

## State Environmental Planning Policy No. 65 – Residential Flat Design Code – Compliance Table

ITEM	GUIDELINE	COMPLIANCE
<b>Part 1: Local Context</b>		
Context	Local Context <ul style="list-style-type: none"> <li>Undertake a local context analysis.</li> </ul>	This context analysis remains unchanged from approved scheme.
	Residential Flat Building Types	The site is within the Ryde City Council adjacent to Victoria Road and frequent bus routes. Low rise apartments within a landscape environment are appropriate in this location.
	Building Envelopes <ul style="list-style-type: none"> <li>Establish the allowable bulk, height and location of a development on a site.</li> </ul>	The building envelope is compliant with the approved Concept Plan for the site.
	Building Height <ul style="list-style-type: none"> <li>Test height controls against the FSR and the proposed number of storeys and minimum ceiling heights.</li> </ul>	The proposed building heights, and FSR are compliant with the approved Concept Plan for the site.
	Building Depth <ul style="list-style-type: none"> <li>An apartment building depth of 10-18 meters is appropriate. Developments that propose wider than 18 meters must demonstrate how satisfactory day lighting and natural ventilation are to be achieved.</li> </ul>	The linear apartment building depth is an average of 18m meters (excluding balconies). There are also a number of double aspect/flow through units.
	Building Separation and Setbacks <ul style="list-style-type: none"> <li>Refer SEPP 65 building separation for buildings 3 storeys and above</li> </ul>	Building separation and setbacks for the residential flat buildings complies with those approved under the Concept Plan.
<b>Part 2: Site Design</b>		
Site Analysis	<ul style="list-style-type: none"> <li>Site analysis to include plans and sections of the existing features of the site, and written description.</li> </ul>	Existing trees and other features are described in detail in the arborist's and landscape architects reports.
Site Configuration	Deep Soil Zones <ul style="list-style-type: none"> <li>Optimise provision of deep soil zones.</li> <li>Support a rich variety of vegetation type and size.</li> <li>Increase permeability of paved areas.</li> <li>25% of open space to be deep soil zone.</li> </ul>	The overall Concept Plan sets out an integrated landscape structure that will deliver deep soil in excess of requirements included under SEPP 65.

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	<b>Fences and Walls</b> <ul style="list-style-type: none"> <li>• Respond to character of street and area.</li> <li>• Delineate private and public domain without compromising safety and security.</li> <li>• Contribute to amenity, beauty and usability of private and communal open spaces.</li> <li>• Retain and enhance amenity of public domain by avoiding continuous lengths of blank walls and using planting to soften the edges and reduce their scale.</li> <li>• Select durable materials which are easily cleaned and graffiti resistant.</li> </ul>	<p>Details of fencing and edges are set out on the landscape architects drawings. Generally a clear delineation between the public and private domain is achieved.</p>
	<b>Landscape Design</b> <ul style="list-style-type: none"> <li>• Improve amenity of open space with landscape design, including shade and screening.</li> <li>• Contribute to streetscape and public domain.</li> <li>• Improve energy efficiency and solar efficiency of dwellings and microclimate of private open spaces.</li> <li>• Design landscape with regard to site characteristics.</li> <li>• Contribute to water and storm water efficiency.</li> <li>• Provide sufficient depth of soil above pavers</li> <li>• Minimise maintenance by robust landscape elements.</li> </ul>	<p>The overall Concept Plan integrates landscape and architecture.</p> <p>In particular the Concept Plan preserves existing natural features including vegetation and topography.</p> <p>Refer to the Landscape Plan for details.</p>
	<b>Open Space</b> <ul style="list-style-type: none"> <li>• Provide communal open space which is appropriate and relevant to the context and building setting.</li> <li>• Facilitate the use of communal open space by solar access, site features, and minimise overshadowing.</li> <li>• Provide private open space for each apartment.</li> <li>• Locate open space to increase residential amenity.</li> <li>• Provide environmental benefits including habitat, microclimate, rainwater percolation, outdoor drying area.</li> <li>• Communal open space should be 25-30% of site area.</li> <li>•</li> </ul>	<p>Communal and private open space is provided as described in the landscape plans. Private space is provided for each apartment in the form of a balcony for above ground dwellings, and terrace areas for ground floor dwellings.</p>

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	<b>Orientation</b> <ul style="list-style-type: none"> <li>• Orient buildings to maximise north facing walls and provide adequate building separation.</li> <li>• Respond to streetscape and optimise solar access.</li> <li>• Courtyards and setbacks to northern boundaries.</li> <li>• Optimise solar access to living spaces and private open space by orienting them to the north.</li> <li>• Building elements to maximise sun in winter and shade in summer.</li> </ul>	The apartment buildings has been oriented to maximise north facing walls.
	<b>Planting on Structures</b> <ul style="list-style-type: none"> <li>• Design for optimum plant growth by appropriate soil and drainage conditions.</li> <li>• Design planters to support soil depth and plant selection.</li> </ul>	Not required as there are large areas of landscaped areas at grade
	<b>Stormwater Management</b> <ul style="list-style-type: none"> <li>• Retain stormwater on site.</li> <li>• Protect stormwater quality.</li> <li>• Control erosion.</li> <li>• Consider using grey water for site irrigation</li> <li>• On dense urban sites where no potential for deep soil zones, seek alternate solutions (gross pollutant traps, OSD).</li> </ul>	<p>Paved areas of communal private open space will generally drain into garden beds to maximise use of garden bed irrigation and of infiltration</p> <p>Stage 1 of project has been completed on the basis that the water quality requirements for the proposed development will be achieved in the centralised OSD basin and the Gross Pollutant Traps being constructed and the OSD basin.</p>
Site Amenity	<b>Safety</b> <ul style="list-style-type: none"> <li>• Delineate private and public space.</li> <li>• Optimise visibility, functionality, and safety of building entrances.</li> <li>• Improve opportunities for casual surveillance.</li> <li>• Minimise opportunities for concealment.</li> <li>• Control access to the development</li> <li>• Carry out a crime risk assessment for all residential developments of more than 20 dwellings.</li> </ul>	<p>Private and public space will be clearly delineated as described on the landscape plan.</p> <p>The building has been designed to allow clear sight lines to maximize visibility and minimise opportunities for concealment. The use of glazed entrances will improve this feature.</p>

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	<b>Visual Privacy</b> <ul style="list-style-type: none"> <li>• Maximise visual privacy between adjoining buildings by separation, setbacks and site layout.</li> <li>• Design layouts to minimise direct overlooking of rooms and private open spaces.</li> <li>• Use site and building design elements to increase privacy without compromising light and air access.</li> </ul>	<p>Visual privacy between the habitable rooms in the residential buildings will be achieved by building separation as described above as well as by the sizing/location of windows and privacy screen where necessary.</p>
Site Access	<b>Building Entry</b> <ul style="list-style-type: none"> <li>• Improve presentation to street by entry treatment.</li> <li>• Direct connection and clear transition between street and entry.</li> <li>• Ensure equal access for all.</li> <li>• Provide safe and secure access.</li> <li>• Separate building entry from car parks.</li> <li>• Design entries/circulation to allow furniture movement.</li> <li>• Provide mailboxes to be convenient, but not clutter the appearance of the development from the street.</li> </ul>	<p>The building will provide clear and unimpeded access to both the residential entries from the public domain and basement car park levels.</p> <p>The principal building entrances will be from the main streets.</p>
	<b>Parking</b> <ul style="list-style-type: none"> <li>• Determine car spaces by access to public transport, density and ability to accommodate on site.</li> <li>• Limit visitor spaces, where impact on landscape and open space is significant.</li> <li>• Give preference to underground parking.</li> <li>• Provide bicycle parking which is easily accessible.</li> </ul>	<p>Car parking is provided in accordance with the Ryde DCP 2010. Visitor parking for the residential flat buildings will be within the basement to preserve outdoor landscape areas.</p>
	<b>Pedestrian Access</b> <ul style="list-style-type: none"> <li>• Accessible routes to public and semi-public areas.</li> <li>• Promote equity by entry location and ramps.</li> <li>• Ground floor apartments to be accessible from the street and associated open space.</li> <li>• Maximise number of accessible, visitable and adaptable apartments in a building.</li> <li>• Barrier free access to at least 20% of dwellings.</li> </ul>	<p>The proposal has been designed to ensure continuous paths of accessible travel can be achieved throughout the building as well as to the public domain.</p>

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	<p>Vehicle Access</p> <ul style="list-style-type: none"> <li>• Ensure adequate separation between vehicle entries and street intersections.</li> <li>• Optimise opportunities for active street frontages and streetscape design.</li> <li>• Improve appearance of car parking entries.</li> <li>• Limit width of driveways to 6 metres.</li> <li>• Locate vehicle entries away from pedestrian entries and on secondary frontages.</li> </ul>	<p>Vehicle and pedestrian access will be clearly delineated.</p> <p>Vehicle access to the basement car park of the residential flat building will be from Road 16 off the main spine road. This will include visitor parking also.</p> <p>Pedestrian access is separated from the car park entry.</p>

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ITEM	GUIDELINE	COMMENT
<b>Part 3 Building Design</b>		
Building Configuration	<b>Apartment Layout</b> <ul style="list-style-type: none"> <li>Determine apartment sizes in relation to location, market, spatial configuration and affordability.</li> <li>Ensure apartment layouts are resilient over time.</li> <li>Design layouts to respond to natural and built environments and optimise site opportunities.</li> <li>Avoid locating kitchen in circulation space.</li> <li>Include adequate storage in the apartment.</li> <li>Ensure apartments facilitate furniture removal and placement.</li> <li>Single aspect apartments to have maximum depth of 8m from a window.</li> <li>Back of kitchen to be maximum of 8m from window.</li> <li>Cross over or cross through apartments &gt;15m deep to have minimum width of 4m.</li> </ul>	<p>Detailed building layouts are included in the application.</p> <p>The apartment layouts have been designed having regard to the principles of SEPP 65</p> <p>The apartments incorporate a modern open plan layout with adequate storage spaces.</p> <p>Single aspect units are less than 8m deep</p> <p>Kitchens have been placed on the façade where possible, when not on a façade the back of kitchens are less than 8m from a window.</p> <p>Cross through apartments have a minimum width of 4m.</p>
	<b>Apartment Mix</b> <ul style="list-style-type: none"> <li>Provide a diversity of apartment types</li> </ul>	<p>The apartment sizes and layouts have been designed to satisfy the evolving housing market in the area . A healthy apartment mix will continue to be provided across the Concept Plan site.</p>
	<b>Balconies</b> <ul style="list-style-type: none"> <li>Provide at least one primary balcony.</li> <li>Primary balconies to be adjacent to living area.</li> <li>Consider secondary balconies in larger apartments, adjacent to bedrooms and for clothes drying.</li> <li>Balconies to respond to local climate and context, solar access, wind and privacy.</li> <li>Design balustrades to allow views and casual surveillance, while providing safety and privacy.</li> <li>Coordinate and integrate building services with façade and balcony design.</li> <li>Primary balcony to have minimum depth of 2m.</li> </ul>	<p>Balconies are provided to all apartments above grade. All will have a minimum depth of 2.4 meters.</p> <p>At grade apartments have been provided with terraces.</p>

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	<p><b>Ceiling Heights</b></p> <ul style="list-style-type: none"> <li>• Coordinate internal ceiling heights and slab levels with external height requirements.</li> <li>• Minimum floor to ceiling height of 2.7m for upper levels.</li> <li>• Minimum floor to ceiling height of 3.3m at ground to allow flexibility of use.</li> <li>• Variations to demonstrate satisfactory daylight.</li> </ul>	<p>The residential floor to floor heights will be a minimum of 3000mm, resulting in a floor to ceiling height of 2.7m for habitable rooms.</p>
	<p><b>Flexibility</b></p> <ul style="list-style-type: none"> <li>• Provide robust building configurations which utilise multiple building entries and circulation cores.</li> <li>• Promote accessibility and adaptability by accessible and visitable apartments and pedestrian access.</li> </ul>	<p>A simple core layout has been developed to maximize flexibility.</p>
	<p><b>Internal Circulation</b></p> <ul style="list-style-type: none"> <li>• Increase amenity and safety by generous widths, lighting, minimising lengths, avoiding tight corners, legible signage and adequate ventilation.</li> <li>• Support better apartment layouts by designing buildings with multiple cores.</li> <li>• Articulate longer corridors by using series of foyer areas and windows along or at end of window.</li> <li>• Minimise maintenance and maintain durability by using robust materials in common circulation areas.</li> </ul>	<p>Long corridors are avoided with a single core provided for each half of the apartment building. Corridors and lobbies have windows to the ends to increase natural light and provide a connection back to the surrounding area.</p>
	<p><b>Mixed Use</b></p> <ul style="list-style-type: none"> <li>• Choose a compatible mix of uses for the development and which complement the character and function of the area.</li> <li>• Utilize flexible building layouts to provide requirements for servicing and amenity.</li> <li>• Design legible circulation systems.</li> <li>• Provide appropriate acoustic separation between retail and residential uses.</li> </ul>	<p>N/A</p>
	<p><b>Storage</b></p> <ul style="list-style-type: none"> <li>• 50% of storage to be within apartment and accessible from hall or living area, and dedicated storage rooms on each floor and car parks.</li> <li>• Storage within apartments as follows: studio and one bedroom – 6m<sup>3</sup>; two bedroom – 8m<sup>3</sup> and three plus bedroom – 10m<sup>3</sup>.</li> <li>• Storage to be suitable for local area and able to accommodate larger items (e.g. bicycles).</li> <li>• Ensure storage is secure for individual use.</li> </ul>	<p>The required areas of storage have been provided –</p>

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Building Amenity	<p>Acoustic Privacy</p> <ul style="list-style-type: none"> <li>• Maximise acoustic privacy by adequate separation.</li> <li>• Internal layout to separate noise from quiet areas by grouping bedrooms and service areas.</li> <li>• Resolve conflicts between noise, outlook and views by design measures, such as double glazing.</li> <li>• Reduce noise transmission from common corridors</li> <li>• Provide seals to entry doors.</li> </ul>	<p>Building separation has been described above. Apartments are designed to separate quiet areas from common family areas.</p>
	<p>Daylight Access</p> <ul style="list-style-type: none"> <li>• Orient building to optimise northern aspect.</li> <li>• Ensure daylight access to communal open space March-September and shade in summer.</li> <li>• Optimise apartments receiving daylight access to habitable rooms and principal windows.</li> <li>• Design for shading and glare control.</li> <li>• Living rooms and private open space of at least 70% of apartments should receive 3 hours direct sunlight between 9am and 3pm in mid winter.</li> <li>• Limit single aspect apartments with a southerly aspect to a maximum of 10% of total units.</li> </ul>	<p>Apartments are oriented to the north where possible.</p> <ul style="list-style-type: none"> <li>• Living rooms and private open space of at least 69% of apartments receive 3 hours direct sunlight between 9am and 3pm in mid winter.</li> </ul>
	<p>Natural Ventilation</p> <ul style="list-style-type: none"> <li>• Promote and guide natural breezes.</li> <li>• Utilise building layout and section to increase potential for natural ventilation.</li> <li>• Internal layout to minimise disruptions and group rooms with similar usage together.</li> <li>• Select doors and operable windows to utilise air pressure or windows to funnel breezes.</li> <li>• Coordinate design with passive solar design.</li> <li>• Explore innovative technologies to ventilate rooms.</li> <li>• 10-18m building depth recommended for natural ventilation.</li> <li>• 60% of units to be naturally cross ventilated.</li> <li>• 25% of kitchens to have access to natural ventilation.</li> </ul>	<p>The number of corner and through apartments have been maximized.</p> <p>The building orientation will ensure capture of the prevailing north-easterly and westerly breezes.</p> <p>All apartments will have operable windows to maximize natural ventilation.</p>
Building Form	<p>Awnings and Signage</p> <ul style="list-style-type: none"> <li>• Locate awnings over building entries.</li> <li>• Enhance safety by providing lighting.</li> </ul>	<p>Appropriate lighting will be incorporated into the building entrances and along the building facades, enhancing public safety at night.</p>

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	<b>Facades</b> <ul style="list-style-type: none"> <li>Consider relationship between building form and façade or building elements.</li> <li>Facades to have appropriate scale, rhythm and proportion responding to use and desired character.</li> <li>Facades to reflect orientation of site using sun shading devices.</li> <li>Express important corners by giving visual prominence to parts of the façade.</li> <li>Coordinate and integrate building services and utility items.</li> </ul>	<p>Facades have been designed to relate both in language and material to the approved housing product.</p> <p>Corners and facades have been articulated with recesses and projections to provide prominence and rhythm.</p>
	<b>Roof Design</b> <ul style="list-style-type: none"> <li>Relate roof design to desired built form.</li> <li>Relate to size and scale of building, elevations, building form.</li> <li>Respond to orientation of site.</li> <li>Minimise visual intrusiveness of service elements.</li> <li>Facilitate use of roof for sustainable functions.</li> </ul>	<p>A simple flat roof with minimal roof plant has been proposed so as not to detract from the simple building form and reduce bulk.</p>
Building Performance	<b>Energy Efficiency</b> <ul style="list-style-type: none"> <li>Incorporate passive solar design to optimise heat storage in winter and heat transfer in summer.</li> <li>Improve control of mechanical heating and cooling.</li> <li>Plan for photovoltaic panels.</li> <li>Improve hot water system efficiency.</li> <li>Reduce reliance on artificial lighting.</li> <li>Maximise efficiency of household appliances.</li> </ul>	<p>Refer to the BASIX Report</p>
	Maintenance	<p>Will be included in the Construction Certificate</p>
	Waste Management	<p>Refer report</p>
	Water Conservation	<p>Refer landscape architect's report</p>