

State Environmental Planning Policy Housing 2021
Chapter 4 - Design of Residential Apartment Development
Table of requirements

Design of Residential Apartment Development	Discussion	Compliance Yes or No
<p>142 Aims of the chapter</p> <p>(1) The aim of this chapter is to improve the design of residential apartment development in New South Wales for the following purposes—</p> <p>(a) to ensure residential apartment development contributes to the sustainable development of New South Wales by—</p> <p>(i) providing socially and environmentally sustainable housing, and</p> <p>(ii) being a long-term asset to the neighbourhood, and</p> <p>(iii) achieving the urban planning policies for local and regional areas.</p> <p>(b) to achieve better built form and aesthetics of buildings, streetscapes and public spaces,</p> <p>(c) to maximise the amenity, safety and security of the residents of residential apartment development and the community,</p> <p>(d) to better satisfy the increasing demand for residential apartment development, considering—</p> <p>(i) the changing social and demographic profile of the community, and</p> <p>(ii) the needs of a wide range of people, including persons with disability, children and seniors,</p> <p>(e) to contribute to the provision of a variety of dwelling types to meet population growth,</p>	<p>This is noted. It is considered that the development is consistent with the aims of the chapter especially given that the development is contributing to a revitalisation of Wentworthville Town Centre close to Wentworthville railway station.</p> <p>In addition, the DA will provide for affordable housing and a variety of dwelling mix that will provide housing for a diverse range of occupants.</p>	Yes

<p>(f) to support housing affordability,</p> <p>(g) to minimise the consumption of energy from non-renewable resources, to conserve the environment and to reduce greenhouse gas emissions,</p> <p>(h) to facilitate the timely and efficient assessment of development applications to which this chapter applies.</p>		
<p>144 Application of chapter</p> <p>(1) In this policy, development to which this chapter applies is referred to as <i>residential apartment development</i>.</p> <p>(2) This chapter applies to the following—</p> <ul style="list-style-type: none"> (a) development for the purposes of residential flat buildings, (b) development for the purposes of shop top housing, (c) mixed use development with a residential accommodation component that does not include boarding houses or co-living housing, unless a local environmental plan provides that mixed use development including boarding houses or co-living housing is residential apartment development for this chapter. <p>(3) This chapter applies to development only if—</p> <ul style="list-style-type: none"> (a) the development consists of— <ul style="list-style-type: none"> (i) the erection of a new building, or (ii) the substantial redevelopment or substantial refurbishment of an existing building, or (iii) the conversion of an existing building, and 	<p>This policy applies to the subject application as it contains shop-top housing.</p>	<p>Yes</p>

<p>(b) the building is at least 3 storeys, not including underground car parking storeys, and</p> <p>(c) the building contains at least 4 dwellings.</p> <p>(4) If particular development comprises development for the purposes specified in subsection (2) and development for other purposes, this chapter applies only to the part of the development for the purposes specified in subsection (2).</p> <p>(5) This chapter does not apply to development that involves only a class 1a or 1b building within the meaning of the <i>Building Code of Australia</i>.</p> <p>(6) To avoid doubt, development to which Chapter 2, Part 2, Division 1, 5 or 6 applies may also be residential apartment development under this chapter.</p> <p>(7) <i>In this section—underground car parking storey</i> means a storey used for car parking that is—</p> <p>(a) below ground level (existing), or</p> <p>(b) less than 1.2m above ground level (existing).</p>		
<p>145 Referral to design review panel for development applications</p> <p>(1) This section applies to a development application for residential apartment development, other than State significant development.</p> <p>(2) Before determining the development application, the consent authority must refer the application to the design review panel for the local government area in which the development will be carried out for</p>	<p>The application was referred to the Design Excellence Panel. Refer to Attachment 12 for comments.</p>	<p>Yes</p>

<p>advice on the quality of the design of the development.</p> <p>(3) This section does not apply if—</p> <ul style="list-style-type: none"> (a) a design review panel has not been constituted for the local government area in which the development will be carried out, or (b) a competitive design process has been held. <p>(4) <i>In this section - competitive design process means a design competition held in accordance with the Design Competition Guidelines published by the Department in September 2023.</i></p>		
<p>146 Referral to design review panel for modification applications</p> <p>(1) This section applies to a modification application for residential apartment development, other than State significant development.</p> <p>(2) If the statement by the qualified designer required to accompany the modification application under the <i>Environmental Planning and Assessment Regulation 2021</i>, section 102(1) does not verify that the qualified designer designed, or directed the design of, the original development, the consent authority must refer the modification application to the relevant design review panel for advice before determining the modification application.</p> <p>(3) The consent authority may also refer a modification application for residential apartment development to the relevant design review panel for advice before determining the modification application.</p> <p>(4) The design review panel must advise whether the modification—</p>	<p>The application is not a modification application.</p>	<p>N/A</p>

<p>(a) diminishes or detracts from the design quality of the original development, or</p> <p>(b) compromises the design intent of the original development.</p> <p>(5) Subsection (2) does not apply if—</p> <p>(a) a design review panel has not been constituted for the local government area in which the development will be carried out, or</p> <p>(b) a competitive design process has been held.</p>		
<p>147 Determination of development applications and modification applications for residential apartment development</p> <p>(1) Development consent must not be granted to residential apartment development, and a development consent for residential apartment development must not be modified, unless the consent authority has considered the following—</p> <p>(a) the quality of the design of the development, evaluated in accordance with the design principles for residential apartment development set out in Schedule 9,</p> <p>(b) the Apartment Design Guide,</p> <p>(c) any advice received from a design review panel within 14 days after the consent authority referred the development application or modification application to the panel.</p> <p>(2) The 14-day period referred to in subsection (1)(c) does not increase or otherwise affect the period in which a development application or modification application must be determined by the consent authority.</p>	<p>An assessment of Schedule 9 and the ADG is contained below this table. The DEP comments are contained in Attachment 12.</p>	<p>Yes</p>

<p>(3) To avoid doubt, subsection (1)(b) does not require a consent authority to require compliance with design criteria specified in the Apartment Design Guide.</p> <p>(4) Subsection (1)(c) does not apply to State significant development.</p>		
<p>148 Non-discretionary development standards for residential apartment development—the Act, s 4.15</p> <p>(1) The object of this section is to identify development standards for particular matters relating to residential apartment development that, if complied with, prevent the consent authority from requiring more onerous standards for the matters.</p> <p>Note— See the Act, section 4.15(3), which does not prevent development consent being granted if a non-discretionary development standard is not complied with.</p> <p>(2) The following are non-discretionary development standards—</p> <ul style="list-style-type: none"> (a) the car parking for the building must be equal to, or greater than, the recommended minimum amount of car parking specified in Part 3J of the Apartment Design Guide, (b) the internal area for each apartment must be equal to, or greater than, the recommended minimum internal area for the apartment type specified in Part 4D of the Apartment Design Guide, (c) the ceiling heights for the building must be equal to, or greater than, the recommended minimum ceiling heights specified in Part 4C of the Apartment Design Guide. 	<p>The car parking is compliant. Refer to detailed ADG assessment.</p> <p>The apartments meet the internal areas for their type as specified in Part 4D of the ADG.</p> <p>The proposal provides floor to floor height of 4.4 metres to the ground floor and is compliant and 3.2 metres to the first floor and is therefore non-compliant</p>	<p>Yes</p> <p>Yes</p> <p>Clause 4.6 lodged for first floor non-compliance.</p>

	<p>The residential levels provide a floor to floor of 3.1metres, therefore the development will achieve ceiling heights of 2.7metres as per Part 4C of the ADG.</p>	
149 Apartment Design Guide prevails over development control plans	<p>(1) A requirement, standard or control for residential apartment development that is specified in a development control plan and relates to the following matters has no effect if the Apartment Design Guide also specifies a requirement, standard or control in relation to the same matter—</p> <ul style="list-style-type: none"> a) visual privacy, b) solar and daylight access, c) common circulation and spaces, d) apartment size and layout, e) ceiling heights, f) private open space and balconies, g) natural ventilation, h) storage. <p>(2) This section applies regardless of when the development control plan was made.</p>	<p>Noted. An ADG assessment is contained further below.</p> <p>Refer to assessment below.</p>
Schedule 9		
Design Principles for residential apartment development.		
1 Context and neighbourhood character	<p>The site is located close to Wentworthville Train station.</p> <p>The development is generally consistent with the applicable planning controls that allows for the form of development to occur. While certain variations are identified with the planning controls and State Policies, overall, the form and pattern of urban development shown is broadly consistent with desired outcomes for the locality.</p>	Yes
<p>(1) Good design responds and contributes to its context, which is the key natural and built features of an area, their relationship and the character they create when combined and also includes social, economic, health and environmental conditions.</p> <p>(2) Responding to context involves identifying the desirable elements of an area's existing or future character.</p>		

<p>(3) Well designed buildings respond to and enhance the qualities and identity of the area including the adjacent sites, streetscape and neighbourhood.</p> <p>(4) Consideration of local context is important for all sites, including sites in the following areas—</p> <ul style="list-style-type: none"> (a) established areas, (b) areas undergoing change, (c) areas identified for change. 	<p>The applicant is also dedicating a portion of the site to provide for a laneway that will be an extension to Station Lane and provided in accordance with figure 24 of Part F2-14 of the CDCP 2021.</p>	
<p>2 Built form and scale</p> <p>(1) Good design achieves a scale, bulk and height appropriate to the existing or desired future character of the street and surrounding buildings.</p> <p>(2) Good design also achieves an appropriate built form for a site and the building's purpose in terms of the following—</p> <ul style="list-style-type: none"> a) building alignments and proportions, b) building type, c) building articulation, d) the manipulation of building elements. <p>(3) Appropriate built form—</p> <ul style="list-style-type: none"> a) defines the public domain, and b) contributes to the character of streetscapes and parks, including their views and vistas, and c) provides internal amenity and outlook. 	<p>The form of the development, including built form massing, setbacks, materials are consistent with the planning controls for the locality.</p> <p>Building entrances face west towards Station Street.</p> <p>The vehicle entrance to the development will be via the rear and will face the new laneway which is not directly visible from the public domain areas.</p>	Yes
<p>3 Density</p> <p>1) Good design achieves a high level of amenity for residents and each apartment, resulting in a density appropriate to the site and its context.</p> <p>2) Appropriate densities are consistent with the area's existing or projected population.</p>	<p>The proposal seeks 59 units with a mix of 1 bedroom, 2 bedrooms and 3 bedrooms. Of the 59 units, 12 will be dedicated for affordable housing pursuant to Chapter 2, Division 1 of the Housing SEPP 2021 for 15 years from the date the occupation certificate is issued.</p>	Yes

<p>3) Appropriate densities are sustained by the following—</p> <ul style="list-style-type: none"> a) existing or proposed infrastructure, b) public transport, c) access to jobs, d) community facilities, e) the environment. 	<p>The site is within an appropriate location being in close proximity to Wentworthville train station and within the Wentworthville Town Centre.</p> <p>The location of such a development is appropriate for its location.</p>	
<p>4 Sustainability</p> <p>(1) Good design combines positive environmental, social and economic outcomes.</p> <p>(2) Good sustainable design includes—</p> <ul style="list-style-type: none"> (a) use of natural cross ventilation and sunlight for the amenity and liveability of residents, and (b) passive thermal design for ventilation, heating and cooling, which reduces reliance on technology and operation costs. <p>(3) Good sustainable design also includes the following—</p> <ul style="list-style-type: none"> a) recycling and reuse of materials and waste, b) use of sustainable materials, c) deep soil zones for groundwater recharge and vegetation. 	<p>The proposal provides:</p> <p>The development will achieve solar access to at least 70% of apartments which receive a minimum of 2 hours of solar access during mid-winter to the living rooms and private open space between 8am-4pm.</p> <p>The residential lift lobbies are naturally lit and ventilated.</p> <p>The communal open space on the rooftop will receive over 3 hours of solar access throughout the day in mid-winter.</p> <p>The BASIX Certificate concludes that the project meets the targets for water, thermal performance and energy,</p>	Yes
<p>5 Landscape</p> <p>(1) Good design recognises that landscape and buildings operate together as an integrated and sustainable system, resulting in development with good amenity.</p> <p>(2) A positive image and contextual fit of well designed development is achieved by contributing to the landscape character of the streetscape and neighbourhood.</p>	<p>The proposal incorporates low water-use landscaping which integrates with the built form and façade.</p> <p>Planters are distributed across the floor plates for a consistent greening of the facade and impact from the public domain.</p> <p>Terrace planter with species utilised to be indigenous coastal plants adapted to the windy conditions. A centrally</p>	Yes

<p>(3) Good landscape design enhances the development's environmental performance by retaining positive natural features that contribute to the following—</p> <ul style="list-style-type: none"> (a) the local context, (b) co-ordinating water and soil management, (c) solar access, (d) micro-climate, (e) tree canopy, (f) habitat values, (g) preserving green networks. <p>(4) Good landscape design optimises the following—</p> <ul style="list-style-type: none"> (a) usability, (b) privacy and opportunities for social interaction, (c) equitable access, (d) respect for neighbours' amenity. <p>(5) Good landscape design provides for practical establishment and long term management.</p>	<p>controlled and computerised irrigation system will be incorporated to maintain consistent and healthy growth</p>	
<p>6 Amenity</p> <p>(1) Good design positively influences internal and external amenity for residents and neighbours.</p> <p>(2) Good amenity contributes to positive living environments and resident well-being.</p> <p>(3) Good amenity combines the following—</p> <ul style="list-style-type: none"> a) appropriate room dimensions and shapes, b) access to sunlight, c) natural ventilation, d) outlook, e) visual and acoustic privacy, f) storage, g) indoor and outdoor space, h) efficient layouts and service areas, 	<p>Apartments are a mixture of 1, 2 and 3 bedroom units.</p> <p>Cross ventilation is achieved for all apartments. Proposed 49 of 59 (83%) apartments have the required 2-hour solar access to habitable space.</p> <p>Privacy is ensured by east and western setbacks and windows primary facing east-west.</p> <p>Each dwelling has its own external private open space. Bathrooms/Ensuite are accessed from the hallways leading to the bedrooms. Kitchens are accessed from the primary living area</p>	<p>Yes</p>

<p>i) ease of access for all age groups and degrees of mobility.</p>		
<p>7 Safety</p> <p>(1) Good design optimises safety and security within the development and the public domain.</p> <p>(2) Good design provides for quality public and private spaces that are clearly defined and fit for the intended purpose.</p> <p>(3) Opportunities to maximise passive surveillance of public and communal areas promote safety.</p> <p>(4) 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.</p>	<p>The main entrance to the building is via Station Street which will be adequately lit. A secured lobby and lift provided for all levels.</p> <p>The list to the residential foyer is visible from the public domain for passive surveillance.</p> <p>Balconies above ground overlook on walkway and street front.</p>	Yes
<p>8 Housing diversity and social interaction</p> <p>(1) Good design achieves a mix of apartment sizes, providing housing choice for different demographics, living needs and household budgets.</p> <p>(2) Well designed residential apartment development responds to social context by providing housing and facilities to suit the existing and future social mix.</p> <p>(3) Good design involves practical and flexible features, including—</p> <ul style="list-style-type: none"> a) different types of communal spaces for a broad range of people, and b) opportunities for social interaction among residents. 	<p>The proposed development has an appropriate mix of 1, 2 and 3 bedrooms apartments of varied size.</p> <p>The development also incorporates affordable housing as it is permissible under the Housing SEPP 2021.</p> <p>The range of apartment sizes and types will respond to varying needs of household types within the area thereby maximising housing choice.</p> <p>The proposed development has landscaping throughout main walkway and communal open space provides opportunities for social interaction</p>	Yes
<p>9 Aesthetics</p> <p>(1) Good design achieves a built form that has good proportions and a balanced composition of elements,</p>	<p>Materials selected to complement the surrounding building fabric. Articulation of private open spaces on facades</p>	Yes

<p>reflecting the internal layout and structure.</p> <p>(2) Good design uses a variety of materials, colours and textures.</p> <p>(3) The visual appearance of well designed residential apartment development responds to the existing or future local context, particularly desirable elements and repetitions of the streetscape.</p>	<p>gives a clear reading of scale and texture, alluding to surrounding nature of the Precinct. Articulation of the building form to provides scale, street definition and pedestrian interface.</p>	
--	---	--

Apartment Design Guide
Compliance Table

No.	Required/Permitted		Comment	Compliance
Part 3 – Siting the Development				
3A	Site Analysis			
3A-1	<i>Site analysis illustrates that design decisions have been based on opportunities and constraints of the site conditions and their relationship to the surrounding context.</i>		Satisfactory.	Yes
3B	Orientation			
3B-1	<i>Building types and layouts respond to the streetscape and site while optimising solar access within the development.</i>		Satisfactory.	Yes
3B-2	<i>Overshadowing of neighbouring properties is minimised during mid-winter.</i>		Given the number of habitable windows and balconies that are north facing to the development at 108 Station Street, the massing of the building is concentrated towards Station Street. This minimises the overshadowing impact to the neighbouring property that would be most impact by overshadowing in mid-winter.	Yes
3C	Public Domain Interface			
3C-1	<i>Transition between private and public domain is achieved without compromising safety and security.</i>		Satisfactory.	Yes
3C-2	<i>Amenity of the public domain is retained and enhanced.</i>		Satisfactory.	Yes
3D	Communal and Public Open Space			
3D-1	<i>An adequate area of communal open space is provided to enhance residential amenity and to provide opportunities for landscaping.</i>		Satisfactory.	es
	Design Criteria	Communal open space has a minimum area equal to 25% of the site.	420 square metres or 25.9% Proposed.	Yes

		25% of 1622 sqm = 405.5sqm. 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 9am and 3pm on 21 June.	The principal usable area will achieve more than 50% direct sunlight from 9am to 1pm on 21 June.	Yes												
3D-2		<i>Communal open space is designed to allow for a range of activities, respond to site conditions and be attractive and inviting.</i>	Satisfactory. The roof top communal open space provides for a variety of areas that can be used by the occupants including table and chairs, a BBQ area, artificial turf with seating.	Yes												
3D-3		<i>Communal open space is designed to maximise safety.</i>	Satisfactory.	Yes												
3D-4		<i>Public open space, where provided, is responsive to the existing pattern and uses of the neighbourhood.</i>	Satisfactory.	N/A. However, a public park is being delivered under a separate DA.												
3E	Deep Soil Zones															
3E-1	Design Criteria	Deep soil zones are to meet the following minimum requirements:	<table border="1"> <thead> <tr> <th>Site area</th> <th>Minimum dimensions</th> <th>Deep soil zone (% of site area)</th> </tr> </thead> <tbody> <tr> <td>less than 650m²</td> <td>-</td> <td rowspan="4">7%</td> </tr> <tr> <td>650m² - 1,500m²</td> <td>3m</td> </tr> <tr> <td>greater than 1,500m²</td> <td>6m</td> </tr> <tr> <td>greater than 1,500m² with significant existing tree cover</td> <td>6m</td> </tr> </tbody> </table> <p>7% of 1622 sqm = 113.54 sqm required.</p>	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	Given the location of the site in a town centre the proposal does not provide any deep soil zones. This acceptable.
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															
3F-1	<p><i>Adequate building separation distances are shared equitably between neighbouring sites, to achieve reasonable levels of external and internal visual privacy</i></p>		Noted. Refer to below.	Yes												
	<p>Design Criteria</p> <p>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:</p> <table border="1"> <thead> <tr> <th></th> <th>Habitable rooms and balconies</th> <th>Non-habitable rooms</th> </tr> </thead> <tbody> <tr> <td>up to 12m (4 storeys)</td> <td>6m</td> <td>3m</td> </tr> <tr> <td>up to 25m (5-8 storeys)</td> <td>9m</td> <td>4.5m</td> </tr> <tr> <td>over 25m (9+ storeys)</td> <td>12m</td> <td>6m</td> </tr> </tbody> </table> <p>Separation distances between buildings on the same site should combine required building separations depending on the type of room (see Figure 3F.2)</p> <p>Gallery access circulation should be treated as habitable space when measuring privacy separation distances between neighbouring properties</p>		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	<p>Eastern elevation: Level 1 & 2 (3rd & 4th storey) - 8.042metres.</p> <p>Levels 3-5 (5th-7th storey)- 8.042m.</p> <p>Southern elevation: Levels 8-14 (9th-15th storey) – 4.5m.</p> <p>North elevation: Levels 3-5 (5th-7th storey)- 6.6m.</p> <p>Communal open space: Level 6 (8th storey)</p> <p>Northern elevation – 9.5-6.6m.</p> <p>Eastern elevation – 8.042m-11.6m.</p>		No. Acceptable on merit, refer to amin body of report for a detailed assessment.
	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														
3G	Pedestrian Access and Entries															
3G-1	<p><i>Building entries and pedestrian access connects to and addresses the public domain</i></p>		The location of the building entrances are satisfactory.	Yes												
3G-2	<p><i>Access, entries and pathways are accessible and easy to identify</i></p>		This is achieved.	Yes												

3G-3	<i>Large sites provide pedestrian links for access to streets and connection to destinations</i>	A portion of the site is being dedicated to Council that will form for a new laneway.	Yes
3H	Vehicle Access		
3H-1	<i>Vehicle access points are designed and located to achieve safety, minimise conflicts between pedestrians and vehicles and create high quality streetscapes</i>	The vehicle access is via the rear and is considered satisfactory as the portion of land being dedicated to the rear will form a new laneway.	Yes
3J	Bicycle and Car Parking		
3J-1	<i>Car parking is provided based on proximity to public transport in metropolitan Sydney and centres in regional areas</i>	Satisfactory.	Yes
	<p>Design Criteria</p> <p>For development in the following locations:</p> <ul style="list-style-type: none"> on sites that are within 800 metres of a railway station or light rail stop in the Sydney Metropolitan Area; or on land zoned, and sites within 400 metres of land zoned, B3 Commercial Core, B4 Mixed Use or equivalent in a nominated regional centre <p>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</p>	<p>The proposed development generates the following demand based on a Category 1 under the 'Guide to Transport Impact Assessment':</p> <p><u>Res.</u> $2 \times 0.4 = 0.8$ $32 \times 0.7 = 45.7$ $25 \times 1.2 = 30$</p> <p>Total = 76.5 (77) spaces</p> <p><u>Vis.</u> $59/7 = 8.4$ (9) spaces</p> <p>Provided: <u>Res.</u> 77 spaces (3 of which can be post adaptable to a shared zone to accommodate the accessible</p>	Yes

		space adjoining the car space). <u>Vis. 10 spaces</u>	Yes	
	The car parking needs for a development must be provided off street	This is achieved.		
3J-2	<i>Parking and facilities are provided for other modes of transport</i>	Bicycle storage is provided in basement 1, 2 and on the ground floor to supplement the car parking.	Yes	
3J-3	<i>Car park design and access is safe and secure</i>	Satisfactory. A boom gate is shown on the plans on the basement 1 access level.	Yes	
3J-4	<i>Visual and environmental impacts of underground car parking are minimised</i>	Satisfactory.	Yes	
3J-5	<i>Visual and environmental impacts of on-grade car parking are minimised</i>	N/A	N/A	
3J-6	<i>Visual and environmental impacts of above ground enclosed car parking are minimised</i>	N/A	N/A	
Part 4 – Designing the Building				
4A-1	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 49 of the 59 apartments or 83% will receive adequate direct sunlight at the winter solstice.	Yes
		A maximum of 15% of apartments in a building receive no direct sunlight between 9 am and 3 pm at mid winter	The proposal will result in 4 out of 59 units or 6.8% not receiving direct sunlight between 9am and 3pm at mid winter.	Yes
4A-2	<i>Daylight access is maximised where sunlight is limited</i>		Satisfactory.	Yes
4A-3	<i>Design incorporates shading and glare control, particularly for warmer months</i>		Satisfactory.	Yes
4B	Natural Ventilation			
4B-1	<i>All habitable rooms are naturally ventilated</i>		Satisfactory.	

4B-2	<i>The layout and design of single aspect apartments maximises natural ventilation</i>		Satisfactory.	Yes												
4B-3	<i>The number of apartments with natural cross ventilation is maximised to create a comfortable indoor environment for residents</i>															
	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	42 units out of 59 are naturally crossed ventilated or 71.19%.	Yes												
		Overall depth of a cross-over or cross-through apartment does not exceed 18m, measured glass line to glass line	There are no apartments that exceed a length of 18 metres.	Yes												
4C	Ceiling heights															
4C-1			<i>Ceiling height achieves sufficient natural ventilation and daylight access</i>													
	Design Criteria	<p>Measured from finished floor level to finished ceiling level, minimum ceiling heights are:</p> <table border="1"> <thead> <tr> <th colspan="2">Minimum ceiling height for apartment and mixed use buildings</th> </tr> </thead> <tbody> <tr> <td>Habitable rooms</td> <td>2.7m</td> </tr> <tr> <td>Non-habitable</td> <td>2.4m</td> </tr> <tr> <td>For 2 storey apartments</td> <td>2.7m for main living area floor 2.4m for second floor, where its area does not exceed 50% of the apartment area</td> </tr> <tr> <td>Attic spaces</td> <td>1.8m at edge of room with a 30 degree minimum ceiling slope</td> </tr> <tr> <td>If located in mixed used areas</td> <td>3.3m for ground and first floor to promote future flexibility of use</td> </tr> </tbody> </table>	Minimum ceiling height for apartment and mixed use buildings		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 used areas	3.3m for ground and first floor to promote future flexibility of use	<p>2.7m floor to ceiling is provided to all residential floors, the proposal provides for 3.1m floor to floor heights.</p> <p>The proposed development complies with the ADG provisions.</p>	Yes
Minimum ceiling height for apartment and mixed use buildings																
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 used areas	3.3m for ground and first floor to promote future flexibility of use															
4C-2	<i>Ceiling height increases the sense of space in apartments and provides for well proportioned rooms</i>		Satisfactory.	Yes												

4C-3	<i>Ceiling heights contribute to the flexibility of building use over the life of the building</i>		The ground and first floor allow for flexibility of the building use over the life of the building.	Yes										
4D	Apartment size and layout													
4D-1	<i>The layout of rooms within an apartment is functional, well organised and provides a high standard of amenity</i>													
	Design Criteria	<p>Apartments are required to have the following minimum internal areas:</p> <table border="1"> <thead> <tr> <th>Apartment size</th> <th>Minimum Internal Area</th> </tr> </thead> <tbody> <tr> <td>Studio</td> <td>35m²</td> </tr> <tr> <td>1 bedroom</td> <td>50m²</td> </tr> <tr> <td>2 bedroom</td> <td>70m²</td> </tr> <tr> <td>3 bedroom</td> <td>90m²</td> </tr> </tbody> </table> <p>The minimum internal areas include only one bathroom. Additional bathrooms increase the minimum internal area by 5m² each</p> <p>A fourth bedroom and further additional bedrooms increase the minimum internal area by 12m² each</p>	Apartment size	Minimum Internal Area	Studio	35m ²	1 bedroom	50m ²	2 bedroom	70m ²	3 bedroom	90m ²	All apartments achieve or exceed the minimum apartment size.	Yes
Apartment size	Minimum Internal Area													
Studio	35m ²													
1 bedroom	50m ²													
2 bedroom	70m ²													
3 bedroom	90m ²													
		<p>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</p>	Satisfactory.	Yes										
4D-2	<i>Environmental performance of the apartment is maximised</i>													
	Design Criteria	Habitable room depths are limited to a maximum of 2.5 x the ceiling height	Room depths are satisfactory.	Yes										
		In open plan layouts (where the living, dining and kitchen are combined) the maximum habitable room depth is 8m from a window	This achieved.	Yes										
4D-3	<i>Apartment layouts are designed to accommodate a variety of household activities and needs</i>													
	Design Criteria	Master bedrooms have a minimum area of 10m ² and other bedrooms 9m ² (excluding wardrobe space)	All bedrooms comply.	Yes										
		Bedrooms have a minimum dimension of 3m (excluding wardrobe space)	All bedrooms comply.	Yes										

		<p>Living rooms or combined living/dining rooms have a minimum width of:</p> <ul style="list-style-type: none"> • 3.6m for studio and 1 bedroom apartments • 4m for 2 and 3 bedroom apartments 	<p>Living rooms comply with minimum dimensions.</p>	Yes														
		<p>The width of cross-over or cross-through apartments are at least 4m internally to avoid deep narrow apartment layouts</p>	<p>Satisfactory.</p>	Yes														
4E	Private open space and balconies																	
4E-1	<p><i>Apartments provide appropriately sized private open space and balconies to enhance residential amenity</i></p>																	
	<p>Design Criteria</p> <p>All apartments are required to have primary balconies as follows:</p> <table border="1"> <thead> <tr> <th>Dwelling Type</th> <th>Minimum Area</th> <th>Minimum Depth</th> </tr> </thead> <tbody> <tr> <td>Studio</td> <td>4m²</td> <td>-</td> </tr> <tr> <td>1 bedroom</td> <td>8m²</td> <td>2m</td> </tr> <tr> <td>2 bedroom</td> <td>10m²</td> <td>2m</td> </tr> <tr> <td>3+ bedroom</td> <td>12m²</td> <td>2.4m</td> </tr> </tbody> </table> <p>The minimum balcony depth to be counted as contributing to the balcony area is 1m</p>	Dwelling Type	Minimum Area	Minimum Depth	Studio	4m ²	-	1 bedroom	8m ²	2m	2 bedroom	10m ²	2m	3+ bedroom	12m ²	2.4m	<p>All 1 bedroom apartments have a minimum area of 8 square metres with a minimum depth of 2 metres.</p> <p>All 2 bedroom apartments have a minimum area of 10 square metres with a minimum depth of 2 metres.</p> <p>All 3 bedroom apartments meet the 12 sqm area with a depth of 2.4metres or more.</p> <p>Areas with a depth of 1m have been included in the calculation.</p>	<p>Yes</p>
Dwelling Type	Minimum Area	Minimum Depth																
Studio	4m ²	-																
1 bedroom	8m ²	2m																
2 bedroom	10m ²	2m																
3+ bedroom	12m ²	2.4m																
	<p>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 15m² and a minimum depth of 3m</p>	<p>N/A. No ground level or podium apartments are proposed.</p>	<p>N/A</p>															
4F	<p><i>Common circulation spaces achieve good amenity and properly service the number of apartments</i></p>																	

4F-1	Design Criteria	The maximum number of apartments off a circulation core on a single level is eight	Maximum is 8 off a circulation core on a single level. Each residential level provides two lifts.	Yes										
		For buildings of 10 storeys and over, the maximum number of apartments sharing a single lift is 40	59 units are served by 2 lifts = 29.5 units per lift.	Yes										
4F-2	<i>Common circulation spaces promote safety and provide for social interaction between residents</i>			Satisfactory.										
4G	Storage	<i>Adequate, well designed storage is provided in each apartment</i>												
4G-1	Design Criteria	<p>In addition to storage in kitchens, bathrooms and bedrooms, the following storage is provided:</p> <table border="1"> <thead> <tr> <th>Dwelling type</th> <th>Storage size volume</th> </tr> </thead> <tbody> <tr> <td>Studio apartments</td> <td>4m³</td> </tr> <tr> <td>1 bedroom apartments</td> <td>6m³</td> </tr> <tr> <td>2 bedroom apartments</td> <td>8m³</td> </tr> <tr> <td>3+ bedroom apartments</td> <td>10m³</td> </tr> </tbody> </table> <p>At least 50% of the required storage is to be located within the apartment</p>	Dwelling type	Storage size volume	Studio apartments	4m ³	1 bedroom apartments	6m ³	2 bedroom apartments	8m ³	3+ bedroom apartments	10m ³	Storage is provided the apartments and storage spaces in the basement levels.	Yes
Dwelling type	Storage size volume													
Studio apartments	4m ³													
1 bedroom apartments	6m ³													
2 bedroom apartments	8m ³													
3+ bedroom apartments	10m ³													
4G-2	<i>Additional storage is conveniently located, accessible and nominated for individual apartments</i>			Satisfactory.										
4H	Acoustic privacy			Yes										
4H-1	<i>Noise transfer is minimised through the siting of buildings and building layout</i>			Satisfactory where possible.										
4H-2	<i>Noise impacts are mitigated within apartments through layout and acoustic treatments</i>			Internal layout sensibly locates bedrooms away lounge and dining room areas.										
4J	Noise and pollution			Yes										
4J-1	<i>In noisy or hostile environments the impacts of external noise and pollution are minimised through the careful siting and layout of buildings</i>			Satisfactory. An acoustic report has been provided and Council's Environmental Health officer raised no objections subject to conditions.										

4J-2	<i>Appropriate noise shielding or attenuation techniques for the building design, construction and choice of materials are used to mitigate noise transmission</i>	An acoustic report has been provided and is satisfactory.	Yes
4K	Apartment Mix		
4K-1	<i>A range of apartment types and sizes is provided to cater for different household types now and into the future</i>	Satisfactory and achieved via a range of apartment types to meet a range of household types.	Yes
4K-2	<i>The apartment mix is distributed to suitable locations within the building</i>	2 x 1 bedroom units, 32 x 2 bedroom units and 25 x 3 bedroom units. 20% of units being provided as adaptable dwellings, and 12 out of 59 units will be dedicated for affordable housing for 15 years.	Yes
4L	Ground Floor Apartments		
4L-1	<i>Street frontage activity is maximised where ground floor apartments are located</i>	N/A	N/A
4L-2	<i>Design of ground floor apartments delivers amenity and safety for residents</i>	N/A	N/A
4M	Facades		
4M-1	<i>Building facades provide visual interest along the street while respecting the character of the local area</i>	This is achieved with an active street frontage of 2 commercial tenancies and a forecourt area.	Yes
4M-2	<i>Building functions are expressed by the facade</i>	Satisfactory.	Yes
4N	Roof Design		
4N-1	<i>Roof treatments are integrated into the building design and positively respond to the street</i>	The building has communal open space on the rear rooftop. These spaces are screened to mitigate high wind speeds and to provide a	Yes

		comfortable environment. The building facing the street provides feature and façade treatments to obscure the view of the lift over run and solar panels.	
4N-2	<i>Opportunities to use roof space for residential accommodation and open space are maximised</i>	Refer to above.	Yes
4N-3	<i>Roof design incorporates sustainability features</i>	The roof space facing Station Street is capable of achieving sustainable features.	N/A
4O	Landscape Design		
4O-1	<i>Landscape design is viable and sustainable</i>	Satisfactory.	Yes
4O-2	<i>Landscape design contributes to the streetscape and amenity</i>	Satisfactory.	Yes
4P	Planting on Structures		
4P-1	<i>Appropriate soil profiles are provided</i>	This is satisfactory.	Yes
4P-2	<i>Plant growth is optimised with appropriate selection and maintenance</i>	These are shown on the landscape plans.	Yes
4P-3	<i>Planting on structures contributes to the quality and amenity of communal and public open spaces</i>	Satisfactory.	Yes
4Q	Universal Design		
4Q-1	<i>Universal design features are included in apartment design to promote flexible housing for all community members</i>	Satisfactory.	Yes
4Q-2	<i>A variety of apartments with adaptable designs are provided</i>	12 apartments (20%) nominated as adaptable.	Yes
4Q-3	<i>Apartment layouts are flexible and accommodate a range of lifestyle needs</i>	Satisfactory.	Yes
4R	Adaptive Reuse		
4R-1	<i>New additions to existing buildings are contemporary and complementary and enhance an area's identity and sense of place</i>	N/A	N/A
4R-2	<i>Adapted buildings provide residential amenity while not precluding future adaptive reuse</i>	N/A	N/A
4S	Mixed Use		

4S-1	<i>Mixed use developments are provided in appropriate locations and provide active street frontages that encourage pedestrian movement</i>	Satisfactory.	Yes
4T	Awnings and Signage		
4T-1	<i>Awnings are well located and complement and integrate with the building design</i>	Satisfactory.	Yes
4U	Energy Efficiency		
4U-1	<i>Development incorporates passive environmental design</i>	<i>A BASIX Certificate is provided addressing sustainability matters. The Certificate suggests compliances with the water and energy needs.</i>	Yes
4U-2	<i>Development incorporates passive solar design to optimise heat storage in winter and reduce heat transfer in summer</i>	Satisfactory.	Yes
4U-3	<i>Adequate natural ventilation minimises the need for mechanical ventilation</i>	Satisfactory.	Yes
4V	Water Management and Conservation		
4V-1	<i>Potable water use is minimised</i>	Satisfactory.	Yes
4V-2	<i>Urban stormwater is treated on site before being discharged to receiving waters</i>	Satisfactory.	Yes
4V-3	<i>Flood management systems are integrated into site design</i>	<i>Separate engineering consideration.</i>	Yes
4W	Waste Management		
4W-1	<i>Waste storage facilities are designed to minimise impacts on the streetscape, building entry and amenity of residents</i>	<i>Waste storage and collection is carried within 'basement 1' within the subject site.</i>	Yes
4W-2	<i>Domestic waste is minimised by providing safe and convenient source separation and recycling</i>	Satisfactory.	Yes
4X	Building Maintenance		
4X-1	<i>Building design detail provides protection from weathering</i>	Satisfactory.	Yes
4X-2	<i>Systems and access enable ease of maintenance</i>	Satisfactory.	Yes
4X-3	<i>Material selection reduces ongoing maintenance costs</i>	Satisfactory.	Yes