

## SEPP 65 Numerical Compliance table for: 420 Macquarie Street Liverpool

Ex	ITEM	PART/ PAGE	RULES OF THUMB	BETTER DESIGN PRACTICE	NOTES	complies
	<b>PART 1 LOCAL CONTEXT</b>					
<b>1</b>	<b>PRIMARY DEVELOPMENT CONTROLS</b>					
<b>1.1</b>	<b>BUILDING HEIGHT</b>	1-24				
	Where there is an existing FSR, test height controls against it to ensure a good fit			√		√
	Test height against the number of storeys and minimum ceiling heights required for the desired building use			√	Refer to SEE with regard to number of storeys and building height.	x
<b>1.2</b>	<b>BUILDING DEPTH</b>	1-26				
	Apartment building depths of 10-18mm are appropriate			√		√
<b>1.3</b>	<b>BUILDING SEPARATION</b>					
	Building Separation is proportionate to building height to facilitate better urban form and improved residential amenity			√		√
<b>1.4</b>	<b>STREET SETBACKS</b>	1-30				
	Identify desired streetscape character, the common setback of building in the street, the accommodation of street planting and height of buildings and daylight access controls			√		√
<b>1.5</b>	<b>SIDE &amp; REAR SETBACKS</b>	1-33				
	Relate side and rear setbacks to existing streetscape patterns			√		√
<b>1.6</b>	<b>FLOOR SPACE RATIO</b>	1-35				
	Test desired built form outcome against proposed floor space ratio to ensure consistency with height, footprint, envelope and open space.			√	Density proposed will enable the delivery of affordable housing	√
	<b>PART 2 SITE DESIGN</b>					
<b>2</b>	<b>SITE CONFIGURATION</b>					
<b>2.1</b>	<b>DEEP SOIL ZONES</b>	2-44				
	A minimum of 25 percent of the open space area of a site should be a deep soil zone: more is desirable. Exceptions may be made in urban areas where sites are built out and there is no capacity for water filtration.		√		In addition to the Carey Street deep soil and given the dense urban environment. Deep planter beds are proposed in conjunction with natural deep soil to enable mature tree growth and water	√

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					filtration.	
<b>2.2</b>	<b>FENCES &amp; WALLS</b>	2-45				
	Delineate the private and public domain without compromising safety and security			√		√
<b>2.3</b>	<b>LANDSCAPE DESIGN</b>	2-46				
	Improve amenity of open space with landscape design			√		√
<b>2.4</b>	<b>OPEN SPACE</b>	2-48		√		
	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%.		√		Complies, communal open space equates to 31%, ie 1,950 m2	√
	Where recommended area is unachievable demonstrate that residential amenity is provided in the form of increased private open space &/or contribution to public open space.		√			n/a
	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 carpark, is 25 m2 ; the minimum preferred dimension in one direction is 4 m.		√		Private open space for podium apartments comply with this requirement .ie >25m2. They range from 25m2 up to 169 m2 with a variety of 1,2,& 3 bedroom apartments.	√
<b>2.5</b>	<b>ORIENTATION</b>	2-50				
	Plan the site to optimise solar access.			√		√
	Select building types which respond to the streetscape whilst optimising solar access			√		√
	Optimise solar access to living spaces and associated private open spaces by orientating them north			√		√
	Detail buildings elements to modify environmental conditions			√		√
<b>2.6</b>	<b>PLANTING ON STRUCTURES</b>					
	Minimum soil depth for planting		√		Complies, refer to Landscape dwgs.	√
<b>2.7</b>	<b>STORMWATER MANAGEMENT</b>					
	On dense urban sites seek measures such as on site detention			√	Complies, refer to Stormwater dwgs	√
<b>3</b>	<b>SITE AMENITY</b>					
<b>3.1</b>	<b>SAFETY</b>	2-56				
	Separate residential parking from other building use and control access from			√	Separate carparking spaces are proposed	√

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	public and common areas				for retail staff.	
	Provide direct access from car park to apartment lobbies for residents			√		√
	Provide separate access for residents in mixed –use buildings			√		√
	Provide audio or video intercom for visitor entry			√		√
	Provide key card access for residents			√		√
<b>3.2</b>	<b>VISUAL PRIVACY</b>	<b>2-58</b>				
	Locate and orient development to maximise visual privacy			√		√
	Design building layouts to minimise direct overlooking of rooms and private open spaces			√		√
<b>4</b>	<b>SITE ACCESS</b>					
<b>4.1</b>	<b>BUILDING ENTRY</b>	<b>2-60</b>				
	Provide as direct a physical and visual connection as possible between street and entry			√	Clearly defined feature entries to each Lift Lobby.	√
	Achieve clear lines of transition between public street, the shared private, circulation spaces and apartment unit			√		√
	Generally provide separate entries from the street for pedestrians and cars and different uses			√	Clearly defined and separate pedestrian and vehicle entry points.	√
<b>4.2</b>	<b>PARKING</b>	<b>2-62</b>				
	Give preference to underground carparking			√		√
	Provide bicycle parking which is easily accessible from ground level and from apartments			√		√
<b>4.3</b>	<b>PEDESTRIAN ACCESS</b>	<b>2-64</b>				
	Follow accessibility standard AS 1428 (Pt. 1 & 2) as a minimum		√		Complies subject to design detail at C.C, refer to Access Report.	√
	Provide barrier free access to at least 20 percent of dwellings in the development		√		Complies subject to design detail at C.C, refer to Access Report.	√
<b>4.4</b>	<b>VEHICLE ACCESS</b>	<b>2-65</b>				
	Generally limit the width of driveways to a max of 6m		√		Complies, with minimum standards.	√
	Locate vehicle entries away from main pedestrian entries and on secondary frontages		√		Vehicle entry located away from pedestrian entry.	√

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Ex	ITEM	PART/ PAGE	RULES OF THUMB	BETTER DESIGN PRACTICE	NOTES	complies
	<b>PART 3 BUILDING DESIGN</b>					
<b>5</b>	<b>BUILDING CONFIGURATION</b>					
<b>5.1</b>	<b>APARTMENT LAYOUT</b>	3-67				
	<p>Determine appropriate apartment sizes in relation to:</p> <ul style="list-style-type: none"> <li>– Geographic location and market demands.</li> <li>– The spatial configuration of an apartment.</li> <li>– Affordability and range of apartment sizes provides more choice for more people</li> </ul>			√		√
	<p>Ensure apartment layouts are resilient over time. Design issues to address may include:</p> <ul style="list-style-type: none"> <li>– Accommodating a variety of furniture arrangements</li> <li>– Providing for a range of activities and privacy levels between different spaces within the apartment</li> <li>– Utilising flexible room sizes and proportions or open plans</li> <li>– Ensuring circulation by stairs, corridors and through rooms is planned as efficiently as possible thereby increasing the amount of floor space in rooms.</li> </ul>			√		√
	<p>Design apartment layouts, which respond to the natural and built environments and optimise site opportunities by:</p> <ul style="list-style-type: none"> <li>– Providing private open space in the form of a balcony, a terrace, a courtyard or a garden for every apartment</li> <li>– Orientating main living spaces toward the primary outlook and aspect away from neighbouring noise sources or windows.</li> <li>– Locating main living spaces adjacent to main private open space.</li> <li>– Locating habitable rooms, and where possible kitchens and bathrooms, on the external face of the buildings thereby maximises the number of rooms with windows.</li> </ul>			√		√

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	<ul style="list-style-type: none"> <li>Maximising opportunities to facilitate natural ventilation and to capitalise on natural daylight</li> <li>Avoid locating kitchen as part of main circulation spaces, such as hallway or entry space</li> </ul>					
	Ensure apartment layouts and dimensions facilitate furniture removal and placement			√		√
	Single-aspect apartments should be limited in depth to 8m from a window.	3-69	√		Complies, single aspect apartments range from 6.2m to 8.6m from a window.	√
	The back of a kitchen should be no more than 8m from a window.	3-69	√		Complies, back of kitchens range from 6.2m to 8.6m from a window.	√
	The width of cross over or cross through apartments over 15m deep should be 4m or greater to avoid deep narrow apartment layouts	3-69	√		Complies, no such apartments provided.	√
	Buildings not meeting minimum standards listed above must demonstrate how satisfactory daylight and ventilation can be achieved	3-69	√			n/a
	<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:</p> <ul style="list-style-type: none"> <li>1 bedroom apartment 50m<sup>2</sup></li> <li>2 bedroom apartment 70m<sup>2</sup></li> <li>3 bedroom apartment 95m<sup>2</sup></li> </ul>	3-69	√		Complies, Apartments sizes range from: 1Bed-56m <sup>2</sup> to 61m <sup>2</sup> 2Bed-71m <sup>2</sup> to 89m <sup>2</sup> 3Bed-95m <sup>2</sup>	√
<b>5.2</b>	<b>APARTMENT MIX</b>					
	Provide a variety of apartment types	3-70				
	<p>Refine the appropriate apartment mix for a location by:</p> <ul style="list-style-type: none"> <li>Considering population trends in the future as well as present market demands</li> <li>Noting the apartment's location in relation to public transport, public facilities, employment areas, schools and universities and retail centres.</li> </ul>			√	149 dual key apartments are proposed. These are affordable apartments with above average rental returns. 258, 1 bedroom / studios are proposed within these apartments.	√
	Locate mix of one and three bedroom apartments on the ground level where accessibility is more easily achieved for			√		√

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	disabled, elderly people or families with children					
	Optimise the number of accessible and adaptable apartments to cater for a wider range of occupants. Australian Standards are only a minimum.			√	Complies, refer to Access report.	√
	Investigate the possibility of flexible apartment configuration, which support change in the future.			√	Provided flexibility with 149 dual key apartments	√
<b>5.3</b>	<b>BALCONIES</b>	3-71				
	Provide primary balconies for all apartments with a minimum depth of 2m	3-72	√		Complies, balconies vary between 2.0m to 2.8m wide.	√
	Require scale plans of balcony with furniture layout to confirm adequate, useable space when an alternate balcony depth is proposed		√			n/a
<b>5.4</b>	<b>CEILING HEIGHTS</b>	3-73				
	Recommended minimum FFL-FCL heights:					
	Mixed use 3.3m ground & first floor to promote future use flexibility		√		Complies, ground floor commercial allowance of 3.3m provided for ceiling height	√
	Residential building in mixed use area 3.3m ground and first floor to promote future use flexibility.		√		Ground commercial achieves a floor to ceiling height of 3.3m	√
	In residential flats or other residential floor of mixed use buildings					
	2.7m habitable rooms, 2.4 non habitable preferred, 2.25 permitted		√		All apartments achieve 2.7m.	√
	Two storey units 2.4m min. for second storey if 50% or more of the apartment has 2.7m min heights		√			n/a
	Two storey units with two storey void space, 2.4m min ceiling heights		√			n/a
	Attic spaces 1.5m min height at edge of room with 30 degree min. ceiling slope.		√			n/a
	Developments which seek to vary the recommended ceiling heights must demonstrate that apartments will receive satisfactory daylight		√			n/a
<b>5.5</b>	<b>FLEXIBILITY</b>	3-75				
	Provide robust building configurations, which utilise multiple entries and circulation cores, especially in larger buildings over 15m long. – Thin building cross sections, which are suitable for residential			√	There are three separate entries to lift lobbies servicing three separate residential apartment blocks.	√

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	<ul style="list-style-type: none"> <li>or commercial uses.</li> <li>A mix of apartment types</li> <li>Higher ceilings in particular on the ground floor and first floor</li> <li>Separate entries for the ground floor level, and the upper levels</li> <li>Sliding and/or moveable wall systems</li> </ul>					
	Provide apartment layouts, which accommodate the changing use of rooms			√		√
	Utilise structural systems, which support a degree of furniture change in building use or configuration			√		√
	Promote accessibility	3-76				
<b>5.6</b>	<b>GROUND FLOOR APARTMENTS</b>	3-77				
	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		√		There are no ground floor apartments proposed for this development due to the constraints of the site and context.	n/a
	Provide ground floor apartments with access to private open space, preferably as a terrace or garden		√			n/a
<b>5.7</b>	<b>INTERNAL CIRCULATION</b>	3-79				
	In general where units are located off a double loaded corridor the number of units accessible from a single corridor should be limited to 8		√		Blocks B & C have lobbies and corridors servicing less than 8 apartments per corridor / floor. Block A has one lobby with three lifts servicing a range of 7, 9 & 12 apartments per corridor / floor. The lift core / corridor here has been strategically positioned to provide for a high level of amenity such as natural light and ventilation.	√
<b>5.8</b>	<b>MIXED USE</b>	3-80				
	Choose a mix of uses that compliment and reinforce the character, economics and function of the local area			√		√
	Choose compatible mix of uses			√		√
	Consider building depth and form in relation to each uses requirements for			√		√

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	servicing and amenity					
	Design legible circulation systems, which ensure safety of users			√		√
	Ensure building positively contributes to public domain			√		√
	Design for acoustic privacy from the beginning of the project to ensure that future services, such as air conditioning, do not cause acoustic problems late			√		√
	Recognising the ownership/lease patterns and separating requirements for purposes of BCA for considerations			√		√
<b>5.9</b>	<b>STORAGE</b>	3-82				
	In addition to kitchen cupboards and bedroom wardrobes, provide accessible storage facilities at the following rates <ul style="list-style-type: none"> <li>– Studio apartments 6m3</li> <li>– One bedroom apartments 6m3</li> <li>– Two bedroom apartments 8m3</li> <li>– Three plus bedroom apartments 10m3</li> </ul>		√		Complies, all storage is provided within the apartments with some having it split within the apartment and secured locations within the basement.	√
<b>6</b>	<b>BUILDING AMENITY</b>					
<b>6.1</b>	<b>ACOUSTIC PRIVACY</b>	3-83				
	Arrange apartments within development to minimise noise transition between flats			√		√
	Design the internal apartment layout to separate noisier spaces from quieter spaces			√		√
<b>6.2</b>	<b>DAYLIGHT ACCESS</b>	3-84				
	Living rooms and private open spaces for at least 70% of apartments in a development should receive a min. 3 hours direct sunlight between 9am and 3pm in mid-winter. In dense urban areas min 2 hours may be acceptable		√		Complies, apartments that receive the required sunlight equate to 69.3 % ie: 294 apartments. Refer to Solar Access and Natural Ventilation Report.	√
	Limit the number of single aspect apartments with a southerly aspect to a maximum of 10% of total units		√		Complies, apartments with a southerly aspect equate to 7.5% ie: 32 apartments.	√
<b>6.3</b>	<b>NATURAL VENTILATION</b>	3-86				
	Building depths which support natural ventilation typically range from 10-18m		√		Complies, buildings range from 9.2 m to 23.5 m in depth. Where the building exceeds the depth it is	√



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					supported by naturally ventilated corridors.	
	60% of residential units should be naturally cross ventilated		√		Complies, naturally cross ventilated apartments equate to 68.4% ie: 290 apartments. Refer to Solar Access and Ventilation Report.	√
	25% of kitchens should have access to natural ventilation		√		Complies, 31% of kitchens are naturally ventilated ie: 133 kitchens. Of the total, 36 kitchens are adjacent to an external wall and 97 kitchens are well positioned within a naturally cross ventilated living space.	√
<b>7</b>	<b>BUILDING FORM</b>					
<b>7.1</b>	<b>AWNINGS &amp; SIGNAGE</b>	3-88				
	Awnings encourage pedestrian activity on streets			√		√
	Signage should be carefully considered and integrated into the development			√		√
<b>7.2</b>	<b>FACADES</b>	3-89				
	Compose facades with appropriate scale, rhythm and proportion, which respond to building uses and contextual character			√		√
	Design facades to reflect the orientation of the site using elements such as sun shading, depending on orientation			√		√
<b>7.3</b>	<b>ROOF DESIGN</b>	3-91				
	Relate roof design to the desired built form			√		√
	Design the roof to relate to the size and scale of the building			√		√
<b>8</b>	<b>BUILDING PERFORMANCE</b>					
<b>8.1</b>	<b>ENERGY EFFICIENCY</b>	3-93				
	Incorporate passive solar design techniques to optimise heat storage in winter and heat transfer in summer by:			√	Development is BASIX compliant.	√
	Maximising thermal mass in floor &			√	Development is	√

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	walls in northern rooms				BASIX compliant.	
	Hard floor finishes instead of carpet			√	Development is BASIX compliant.	√
	Insulating roof/ceiling to R2.0, external walls to R1.0 and floor including separation from basement parking to R1.0			√	Development is BASIX compliant.	√
	Improve control of mechanical space heating & cooling by:					
	Designing apartments so that entries open into lobbies or vestibules and are isolated from living areas by doorways			√		√
	Provide or plan for future installation of photo voltaic panels			√	Possible as part of future roof design but not proposed, as development is BASIX compliant.	√
	Improve efficiency of hot water systems			√	Development is BASIX compliant.	√
	Reduce reliance on artificial lighting			√	Development is BASIX compliant.	√
	Maximise the efficiency of household appliances			√	Development is BASIX compliant.	√
<b>8.2</b>	<b>MAINTENANCE</b>	3-95				
	Select manually operated systems such as blinds, sunshades and curtains in preference to mechanical systems			√		√
	Select durable materials which can be easily cleaned and graffiti resistant			√		√
<b>8.3</b>	<b>WASTE MANAGEMENT</b>	3-96				
	Provide every dwelling with a waste cupboard or temporary storage area of sufficient size to hold a single days waste and enable source separation			√		√
	Supply waste management plan with DA		√		Complies, refer to Waste Management Plan.	√
<b>8.4</b>	<b>WATER CONSERVATION</b>	3-97				
	Collect ,store and use rainwater on site for car washing, garden, toilet flushing, laundry and clothes washing			√	Complies with water efficiency targets required in the BASIX Report	√
	Rainwater is not to be collected from roofs coated with lead or bitumen based paints.		√			√