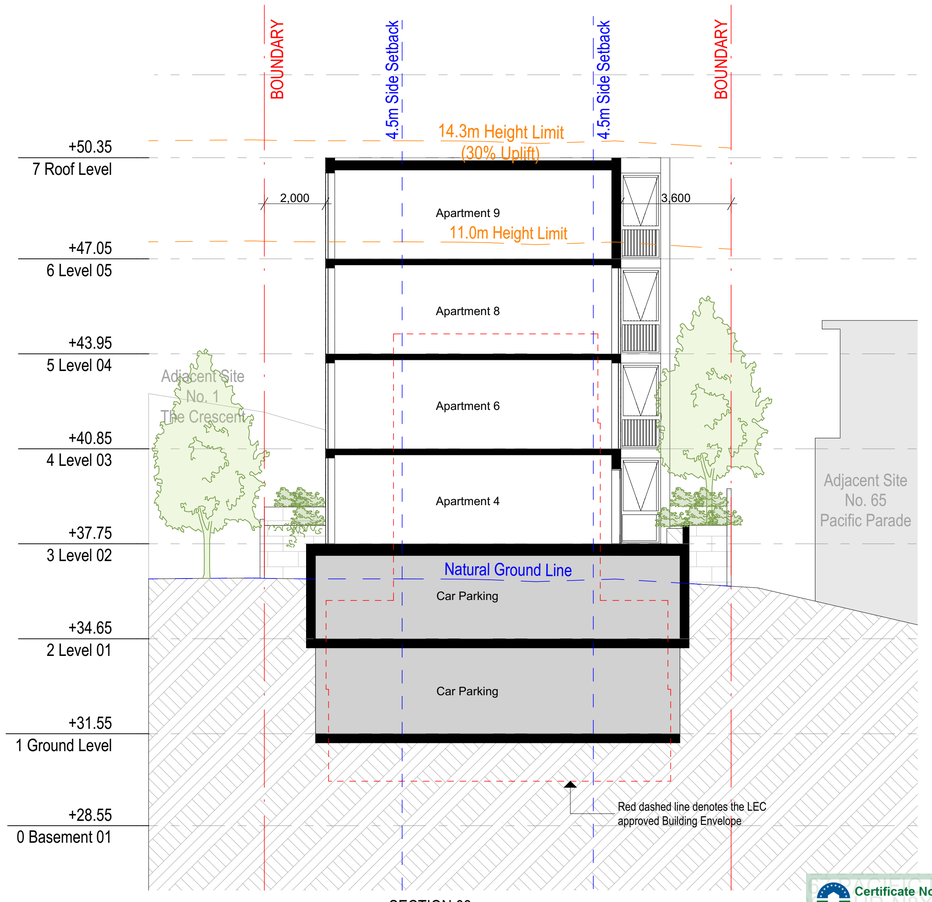
Project Name	67 Pacific Parade, Dee Why	Project Number	00013395
Project Address	67 Pacific Parade, Dee Why, NSW 2099	Drawing Name	Section North-South
		Scale	1:100, 1:200@A3
		Date	17/07/2024
Client	Adjani	Drawing Number	DA302
		Revision	A

Key Plan





S02 SECTION 02 1:100

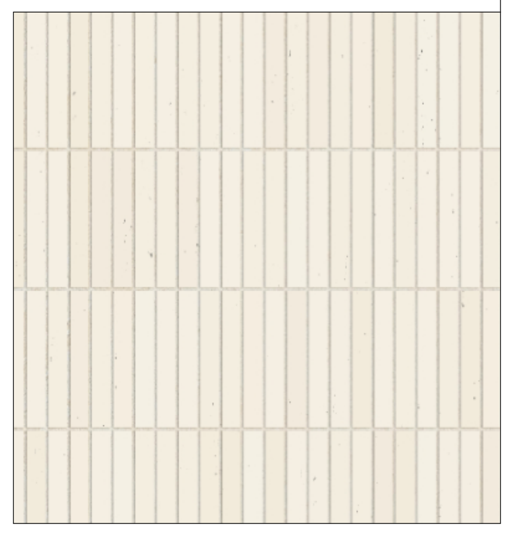


S03 SECTION 03

Rev	Date	By	Chk	Description
A	17/07/2024	OD	MW XD	DA ISSUE

DKO Architecture (NSW) Pty Ltd
42 Davies Street
Surry Hills, NSW 2010
T +61 2 8346 4500
info@DKO.com.au
www.DKO.com.au
ABN: 81956706590
NSW: Nominated Architects
Koos de Keijzer 5767
David Randerson 8542

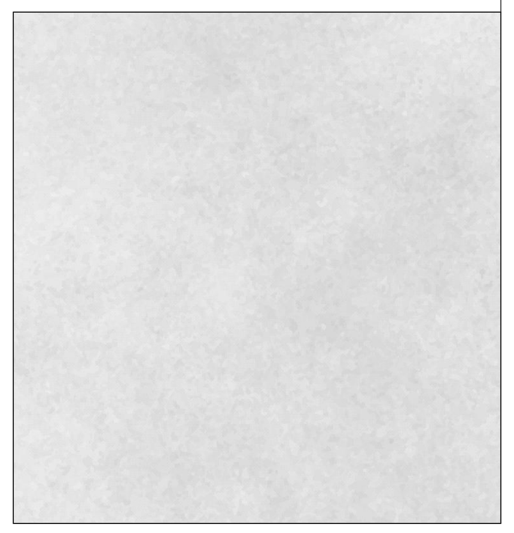
Project Name	67 Pacific Parade, Dee Why
Project Address	67 Pacific Parade, Dee Why, NSW 2099
Client	Adjani
Project Number	00013395
Drawing Name	Section East-West
Scale	1:100, 1:200@A3
Date	17/07/2024
Drawing Number	DA303
Revision	A



EF01
LIGHT BRICK

EF02
BRONZE METAL CLADDING

EF05
BRONZE METAL BALUSTRADE



EF06
CONCRETE

EF07
GLASS

Certificate No. #HR-N8XSZ8-01
Scan QR code or follow website link for rating details.

Assessor name	Horatio Cai
Accreditation No.	DMN/18/1849
Property Address	67 Pacific Parade, Dee Why, NSW, 2099

http://www.hero-software.com.au/pdf/HR-N8XSZ8-01

Rev	Date	By	Chk	Description
A	17/07/2024	OD	MW XD	DA ISSUE

DKO Architecture (NSW) Pty Ltd
42 Davies Street
Surry Hills, NSW 2010
T +61 2 8346 4500
info@DKO.com.au
www.DKO.com.au
ABN: 81956706590
NSW: Nominated Architects
Koos de Keijzer 5767
David Randerson 8542

Project Name	67 Pacific Parade, Dee Why	Project Number	00013395
Project Address	67 Pacific Parade, Dee Why, NSW 2099	Drawing Name	Materials & Finishes
		Scale	1:0.54, 1:1.61, 1:0.71@A3
		Date	17/07/2024
Client	Adjani	Drawing Number	**DA304**
		Revision	**A**