

ASSESSMENT AGAINST NSW RESIDENTIAL FLAT DESIGN CODE – RULES OF THUMB

RULE OF THUMB		COMMENT	COMPLIES
Open Space - communal	<p><i>A minimum of 25% of the open space area of a site should be a deep soil zone; more is desirable.</i></p> <p><i>Exceptions may be made in urban areas where sites are built out and there is no capacity for water infiltration.</i></p> <p><i>In these instances, stormwater treatment measures must be integrated with the design of the residential flat building.</i></p>	<p>The site is located within an urban area and will be built out with full podium carparking, therefore a deep soil zone of greater than the DCP requirement will not be possible. The current proposal achieves 183m² of deep soil planting at basement & ground levels on Enid Street. The minimum requirement for deep soil zone under the DCP is 410m² (7.5% of total Site Area). This figure is more than adequately achieved when factoring in all proposed planting across the landscaped podium, communal courtyards on Level 10 (Towers B & C), and terraced planting zones to the rear & side boundaries of the property, as a 'soft edge' to proposed carparking that faces adjoining neighbouring buildings.</p> <p>Stormwater treatment measures will be fully employed in accordance with the design code.</p>	✓
	<i>The area of communal open space required should generally be at least between 25 and 30% of the site area. Larger sites and brownfield sites may have potential for more than 30%.</i>	1849.5 sqm of landscaped communal open space is proposed. This equates to 33.8% of the total site area (5472sqm)	✓
	<i>Where developments are unable to achieve the recommended communal open space, such as those in dense urban areas, they must demonstrate that residential amenity is provided in the form of increased private open space and/or in a contribution to public open space.</i>	N/A	
Open Space - private	<i>The minimum recommended area of private open space for each apartment at ground level or similar space on a structure, such as on a podium or car park, is 25m²; the minimum preferred dimension in one direction is 4m.</i>	Ground floor courtyards on podium (facing inwards towards communal open space areas) comply with private open space requirements .i.e. are in excess of 25sqm.	✓
	<i>In terms of soil provision there is no minimum standard that can be applied to all situations as the requirements vary with the size of plants and trees at maturity. The following are recommended as minimum standards for a range of plant</i>	Refer to Landscape Design Report & drawings	✓

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<p><i>sizes:</i></p> <ul style="list-style-type: none"> ▪ <i>Large trees such as figs (canopy diameter of up to 16 metres at maturity)</i> <ul style="list-style-type: none"> - <i>minimum soil volume 150 cubic metres</i> - <i>minimum soil depth 1.3 metre</i> - <i>minimum soil area 10 metre x 10 metre area or equivalent</i> ▪ <i>Medium trees (8 metre canopy diameter at maturity)</i> <ul style="list-style-type: none"> - <i>minimum soil volume 35 cubic metres</i> - <i>minimum soil depth 1 metre</i> - <i>approximate soil area 6 metre x 6 metre or equivalent</i> ▪ <i>Small trees (4 metre canopy diameter at maturity)</i> <ul style="list-style-type: none"> - <i>minimum soil volume 9 cubic metres</i> - <i>minimum soil depth 800mm</i> - <i>approximate soil area 3.5 metre x 3.5 metre or equivalent</i> ▪ <i>Shrubs</i> <ul style="list-style-type: none"> - <i>minimum soil depths 500-600mm</i> ▪ <i>Ground cover</i> <ul style="list-style-type: none"> - <i>minimum soil depths 300-450mm</i> ▪ <i>Turf</i> <ul style="list-style-type: none"> - <i>minimum soil depths 100-300mm</i> <p><i>- any subsurface drainage requirements are in addition to the minimum soil depths quoted above</i></p>		

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Crime Prevention	<i>Carry out a formal crime risk assessment for all residential developments of more than 20 new dwellings</i>	The development has taken into account performance criteria and design requirements within the DCP - Crime Prevention through Environmental Design	✓
Separation Distances	<p><i>For buildings over three storeys, it is recommended that building separation increase in proportion to building height to ensure appropriate urban form, adequate amenity and privacy for building occupants. Suggested dimensions within a development, for internal courtyards and between adjoining sites are:</i></p> <ul style="list-style-type: none"> ▪ <i>Up to four storeys/12 metres</i> - <i>12 metres between habitable rooms/balconies</i> - <i>9 metres between habitable/balconies and non-habitable rooms</i> - <i>6 metres between non-habitable rooms</i> ▪ <i>Five to eight storeys/up to 25 metres</i> - <i>18 metres between habitable rooms/balconies</i> - <i>13 metres between habitable rooms/balconies and non-habitable rooms</i> - <i>9 metres between non-habitable rooms</i> ▪ <i>Nine storeys and above/ over 25 metres</i> - <i>24 metres between habitable rooms/balconies</i> - <i>18 metres between habitable rooms/balconies and non-habitable rooms</i> - <i>12 metres between non-habitable rooms</i> 	<p>The location of the building footprints, building heights and setbacks to the perimeter of the site are governed by compliance with the requirements of the DCP. This is discussed in more detail in the SEE and Architectural Design statement.</p> <p>Within the courtyard, minimum privacy separation distances between facing habitable rooms & balconies have been adhered to. Balconies have operable privacy screens to enable active privacy control. Refer to Architectural drawings and visuals for further detail.</p>	✓ / ✕

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	<i>Allow zero building separation in appropriate contexts, such as in urban areas between street wall building types (party walls).</i>		
Accessibility	<i>Identify the access requirements from the street or car parking area to the apartment entrance.</i>	Complies	✓
	<i>Follow the accessibility standard set out in Australian Standard AS 1428 (parts 1 and 2), as a minimum.</i>	Complies	✓
	<i>Provide barrier free access to at least 20% of dwellings in the development.</i>		
Driveway Design	<i>Generally limit the width of driveways to a maximum of six metres.</i>	Complies, Refer to Architectural drawings and for further detail.	✓
	<i>Locate vehicle entries away from main pedestrian entries and on secondary frontages.</i>	Complies, Refer to Architectural drawings and for further detail.	✓
Ventilation Requirements	<ul style="list-style-type: none"> ▪ <i>Single-aspect apartments should be limited in depth to 8m from a window.</i> ▪ <i>The back of a kitchen should be no more than 8m from a window.</i> ▪ <i>The width of cross-over or cross-through apartments over 15m deep should be 4m or greater to avoid deep narrow apartment layouts.</i> 	<p>Complies, maximum depth of single aspect apartment is 8m</p> <p>Complies, maximum distance from back of a kitchen to a window is 8m</p> <p>Complies, maximum depth of through apartment is 15m</p>	✓
	<i>In general, an apartment building depth of 10-18 metres is appropriate. Developments that propose wider than 18 metres must demonstrate how satisfactory daylighting and natural ventilation are achieved</i>	Complies, maximum depth of a building on a double loaded apartment building is 18m	

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	<ul style="list-style-type: none"> ▪ Buildings not meeting the minimum standards listed above, must demonstrate how satisfactory daylighting and natural ventilation can be achieved, particularly in relation to habitable rooms (see Daylight Access and Natural Ventilation). 	N/A	
	<ul style="list-style-type: none"> ▪ Building depths, which support natural ventilation, typically range from 10 to 18 metres. ▪ Sixty percent (60%) of residential units should be naturally cross ventilated. ▪ Twenty five percent (25%) of kitchens within a development should have access to natural ventilation. <p>Developments, which seek to vary from the minimum standards, must demonstrate how natural ventilation can be satisfactorily achieved, particularly in relation to habitable rooms.</p>	<p>Complies</p> <p>Complies, in excess of Sixty percent (87% achieved) of the residential units are naturally cross ventilated. Refer to Architectural Drawings A06-01, A06-02, A06-03.</p> <p>Complies, in excess of Twenty five percent (56% achieved) of kitchens have access to natural ventilation.</p>	✓
Apartment Sizes	<p>If council chooses to standardise apartment sizes, a range of sizes that do not exclude affordable housing should be used. As a guide, the Affordable Housing Service suggest the following minimum apartment sizes, which can contribute to housing affordability: (apartment size is only one factor influencing affordability)</p> <ul style="list-style-type: none"> - 1 bedroom apartment 50m² - 2 bedroom apartment 70m² - 3 bedroom apartment 95m² 	<p>Council do not prescribe standard or minimum apartment sizes within their controls. It is important to provide a range of sizes to enable the opportunity for a wide variety of occupants as set out in Principle 9. Local real estate agent advice has been taken to ensure an appropriate mix for this context. All apartments adhere to the guidelines set out in the RFDC</p> <p>The apartment sizes are as follows:</p> <p>1 bedroom 68m² - 79m²</p> <p>2 bedroom 85m² – 94m²</p> <p>3 bedroom 102m² – 104m²</p>	✓

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Balcony Sizes	<p><i>Provide primary balconies for all apartments with a minimum depth of 2 metres. Developments which seek to vary from the minimum standards must demonstrate that negative impacts from the context-noise, wind- can not be satisfactorily mitigated with design solutions.</i></p> <p><i>Require scale plans of balcony with furniture layout to confirm adequate, useable space when an alternate balcony depth is proposed</i></p>	<p>Complies, minimum depth of balcony is 2m</p> <p>Minimum area of balconies complies with DCP 54 as follows: Combined area of balconies min.10% apartment area.</p> <p>Primary balconies:</p> <p>1 Bed- 8m² 2 Bed- 10m² 3 Bed- 10m²</p>	✓
Apartment Design	<p><i>The following recommended dimensions are measured from finished floor level (FFL) to finished ceiling level (FCL). These are minimums only and do not preclude higher ceilings, if desired.</i></p> <ul style="list-style-type: none"> ▪ <i>In mixed use buildings: 3.3m minimum for ground floor retail or commercial and for first floor residential, retail or commercial to promote future flexibility of use</i> ▪ <i>In mixed use buildings: 3.3m minimum for ground floor retail or commercial and for first floor residential, retail or commercial to promote future flexibility of use</i> 	<p>Able to comply – subject to tenant fit out.</p> <p>The minimum FFL to underside of slab of commercial unit is 3.7m (Stage 1 Gymnasium), and a maximum 6.8m (Stage 2 retail corner tenancy).</p>	✓
	<ul style="list-style-type: none"> ▪ <i>In residential flat buildings in mixed use areas: 3.3m minimum for ground floor to promote future flexibility of use</i> 	Complies. Minimum FFL to ceiling 3.7m	

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	<ul style="list-style-type: none"> ▪ <i>In residential flat buildings or other residential floors in mixed use buildings:</i> - <i>In general, 2.7m minimum for all habitable rooms on all floors, 2.4m is the preferred minimum for all non-habitable rooms, however 2.25m is permitted.</i> - <i>For two storey units, 2.4m minimum for second storey if 50% or more of the apartment has 2.7m minimum ceiling heights</i> - <i>For two-storey units with a two storey void space, 2.4m minimum ceiling heights</i> - <i>Attic spaces, 1.5m minimum wall height at edge of room with a 30 degree minimum ceiling slope.</i> <p><i>Developments which seek to vary the recommended ceiling heights must demonstrate that apartments will receive satisfactory daylight (eg. shallow apartments with large amount of window area).</i></p>	<p>Complies, 2.7m for all habitable rooms. 2.4m for all non-habitable rooms</p> <p>N/A – no 2 storey units</p> <p>N/A – no 2 storey units</p> <p>N/A</p>	
Apartment Access Design	<p><i>Optimise the number of ground floor apartments with separate entries and consider requiring an appropriate percentage of accessible units. This relates to the desired streetscape and topography of the site.</i></p> <p><i>Provide ground floor apartments with access to private open space, preferably as a terrace or garden.</i></p>	Complies, Podium level units internally have direct access via private open terraces, and promote an active facade and increased security through activation and observation.	✓
	<ul style="list-style-type: none"> ▪ <i>In general, where units are arranged off double-loaded corridor, the number of units accessible from a single core/ corridor should be limited to eight. Exceptions may be allowed:</i> - <i>For adaptive reuse buildings</i> 	<p>Comment</p> <p>Complies, a maximum of 8 apartments are accessible from a single core/corridor per building.</p>	✓

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	<ul style="list-style-type: none"> - Where developments can demonstrate the achievement of the desired streetscape character and entry response - Where developments can demonstrate a high level of amenity for common lobbies, corridors and units, (cross over, dual aspect apartments). 		
Other Amenities in Apartments	<p>In addition to kitchen cupboards and bedroom wardrobes, provide accessible storage facilities at the following rates:</p> <ul style="list-style-type: none"> - studio apartments 6m³ - one-bedroom apartments 6m³ - two-bedroom apartments 8m³ - three plus bedroom apartments 10m³ 	Complies, Storage provided in apartments and nominated secure locations within the Basement areas.	✓
Solar Access	<p>Living rooms and private open spaces for at least 70 percent of apartments in a development should receive a minimum of three hours direct sunlight between 9 am and 3 pm in mid winter. In dense urban areas a minimum of two hours may be acceptable</p>	<p>Complies, the DCP enables new developments that will be defined as a dense urban area.</p> <p>A total of Ninety nine percent (99%) will receive a minimum of two hours sunlight between 9.00am and 3.00pm in midwinter.</p> <p>Of which Fifty nine percent (59%) of the residential units will receive a minimum of three hours sunlight between 9.00am and 3.00pm in midwinter.</p>	✓
Waste	<p>Supply waste management plans as part of the development application submission as per the NSW Waste Board.</p>	Complies, Refer to Waste Management Report	✓

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Water	<i>Rainwater is not to be collected from roofs coated with lead- or bitumen-based paints, or from asbestos-cement roofs. Normal guttering is sufficient for water collections provided that it is kept clear of leaves and debris.</i>	Noted	✓