

Koichi Takada Architects

LETTER

KOICHI TAKADA
ARCHITECTS Pty Ltd

Office:
Suites 41 & 42 (Level 4)
61 Marlborough Street
Surry Hills, NSW 2010
AUSTRALIA

T +61 2 9698 8510
F +61 2 8209 4995

E info@koichitakada.com

ABN 63 131 365 896

Nominated Architect:

Koichi Takada
NSW Architects 6901
VIC Architects 16179

Australian Institute of
Architects 25286
Royal Institute of British
Architects 10411592

1st September 2023

The General Manager
PO Box 82 Manly
NSW 1655 Australia

**RE: Design Verification Statement – 1112-1116 Barrenjoey Road, Palm Beach
Development Application**

To whom it may concern,

Pursuant to Section 102 of the Environmental Planning and Assessment Regulation 2021, I hereby declare that I am a qualified designer as defined under Schedule 7, being a registered architect in accordance with the Architects Act 2003.

I directed the design of the residential development at **1112-1116 Barrenjoey Road, Palm Beach**. The following pages demonstrate, in terms of the Apartment Design Guide, how the objectives in Parts 3 and 4 of that guide have been achieved.

I confirm that the design achieves the quality principles set out in the State Environmental Planning Policy No.65 – Design Quality of Residential Apartment Development and Schedule 1 Design Quality Principles.

Yours sincerely,



Koichi Takada
Nominated Architect
NSW Architects No. 6901

Principle 1: Context & Neighbourhood Character

Good design responds and contributes to its context. Context is the key natural and built features of an area, their relationship and the character they create when combined. It also includes social, economic, health and environmental conditions.

Responding to context involves identifying the desirable elements of an area's existing or future character. Well designed buildings respond to and enhance the qualities and identity of the area including the adjacent sites, streetscape and neighbourhood.

The site is located 1112-1116 Barrenjoey Road, Palm Beach, to the North of the prominent Barrenjoey House. The site is located approximately 50km north of Sydney's CBD on Pittwater Bay. Located on the main road and entry point to this popular destination makes this a prominent and highly visible context. The site is located within the Northern Beaches Local Government Area (LGA) within a B1 Neighbourhood Centre.

Located across the road from the Palm Beach wharf, the site is ideally positioned to access all the amenities of Palm Beach. The area around the site boasts a wide variety of outdoor amenity and recreation, with a small amount of retail offerings, cafés, and restaurants.

The site has a very steep terrain, built into the natural cliff that fronts both Pittwater Bay and east to Palm Beach. The surrounding sites are built following the natural topography, making this site unique when designing to maximise the views, solar access and natural topography. The level change on the site from East to West falls by approximately 13m, with 10m occurring in approximately 50% of the site depth. The slope of the site exceeds 30% (calculated at 41.91% = average of 22.74°) applying a 10m height limit to the site.



Looking North towards the site aligning with and complimenting Barrenjoey House.

Principle 2: Built Form and Scale

Good design achieves a scale, bulk and height appropriate to the existing or desired future character of the street and surrounding buildings.

Good design also achieves an appropriate built form for a site and the building's purpose in terms of building alignments, proportions, building type, articulation and the manipulation of building elements. Appropriate built form defines the public domain, contributes to the character of streetscapes and parks, including their views and vistas, and provides internal amenity and outlook.

This proposal seeks a primary 3-storey frontage to Barrenjoey Road. The upper 2-storeys step back with the terrain to the East, making the top two floors recessive and visually minimized from the pedestrian realm and streetscape. The proposal is wholly compliant with the 10m Height limit. Consideration has been given to the local context; the proposal mirrors the scale and height of Barrenjoey House to the south while providing a more sensitive terraced form and landscape design to connect with the landscape character of Palm Beach. At the ground plane, and within the side setbacks, a combination of low, stepped planters, palisade fencing and deep soil planting creates a soft interface with the public domain and neighbouring properties.

Expressed perimeter planters and privacy screens express a horizontal language consistent with the residential buildings in the area, a feature awning structure provides strong breaks in the building form, breaking the length into three distinct parts. The alternating feature aims to break an otherwise symmetrical form, aligning to the two adjacent building lengths (Barrenjoey House and the Single Dwelling) providing a transition in urban character and built form. A flat roof creates a tidy, homogenous façade while also highlighting the terraced eastern aspect.

The combination of greening, timber look screens and the feature awning provides a design that is sensitive to the natural context. The terraced form of the first 3 storeys provides a scheme that is sympathetic to the streetscape and provides a better relationship to highlight Barrenjoey House.



Barrenjoey Road Street perspective, showing the vertical articulation and modulation.

Principle 3: Density

Good design achieves a high level of amenity for residents and each apartment, resulting in a density appropriate to the site and its context.

Appropriate densities are consistent with the area's existing or projected population. Appropriate densities can be sustained by existing or proposed infrastructure, public transport, access to jobs, community facilities and the environment.

The site is located in a B1 Neighbourhood Centre zone. Its location is well served by public transportation connections (a bus and ferry) as well as lifestyle, leisure and community facilities, including beaches golf clubs, retail offerings and parks. The mixed use proposal combines seven apartments with two ground floor retail tenancies, delivery high quality retail to this key arrival location in Palm Beach.

The DCP requires 25% of the gross floor area to be commercial/retail. The ground floor maximizes the available frontage and area for Retail with a proposed 393m² of area (22.2% of the overall GFA). The area required for services, the driveway ramp and the residential entry has been contained to the building footprint in order to maximize the landscaped area. This footprint, in addition to the heritage preservation zone, limits the ability to achieve the full 25% requirement.

The proposal responds according to the infrastructure and amenity through providing 3 Bedroom units with a range of apartments sizes from 126.8m² up to a 2-storey PH of 329.7m². This mix aims to cater to the market appealing to downsizers and holiday makers. All apartments comply with the DCP and ADG in terms of room sizes, balcony sizes, and achieve the appropriate amenity envisaged from a development of this nature.



Typical Apartment Plans - Level 1

Principle 4: Sustainability

Good design combines positive environmental, social and economic outcomes.

Good sustainable design includes use of natural cross ventilation and sunlight for the amenity and liveability of residents and passive thermal design for ventilation, heating and cooling reducing reliance on technology and operation costs. Other elements include recycling and reuse of materials and waste, use of sustainable materials and deep soil zones for groundwater recharge and vegetation.

The proposed building is designed to satisfy energy and efficiency performance standards. A BASIX assessment has been prepared, designed to achieve verification for water conservation, thermal comfort and energy efficiency.

The insulation value for the walls, roofs and floors combined with window dimensions, locations, glass types and shading devices has achieved compliant heating and cooling loads.

A feature awning is provided on the western elevation which provides additional shading to living areas and balconies from the afternoon summer sun.

All toilet cisterns, shower heads and taps have been specified to achieve a minimum of 3-Star WELS rating. Natural cross ventilation is achieved in 100% (7/7) of the apartments.

Palm beach support and encourage innovative and emerging transport technology, such as electric cars and autonomous vehicles. The proposed scheme provides EV charger at basement car park for electric vehicle charging. Dedicated Bicycle spaces on ground level and general storage for each unit is provided to promote alternate transport modes. PV panels are installed on the roof and facing north to maximize the energy harvest.

All units are oriented to maximise the view and provide good access to daylight. The open fire stairs have access to natural light and ventilation.



Principle 5: Landscape

Good design recognises that together landscape and buildings operate as an integrated and sustainable system, resulting in attractive developments with good amenity. A positive image and contextual fit of well designed developments is achieved by contributing to the landscape character of the streetscape and neighbourhood.

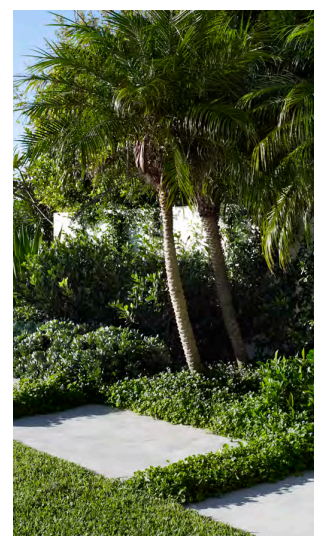
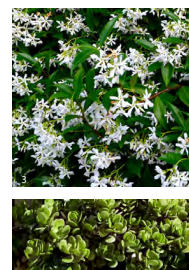
Good landscape design enhances the development's environmental performance by retaining positive natural features which contribute to the local context, co-ordinating water and soil management, solar access, microclimate, tree canopy, habitat values and preserving green networks.

Good landscape design optimises useability, privacy and opportunities for social interaction, equitable access, respect for neighbours' amenity and provides for practical establishment and long term management.

The proposed landscaping responds to both the existing local context and the aims of Council's controls, through the introduction of new, vibrant planting. This proposal seeks to improve upon the current site conditions (mostly hard surfaces at the ground level) by providing substantial perimeter planting to soften the boundary and street frontages.

A series of stepped planters in the side setbacks seek to retain the steep level change while providing an attractive screening to the site. These, coupled with the perimeter planters to the balconies break up the building's overall mass, while preserving the architectural language of the proposal. These planters also offer visual privacy to the residents, interrupting views from the streets below. In addition to architectural screening, landscape planters to the side elevations assist in screening and providing visual privacy. The deep soil zones (22.1% of the site area) located at the north, south and east setbacks allow for a series of significant trees. All plant species have been carefully selected to suit the location and climate and native species have been used where possible.

Private courtyards are proposed at the rear of the site for the units on Level 1 and provide good cross flow ventilation to all units above. The courtyard receives morning and midday sun, and will expose the natural rock face where possible.



Planting Typologies

Principle 6: Amenities

Good design positively influences internal and external amenity for residents and neighbours. Achieving good amenity contributes to positive living environments and resident well being.

Good amenity combines appropriate room dimensions and shapes, access to sunlight, natural ventilation, outlook, visual and acoustic privacy, storage, indoor and outdoor space, efficient layouts and service areas and ease of access for all age groups and degrees of mobility

The new building optimises residential amenity, providing each of the 7 units will large external balconies. Two Silver level liveable housing units are provided in the mix (Apts 102, an 202) incorporating the Liveable Housing Guideline's silver level universal design features.

Tri aspect and cross through units are maximised in order to provide the opportunity for cross ventilation with 100% (7/7) compliance. Living rooms are positioned to maximise views and solar access, with 100% (7/7) meeting the requirements for solar access.

Landscape buffer zones, perimeter planting and privacy screens are proposed to address any overlooking onto the adjacent development to the north.

Access to ground floor residential entry has been designed to ensure that all people, regardless of physical ability, are able to access the building. All levels are serviced by a lift with direct access from the basement floor carpark level.

A garbage and recycling room is included at the ground floor for residential garbage. There is a separate waste room for retail. Bins are collected from a screened holding area at street level. Bicycle storage lockers are located in the dedicated storage on the ground level for the use by the residents.

All units have balconies, with full height sliding doors. All balconies and terraces exceed the ADG minimum area requirements. All apartments have been designed to exceed ADG minimum area requirements and special care has been taken to provide useful storage areas, larger laundries and integrated joinery to address an increasing demand for the downsizer market.

For public interface, a front setback of 4.4m on ground as well as planting and outdoor seating provides quality outdoor space and a good connection to Barrenjoey Road.

Principle 7: Safety

Good design optimises safety and security within the development and the public domain. It provides for quality public and private spaces that are clearly defined and fit for the intended purpose. Opportunities to maximise passive surveillance of public and communal areas promote safety.

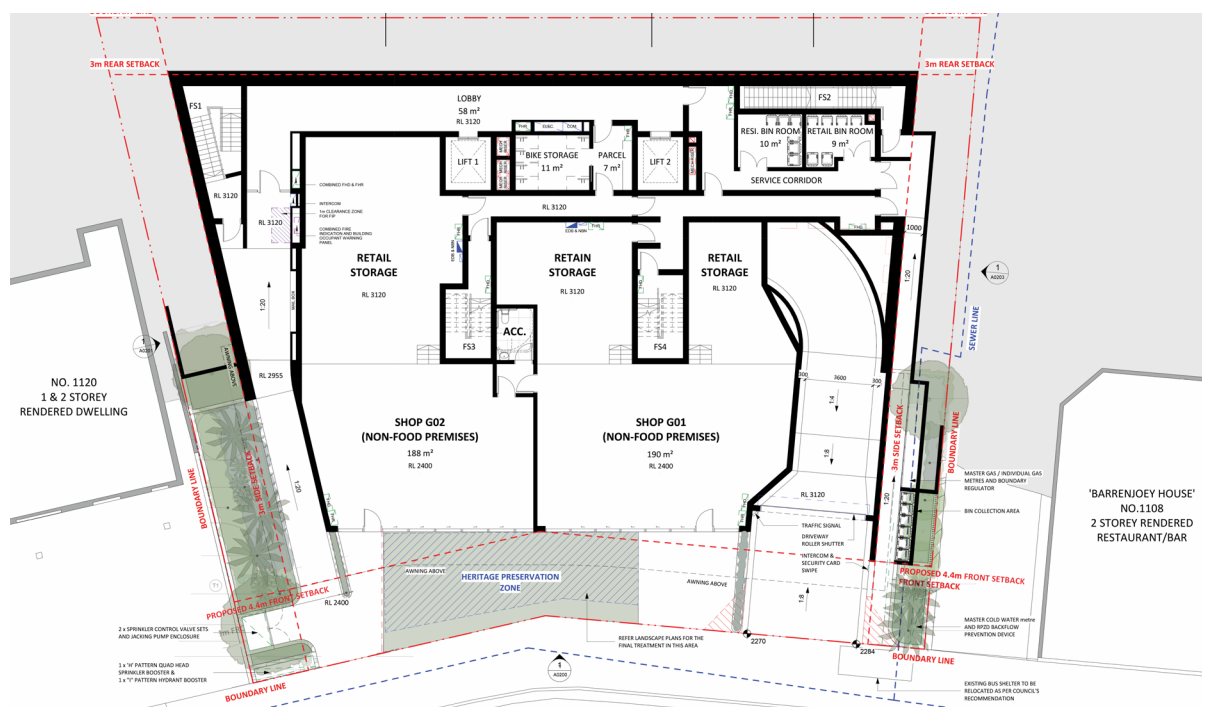
A positive relationship between public and private spaces is achieved through clearly defined secure access points and well lit and visible areas that are easily maintained and appropriate to the location and purpose.

The proposal aims to promote safe movement to its tenants and neighbours by creating welcoming, attractive street frontages.

A highly visible pedestrian entry connects the ground floor lobby to Barrenjoey road. This entry will be well lit, day and night, with access to natural daylight and connection to the landscape. The Basement is accessible via a remote operated roller shutter, which will be secured at all times. An intercom system will allow for identification of visitors at the pedestrian and vehicle entries. The driveway entry is positioned on the southern corner of the site, away from the pedestrian crossing and residential entry to minimise conflicts. The installation of traffic sign at each end of the driveway ramp is to enhance the safety for the vehicles' safety.

At its northern and southern boundaries, the site will be secured with planters and palisade fencing. This combination allows screening of services and security while facilitating plant growth and the passage of cooling breezes.

Windows and balconies from the apartments address all aspects of the site, providing a high level of passive surveillance to the street below.



Ground Floor Plan

Principle 8: Housing diversity and Social Interaction

Good design achieves a mix of apartment sizes, providing housing choice for different demographics, living needs and household budgets. Well designed apartment developments respond to social context by providing housing and facilities to suit the existing and future social mix.

Good design involves practical and flexible features, including different types of communal spaces for a broad range of people and providing opportunities for social interaction among residents.

The proposed building has been designed to respond to its social context and offer a range of apartment sizes in the 3Bedroom type. The variety of apartment sizes, coupled with the provision of landscaped balconies and terraces of varying size will attract different buyers and occupants with individual requirements.

The design promotes social interaction between residents through the inclusion of the retail offering at the ground floor, as well as the open stair cases encouraging the use of these communal stairs for access to all levels. The linear residential lobby has access to natural light and ventilation and provides an open entry to congregate and chat with your neighbours.

While no communal open space has been provided in the development the site is located within close proximity to many open spaces, parks and waterways providing easy access for communal gatherings.

With two silver living apartments and equitable access to all levels the development addresses accessibility in all elements of the design.



3D view - Barrenjoey Road

Principle 9: Aesthetics

Good design achieves a built form that has good proportions and a balanced composition of elements, reflecting the internal layout and structure. Good design uses a variety of materials, colours and textures.

The visual appearance of a well designed apartment development responds to the existing or future local context, particularly desirable elements and repetitions of the streetscape.

This proposal is the product of careful consideration for local context, incorporating a balanced mix between modern geometry and natural forms and materials. The proposal seeks to address the distinct identities of the seaside character while not competing with the heritage significance of Barrenjoey House. The built form terraces back with the natural terrain, with the feature awning providing both a lightweight sunshading element and strong vertical articulation to delivery a fine grain character.

At the ground plane, and in the side setbacks, the planters and pedestrian entry are clad in sandstone providing a solid base that connects to the sandstone walls, and surrounding beaches and waterways. The inclusion of a natural, raw material at the lower levels anchors the building to the site. The upper levels are characterized with perimeter planters, timber look screens, and a bamboo like awning. The landscape inclusions serves to compliment the modern geometry of the building, lightweight building design and accentuate its connection to the natural environment.

The horizontal form of the proposal is broken with two slots that provide light and ventilation to the lift and stair cores. This interruption to the clean horizontal lines of the planters and feature awning serves to reduce the bulk and scale of the building when viewed from the street aligning to the widths of the adjacent developments.

The design, scale and treatment reflect a 'seaside-village' character through a building design that sits comfortably within the landscape, provides a coastal material palette and light weight facade features. The retail will incorporate outdoor seating encouraging public domain activation which can be enhanced with retail seating.



3D visualisation of the ground floor retail and public domain.

Summary of Compliance with the NSW Apartment Design Guide

Objectives and Design Criteria			Consistent
Part 2 Developing the controls			
2E Building Depth			<p>All apartments are through units, with glass to two (Front & Rear) or three frontages (Side) maximising cross floor ventilation, natural light and amenity.</p> <p>Level 1: 17.7m glass line to glass line</p> <p>Level 2: 17.7m glass line to glass line</p> <p>Level 3: 7-8m glass line to glass line</p> <p>Level 4: 3.8m – 4.3m glass line to glass line</p>
2F Building Separation			<p>The north setback has been increased to an average 4.5m setback, with the closest setback at 3m.</p> <p>The lower levels have a reduced separation to the residential dwelling at 1120 Barrenjoey Road. Landscaping in the Ground Floor setback, and privacy screens protect from cross viewing, and Levels 3 & 4 are well setback so as not to dominant the built form.</p> <p>Landscaping and privacy screens to the north setback and southern setback provide visual separation to the neighbouring properties.</p>
Part 3 Siting the Development			
3D Communal and Public Open Space			
Objective An adequate area of communal open space is provided to enhance residential amenity and to provide opportunities for landscaping.			X Given the context of the development & smaller number of units, communal open space has not been provided.
Design Criteria Communal open space has a minimum area equal to 25% of the site.			N/A
Developments achieve a minimum of 50% direct sunlight to the principal usable part of the communal open space for a minimum of 2 hours between 9 am and 3 pm on 21 June (mid winter).			N/A
3E Deep Soil Zones			
Objective Deep soil zones provide areas on the site that allow for and support healthy plant and tree growth. They improve residential amenity and promote management of water and air quality.			✓ With the exception of the front setback, the site is bounded on all sides with a deep soil zone of 3m.
Design Criteria Deep soil zones are to meet the following minimum requirements:			✓ 301.5m ² or 22.1% of the site area is provided as deep soil. The side and rear setbacks have a minimum dimension of 3m.
Site Area	Minimum Dimensions	Deep Soil Zone (% of site area)	
Less than 650m ²	-	7%	
650m ² – 1,500m ²	3m		
Greater than 1,500m ²	6m		
Greater than 1,500m ² with significant existing tree cover	6m		

3F Visual Privacy**Objective**

Adequate building separation distances are shared equitably between neighbouring sites, to achieve reasonable levels of external and internal visual privacy.

✓

The steeply sloping site is terraced up to the East, meaning there limited interface to the properties that sit higher on the surrounds.

A 3m rear setback allows for the protection of the existing planting and new screening plants, providing additional visual privacy. The proposal generally will be treated with a green curtilage.

All sides are screened at ground level with stepped planters while the upper levels will be screened with perimeter planters.

An average 4.5m setback is provided to the North and South setbacks. The angled site boundary has varied setbacks from MAX 6m to MIN 3m dimensions.

In addition to this, privacy screens are provided to the North and South facades, providing increased privacy and protecting against cross viewing into adjoining properties.

Design Criteria

Separation between windows and balconies is provided to ensure visual privacy is achieved. Minimum required separation distances from buildings to the side and rear boundaries are as follows:

Building Height	Habitable rooms and balconies	Non-habitable rooms
Up to 12m (4 storeys)	6m	3m
Up to 25m (5-8 storeys)	9m	4.5m
Over 25m (9+ storeys)	12m	6m

X

Side setbacks DCP exceed 3m control.

The development has a 2 storey dwelling house on the North, and abuts a driveway and commercial property (Barrenjoey House) to the South. The setbacks to the South are considered sufficient given the driveway position and generous setback of the commercial building.

While setback to the north is less than recommended 6m to the north, the current setbacks exceed DCP requirements and the planning, layout and position of windows have been designed so as to protect the visual amenity, prevent cross viewing and provide a landscape buffer.

The windows on the North and South range in distance from the boundary from a MIN 4m to 5m from the boundary, with an average of 4.5m for the extent of the side walls.

3J Bicycle and Car Parking**Objective**

Car Parking is provided based on proximity to public transport in metropolitan Sydney and centres in regional areas.

✓

Design Criteria

For development in the following locations:

- on sites that are within 800m of a railway station or light rail stop in the Sydney Metropolitan Area; or
- on land zoned, and sites within 400m of land zoned, B3 Commercial Core, B4 Mixed Use or equivalent in a nominated regional centre

The minimum car parking requirement for residents and visitors is set out in the Guide to Traffic Generating Developments, or the car parking requirement prescribed by the relevant council, whichever is less.

The car parking needs for a development must be provided off street.

✓ / X

The development has numerous site constraints (including a heritage preservation zone) which restrict the number of parking spaces that can be provided. This results in a shortfall of 6 retail parking spaces vs. Council DCP requirements. That said, retail parking provisions are expected to adequately cater to actual parking demand noting the retail shops are expected to draw many of the customers from "linked trips" or "passing trade", noting that the site is located in direct walking vicinity of the popular beaches within Palm Beach. Linked trips occur when a

person visits the site but also visits another premises nearby on the same trip whilst not moving their car, thereby not requiring an additional parking space.

Bicycle parking is located at Ground level in a dedicated storage area.

Part 4 Designing the Buildings

4A Solar and Daylight access

Objective

To optimise the number of apartments receiving sunlight to habitable rooms, primary windows and private open space.

✓

All units are through units and corner units allowing windows to access natural light in 2-3 facades. An excavated lightwell exposes the natural rock, and facilitates natural light from the North-East to all levels of apartments.

Design Criteria

Living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 2 hours direct sunlight between 9 am and 3 pm at mid winter in the Sydney Metropolitan Area and in the Newcastle and Wollongong local government areas.

✓

A total of 7 units (being 100% of total units) receive direct sunlight for a minimum of 2 hours.

A maximum of 15% of apartments in a building receive no direct sunlight between 9 am and 3 pm at mid winter.

✓

All apartments receive solar access.

4B Natural Ventilation

Objective

The number of apartments with natural cross ventilation is maximised to create a comfortable indoor environment for residents.

✓

Design Criteria

At least 60% of apartments are naturally cross ventilated in the first nine storeys of the building. Apartments at ten storeys or greater are deemed to be cross ventilated only if any enclosure of the balconies at these levels allows adequate natural ventilation and cannot be fully enclosed.

✓

100% of units are cross-ventilated. In addition to this, the common corridor and stairs are designed as open stairs to provide natural ventilation and daylight to the common areas.

Overall depth of a cross-over or cross-through apartment does not exceed 18m, measured glass line to glass line.

✓

The building depth varies from 3.8m to 17.7m glass line to glass line. 2 out of 3 units on the typical floor also have side windows, allowing each apartment access sunlight and ventilation.

Level 1: 17.7m glass line to glass line

Level 2: 17.7m glass line to glass line

Level 3: 7-8m glass line to glass line

Level 4: 3.8m – 4.3m glass line to glass line

4C Ceiling Height

Objective

Ceiling height achieves sufficient natural ventilation and daylight access.

✓

Design Criteria

Measured from finished floor level to finished ceiling level, minimum ceiling heights are:

✓

Minimum ceiling height

Habitable rooms	2.7m
Non-habitable	2.4m
For 2 storey apartments	2.7m for main living area floor 2.4m for second floor, where its area does not exceed 50% of the apartment area
Attic spaces	1.8m at edge of room with a 30 degree minimum ceiling slope
If located in mixed use areas	3.3m for ground and first floor to promote future flexibility of use

These minimums do not preclude higher ceilings if desired.

Ceiling heights for residential units on all levels achieve 2.7m minimum for habitable rooms.

4D Apartment Size and Layout

Objective	✓	
The layout of rooms within an apartment is functional, well organised and provides a high standard of amenity		
Design Criteria	✓	
Apartments are required to have the following minimum internal areas:		
Apartment Type	Minimum internal area	
Studio	35m ²	
1 bedroom	50m ²	
2 bedroom	70m ²	
3 bedroom	90m ²	
The minimum internal areas include only one bathroom. Additional bathrooms increase the minimum internal area by 5m ² each.		
A fourth bedroom and further additional bedrooms increase the minimum internal area by 12m ² each.		
Every habitable room must have a window in an external wall with a total minimum glass area of not less than 10% of the floor area of the room. Daylight and air may not be borrowed from other rooms.	✓	
All habitable rooms are provided with a window opening for natural daylight and air.		
Objective	✓	
Environmental performance of the apartment is maximised.		
Design Criteria		
Habitable room depths are limited to a maximum of 2.5 x the ceiling height.		
The apartment areas and dimensions of the rooms are generous, providing larger proportions. While some living rooms are approx. 8m wide all rooms have corner glazing, allowing good amenity.		
In open plan layouts (where the living, dining and kitchen are combined) the maximum habitable room depth is 8m from a window.	✓	
Habitable room depths are not more than 8m from an openable window (measured to the edge of the back kitchen bench)		
Objective	✓	
Apartment layouts are designed to accommodate a variety of household activities and needs.		
Design Criteria	✓	
Master bedrooms have a minimum area of 10m ² and other bedrooms 9m ² (excluding wardrobe space).		
Bedrooms have a minimum dimension of 3m (excluding wardrobe space).		
Living rooms or combined living/dining rooms have a minimum width of:		
• 3.6m for studio and 1 bedroom apartments		
• 4m for 2 and 3 bedroom apartments.		
The width of cross-over or cross-through apartments are at least 4m internally to avoid deep narrow apartment layouts.		
✓		
4E Private Open Space and Balconies		
Objectives	✓	
Apartments provide appropriately sized private open space and balconies to enhance residential amenity.		
Design Criteria	✓	
All apartments are required to have primary balconies as follows:		
Dwelling Type	Minimum Area	Minimum depth
Studio apartment	4m ²	-
1 bedroom apartment	8m ²	2m
2 bedroom apartment	10m ²	2m
3+ bedroom apartment	12m ²	2.4m
The minimum balcony depth to be counted as contributing to the balcony area is 1m.		
Balconies are designed in accordance with this requirement, with all balconies a minimum of 2.4m deep.		
Level 1: 2.4m		
Level 2: 2.4m		
Level 3-4: 3m+		
For apartments at ground level or on a podium or similar structure, a private open space is provided instead of a balcony. It must have a minimum area of 15m ² and a minimum depth of 3m.		
N/A		
4F Common Circulation and Spaces		
Objective	✓	
Common circulation spaces achieve good amenity and properly service the number of apartments.		
The common corridors are designed with natural ventilation and solar access through an open stair. Two Lifts service the 7units, providing a well serviced building.		

For buildings of 10 storeys and over, the maximum number of apartments sharing a single lift is 40.	N/A
4G Storage	
Objective	✓
Adequate, well designed storage is provided in each apartment.	
Design Criteria	✓
In addition to storage in kitchens, bathrooms and bedrooms, the following storage is provided:	All units are generous in size and are provided with adequate storage in accordance with the design criteria requirements. Additional storage is also provided at basement levels
Dwelling Type	
Studio apartment	
1 bedroom apartment	
2 bedroom apartment	
3+ bedroom apartment	
At least 50% of the required storage is to be located within the apartment.	